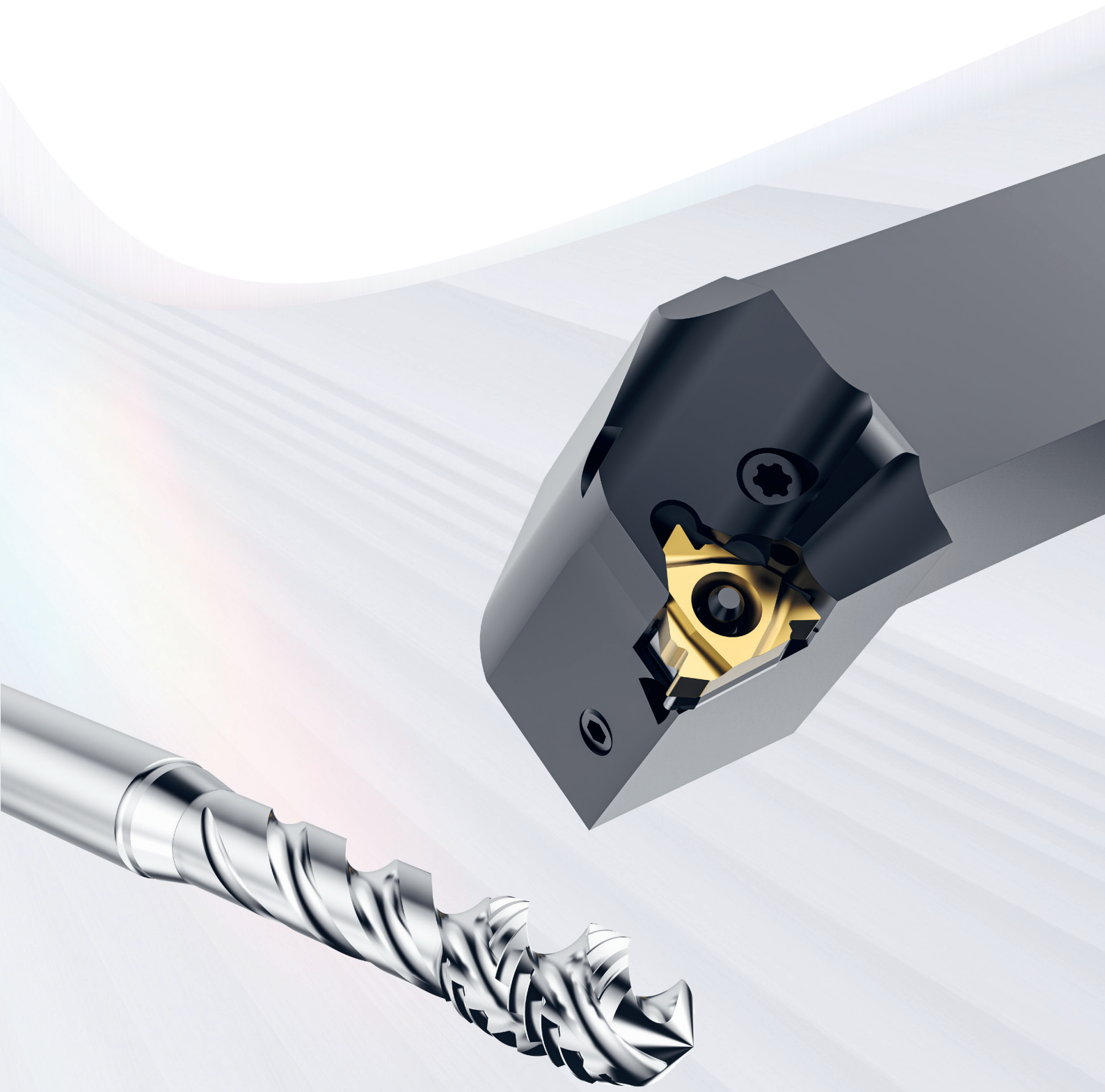
Seco BROTECH

Catalog & technical guide

# Threading 2025.1



At Seco, we make tools, tech, and solutions for the most advanced manufacturing challenges on Earth. From our founding in Fagersta Sweden, to today's global company, our business has always been made to measure, and built on trust.

Combining cutting-edge, precision tools with lasting, personal partnerships, we're a true people company helping our partners discover the future of the manufacturing industry.

We're proud to make for makers, invent for inventors, and partner with pioneers. Driving the future forward with our focus on innovation. In short - if the right tool for the job exists, we'll deliver it. If it doesn't, we'll create it.

We're proud to put sustainability at the heart of everything we do, challenging perceptions of our industry, changing the process of manufacturing, and playing our own small part in shaping a brighter looking future.

Made for Makers

## Introduction

Alphanumeric index ..... 2
Technical information ..... 6

## Thread turning

Jetstream Tooling® toolholders ..... 53
External toolholders ..... 59
Internal toolholders ..... 69
Seco-Capto™ toolholders ..... 78
Steadyline® GL-heads toolholders ..... 94
Quick Change toolholders ..... 97
Peeling toolholders ..... 98
Pipe-facing toolholders ..... 100
Seco-Capto™ Multi insert pocket toolholders ..... 102
Chasers toolholders ..... 104
Precision Grooves toolholders ..... 112
Inserts ..... 122
Chasers ..... 168
Chipformers ..... 169

## Thread MDT

Toolholders ..... 171
Inserts ..... 181

## Thread Mini-Shaft™

Toolholders ..... 182
Inserts ..... 186

## Thread milling

Technical information ..... 191
Threadmaster™ ..... 199
Cutting data ..... 205
Code keys ..... 209
Thread milling indexable ..... 211
Thread milling shanks ..... 223

## Thread tapping

Threadmaster™ Taps technical information and overview ..... 231
Threadmaster™ Taps ..... 276

## Annex

Declaration of conformity ..... 469
SMG Workpiece materials ..... 473

**2**
22NR/L / ..RD ... 154

**3**
335.14 ... 224-225
335.14-ER ... 226

**A**
A..-CGGR/L ... 178
A..-CGIR/L ... 177,179
A..-SGXN ... 183,185
A..-SGXN..-R ... 183

**C**
C..CER/L..X ... 106
C..CNR/L..X ... 106-108
C..CNR/L.C-X ... 109-110
C.-CER/L ... 93
C.-CER/L-..CHD ... 80-81
C.-CER/L-..HD ... 78-79,82,92-93
C.-CNR/L-..CHD ... 89-91
C.-CNR/L-..HD ... 83-88
C.-DSKNR/L-PCLNR/L ... 102
C.-MSKNR/L-PCLNR/L ... 103
C.-SNR ... 83
CEAR/L ... 113
CEAR/L...D ... 112
CEAR/L...HD ... 112
CEAR/L...QHD ... 112
CEAR/L...QHD ... 112
CER/L ... 59
CER/L...D ... 121
CER/L...QHD ... 68,121
CER/L..CQHD ... 66
CER/L..Q ... 60,118
CER/L..QHD ... 60,63-64,120
CER/L..Q-S ... 67
CER/L...HD ... 59
CER/L...Q ... 61-62
CER/L...QHD ... 59,61-62,68
CER...X ... 104-105
CER..16HD ... 60
CER...CQHD ... 65
CFIR/L ... 172
CFIR/L...JET ... 176
CFMR/L ... 174
CFMR/L...JET ... 176
CFOR/L ... 175
CFSR/L ... 173
CFTR/L ... 175
CNR/L ... 117
CNR/L...A ... 116
CNR/L...DA ... 116
CNR/L..AHD ... 72-75,119
CNR/L..APIHD ... 74-75
CNR/L..H ... 117
CNR/L...AHD ... 70-71,77
CNR/L...APIHD ... 70
CSXCR/L ... 98-99

**D**
DTM ... 204

**E**
E..-SGXN ... 184-185
E..-SGXN..-R ... 184

**G**
GL..-CNR/L ... 96
GL..CNR/L..X ... 111
GL..PNR/L ... 94-95

**M**
MSGNR/L ... 100-101
MTH ... 436-445,459-460
MTH-S001 ... 446
MTH-S002 ... 446
MTH-S003 ... 447
MTH-S004 ... 447
MTH-S011 ... 448
MTH-S012 ... 449
MTH-S031 ... 450
MTH-S032 ... 451
MTH-S041 ... 452
MTH-S042 ... 453
MTH-S043 ... 454
MTH-S044 ... 454
MTH-S101 ... 455
MTH-S102 ... 455
MTH-S111 ... 456
MTH-S112 ... 457
MTH-S142 ... 458
MTP ... 420-429
MTP-S001 ... 430
MTP-S002 ... 430
MTP-S011 ... 431
MTP-S012 ... 432
MTP-S013 ... 433
MTP-S042 ... 434
MTP-S043 ... 435
MTS ... 462
MTS-K101 ... 461
MTS-K101-A ... 461
MTS-K102 ... 463
MTS-K102-A ... 464
MTS-K111 ... 465
MTS-K121 ... 466
MTS-K131 ... 467
MTS-K141 ... 468

**P**
PER..QHDJETI ... 54-55
PNR/L..AHDJET ... 56-58

**Q**
QC..-PER/L-..HDJET ... 97

**R**
R396.18 ... 212-213,218
R396.19 ... 212-216,218
R396.20 ... 217-218

**S**
SNR/L ... 69,76,114-115
SNR...A ... 69

**T**
T30-PUB ... 276-286
T30-PXB ... 298-300
T30-R40UC ... 287-297
T30-R40XC ... 301-303
T30-SUC ... 304-306
T32-PHB ... 330
T32-PNB ... 318,325,328
T32-PNB, G ... 329
T32-PNB, M ... 315-317
T32-PNB, M 6G ... 319
T32-PNB, MF ... 321-322
T32-PNB, M LH ... 320
T32-PNB, UNC ... 323-324
T32-PNB, UNF ... 326-327
T32-PNB-micro, M ... 314
T32-R40HC ... 347
T32-R40NC ... 335,342,345
T32-R40NC, G ... 346
T32-R40NC, M ... 332-334
T32-R40NC, M 6G ... 336
T32-R40NC, MF ... 338-339
T32-R40NC, M LH ... 336-337
T32-R40NC, UNC ... 340-341
T32-R40NC, UNF ... 343-344
T32-R40NC-micro, M ... 331
T32-SNC, G ... 313

T32-SNC, M ..... 308-309
T32-SNC, MF ..... 311-312
T32-SNC, M LH ..... 310
T32-SNC-micro M ..... 307
T32-SNC-micro – M ..... 307
T33A-FSCE, M ..... 416
T33B-FSCC ..... 417,419
T33B-FSCE, M ..... 416
T33-FNC, M ..... 408
T33-FSCC, M ..... 415
T33-FSCC, MF ..... 418-419
T33-FSCE, M ..... 415
T33-FSNC, G ..... 414
T33-FSNC, M ..... 409
T33-FSNC, M 6G ..... 410
T33-FSNC, MF ..... 411
T33-FSNC, UNC ..... 412
T33-FSNC, UNF ..... 413
T34A-R45HC, M ..... 369
T34A-R45HC, MF ..... 372
T34A-R45HE, MF ..... 380
T34B-PHB, M ..... 352
T34B-PHB, MF ..... 355
T34-PCB ..... 364
T34-PHB ..... 351,357,359
T34-PHB, EGM ..... 360
T34-PHB, EGUNC ..... 361
T34-PHB, EGUNF ..... 362
T34-PHB, G ..... 363
T34-PHB, M ..... 349-350
T34-PHB, MF ..... 353-354
T34-PHB, UNC ..... 356
T34-PHB, UNF ..... 358
T34-PHB-micro, M ..... 348
T34-R45CC ..... 384
T34-R45HC ..... 368,374,376
T34-R45HC, G ..... 377
T34-R45HC, M ..... 366-367
T34-R45HC, MF ..... 370-371
T34-R45HC, UNC ..... 373
T34-R45HC, UNF ..... 375
T34-R45HC-micro, M ..... 365
T34-R45HE, EGM ..... 381
T34-R45HE, EGUNC ..... 382
T34-R45HE, EGUNF ..... 383
T34-R45HE, M ..... 378
T34-R45HE, MF ..... 379
T35A-R15SC-H ..... 405,407
T35A-SSC-K ..... 392
T35A-SSE-K ..... 396,399
T35B-SSE-K ..... 397,400
T35-PSB-H ..... 403
T35-PSB-P ..... 385-387
T35-R15SC-H ..... 404,406
T35-R40SC-P ..... 388-390
T35-R45UC-N ..... 401
T35-SSC-H ..... 402
T35-SSC-K ..... 391,393-394
T35-SSE-K ..... 395,398
TM ..... 200-203

**V**

V21-CMR/L ..... 180

**0**
09NR / ..A55 ... 124
09NR / ..A60 ... 126
09NR / ..BSPT ... 148
09NR / ..ISO ... 130
09NR / ..NPT ... 150
09NR / ..UN ... 136-137
09NR / ..W ... 145-146

**1**
10-11.. ... 168
11NR/L / ..A55 ... 124
11NR/L / ..A60 ... 126
11NR/L / ..ISO ... 130-132
11NR/L / ..NPT ... 150
11NR/L / ..UN ... 136-138
11NR/L / ..W ... 145-146
11NR / ..NPTF ... 152
13NMS ... 219
13XMS ... 219
16ER/L / ..A55 ... 123
16ER/L / ..A60 ... 125
16ER/L / ..ACME ... 157
16ER/L / ..AG55 ... 123
16ER/L / ..AG60 ... 125
16ER/L / ..APIRD ... 165
16ER/L / ..BSPT ... 147
16ER/L / ..BUT ... 161
16ER/L / ..G55 ... 123
16ER/L / ..G60 ... 125
16ER/L / ..ISO ... 127-129
16ER/L / ..MJ ... 141
16ER/L / ..NPT ... 149
16ER/L / ..NPTF ... 151
16ER/L / ..RD ... 153
16ER/L / ..STACME ... 159
16ER/L / ..TR ... 155
16ER/L / ..UN ... 133-137
16ER/L / ..UNJ ... 139
16ER/L / ..W ... 143-144
16ER / ..STACME ... 159
16NR/L / ..A55 ... 124
16NR/L / ..A60 ... 126
16NR/L / ..ACME ... 158
16NR/L / ..AG55 ... 124
16NR/L / ..AG60 ... 126
16NR/L / ..API RD ... 165
16NR/L / ..BSPT ... 148
16NR/L / ..BUT ... 161
16NR/L / ..G55 ... 124
16NR/L / ..G60 ... 126
16NR/L / ..ISO ... 130-132
16NR/L / ..MJ ... 142
16NR/L / ..NPT ... 150
16NR/L / ..NPTF ... 152
16NR/L / ..RD ... 154
16NR/L / ..STACME ... 160
16NR/L / ..TR ... 156
16NR/L / ..UN ... 136-138
16NR/L / ..UNJ ... 140
16NR/L / ..W ... 145-146
16NR/L / .NPTF ... 152
16V55 / ... 123
16V60 / ... 125

**2**
20ER / ..ACME ... 157
20ER / ..STACME ... 159
20ER / ..TR ... 155
20NR / ..ACME ... 158
20NR / ..STACME ... 160
20NR / ..TR ... 156
22ER/L / ..ACME ... 157
22ER/L / ..API ... 162
22ER/L / ..API RD ... 165
22ER/L / ..BUT ... 166-167
22ER/L / ..HEF ... 164
22ER/L / ..ISO ... 127-131
22ER/L / ..N55 ... 123
22ER/L / ..N60 ... 125
22ER/L / ..NPT ... 149
22ER/L / ..PAC ... 164
22ER/L / ..RD ... 153
22ER/L / ..STACME ... 159
22ER/L / ..TR ... 155
22ER/L / ..UN ... 133-134
22ER/L / ..W ... 143-144
22NR/L / ..ACME ... 158
22NR/L / ..API ... 163
22NR/L / ..BUT ... 166-167
22NR/L / ..HEF ... 164
22NR/L / ..ISO ... 130-132
22NR/L / ..N55 ... 124
22NR/L / ..N60 ... 126
22NR/L / ..NPT ... 150
22NR/L / ..PAC ... 164
22NR/L / ..RD ... 154
22NR/L / ..STACME ... 160
22NR/L / ..TR ... 156
22NR/L / ..UN ... 136-137
22NR/L / ..W ... 145-146
26ER / ..ACME ... 157
26ER / ..K55 ... 123-124
26ER / ..K60 ... 125-126
26ER / ..STACME ... 159
26ER / ..TR ... 155
26NR / ..ACME ... 158
26NR / ..K55 ... 123
26NR / ..K60 ... 125-126
26NR / ..TR ... 156
27ER/L / ..ACME ... 157
27ER/L / ..API ... 162
27ER/L / ..H ... 164
27ER/L / ..ISO ... 127-128
27ER/L / ..PAC ... 164
27ER/L / ..RD ... 153
27ER/L / ..TR ... 155
27ER/L / ..UN ... 133
27ER / ..API ... 165
27ER / ..ISO ... 127
27ER / ..NPT ... 150
27ER / ..STACME ... 159
27NR/L / ..API ... 163
27NR / ..ACME ... 158
27NR / ..API ... 163,165
27NR / ..H ... 164
27NR / ..ISO ... 130-132
27NR / ..PAC ... 164
27NR / ..RD ... 154
27NR / ..STACME ... 160
27NR / ..TR ... 156
27NR / ..UN ... 136

**5**
5-11.. ... 168
5-31.. ... 168
5-31... ... 168
5-51.. ... 168

**8**
8-11.. ... 168
8-21.. ... 168
8-41.. ... 168
8-51.. ... 168

**C**
C-.. ... 169-170

**L**
LCEX ... 186-190
LCGN ... 181

**R**
R335.14...MNF . . . . . 229
R335.14...MNP . . . . . 228
R335.14...UNNF . . . . . 230
R335.14...WXF . . . . . 227

**S**
S-41.. . . . . 168
SCNN . . . . . 122

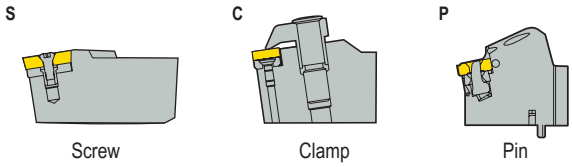
# Code keys

## Toolholders




| C | E | R | 25 | 25 | M | 16 | Q | HD |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

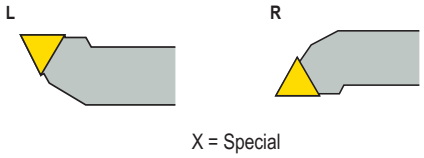
### 1. Insert clamping




### 2. External/Internal

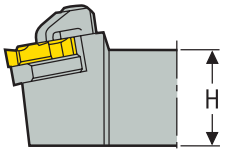
E = External
N = Internal

### 3. Cutting direction



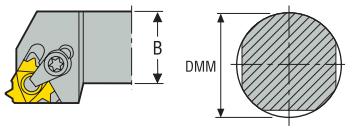

X = Special

### 4. Shank height



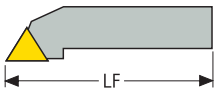

00 = Round toolholders S & C
25 = 25 mm *(0.984")*
32 = 32 mm *(1.260")*
etc.

### 5. Shank width/diameter




20 = 20 mm *(0.787")*
25 = 25 mm *(0.984")*
etc.

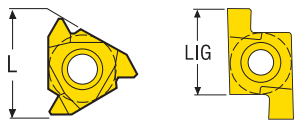
### 6. Tool length




H = 100 mm *(3.937")*
K = 125 mm *(4.921")*
L = 140 mm *(5.512")*
M = 150 mm *(5.906")*
P = 170 mm *(6.693")*

Q = 180 mm *(7.087")*
R = 200 mm *(7.874")*
S = 250 mm *(9.843")*
T = 300 mm *(11.811")*
U = 350 mm *(13.780")*
V = 400 mm *(15.748")*

### 7. Cutting edge length




If the cutting edge length consists of only one digit, the designation should start with a 0.

Example:

| | |
|---|---|
| Cutting edge length | = 16,5 mm *(0.650")* |
| Symbol | = 16 |
| Cutting edge length | = 9,525 mm *(0.375")* |
| Symbol | = 09 |

### 8. Other information

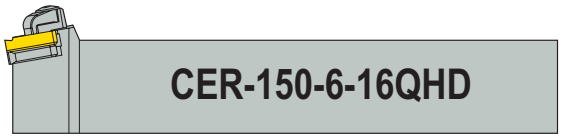
A = Steel with coolant passage
Q = Toolholder/cranked
CQ = For mounting upside down

### 9. Other information

H = High density bar
HD = Heavy duty
JET = Jetstream Tooling®
JETI = Jetstream Tooling® Jeti

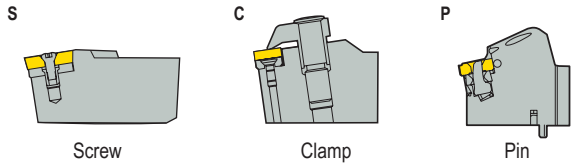
# Code keys

## Toolholders




| C | E | R | | - | 150 | - | 6 | - | 16 | Q | HD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | 5 | | 6 | | 7 | 8 | 9 |

### 1. Insert clamping




### 2. External/Internal

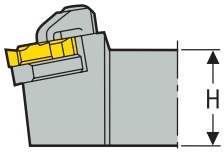
E = External
N = Internal

### 3. Cutting direction



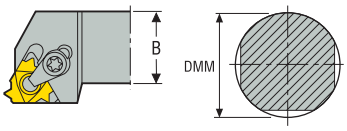

X = Special

### 4. Shank definition



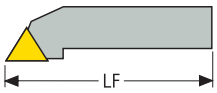

00 = Boring bars
= Square shanks

### 5. Square shank height/width and bar diameter



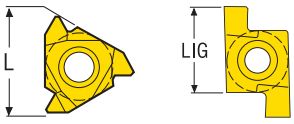

For square shank tools height and width in inches.
For boring bars bar diameter in inches.
075 = 0.75
100 = 1.00
125 = 1.25
etc.

### 6. Tool length




3 = 3 inches
4 = 4 inches
5 = 5 inches
6 = 6 inches

### 7. Cutting edge length




If the cutting edge length consists of only one digit, the designation should start with a 0.

Example:

| | |
|---|---|
| Cutting edge length | = 16,5 mm (0.650") |
| Symbol | = 16 |
| Cutting edge length | = 9,525 mm (0.375") |
| Symbol | = 09 |

### 8. Other information

A = Steel with coolant passage
Q = Qualified
CQ = For mounting upside down

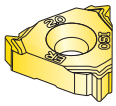
### 9. Other information

H = High density bar
HD = Heavy duty
JET = Jetstream Tooling®
JETI = Jetstream Tooling® Jeti

# Code keys

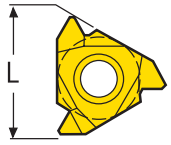
## Inserts



| 16 | E | R | 1.5 | ISO | – | A1 |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | | 6 |

### 1. Cutting edge length



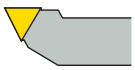

Example:
Cutting edge length = 16,5 mm (0.650")
Symbol = 16
Cutting edge length = 9,525 mm (0.375")
Symbol = 09

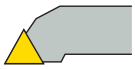
If the cutting edge length consists of only one digit, the designation should start with a 0.

### 2. External/Internal

E = External
N = Internal

### 3. Cutting direction

L 

R 

X = Special

### 4. Pitch

| | | | | | |
|---|---|---|---|---|---|
| **Full profile: (mm)** | 0,50 | 1,25 | 3,00 | 6,00 | |
| | 0,70 | 1,50 | 4,00 | 8,00 | |
| | 0,75 | 1,75 | 4,50 | 10,0 | |
| | 0,80 | 2,00 | 5,00 | 12,0 | |
| | 1,00 | 2,50 | 5,50 | 14,0 | |
| **Full profile: (TPI)** | 48 | 18 | 11 | 6.0 | 2.5 |
| | 40 | 16 | 10 | 5.0 | 2.0 |
| | 32 | 14 | 9 | 4.5 | |
| | 24 | 13 | 8 | 4.0 | |
| | 20 | 12 | 7 | 3.0 | |

| | | | |
|---|---|---|---|
| **Partial profile:** | A | = 0,50-1,50 mm | 48-16 TPI |
| | AG | = 0,50-3,00 mm | 48-8 TPI |
| | G | = 1,75-3,00 mm | 14-8 TPI |
| | N | = 3,50-5,00 mm | 7-5 TPI |
| | K | = 5,50-10,00 mm | 4.5-2.5 TPI |

### 5. Thread

| Thread = | |
|---|---|
| 60 | = V profile, 60° |
| 55 | = V profile, 55° |
| ISO | = ISO, Metric |
| UN | = Am. UN |
| UNJ | = Am. Aerospace |
| MJ | = Metr. Aerospace |
| W | = Whitworth, BSW |
| BSPT | = Whitworth, Taper |
| NPT | = Am. NPT |
| NPTF | = Am. NPTF (Dryseal) |
| RD | = Round, DIN405 |
| TR | = Trapezoidal, DIN103 |
| ACME | = Am. ACME-G |
| STACME | = Am. Stub-ACME |
| API 384 | = API V 038R 1:4 |
| API 386 | = API V 038R 1:6 |
| API 404 | = API V 040 1:4 |
| API 504 | = API V 050 1:4 |
| API 506 | = API V 050 1:6 |
| API RD | = API Round Casing |
| BUT 2.5 | = Buttress, 1°47' |
| BUT 2.6 | = Buttress, 2°23' |

### 6. Number of teeth per cutting edge/ Type of chipbreaker

2M = 2 teeth
3M = 3 teeth
TT = TWIN THREADER

A = Universal
A1 = Chipbreaker designation
A2 = Chipbreaker designation

# Selection process

## Seco Suggest

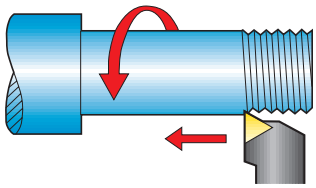
In order to simplify the selection of tools and cutting parameters Seco Tools introduce Suggest which eliminates complicated searching, programming and calculation. Suggest gives you the best suggestion of holder, insert and optimized parameters for your application and the possibility to download information to the CNC machine.

The application can be found at https://www.secotools.com/dashboard/Suggest/Suggest.

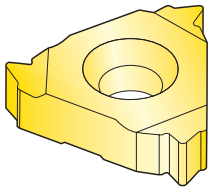
Use the selection process below to choose a suitable tool, insert, cutting data and production method.



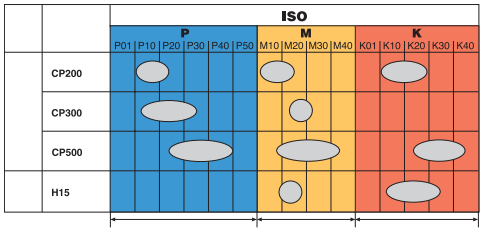
### 1. Selection of production method, page 10.



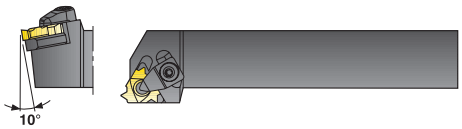
### 2. Selection of insert type, page 11.



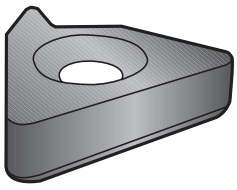
### 3. Selection of grade, page 12.



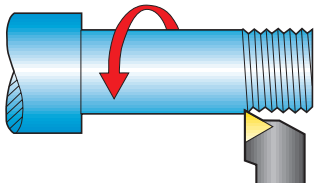

### 4. Selection of toolholder, page 14.




### 5. Selection of insert shim, pages 15–16.



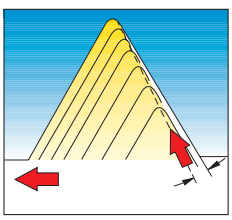
### 6. Selection of cutting speed, pages 17–21.



### 7. Selection of number of passes and infeed depths, pages 22–32.

| $P_h$ | 6.0 | 5.5 | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 |
|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 3,82 *(0.150)* | 3,52 *(0.139)* | 3,19 *(0.126)* | 2,87 *(0.113)* | 2,53 *(0.100)* | 2,23 *(0.088)* | 1,92 *(0.076)* | 1,60 *(0.063)* | 1,25 *(0.049)* |
| 1 | 0,46 *(0.018)* | 0,43 *(0.017)* | 0,41 *(0.016)* | 0,37 *(0.015)* | 0,34 *(0.013)* | 0,34 *(0.013)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,24 *(0.009)* |
| 2 | 0,43 *(0.017)* | 0,40 *(0.016)* | 0,39 *(0.015)* | 0,34 *(0.013)* | 0,32 *(0.013)* | 0,31 *(0.012)* | 0,26 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* |
| 3 | 0,35 *(0.014)* | 0,32 *(0.013)* | 0,32 *(0.013)* | 0,28 *(0.011)* | 0,25 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* |

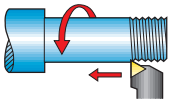
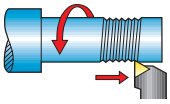
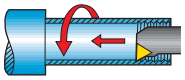
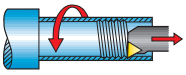
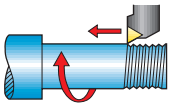
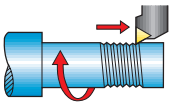
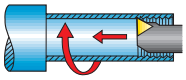
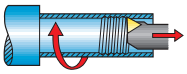
### 8. Selection of infeed method, page 33.



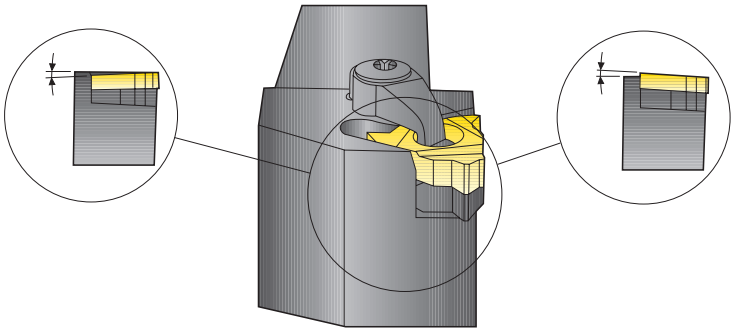
## Production methods

Workpiece
-External or internal thread
-Right or left hand thread
Machine
-Right or left hand tool

| Threading towards the chuck | | Threading away from the chuck* | |
|---|---|---|---|
| **Benefit:** | – Best stability<br>– Originally fitted insert shims can be used for most operations | **Benefit:** | – Chip flow is correctly directed during internal threading |
| **Note:** | – Chip build-up may occur during internal threading, particularly if there is little space between the threading bar and bore of the hole | **Note:** | – Secure clamping of the insert and mounting of the toolholder are necessary |
| | | **Internal threading:** | – Use only CNR/L toolholders |

| Right-hand thread – Right-hand tool | | Left-hand thread – Right-hand tool | |
|---|---|---|---|
|  | ER |  | ER |
|  | NR |  | NR |
| **Left-hand thread – Left-hand tool** | | **Right-hand thread – Left-hand tool** | |
|  | EL |  | EL |
|  | NL |  | NL |

*Notice that the insert shim must be changed when threading away from the chuck.



Threading away from the chuck

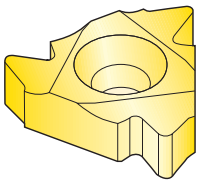
Threading towards the chuck

## Insert types

**For single tooth inserts choose a full profile or partial profile design**

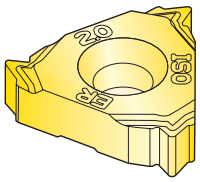
### Single-tooth insert (Type S) A or Original

First choice, can be used for applications in a variety of materials. Low cutting forces.



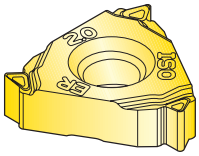
### Single-tooth insert (Type S) A1 chipbreaker

First choice for general applications in steel.



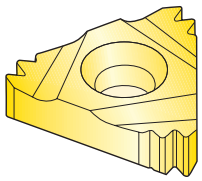
### Single-tooth insert (Type S) A2 chipbreaker

First choice for general applications in stainless steel.



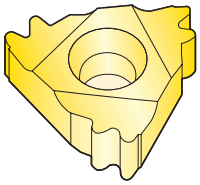
### Multi-tooth insert (Type M)

First choice for mass production, since fewer passes are necessary.
Only for radial infeed.
2M = 2 teeth version
3M = 3 teeth version



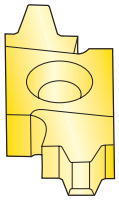
### Multi-tooth insert (TWIN THREADER, TT)

Lower cutting forces than M type.
Shorter undercut length than M type.
Only for radial infeed.
Use insert shim for 2M.



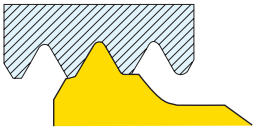
### K insert (Type K)

First choice for large/coarse threads.



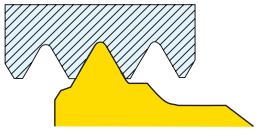
### Full profile

By topping the thread, the workpiece need not be pre-machined to the exact diameter and may be a little oversized for external threads and undersize for internal threads. The threading operation is simplified since only one tool is needed for the entire thread (no subsequent deburring is needed).



### Partial profile

Covers a wide range of thread pitches, which simplifies stock-keeping. Requires a correct workpiece diameter prior to threading. The nose radius of the insert is sized to suit the smallest profile within the pitch range of the insert.

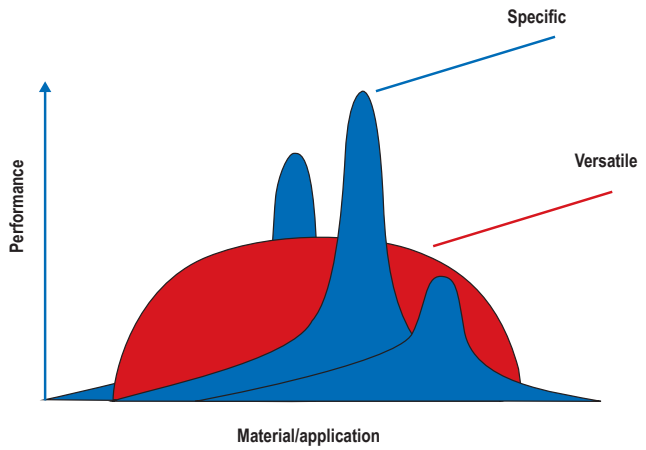
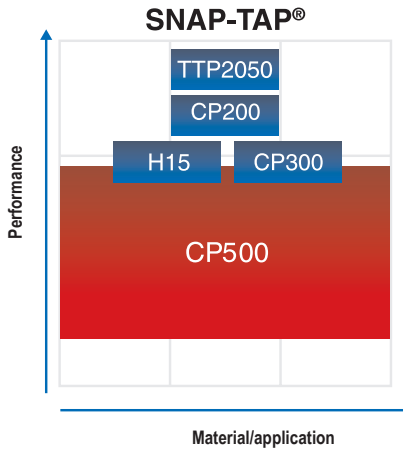


# Insert grades

## Thread turning – Insert grades

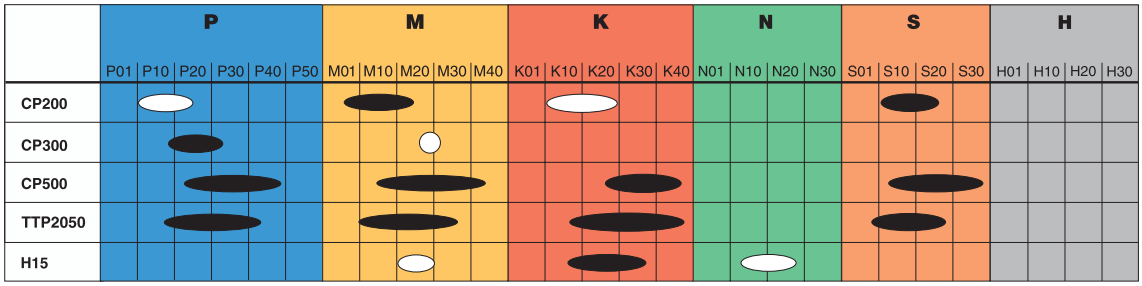
Continuous research and development of better materials, coatings and optimal geometries help fulfil customers requirements.

Our product strategy is to provide the market with versatile first choice tools and specific optimized solutions for threading.

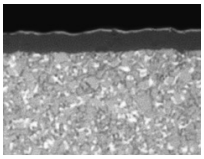
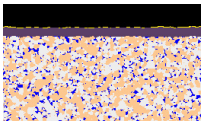
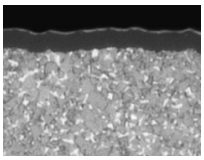
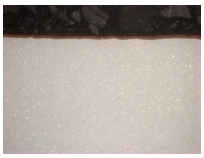
| Product strategy grades | Grade assortment Snap-Tap® |
|---|---|
|  |  |

# Insert grades

**Grades**
The black areas in the chart indicate a grade's main ISO application groups and the white areas indicate other supplementary application groups.




**PVD coated grades**

| | | |
|---|---|---|
| **CP200** |  | First choice for high-strength steel, martensitic stainless steel, cast iron with low hardness, superalloys and titanium alloys. First choice for high cutting speeds. Hard micrograin with sharp edge, highly resistant to plastic deformation.<br><br>(Ti,Al)N + TiN |
| **CP300** |  | Wear-resistant grade which is principally intended for high cutting speeds. Optimizing grade in steel and stainless steel.<br><br>(Ti,Al)N + TiN |
| **CP500** |  | Universal very tough micrograin grade for all types of threading in most materials. Excellent for stainless steel and difficult operations.<br><br>(Ti,Al)N + TiN |
| **TTP2050** |  | Peak performance, wear resistant micrograin grade to be used in steel, stainless steel and cast iron.<br>The nano-laminated coating increases the wear resistance of the grade.<br><br>(TiAl)N/(TiSi)N |
| **TTP1550** |  | Fine grain wear resistant grade for optimized performance in carbon steels.<br><br>(TiAl)N |

**Uncoated grades**

| | | |
|---|---|---|
| **H15** |  | First choice for machining normal to hard cast iron. Also suitable for hard steel with a hardness in excess of 350 HB. Micrograin with excellent wear-resistance and sharp edge. |

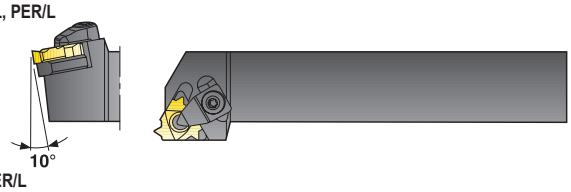
# Toolholders

Use the guidelines below to choose a suitable toolholder type.

## External threading

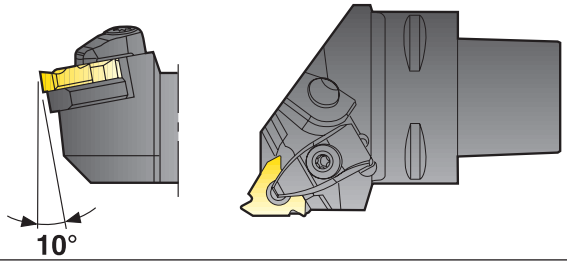
Basic choice
Type C (clamp)
Type P (Pin)

**CER/L, PER/L**




Insert size
16, 20, 22, 26, 27
With insert shim

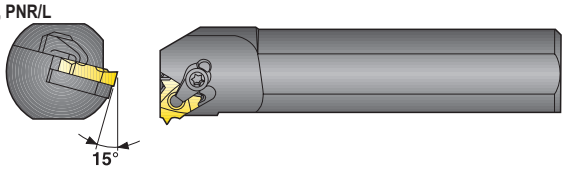
**Cx-CER/L**



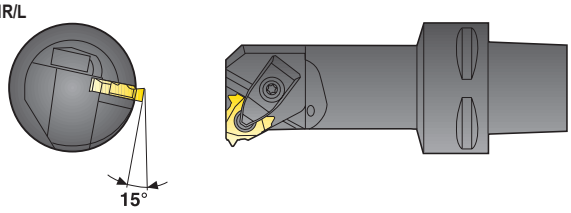

## Internal threading

Basic choice
Type C (clamp)
Type P (Pin)

**CNR/L, PNR/L**




**Cx-CNR/L**

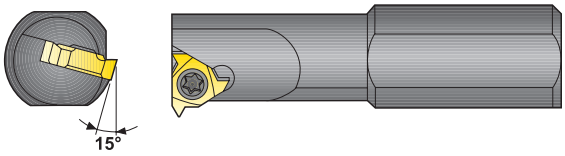



Insert size
16, 20, 22, 26, 27
With insert shim

**N.B. On 27 mm inserts this angle is 10°**

For small holes
Type-S (screw)

**SNR/L**



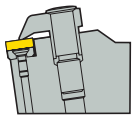
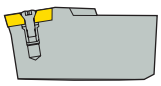
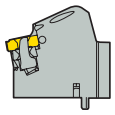

Insert sizes
09,11,16, 22

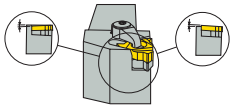
(No insert shim. To be used only when threading towards the chuck)

# Insert shim

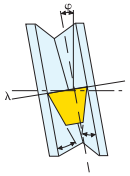
## Originally fitted insert shims

The table below shows the originally fitted insert shims. These insert shims are suitable for most operations when threading towards the chuck.

| | | Clamp | | Screw | Jetstream Tooling® |
|---|---|---|---|---|---|
| Toolholders | |  External and internal threading | |  Internal threading |  External and internal threading |
| Insert type | | Single-tooth insert (Type S) | Single-tooth insert (Type K) | Single-tooth insert (Type S) | Single-tooth insert (Type S) |
| Insert shim | |  |  | No insert shim ( λ=2°) |  |
| Insert size | 16 | GX 16-1 | | | GXA16-1 |
| | 20 | | KX 20-2 | | |
| | 22 | NX22-1 | | | NXA22-1 |
| | 26 | | KX26-2 | | |
| | 27 | VX27-1 | | | VXA27-1 |



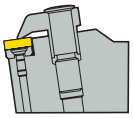
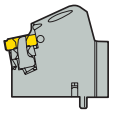
The helix angle can be selected from +5 to -2 by changing the insert shim. The same insert shims are used for both right and left hand holders. The centre height remains constant.



To receive the correct shape on the thread and uniform wear on the insert the cutting edge helix angle (λ) should be equal to the thread lead angle (φ).

The helix angle (λ) can also be calculated. See page 34 for formula.
SNR/L toolholders have no exchangeable insert shim and can therefore only be used for threading towards the chuck. The table below shows the available insert shim range.

## Insert shim range

| | | Clamp | | | | Jetstream Tooling® Thread turning | | |
|---|---|---|---|---|---|---|---|---|
| Toolholders | |  External and internal threading | | | |  External and internal threading | | |
| Insert type | | Multi-tooth insert (Type M) | Single-tooth insert (Type S) | | Single-tooth insert (Type K) | Multi-tooth insert (Type M) | Single-tooth insert (Type S) | |
| Insert shim | |  Threading towards the chuck |  Threading towards the chuck |  Threading away from the chuck |  Threading towards the chuck |  Threading away from the chuck |  Threading towards the chuck |  Threading away from the chuck |
| Insert size | 16 | MX16-1 | GX16-0, -1, -2, -3, -4 | GX16-0 -99 -98 | | | MXA16-1 | GXA16-0, -1, -2, -3, -4 | GXA16-0, -99, -98 |
| | 20 | | | | KX20-0, -1, -2, -3, -4, -5 | KX20-0, -99 | | |
| | 22 | MX22-1 | NX22-0, -1, -2, -3, -4 | NX22-0 -99 -98 | | | MXA22-1 | NXA22-0, -1, -2, -3, -4 | NXA22-0, -99, -98 |
| | 26 | | | | KX26-0, -1, -2, -3, -4, -5 | KX26-0, -99 | | |
| | 27 | MX27-1 | VX27-0, -1, -2, -3, -4 | VX27-0 -99 -98 | | | MXA27-1 | VXA22-0, -1, -2, -3, -4 | VXA27-0,-99,-98 |

# Insert shim

### Choice of insert shim

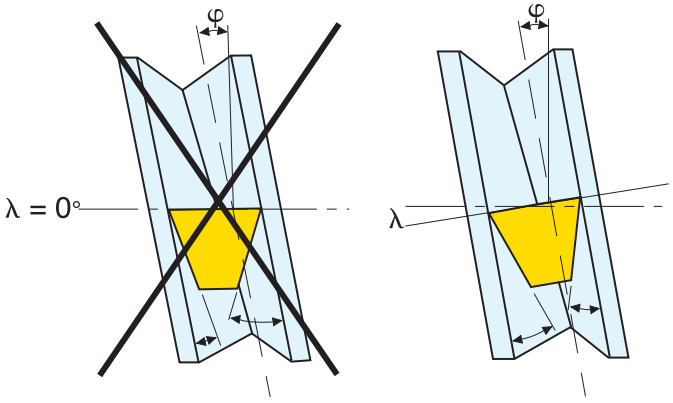
Use the graph below to choose the correct insert shim.
The graph gives the last digit in the insert shim code.
Example: GX16-1

### Production method

Threading towards the chuck, use right side of the graph.
Threading away from the chuck, use left side of the graph.

### Vertical column - lead

Thread with one start, Lead (Ph) = pitch (P).
Thread with several starts, Lead (Ph) = pitch (P) x number of starts.




### Horizontal column = pitch diameter ($D_2$)

Pitch diameter $D_2$ – threading away from the chuck

| mm | 5 | 15 | 20 | 25 | 30 | 40 | 45 | 50 | 60 | 65 | 70 | 75 | 85 | 90 | 95 | 100 | 110 | 115 | 120 | 130 | 135 | 140 | 150 | 155 | 160 | 165 | 170 | 180 | 190 | 200 | 225 | 250 | 300 | | | | | | | | | TPI | Ph mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| inch | .25 | | .75 | 1 | 1.25 | 1.5 | 1.75 | 2 | 2.25 | 2.5 | 2.75 | 3 | | 3.5 | 3.75 | 4 | 4.25 | 4.5 | 4.75 | 5 | 5.25 | 5.5 | 6 | | 6.25 | 6.5 | 6.75 | 7 | 7.5 | 8 | 8.75 | 9 | 12 | | | | | | | | | | |
| – | 2 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | | | | | 0 | 0 | 1 | 80 | – |
| – | 3 | – | – | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | | | | 0 | 0 | 0 | 1 | 72 | – |
| 8,0 | – | – | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | | | 0 | 0 | 0 | 0 | 1 | 64 | – |
| – | 4 | – | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | | | 0 | 0 | 0 | 0 | 1 | 2 | 56 | – |
| 6,0 | – | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | | | 0 | 0 | 0 | 0 | 1 | 2 | – | 0,5 |
| – | 5 | – | – | – | – | – | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 48 | – |
| 5,0 | – | – | – | – | – | – | 98 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 44 | – |
| – | 6 | – | – | – | – | – | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 40 | – |
| 4,0 | – | – | – | – | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 36 | – |
| – | 7 | – | – | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | – | 0,75 |
| 3,5 | – | – | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 32 | – | |
| – | 8 | – | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 28 | – | |
| 3,0 | – | – | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | – | 1,0 | |
| – | 9 | – | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 24 | – | |
| – | 10 | – | – | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 5 | – | 1,25 |
| 2.5 | – | – | – | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 5 | 20 | – |
| – | 11 | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 18 | – |
| – | 12 | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | – | 1,5 |
| 2,0 | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | – | 16 | – |
| – | 13 | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | – | – | 1,75 |
| – | 14 | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | – | 14 | – |
| 1,75 | – | – | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | – | 13 | – |
| – | 16 | – | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | – | – | 2,0 |
| 1,5 | – | – | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | – | 12 | – |
| – | 18 | – | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | – | 11 | – |
| – | 20 | – | 98 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | – | – | 2,5 |
| 1,25 | – | – | 98 | 99 | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | – | 10 | – |
| – | 24 | – | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | – | 9 | – | |
| 1,0 | – | – | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | – | – | 3,0 | |
| – | 28 | – | 99 | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | – | 8 | – | |
| – | 32 | – | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | – | – | 3,5 |
| 0,75 | – | – | 99 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | – | 7 | – |
| – | 36 | – | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | – | – | 4,0 | |
| – | 40 | 98 | 99 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | – | 6 | – | |
| – | 44 | 98 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | – | – | – | 5,0 | |
| – | 48 | 98 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | – | – | 5 | – | |
| 0,5 | – | 98 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | – | – | – | 6,0 | |
| – | 56 | 98 | 99 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | – | – | – | 4 | – | |
| – | 64 | 99 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | – | – | – | – | – | 8,0 | |
| – | 72 | 99 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | – | – | – | – | 3 | – | |
| – | 80 | 99 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | – | – | – | – | – | – | | | – | |
| Ph mm | TPI | inch | 12 | 9 | 8.75 | 8 | 7.5 | 7 | 6.75 | 6.5 | 6.25 | | 6 | 5.5 | 5.25 | 5 | 4.75 | 4.5 | 4.25 | 4 | 3.75 | 3.5 | | 3 | 2.75 | 2.5 | 2.25 | 2 | 1.75 | 1.5 | 1.25 | 1 | .75 | | .25 | | | | | | | | |
| | | mm | 300 | 250 | 225 | 200 | 190 | 180 | 170 | 165 | 160 | 155 | 150 | 140 | 135 | 130 | 120 | 115 | 110 | 100 | 95 | 90 | 85 | 75 | 70 | 65 | 60 | 50 | 45 | 40 | 30 | 25 | 20 | 15 | 5 | | | | | | | |

Pitch diameter $D_2$ – threading towards the chuck

# SMG – Cutting data

In SMG classification of workpiece materials involves a specific material standard in a specific condition assigned as reference for easy and unabiguous adjustment of cutting data for any actual material compared to any Seco reference material. As examples the reference materials EN C45E for SMG P4 and EN 42 CrMo 4 for both SMG P5 and SMG H5 shown below in table 1 where the reference level material property is indicated. A more complete extract can be found on page(s) 473-484.

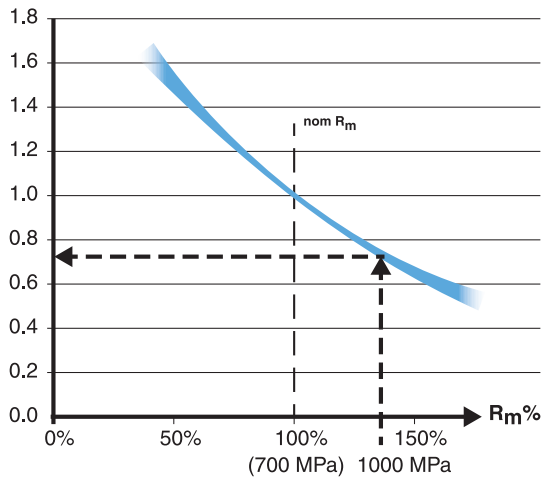
| SMG | Description | Properties | Reference |
|---|---|---|---|
| P4 | Low-alloy general structural steels, 0.25% < C < 0.67%wt<br>Low-alloy Quench & Temper steels | 520 < $R_m$ < 1200 | C 45E<br>$R_m$ = 660 N/mm² |
| P5 | Structural steels, 0.25% < C < 0.67%wt<br>Quench & Temper steels | 550 < $R_m$ < 1200 | 42 CrMo 4<br>$R_m$ = 700 N/mm² |

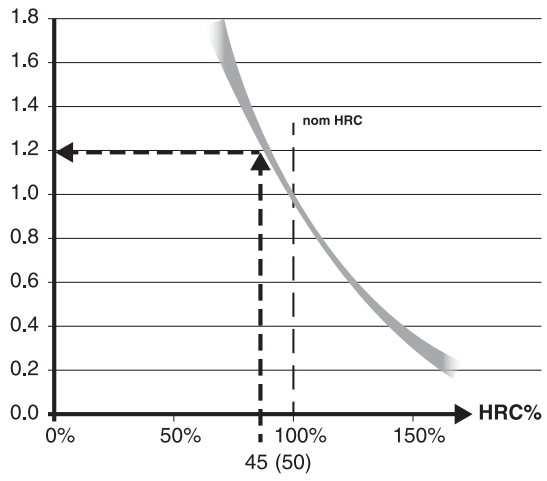
| SMG | Description | Properties | Reference |
|---|---|---|---|
| H5 | Quenched & Tempered steels | 38 < HRC < 56 | 42 CrMo 4<br>50 HRC |

Focusing specifically on EN 42 CrMo 4 in annealed condition, the ultimate tensile strength $R_m$ may typically vary between Rm = 630 N/mm² and $R_m$ = 780 N/mm², which provide a reference level for SMG P5. In Quenched & Tempered condition, the ultimate tensile strength $R_m$ may typically be between $R_m$ = 900 N/mm² and $R_m$ = 1100 N/mm² thus still belongs to SMG P5. However, if hardened above $R_m$ = 1200 N/mm² it instead belongs to SMG H5.

| SMG | EN | W.-Nr | AFNOR | BS | UNI | JIS | AISI / ASTM | GOST | Condition | $R_{m_nom}$ | $HRC_{nom}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P5 | 42 CrMo 4 | 1.1201 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 4142, 4140 | 38HM | Annealed | 700 | |
| | 42 CrMo 4 | 1.1201 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 4142, 4140 | 38HM | Quenched & Tempered | 1000 | |
| H5 | 42 CrMo 4 | 1.1201 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 4142, 4140 | 38HM | Quenched & Tempered | | 45 |
| | 42 CrMo 4 | 1.1201 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 4142, 4140 | 38HM | Quenched & Tempered | | 50 |

The EN 42CrMo4 quench & tempered steel could be used to illustrate the machinability dependence of materials' condition.
The graphs below indicate how speed recommendations for a nominal material conditions may be adjusted for relative $R_m$ (left diagram valid for ISO-P) and for relative HRC (valid for ISO-H).




To further illustrate how the SMG P5 nominal $v_c$ can be adjusted to a more accurate recommended $v_c$ we need ultimate tensile strength $R_m$ data and in this case we use the EN 42 CrMo 4 quenched & tempered to $R_m$ = 1000 N/mm² according to above table (bold blue arrows).
Assume that we find that the SMG P5 nominal $v_c$ = 280 m/min for a certain product and machining.
Then, actual recommended $v_c$ = 280 m/min x 0,75 = 210 m/min.
Consequently in the SMG H5 the nominal $v_c$ can be adjusted using the hardened EN 42 CrMo 4 at HRC 45 (smaller grey arrows).
Assume that the SMG H5 nominal $v_c$ = 50 m/min for a certain product and machining using a coated cemented carbide tools then, actual recommended $v_c$ = 50 m/min x 1,2 = 60 m/min.
For further workpiece material details please see page(s) 473-484 and suggested cutting data at applicable pages.
For more convenient cutting data handling we recommend applicable tools in My Pages – Suggest on www.secotools.com

## Cutting speed metric (*Inch*)

| SMG | $v_c$ m/min *sf/min* | | | | |
|---|---|---|---|---|---|
| | CP200 | CP300 | CP500 | H15 | TTP2050 |
| P1 | — | 275 | 205 | — | 205 |
| | — | *900* | *670* | — | *670* |
| P2 | — | 270 | 200 | — | 200 |
| | — | *890* | *660* | — | *660* |
| P3 | — | 230 | 170 | — | 170 |
| | — | *750* | *560* | — | *560* |
| P4 | — | 205 | 150 | — | 150 |
| | — | *670* | *490* | — | *490* |
| P5 | — | 195 | 145 | — | 145 |
| | — | *640* | *475* | — | *475* |
| P6 | — | 220 | 165 | — | 165 |
| | — | *720* | *540* | — | *540* |
| P7 | — | 205 | 155 | — | 155 |
| | — | *670* | *510* | — | *510* |
| P8 | — | 195 | 145 | — | 145 |
| | — | *640* | *475* | — | *475* |
| P11 | — | 200 | 150 | — | 150 |
| | — | *660* | *490* | — | *490* |
| P12 | — | 120 | 90 | — | 90 |
| | — | *395* | *295* | — | *295* |
| M1 | 150 | — | 135 | 100 | 135 |
| | *490* | — | *445* | *330* | *445* |
| M2 | 120 | — | 110 | 80 | 110 |
| | *395* | — | *360* | *260* | *360* |
| M3 | 90 | — | 85 | 60 | 85 |
| | *295* | — | *280* | *195* | *280* |
| M4 | 70 | — | 65 | — | 65 |
| | *230* | — | *215* | — | *215* |
| M5 | 55 | — | 50 | — | 50 |
| | *180* | — | *165* | — | *165* |
| K1 | 130 | — | 120 | 105 | 120 |
| | *425* | — | *395* | *345* | *395* |
| K2 | 110 | — | 105 | 95 | 105 |
| | *360* | — | *345* | *310* | *345* |
| K3 | 95 | — | 90 | 80 | 90 |
| | *310* | — | *295* | *260* | *295* |
| K4 | 90 | — | 85 | 75 | 85 |
| | *295* | — | *280* | *245* | *280* |
| K5 | 55 | — | 50 | — | 50 |
| | *180* | — | *165* | — | *165* |
| K6 | 80 | — | 75 | — | 75 |
| | *260* | — | *245* | — | *245* |
| K7 | 70 | — | 65 | — | 65 |
| | *230* | — | *215* | — | *215* |
| N1 | — | — | — | 255 | — |
| | — | — | — | *840* | — |
| N2 | — | — | — | 165 | — |
| | — | — | — | *540* | — |
| N3 | — | — | — | 110 | — |
| | — | — | — | *360* | — |
| N11 | — | — | 100 | 150 | 100 |
| | — | — | *330* | *490* | *330* |
| S1 | 20 | — | 20 | — | 20 |
| | *65* | — | *65* | — | *65* |
| S2 | 15 | — | 15 | — | 15 |
| | *49* | — | *49* | — | *49* |
| S3 | 15 | — | 15 | — | 15 |
| | *49* | — | *49* | — | *49* |
| S11 | 45 | — | 39 | — | 39 |
| | *150* | — | *130* | — | *130* |
| S12 | 35 | — | 30 | — | 30 |
| | *115* | — | *100* | — | *100* |
| S13 | 27 | — | 23 | — | 23 |
| | *90* | — | *75* | — | *75* |

Use the SMG tables to classify the workpiece material. Use the table to choose cutting speed. Cutting speeds ($v_c$) in the table are recommendations for a start value. Due to machine, material and setup condition it is advisable to optimize cutting data. Recommended ranges to use for each grade is CP200, CP300, CP500, TTP2050 and H15 +/-15%

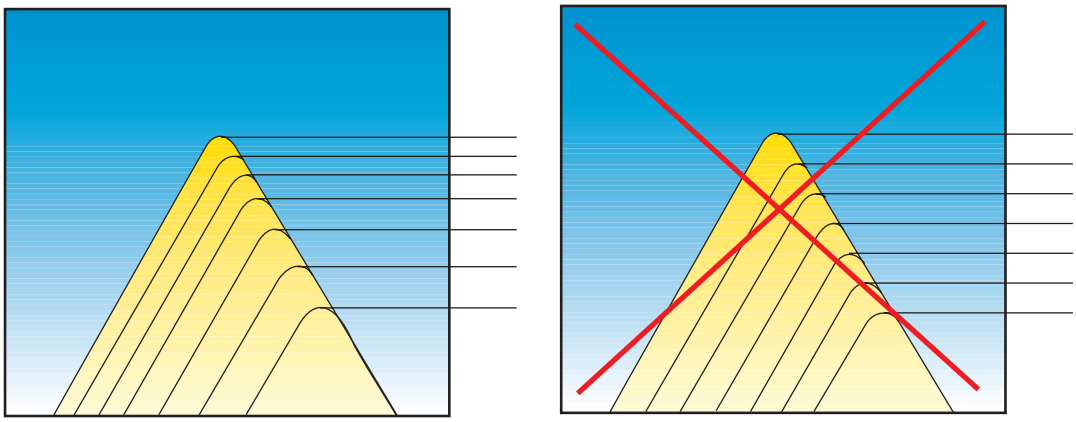
SMG=Seco Material Group
$v_c$ = Cutting speed (m/min)

Note that there is a fixed relationship between rotational speed and feed rate in threading. Check that the chosen cutting speed does not result in a too high feed speed.

## Number of passes and infeed depths

A thread cannot be made in one cut because of the relatively brittle cutting edge. The total cutting depth must be divided into several passes. Those passes should all have similar cutting forces (equal chip areas), see figures.

Use the tables on page 22-32 to find recommendations for number of passes and infeed depths. The tables give basic recommendations and are applicable on all geometries - Original, A, A1 and A2.



– The infeed series given is based on a good control of the OD/ID tolerances for the selected profile.
– If insert fracture should occur, the number of passes should be increased.
– The infeed depth should not be less than 0,05 mm (0.0020") /pass.
– On stainless steel, the infeed depth per pass should be greater than 0,08 mm (0.0031").
– The recommendations can also be used for part-profile inserts. The number of passes should then, in most cases, be increased.
– The threading insert nose radius is relatively small and can easily be damaged if it is overloaded.

## Cutting speed – MDT metric (*Inch*)

| SMG | $v_c$ m/min *sf/min* |
|---|---|
| | CP500 |
| P1 | 155 *510* |
| P2 | 150 *490* |
| P3 | 130 *425* |
| P4 | 115 *375* |
| P5 | 110 *360* |
| P6 | 125 *410* |
| P7 | 115 *375* |
| P8 | 110 *360* |
| P11 | 115 *375* |
| P12 | 65 *215* |
| M1 | 135 *445* |
| M2 | 110 *360* |
| M3 | 85 *280* |
| M4 | 65 *215* |
| M5 | 50 *165* |
| K1 | 130 *425* |
| K2 | 110 *360* |
| K3 | 95 *310* |
| K4 | 90 *295* |
| K5 | 55 *180* |
| K6 | 80 *260* |
| K7 | 70 *230* |
| N1 | — |
| N2 | — |
| N3 | — |
| N11 | 85 *280* |
| S1 | 21 *70* |
| S2 | 17 *55* |
| S3 | 15 *49* |
| S11 | — |
| S12 | — |
| S13 | — |

Use the SMG tables to classify the workpiece material. Use the table  to choose cutting speed.
SMG = Seco Material Group
$v_c$ = m/min
Cutting speeds ($v_c$) in the table are recommendations for a start value.
Due to machine, material and setup condition it is advisable to optimize cutting data. Recommended ranges to use for CP500 +/-15%

## Cutting speed – Mini Shaft metric (*Inch*)

| SMG | $v_c$ m/min *sf/min* |
|---|---|
| | CP500 |
| P1 | 155<br>*510* |
| P2 | 150<br>*490* |
| P3 | 130<br>*425* |
| P4 | 115<br>*375* |
| P5 | 110<br>*360* |
| P6 | 125<br>*410* |
| P7 | 115<br>*375* |
| P8 | 110<br>*360* |
| P11 | 115<br>*375* |
| P12 | 65<br>*215* |
| M1 | 80<br>*260* |
| M2 | 65<br>*215* |
| M3 | 50<br>*165* |
| M4 | 37<br>*120* |
| M5 | 31<br>*100* |
| K1 | 150<br>*490* |
| K2 | 130<br>*425* |
| K3 | 110<br>*360* |
| K4 | 105<br>*345* |
| K5 | 65<br>*215* |
| K6 | 95<br>*310* |
| K7 | 80<br>*260* |
| N1 | — |
| N2 | — |
| N3 | — |
| N11 | 95<br>*310* |
| S1 | 19<br>*60* |
| S2 | 15<br>*49* |
| S3 | 13<br>*43* |
| S11 | — |
| S12 | — |
| S13 | — |

Use the SMG tables to classify the workpiece material. Use the table to choose cutting speed.
SMG = Seco Material Group
$v_c$ = m/min
Cutting speeds ($v_c$) in the table are recommendations for a start value.
Due to machine, material and setup condition it is advisable to optimize cutting data. Recommended ranges to use for CP500 +/-15%

# Number of passes and infeed depths

**External ISO-metric threads, metric (*Inch*)**

| $P_h$ | 6.0 | 5.5 | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 | 1.75 | 1.5 | 1.25 | 1.0 | 0.80 | 0.75 | 0.50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 3,82 *(0.150)* | 3,52 *(0.139)* | 3,19 *(0.126)* | 2,87 *(0.113)* | 2,53 *(0.100)* | 2,23 *(0.088)* | 1,92 *(0.076)* | 1,60 *(0.063)* | 1,25 *(0.049)* | 1,13 *(0.044)* | 0,93 *(0.037)* | 0,81 *(0.032)* | 0,65 *(0.026)* | 0,52 *(0.020)* | 0,48 *(0.019)* | 0,33 *(0.013)* |
| 1 | 0,46 *(0.018)* | 0,43 *(0.017)* | 0,41 *(0.016)* | 0,37 *(0.015)* | 0,34 *(0.013)* | 0,34 *(0.013)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,11 *(0.004)* |
| 2 | 0,43 *(0.017)* | 0,40 *(0.016)* | 0,39 *(0.015)* | 0,34 *(0.013)* | 0,32 *(0.013)* | 0,31 *(0.012)* | 0,26 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,09 *(0.004)* |
| 3 | 0,35 *(0.014)* | 0,32 *(0.013)* | 0,32 *(0.013)* | 0,28 *(0.011)* | 0,25 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,07 *(0.003)* |
| 4 | 0,30 *(0.012)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,07 *(0.003)* | 0,06 *(0.002)* |
| 5 | 0,29 *(0.011)* | 0,26 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – |
| 6 | 0,26 *(0.010)* | 0,24 *(0.009)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – |
| 7 | 0,24 *(0.009)* | 0,21 *(0.008)* | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – |
| 8 | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 9 | 0,22 *(0.009)* | 0,19 *(0.007)* | 0,19 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | – | – | – | – | – | – | – | – |
| 10 | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – |
| 11 | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – |
| 12 | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – |
| 13 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – |
| 14 | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 0,13 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 16 | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## Internal ISO-metric threads, metric (*Inch*)

| $P_h$ | 6.0 | 5.5 | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 | 1.75 | 1.5 | 1.25 | 1.0 | 0.80 | 0.75 | 0.50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 3,54 *(0.139)* | 3,25 *(0.128)* | 2,96 *(0.117)* | 2,65 *(0.104)* | 2,33 *(0.092)* | 2,05 *(0.081)* | 1,78 *(0.070)* | 1,48 *(0.058)* | 1,17 *(0.046)* | 1,05 *(0.041)* | 0,85 *(0.033)* | 0,75 *(0.030)* | 0,60 *(0.024)* | 0,49 *(0.019)* | 0,46 *(0.018)* | 0,31 *(0.012)* |
| 1 | 0,46 *(0.018)* | 0,43 *(0.017)* | 0,42 *(0.017)* | 0,37 *(0.015)* | 0,34 *(0.013)* | 0,32 *(0.013)* | 0,28 *(0.011)* | 0,26 *(0.010)* | 0,23 *(0.009)* | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,17 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,10 *(0.004)* |
| 2 | 0,43 *(0.017)* | 0,40 *(0.016)* | 0,40 *(0.016)* | 0,34 *(0.013)* | 0,31 *(0.012)* | 0,30 *(0.012)* | 0,26 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,08 *(0.003)* |
| 3 | 0,35 *(0.014)* | 0,33 *(0.013)* | 0,32 *(0.013)* | 0,28 *(0.011)* | 0,24 *(0.009)* | 0,24 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,07 *(0.003)* |
| 4 | 0,30 *(0.012)* | 0,26 *(0.010)* | 0,26 *(0.010)* | 0,23 *(0.009)* | 0,21 *(0.008)* | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,10 *(0.004)* | 0,09 *(0.004)* | 0,07 *(0.003)* | 0,07 *(0.003)* | 0,06 *(0.002)* |
| 5 | 0,26 *(0.010)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,11 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | – | – | – |
| 6 | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – |
| 7 | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 8 | 0,19 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 9 | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – |
| 10 | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – |
| 11 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,09 *(0.004)* | – | – | – | – | – | – | – | – | – |
| 12 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – |
| 13 | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – |
| 14 | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 0,12 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 16 | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## External/Internal Whitworth threads, metric (*Inch*)

| TPI | 4.0 | 4.5 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 19 | 20 | 26 | 28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 4,29 *(0.169)* | 3,82 *(0.150)* | 3,44 *(0.135)* | 2,90 *(0.114)* | 2,50 *(0.098)* | 2,17 *(0.085)* | 1,93 *(0.076)* | 1,76 *(0.069)* | 1,58 *(0.062)* | 1,45 *(0.057)* | 1,20 *(0.047)* | 1,13 *(0.044)* | 1,01 *(0.040)* | 0,96 *(0.038)* | 0,92 *(0.036)* | 0,72 *(0.028)* | 0,69 *(0.027)* |
| 1 | 0,49 *(0.019)* | 0,46 *(0.018)* | 0,45 *(0.018)* | 0,38 *(0.015)* | 0,37 *(0.015)* | 0,32 *(0.013)* | 0,30 *(0.012)* | 0,29 *(0.069)* | 0,28 *(0.011)* | 0,28 *(0.011)* | 0,24 *(0.009)* | 0,24 *(0.009)* | 0,23 *(0.009)* | 0,22 *(0.0090)* | 0,21 *(0.008)* | 0,19 *(0.007)* | 0,18 *(0.007)* |
| 2 | 0,46 *(0.018)* | 0,43 *(0.017)* | 0,43 *(0.017)* | 0,36 *(0.014)* | 0,35 *(0.014)* | 0,30 *(0.012)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,26 *(0.010)* | 0,26 *(0.010)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* |
| 3 | 0,38 *(0.015)* | 0,38 *(0.015)* | 0,38 *(0.015)* | 0,30 *(0.012)* | 0,29 *(0.011)* | 0,24 *(0.009)* | 0,23 *(0.009)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,19 *(0.007)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* |
| 4 | 0,36 *(0.014)* | 0,33 *(0.013)* | 0,32 *(0.013)* | 0,26 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,16 *(0.006)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* |
| 5 | 0,34 *(0.013)* | 0,29 *(0.011)* | 0,28 *(0.011)* | 0,22 *(0.009)* | 0,22 *(0.009* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,16 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* |
| 6 | 0,31 *(0.012)* | 0,25 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,19 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – |
| 7 | 0,29 *(0.011)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,09 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – |
| 8 | 0,27 *(0.011)* | 0,22 *(0.009)* | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 9 | 0,24 *(0.009)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – |
| 10 | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – |
| 11 | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – |
| 12 | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – |
| 13 | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 14 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 0,12 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 16 | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## External UN threads, metric (*Inch*)

| TPI | 4.0 | 4.5 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 16 | 18 | 20 | 24 | 28 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 4,07 *(0.160)* | 3,62 *(0.143)* | 3,29 *(0.130)* | 2,71 *(0.107)* | 2,33 *(0.092)* | 2,08 *(0.082)* | 1,84 *(0.072)* | 1,66 *(0.065)* | 1,52 *(0.060)* | 1,39 *(0.055)* | 1,29 *(0.051)* | 1,19 *(0.047)* | 1,05 *(0.041)* | 0,94 *(0.037)* | 0,84 *(0.033)* | 0,70 *(0.028)* | 0,60 *(0.024)* | 0,53 *(0.021)* |
| 1 | 0,47 *(0.019)* | 0,45 *(0.018)* | 0,43 *(0.017)* | 0,36 *(0.014)* | 0,35 *(0.014)* | 0,30 *(0.012)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,27 *(0.011)* | 0,27 *(0.011)* | 0,25 *(0.010)* | 0,23 *(0.009)* | 0,22 *(0.009)* | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,17 *(0.007)* | 0,17 *(0.007)* |
| 2 | 0,44 *(0.017)* | 0,41 *(0.016)* | 0,40 *(0.016)* | 0,34 *(0.013)* | 0,33 *(0.013)* | 0,28 *(0.011)* | 0,26 *(0.010)* | 0,26 *(0.010)* | 0,25 *(0.010)* | 0,26 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,21 *(0.008)* | 0,19 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* |
| 3 | 0,40 *(0.016)* | 0,39 *(0.015)* | 0,36 *(0.014)* | 0,27 *(0.011)* | 0,26 *(0.010)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* | 0,13 *(0.005)* |
| 4 | 0,36 *(0.014)* | 0,31 *(0.012)* | 0,31 *(0.012)* | 0,23 *(0.009)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,09 *(0.004)* | 0,08 *(0.003)* |
| 5 | 0,32 *(0.013)* | 0,26 *(0.010)* | 0,26 *(0.010)* | 0,22 *(0.009)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – |
| 6 | 0,27 *(0.011)* | 0,23 *(0.009)* | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – |
| 7 | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – |
| 8 | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 9 | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,19 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – |
| 10 | 0,21 *(0.008)* | 0,17 *(0.007)* | 0,18 *(0.007)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – |
| 11 | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,17 *(0.007)* | 0,13 *(0.005)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – |
| 12 | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,12 *(0.005)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – | – |
| 13 | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 14 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 0,12 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 16 | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## Internal UN threads, metric (*Inch*)

| TPI | 4 | 4.5 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 16 | 18 | 20 | 24 | 28 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 3,74 *(0.147)* | 3,32 *(0.131)* | 2,99 *(0.118)* | 2,46 *(0.097)* | 2,13 *(0.084)* | 1,88 *(0.074)* | 1,66 *(0.065)* | 1,49 *(0.059)* | 1,36 *(0.054)* | 1,25 *(0.049)* | 1,14 *(0.045)* | 1,06 *(0.042)* | 0,93 *(0.037)* | 0,84 *(0.033)* | 0,76 *(0.030)* | 0,64 *(0.025)* | 0,56 *(0.022)* | 0,49 *(0.019)* |
| 1 | 0,44 *(0.017)* | 0,41 *(0.016)* | 0,42 *(0.017)* | 0,35 *(0.014)* | 0,34 *(0.013)* | 0,30 *(0.012)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,27 *(0.011)* | 0,27 *(0.011)* | 0,25 *(0.010)* | 0,23 *(0.009)* | 0,22 *(0.009)* | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,17 *(0.007)* |
| 2 | 0,41 *(0.016)* | 0,38 *(0.015)* | 0,38 *(0.015)* | 0,33 *(0.013)* | 0,32 *(0.013)* | 0,28 *(0.011)* | 0,26 *(0.010)* | 0,25 *(0.010)* | 0,23 *(0.009)* | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006* |
| 3 | 0,39 *(0.015)* | 0,34 *(0.013)* | 0,33 *(0.013)* | 0,25 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,09 *(0.004)* | 0,10 *(0.004)* |
| 4 | 0,33 *(0.013)* | 0,28 *(0.011)* | 0,27 *(0.011)* | 0,21 *(0.008)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* |
| 5 | 0,28 *(0.011)* | 0,23 *(0.009)* | 0,23 *(0.009)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – |
| 6 | 0,24 *(0.009)* | 0,20 *(0.008)* | 0,20 *(0.008)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,13 *(0.005)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – |
| 7 | 0,22 *(0.009)* | 0,19 *(0.007)* | 0,18 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – |
| 8 | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,11 *(0.004)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – |
| 9 | 0,20 *(0.008)* | 0,17 *(0.007)* | 0,16 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – |
| 10 | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,12 *(0.005)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,09 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – |
| 11 | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – |
| 12 | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* | 0,08 *(0.003)* | 0,08 *(0.003)* | – | – | – | – | – | – | – | – | – | – | – | – |
| 13 | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,11 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 14 | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,10 *(0.004)* | *0,10 (0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 15 | 0,12 *(0.005)* | 0,12 *(0.005)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 16 | 0,10 *(0.004)* | 0,10 *(0.004)* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

## External multi-tooth inserts, metric (*Inch*)

| | ISO Metric | | | | | | UN | | | | | Whitworth | NPT | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | **3M** | **2M** | **3M** | **2M** | **3M** | **2M** | **2M** | **3M** | **2M** | **3M** | **2M** | **2M** | **2M** | **3M** | **2M** |
| **$P_h$ mm** | 1,0 | 1,5 | 1,5 | 2,0 | 2,0 | 3,0 | – | – | – | – | – | – | – | – | – |
| **TPI** | – | – | – | – | – | – | 16 | 16 | 12 | 12 | 8 | 11 | 11,5 | 11,5 | 8 |
| **$a_p$ mm (*inch*)** | 0,65 *(0.026)* | 0,93 *(0.037)* | 0,93 *(0.037)* | 1,25 *(0.049)* | 1,25 *(0.049)* | 1,92 *(0.076)* | 1,05 *(0.041)* | 1,05 *(0.041)* | 1,39 *(0.055)* | 1,39 *(0.055)* | 2,08 *(0.082)* | 1,58 *(0.062)* | 1,76 *(0.069)* | 1,76 *(0.069)* | 2,54 *(0.100)* |
| **Pass 1 mm (*inch*)** | 0,36 *(0.026)* | 0,43 *(0.017)* | 0,56 *(0.022)* | 0,57 *(0.022)* | 0,75 *(0.030)* | 0,65 *(0.026)* | 0,49 *(0.019)* | 0,64 *(0.025)* | 0,64 *(0.025)* | 0,84 *(0.033)* | 0,70 *(0.028)* | 0,73 *(0.029)* | 0,59 *(0.023)* | 0,81 *(0.032)* | 0,88 *(0.035)* |
| **2** | 0,29 *(0.011)* | 0,30 *(0.012)* | 0,37 *(0.015)* | 0,40 *(0.016)* | 0,50 *(0.020)* | 0,53 *(0.021)* | 0,33 *(0.013)* | 0,41 *(0.016)* | 0,44 *(0.017)* | 0,55 *(0.022)* | 0,57 *(0.022)* | 0,50 *(0.020)* | 0,50 *(0.020)* | 0,57 *(0.022)* | 0,64 *(0.025)* |
| **3** | – | 0,20 *(0.008)* | – | 0,28 *(0.011)* | – | 0,42 *(0.017)* | 0,23 *(0.009)* | – | 0,31 *(0.012)* | – | 0,46 *(0.018)* | 0,35 *(0.014)* | 0,37 *(0.015)* | 0,38 *(0.015)* | 0,57 *(0.022)* |
| **4** | – | – | – | – | – | 0,32 *(0.013)* | – | – | – | – | 0,35 *(0.014)* | – | 0,30 *(0.012)* | – | 0,45 *(0.018)* |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## Internal multi-tooth inserts, metric (*Inch*)

| | ISO Metric | | | | | | UN | | | | | Whitworth | NPT | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | **3M** | **2M** | **3M** | **2M** | **3M** | **2M** | **2M** | **3M** | **2M** | **3M** | **2M** | **2M** | **2M** | **3M** | **2M** |
| **$P_h$ mm** | 1,0 | 1,5 | 1,5 | 2,0 | 2,0 | 3,0 | – | – | – | – | – | – | – | – | – |
| **TPI** | – | – | – | – | – | – | 16 | 16 | 12 | 12 | 8 | 11 | 11,5 | 11,5 | 8 |
| **$a_p$ mm (*inch*)** | 0,60 *(0.024)* | 0,85 *(0.033)* | 0,85 *(0.033)* | 1,17 *(0.046)* | 1,17 *(0.046)* | 1,78 *(0.070)* | 0,93 *(0.037)* | 0,93 *(0.037)* | 1,25 *(0.049)* | 1,25 *(0.049)* | 1,88 *(0.074)* | 1,58 *(0.062)* | 1,76 *(0.069)* | 1,76 *(0.069)* | 2,54 *(0.100)* |
| **Pass 1 mm (*inch*)** | 0,33 *(0.013)* | 0,38 *(0.015)* | 0,51 *(0.020)* | 0,51 *(0.020)* | 0,70 *(0.028)* | 0,55 *(0.022)* | 0,42 *(0.017)* | 0,56 *(0.022)* | 0,56 *(0.022)* | 0,75 *(0.030)* | 0,58 *(0.023)* | 0,73 *(0.029)* | 0,59 *(0.023)* | 0,81 *(0.032)* | 0,88 *(0.035)* |
| **2** | 0,27 *(0.011)* | 0,27 *(0.011)* | 0,34 *(0.013)* | 0,38 *(0.015)* | 0,47 *(0.019)* | 0,49 *(0.019)* | 0,30 *(0.017)* | 0,37 *(0.015)* | 0,40 *(0.016)* | 0,50 *(0.020)* | 0,51 *(0.020)* | 0,50 *(0.020)* | 0,50 *(0.020)* | 0,57 *(0.022)* | 0,64 *(0.025)* |
| **3** | – | 0,20 *(0.008)* | – | 0,28 *(0.011)* | – | 0,42 *(0.017)* | 0,21 *(0.008)* | – | 0,29 *(0.011)* | – | 0,44 *(0.017)* | 0,35 *(0.014)* | 0,37 *(0.015)* | 0,38 *(0.015)* | 0,57 *(0.022)* |
| **4** | – | – | – | – | – | 0,32 *(0.013)* | – | – | – | – | 0,35 *(0.014)* | – | 0,30 *(0.012)* | – | 0,45 *(0.018)* |

## External/Internal NPT threads, metric (*Inch*)

| **TPI** | **8** | **11,5** | **14** | **18** | **27** |
|---|---|---|---|---|---|
| **$a_p$** | 2,54 *(0.100)* | 1,76 *(0.069)* | 1,45 *(0.057)* | 1,12 *(0.044)* | 0,75 *(0.030)* |
| **1** | 0,28 *(0.011)* | 0,25 *(0.010)* | 0,24 *(0.009)* | 0,22 *(0.009)* | 0,19 *(0.007)* |
| **2** | 0,25 *(0.010)* | 0,22 *(0.009* | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,15 *(0.006)* |
| **3** | 0,22 *(0.009)* | 0,18 *(0.007)* | 0,17 *(0.007)* | 0,15 *(0.006)* | 0,13 *(0.005)* |
| **4** | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,15 *(0.006)* | 0,14 *(0.006)* | 0,11 *(0.004)* |
| **5** | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,09 *(0.004)* |
| **6** | 0,18 *(0.007)* | 0,14 *(0.006)* | 0,13 *(0.005)* | 0,12 *(0.005)* | 0,08 *(0.003)* |
| **7** | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,12 *(0.005)* | 0,10 *(0.004)* | – |
| **8** | 0,17 *(0.007)* | 0,12 *(0.005)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – |
| **9** | 0,16 *(0.006)* | 0,12 *(0.005)* | 0,10 *(0.004)* | – | – |
| **10** | 0,16 *(0.006)* | 0,10 *(0.004)* | 0,08 *(0.003)* | – | – |
| **11** | 0,14 *(0.006)* | 0,09 *(0.004)* | – | – | – |
| **12** | 0,13 *(0.005)* | 0,08 *(0.003)* | – | – | – |
| **13** | 0,12 *(0.005)* | – | – | – | – |
| **14** | 0,11 *(0.004)* | – | – | – | – |
| **15** | 0,08 *(0.003)* | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

### External Round DIN 405, metric (*Inch*)

| TPI | 4 | 6 | 8 | 10 |
|---|---|---|---|---|
| $a_p$ | 3,43 *(0.135)* | 2,23 *(0.088)* | 1,73 *(0.068)* | 1,40 *(0.055)* |
| 1 | 0,44 *(0.017)* | 0,33 *(0.013)* | 0,29 *(0.011)* | 0,26 *(0.010)* |
| 2 | 0,40 *(0.016)* | 0,29 *(0.011)* | 0,26 *(0.010)* | 0,25 *(0.010)* |
| 3 | 0,34 *(0.013)* | 0,25 *(0.010)* | 0,21 *(0.008)* | 0,23 *(0.009)* |
| 4 | 0,32 *(0.013)* | 0,23 *(0.009)* | 0,19 *(0.007)* | 0,20 *(0.008)* |
| 5 | 0,28 *(0.011)* | 0,20 *(0.008)* | 0,18 *(0.007)* | 0,16 *(0.006)* |
| 6 | 0,26 *(0.010)* | 0,18 *(0.007)* | 0,16 *(0.006)* | 0,12 *(0.005)* |
| 7 | 0,24 *(0.009)* | 0,16 *(0.006)* | 0,14 *(0.006)* | 0,10 *(0.004)* |
| 8 | 0,22 *(0.009)* | 0,15 *(0.006)* | 0,12 *(0.005)* | 0,08 *(0.003)* |
| 9 | 0,20 *(0.008)* | 0,14 *(0.006)* | 0,10 *(0.004)* | – |
| 10 | 0,19 *(0.007)* | 0,12 *(0.005)* | 0,08 *(0.003)* | – |
| 11 | 0,17 *(0.007)* | 0,10 *(0.004)* | – | – |
| 12 | 0,15 *(0.006)* | 0,08 *(0.003)* | – | – |
| 13 | 0,12 *(0.005)* | – | – | – |
| 14 | 0,10 *(0.004)* | – | – | – |

### Internal Round DIN 405, metric (*Inch*)

| TPI | 4 | 6 | 8 | 10 |
|---|---|---|---|---|
| $a_p$ | 3,59 *(0.141)* | 2,44 *(0.096)* | 1,66 *(0.065)* | 1,49 *(0.059)* |
| 1 | 0,46 *(0.018)* | 0,38 *(0.015)* | 0,26 *(0.010)* | 027 *(0.011)* |
| 2 | 0,43 *(0.017)* | 0,34 *(0.013)* | 0,22 *(0.009)* | 0,26 *(0.010)* |
| 3 | 0,40 *(0.016)* | 0,30 *(0.012)* | 0,21 *(0.009)* | 0,25 *(0.010)* |
| 4 | 0,35 *(0.014)* | 0,25 *(0.010)* | 0,19 *(0.007)* | 0,22 *(0.009)* |
| 5 | 0,30 *(0.012)* | 0,21 *(0.008)* | 0,18 *(0.007)* | 0,18 *(0.007)* |
| 6 | 0,26 *(0.010)* | 0,19 *(0.007)* | 0,16 *(0.006)* | 0,13 *(0.005)* |
| 7 | 0,24 *(0.009)* | 0,17 *(0.007)* | 0,14 *(0.006)* | 0,10 *(0.004)* |
| 8 | 0,22 *(0.009)* | 0,16 *(0.006)* | 0,12 *(0.005)* | 0,08 *(0.003)* |
| 9 | 0,20 *(0.008)* | 0,14 *(0.006)* | 0,10 *(0.004)* | – |
| 10 | 0,19 *(0.007)* | 0,12 *(0.005)* | 0,08 *(0.003)* | – |
| 11 | 0,17 *(0.007)* | 0,10 *(0.004)* | – | – |
| 12 | 0,15 *(0.006)* | 0,08 *(0.003)* | – | – |
| 13 | 0,12 *(0.005)* | – | – | – |
| 14 | 0,10 *(0.004)* | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## External TR thread, metric

| $P_h$ | 14.0 | 12.0 | 10.0 | 9.0 | 8.0 | 7.0 | 6.0 | 5.0 | 4.0 | 3.0 | 2.0 | 1.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 8,2 | 6,72 | 5,7 | 5,16 | 4,68 | 4,17 | 3,66 | 2,89 | 2,38 | 1,83 | 1,33 | 0,97 |
| 1 | 0,40 | 0,38 | 0,38 | 0,38 | 0,37 | 0,37 | 0,37 | 0,34 | 0,31 | 0,27 | 0,25 | 0,23 |
| 2 | 0,37 | 0,36 | 0,36 | 0,35 | 0,35 | 0,34 | 0,35 | 0,33 | 0,28 | 0,25 | 0,24 | 0,22 |
| 3 | 0,36 | 0,34 | 0,34 | 0,34 | 0,34 | 0,33 | 0,32 | 0,27 | 0,24 | 0,21 | 0,20 | 0,18 |
| 4 | 0,36 | 0,34 | 0,34 | 0,33 | 0,33 | 0,31 | 0,29 | 0,25 | 0,20 | 0,17 | 0,17 | 0,14 |
| 5 | 0,35 | 0,32 | 0,32 | 0,31 | 0,31 | 0,29 | 0,27 | 0,23 | 0,19 | 0,15 | 0,14 | 0,12 |
| 6 | 0,35 | 0,32 | 0,32 | 0,30 | 0,29 | 0,26 | 0,25 | 0,21 | 0,18 | 0,13 | 0,13 | 0,08 |
| 7 | 0,34 | 0,30 | 0,31 | 0,29 | 0,28 | 0,26 | 0,23 | 0,20 | 0,16 | 0,13 | 0,11 | – |
| 8 | 0,34 | 0,30 | 0,29 | 0,28 | 0,27 | 0,26 | 0,22 | 0,20 | 0,15 | 0,12 | 0,09 | – |
| 9 | 0,34 | 0,30 | 0,28 | 0,26 | 0,25 | 0,24 | 0,22 | 0,18 | 0,15 | 0,12 | – | – |
| 10 | 0,33 | 0,29 | 0,27 | 0,25 | 0,24 | 0,23 | 0,20 | 0,16 | 0,15 | 0,10 | – | – |
| 11 | 0,33 | 0,29 | 0,25 | 0,24 | 0,23 | 0,22 | 0,18 | 0,15 | 0,14 | 0,10 | – | – |
| 12 | 0,32 | 0,29 | 0,24 | 0,23 | 0,21 | 0,22 | 0,17 | 0,14 | 0,13 | 0,08 | – | – |
| 13 | 0,32 | 0,28 | 0,23 | 0,22 | 0,20 | 0,20 | 0,17 | 0,13 | 0,10 | – | – | – |
| 14 | 0,31 | 0,27 | 0,22 | 0,21 | 0,19 | 0,19 | 0,16 | 0,10 | – | – | – | – |
| 15 | 0,31 | 0,25 | 0,22 | 0,21 | 0,19 | 0,17 | 0,14 | – | – | – | – | – |
| 16 | 0,30 | 0,25 | 0,20 | 0,19 | 0,18 | 0,16 | 0,12 | – | – | – | – | – |
| 17 | 0,30 | 0,24 | 0,19 | 0,18 | 0,17 | 0,12 | – | – | – | – | – | – |
| 18 | 0,29 | 0,22 | 0,18 | 0,16 | 0,15 | – | – | – | – | – | – | – |
| 19 | 0,28 | 0,20 | 0,17 | 0,15 | 0,13 | – | – | – | – | – | – | – |
| 20 | 0,27 | 0,20 | 0,16 | 0,15 | – | – | – | – | – | – | – | – |
| 21 | 0,23 | 0,19 | 0,15 | 0,13 | – | – | – | – | – | – | – | – |
| 22 | 0,23 | 0,18 | 0,15 | – | – | – | – | – | – | – | – | – |
| 23 | 0,21 | 0,17 | 0,13 | – | – | – | – | – | – | – | – | – |
| 24 | 0,19 | 0,16 | – | – | – | – | – | – | – | – | – | – |
| 25 | 0,17 | 0,15 | – | – | – | – | – | – | – | – | – | – |
| 26 | 0,16 | 0,13 | – | – | – | – | – | – | – | – | – | – |
| 27 | 0,16 | – | – | – | – | – | – | – | – | – | – | – |
| 28 | 0,15 | – | – | – | – | – | – | – | – | – | – | – |
| 29 | 0,13 | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## Internal TR threads, metric

| $P_h$ | 14.0 | 12.0 | 10.0 | 9.0 | 8.0 | 7.0 | 6.0 | 5.0 | 4.0 | 3.0 | 2.0 | 1.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 8,47 | 6,71 | 5,7 | 5,19 | 4,68 | 4,17 | 3,65 | 2,89 | 2,38 | 1,85 | 1,34 | 0,98 |
| 1 | 0,40 | 0,38 | 0,38 | 0,38 | 0,37 | 0,37 | 0,37 | 0,34 | 0,31 | 0,27 | 0,25 | 0,23 |
| 2 | 0,37 | 0,36 | 0,36 | 0,35 | 0,35 | 0,34 | 0,34 | 0,33 | 0,28 | 0,25 | 0,24 | 0,22 |
| 3 | 0,36 | 0,34 | 0,34 | 0,34 | 0,34 | 0,33 | 0,32 | 0,27 | 0,24 | 0,22 | 0,21 | 0,19 |
| 4 | 0,36 | 0,34 | 0,34 | 0,33 | 0,33 | 0,31 | 0,29 | 0,25 | 0,20 | 0,17 | 0,17 | 0,14 |
| 5 | 0,35 | 0,32 | 0,32 | 0,31 | 0,31 | 0,29 | 0,27 | 0,23 | 0,19 | 0,15 | 0,14 | 0,12 |
| 6 | 0,35 | 0,32 | 0,32 | 0,31 | 0,29 | 0,26 | 0,25 | 0,21 | 0,18 | 0,14 | 0,13 | 0,08 |
| 7 | 0,34 | 0,30 | 0,31 | 0,29 | 0,28 | 0,26 | 0,23 | 0,20 | 0,16 | 0,13 | 0,11 | – |
| 8 | 0,34 | 0,30 | 0,29 | 0,29 | 0,27 | 0,26 | 0,22 | 0,20 | 0,15 | 0,12 | 0,09 | – |
| 9 | 0,34 | 0,30 | 0,28 | 0,26 | 0,25 | 0,24 | 0,22 | 0,18 | 0,15 | 0,12 | – | – |
| 10 | 0,33 | 0,29 | 0,27 | 0,25 | 0,24 | 0,23 | 0,20 | 0,16 | 0,15 | 0,10 | – | – |
| 11 | 0,33 | 0,29 | 0,25 | 0,24 | 0,23 | 0,22 | 0,18 | 0,15 | 0,14 | 0,10 | – | – |
| 12 | 0,32 | 0,28 | 0,24 | 0,23 | 0,21 | 0,22 | 0,17 | 0,14 | 0,13 | 0,08 | – | – |
| 13 | 0,32 | 0,28 | 0,23 | 0,22 | 0,20 | 0,20 | 0,17 | 0,13 | 0,10 | – | – | – |
| 14 | 0,31 | 0,27 | 0,22 | 0,21 | 0,19 | 0,19 | 0,16 | 0,10 | – | – | – | – |
| 15 | 0,31 | 0,25 | 0,22 | 0,21 | 0,19 | 0,17 | 0,14 | – | – | – | – | – |
| 16 | 0,30 | 0,25 | 0,20 | 0,19 | 0,18 | 0,16 | 0,12 | – | – | – | – | – |
| 17 | 0,30 | 0,24 | 0,19 | 0,18 | 0,17 | 0,12 | – | – | – | – | – | – |
| 18 | 0,29 | 0,22 | 0,18 | 0,16 | 0,15 | – | – | – | – | – | – | – |
| 19 | 0,28 | 0,20 | 0,17 | 0,15 | 0,13 | – | – | – | – | – | – | – |
| 20 | 0,27 | 0,20 | 0,16 | 0,15 | – | – | – | – | – | – | – | – |
| 21 | 0,23 | 0,19 | 0,15 | 0,13 | – | – | – | – | – | – | – | – |
| 22 | 0,23 | 0,18 | 0,15 | – | – | – | – | – | – | – | – | – |
| 23 | 0,21 | 0,17 | 0,13 | – | – | – | – | – | – | – | – | – |
| 24 | 0,19 | 0,16 | – | – | – | – | – | – | – | – | – | – |
| 25 | 0,17 | 0,15 | – | – | – | – | – | – | – | – | – | – |
| 26 | 0,16 | 0,13 | – | – | – | – | – | – | – | – | – | – |
| 27 | 0,16 | – | – | – | – | – | – | – | – | – | – | – |
| 28 | 0,15 | – | – | – | – | – | – | – | – | – | – | – |
| 29 | 0,13 | – | – | – | – | – | – | – | – | – | – | – |
| 30 | 0,13 | – | – | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

**External ACME,** *Inch*

| TPI | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 0.265 | 0.18 | 0.138 | 0.112 | 0.095 | 0.074 | 0.063 | 0.050 | 0.041 | 0.039 |
| 1 | 0.028 | 0.019 | 0.013 | 0.012 | 0.011 | 0.010 | 0.010 | 0.009 | 0.008 | 0.009 |
| 2 | 0.026 | 0.018 | 0.012 | 0.011 | 0.011 | 0.010 | 0.009 | 0.009 | 0.008 | 0.009 |
| 3 | 0.023 | 0.016 | 0.011 | 0.010 | 0.010 | 0.009 | 0.009 | 0.007 | 0.007 | 0.007 |
| 4 | 0.022 | 0.015 | 0.011 | 0.01 | 0.009 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 |
| 5 | 0.019 | 0.013 | 0.010 | 0.009 | 0.008 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 |
| 6 | 0.017 | 0.011 | 0.010 | 0.008 | 0.007 | 0.005 | 0.005 | 0.005 | 0.004 | 0.003 |
| 7 | 0.015 | 0.011 | 0.009 | 0.007 | 0.006 | 0.005 | 0.005 | 0.004 | 0.003 | – |
| 8 | 0.013 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.004 | 0.004 | – | – |
| 9 | 0.013 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.004 | – | – | – |
| 10 | 0.011 | 0.009 | 0.007 | 0.006 | 0.006 | 0.004 | 0.004 | – | – | – |
| 11 | 0.011 | 0.008 | 0.007 | 0.006 | 0.006 | 0.004 | – | – | – | – |
| 12 | 0.01 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 | – | – | – | – |
| 13 | 0.009 | 0.007 | 0.006 | 0.005 | 0.004 | – | – | – | – | – |
| 14 | 0.009 | 0.007 | 0.006 | 0.004 | – | – | – | – | – | – |
| 15 | 0.008 | 0.006 | 0.006 | 0.004 | – | – | – | – | – | – |
| 16 | 0.007 | 0.005 | 0.004 | – | – | – | – | – | – | – |
| 17 | 0.007 | 0.005 | 0.004 | – | – | – | – | – | – | – |
| 18 | 0.006 | 0.005 | – | – | – | – | – | – | – | – |
| 19 | 0.006 | – | – | – | – | – | – | – | – | – |
| 20 | 0.005 | – | – | – | – | – | – | – | – | – |

**Internal ACME,** *Inch*

| TPI | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|
| $a_p$ | 0.265 | 0.182 | 0.142 | 0.114 | 0.098 | 0.078 | 0.065 | 0.049 | 0.042 | 0.040 |
| 1 | 0.028 | 0.020 | 0.013 | 0.012 | 0.012 | 0.011 | 0.010 | 0.009 | 0.009 | 0.009 |
| 2 | 0.026 | 0.018 | 0.012 | 0.012 | 0.011 | 0.011 | 0.010 | 0.009 | 0.008 | 0.009 |
| 3 | 0.023 | 0.016 | 0.012 | 0.011 | 0.011 | 0.009 | 0.009 | 0.007 | 0.007 | 0.008 |
| 4 | 0.022 | 0.015 | 0.011 | 0.010 | 0.009 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 |
| 5 | 0.019 | 0.013 | 0.011 | 0.009 | 0.008 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 |
| 6 | 0.017 | 0.011 | 0.010 | 0.008 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 | 0.003 |
| 7 | 0.015 | 0.011 | 0.009 | 0.007 | 0.007 | 0.005 | 0.005 | 0.004 | 0.003 | – |
| 8 | 0.013 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.004 | 0.004 | – | – |
| 9 | 0.013 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.004 | – | – | – |
| 10 | 0.011 | 0.009 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 | – | – | – |
| 11 | 0.011 | 0.008 | 0.007 | 0.006 | 0.006 | 0.004 | – | – | – | – |
| 12 | 0.010 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 | – | – | – | – |
| 13 | 0.009 | 0.007 | 0.006 | 0.005 | 0.004 | – | – | – | – | – |
| 14 | 0.009 | 0.007 | 0.006 | 0.004 | – | – | – | – | – | – |
| 15 | 0.008 | 0.006 | 0.006 | 0.004 | – | – | – | – | – | – |
| 16 | 0.007 | 0.005 | 0.005 | – | – | – | – | – | – | – |
| 17 | 0.007 | 0.005 | 0.005 | – | – | – | – | – | – | – |
| 18 | 0.006 | 0.005 | – | – | – | – | – | – | – | – |
| 19 | 0.006 | – | – | – | – | – | – | – | – | – |
| 20 | 0.005 | – | – | – | – | – | – | – | – | – |

Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

## Multi-tooth insert TWIN THREADER, TT

### External 60° threads, metric (*Inch*)

| $P_h$ mm | 2.0 | 1.5 | 1.0 |
|---|---|---|---|
| $a_p$ mm (*inch*) | 1,25 *(0.049)* | 0,93 *(0.037)* | 0,65 *(0.026)* |
| Pass 1 mm (*inch*) | 0,25 *(0.010)* | 0,22 *(0.009)* | 0,22 *(0.009)* |
| 2 | 0,36 *(0.014)* | 0,31 *(0.012)* | 0,25 *(0.010)* |
| 3 | 0,25 *(0.010)* | 0,22 *(0.009)* | 0,18 *(0.007)* |
| 4 | 0,21 *(0.008)* | 0,18 *(0.007)* | – |
| 5 | 0,18 *(0.007)* | – | – |

### Internal 60° threads, metric (*Inch*)

| $P_h$ mm | 2.0 | 1.5 | 1.0 |
|---|---|---|---|
| $a_p$ mm (*inch*) | 1,17 *(0.046)* | 0,85 *(0.033)* | 0,60 *(0.024)* |
| Pass 1 mm (*inch*) | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,19 *(0.007)* |
| 2 | 0,34 *(0.013)* | 0,27 *(0.011)* | 0,23 *(0.009)* |
| 3 | 0,23 *(0.009)* | 0,20 *(0.008)* | 0,18 *(0.007)* |
| 4 | 0,19 *(0.007)* | 0,18 *(0.007)* | – |
| 5 | 0,18 *(0.007)* | – | – |

### External and internal Whitworth and BSPT threads, metric (*Inch*)

| TPI | 11 | 14 |
|---|---|---|
| $a_p$ mm (*inch*) | 1,58 *(0.062)* | 1,20 *(0.047)* |
| Pass 1 mm (*inch*) | 0,26 *(0.010)* | 0,22 *(0.009)* |
| 2 | 0,38 *(0.015)* | 0,35 *(0.014)* |
| 3 | 0,27 *(0.011)* | 0,24 *(0.009)* |
| 4 | 0,25 *(0.010)* | 0,21 *(0.008)* |
| 5 | 0,22 *(0.009)* | 0,18 *(0.007)* |
| 6 | 0,20 *(0.008)* | – |

### External UN threads, metric (*Inch*)

| TPI | 12 | 16 |
|---|---|---|
| $a_p$ mm (*inch*) | 1,39 *(0.055)* | 1,05 *(0.041)* |
| Pass 1 mm (*inch*) | 0,28 *(0.011)* | 0,25 *(0.010)* |
| 2 | 0,38 *(0.015)* | 0,36 *(0.014)* |
| 3 | 0,28 *(0.011)* | 0,26 *(0.010)* |
| 4 | 0,25 *(0.010)* | 0,18 *(0.007)* |
| 5 | 0,20 *(0.008)* | – |

### Internal UN threads, metric (*Inch*)

| $P_h$ mm | 2.0 | 1.5 | 1.0 |
|---|---|---|---|
| $a_p$ mm (*inch*) | 1,25 *(0.049)* | 0,93 *(0.037)* | 0,65 *(0.026)* |
| Pass 1 mm (*inch*) | 0,25 *(0.010)* | 0,22 *(0.009)* | 0,22 *(0.009)* |
| 2 | 0,36 *(0.014)* | 0,31 *(0.012)* | 0,25 *(0.010)* |
| 3 | 0,25 *(0.010)* | 0,22 *(0.009)* | 0,18 *(0.007)* |
| 4 | 0,21 *(0.008)* | 0,18 *(0.007)* | – |
| 5 | 0,18 *(0.007)* | – | – |

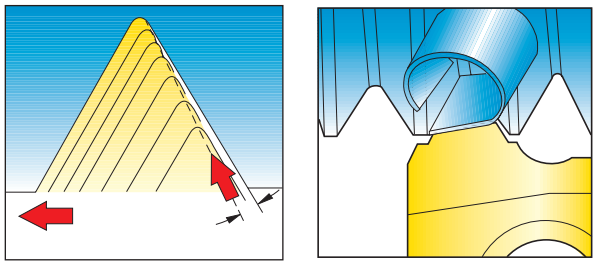
Ph = Lead
$a_p$ = Total infeed depth
TPI = Threads per inch
Recommendations are for steel with a hardness < 300 HB

# Infeed method

The choice of infeed method is most important for long chipping materials to ensure good chip control.

### Modified flank infeed

**For CNC machines and conventional machines**

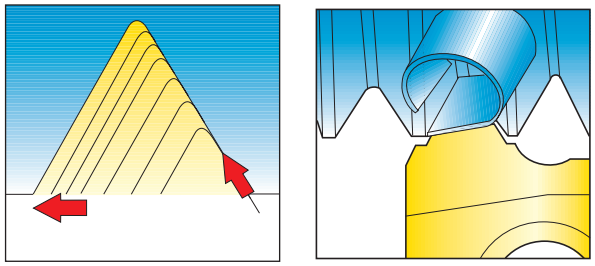


**First choice for CNC machines**
The infeed angle should be 2,5–5% less than the flank angle

- Good chip control (important for internal threading)
- Good surface finish on thread
- Long tool life

### Flank infeed

**For CNC machines and conventional machines**

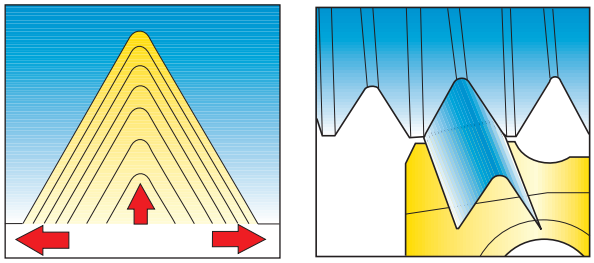


**Choose flank infeed when modified flank infeed cannot be used**

- Good chip control
- Can result in bad surface on thread
- Not suitable for work hardening materials

### Radial infeed

**For conventional machines and multi-tooth inserts**

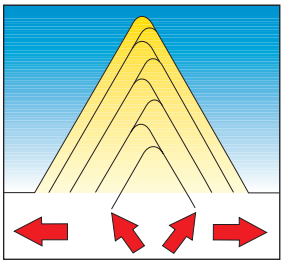


**Multitooth inserts demand radial infeed**
**First choice for work hardening materials**

- Difficult to control the chip
- High cutting forces

### Alternate flank infeed

**For CNC machines**



**First choice for large** coarse threads

- Long tool life
- Chipbreaking problems can arise

## Nomenclature and formula

**RPM**

$$n = \frac{v_c \cdot 1000}{\pi \cdot D_c} \quad \text{(rev/min)}$$

**Cutting speed**

$$v_c = \frac{n \cdot \pi \cdot D_c}{1000} \quad \text{(m/min)}$$

**Slide velocity/feed rate**

$$v_f = \frac{n \cdot P_h}{1000} \quad \text{(mm/min)}$$

**Lead**

$P_h = P \cdot$ numbers of starts (mm)

**Helix angle**

$$\lambda = \arctan \frac{P_h}{D_2 \cdot \pi} \quad (°)$$

**Conversion of P to TPI**

$$TPI = \frac{25{,}4}{P}$$

$D_c$ = Workpiece diameter (mm)
$D_2$ = Pitch diameter (mean diameter) (mm)
n = RPM (rev/min)
P = Pitch (mm)
$P_h$ = Lead (mm)
$v_f$ = Slide velocity (feed rate) (m/min)
TPI = Number of threads per inch
$v_c$ = Cutting speed (mm/min)
$\lambda$ = Helix angle (°)

**RPM**

$$n = \frac{v_c \cdot 3.82}{D} \quad \text{(rev/min)}$$

**Cutting speed**

$$v_c = \frac{0.262 \cdot D \cdot n}{1000} \quad \text{(sf/min)}$$

**Slide velocity/feed rate**

$$Sv = \frac{n \cdot P_h}{1000} \quad \text{(in/min)}$$

**Lead**

$P_h = P \cdot$ numbers of starts (inch)

**Helix angle**

$$\lambda = \arctan \frac{P_h}{D_2 \cdot \pi} \quad (°)$$

**Conversion Pitch – TPI**

$$P = \frac{1}{TPI}$$

D = Workpiece diameter (inch)
$D_2$ = Pitch diameter (effective diameter) (inch)
n = RPM (r/min)
P = Pitch (inch)
$P_h$ = Lead (inch)
Sv = Slide velocity (in/min)
TPI = Thread per inch
$v_c$ = Cutting speed (sf/min)
$\lambda$ = Helix angle (°)

# Toolholder modification to thread small ID

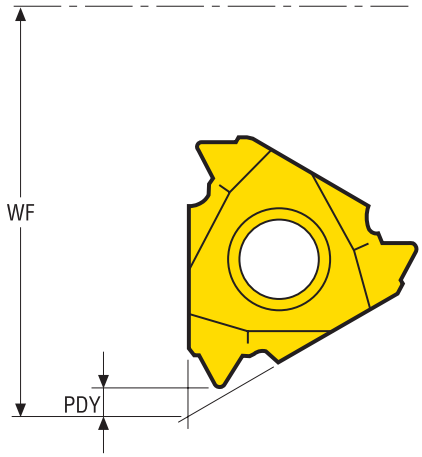
It is often necessary to cut internal threads which are too small to be made with a standard toolholder.

Several standard internal toolholders can be modified by a simple reworking so that threads can be cut in approximately 30% smaller bores.
This modification work can be made on an lathe with a four-jaw chuck.
In the dimension table DCINN at pages 'Toolholders Internal' you will find the dimensions required for the alteration.

On demand, these internal toolholders can also be supplied as special design.

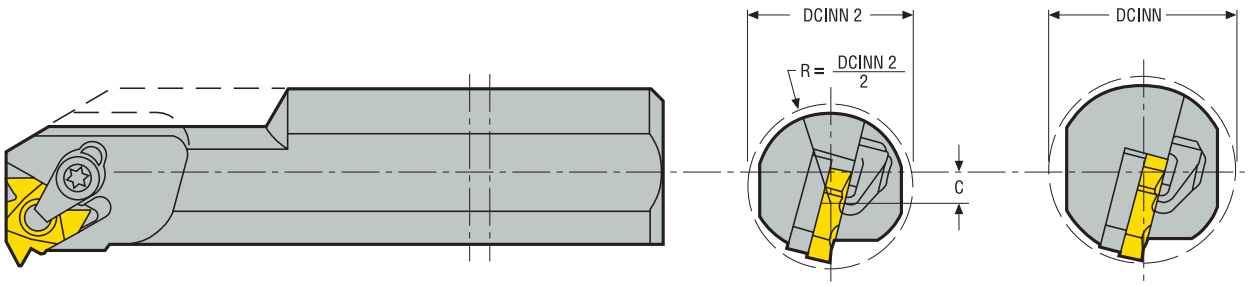
For some holders it is possible to work inside smaller bores than indicated by the DCINN2 dimension, here it is necessary "to back off" the bottom corner of the insert (possibly also the insert shim).

## Reference dimensions on insert




WF and PDY dimensions can be found on the pages for internal toolholders and threading inserts.

## Reference dimensions on bar



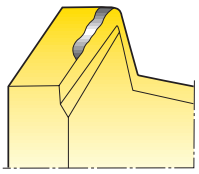

C = WF – PDY + R – DCINN2

C = Centre-point displacement when modifying the tool.
DCINN = Minimum bore diameter of standard tool.
DCINN2 = Minimum bore diameter with a modified tool.

## Troubleshooting

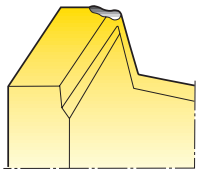
### Rapid flank wear

- Reduce the cutting speed
- Increase the infeed per pass
- Use modified flank infeed
- Check that the correct insert shim has been selected
- Select a more wear-resistant grade



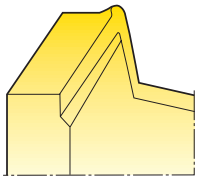
### Insert fracture

- Increase the number of passes
- Check the workpiece mounting
- Check the centre height of the cutting edge
- Check for built-up edge
- Select a tougher grade



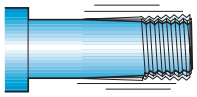
### Plastic deformation

- Select a grade with better resistance to plastic deformation
- Reduce the cutting speed
- Increase the number of passes
- Increase the coolant supply
- Check that the workpiece diameter is correct prior to cutting the thread



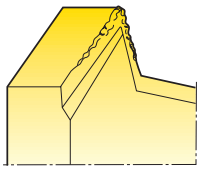
### Vibrations

- Change the cutting speed
- Reduce the overhang and use the most stable toolholder
- Check the centre height of the cutting edge
- Check that the workpiece diameter is correct



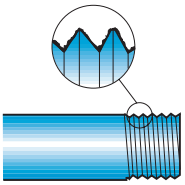
### Build-up edge

- Increase the cutting speed
- Do not use coolant



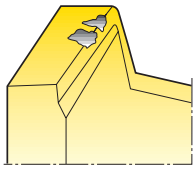
### Poor finish

- Increase the cutting speed
- Check that the correct insert shim has been selected
- Use modified flank infeed or radial infeed



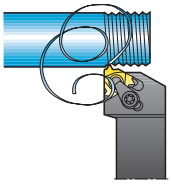
### Edge chipping

- Check the workpiece mounting
- Check the cutting speed
- Use modified flank infeed
- Select a tougher grade



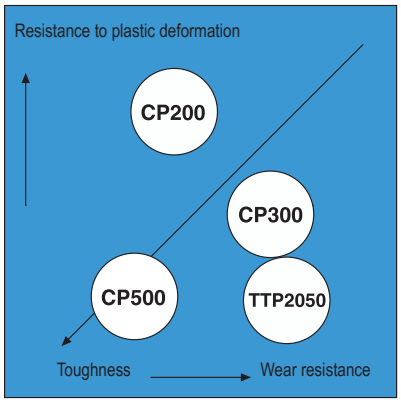
### Poor chip control

- Reduce the number of passes
- Increase the cutting speed
- Use modified flank infeed
- Increase the coolant supply

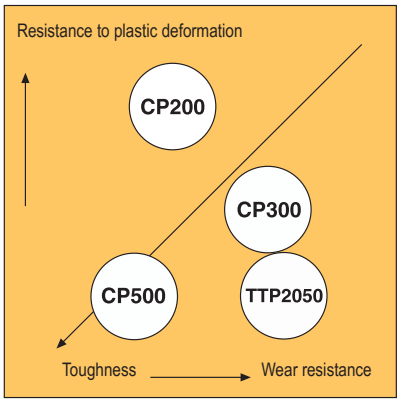


## Optimisation

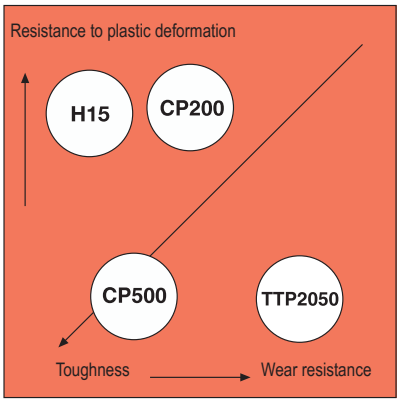
ISO-P (steel)




ISO-M (stainless steel)




ISO-K (cast iron)



# Torque values for clamping screws

**Maximum Torque value for each screw is shown below**

| Screw designation | Torque Nm | Torque key |
|---|---|---|
| 110.26-655 | 10,0 | H00T-60100 |
| 117.26-655 | 5,0 | H00T-3050 |
| 117.26-657 | 3,0 | H00-2530 |
| 170.26-655 | 6,0 | H00T-4060 |
| C02205-T07P | 0,9 | T00-07P09 |
| C02505-T07P | 0,9 | T00-07P09 |
| C02506-T07P | 0,9 | T00-07P09 |
| C03007-T09P | 2,0 | T00-09P20 |
| C03508-T15P | 3,0 | T00-15P30 |
| C03509-T15P | 3,0 | T00-15P30 |
| C03510-T15P | 3,0 | T00-15P30 |
| C03511-T09P | 2,0 | T00-09P20 |
| C03512-T15P | 3,0 | T00-15P30 |
| C04008-T15P | 3,5 | T00-15P35 |
| C04010-T15P | 3,5 | T00-15P35 |
| C04011-T15P | 3,5 | T00-15P35 |
| C04014-T15P | 3,5 | T00-15P35 |
| C04512-T15P | 5,0 | T00-15P50 |
| C04518-T15P | 5,0 | T00-15P50 |
| C05010-T20P | 5,0 | T00-20P50 |
| C05012-T15P | 5,0 | T00-15P50 |
| C05013-T20P | 5,0 | T00-20P50 |
| C05018-T20P | 5,0 | T00-20P50 |
| C11804-T06P | 0,5 | T00-06P05 |
| C46017-T20P | 6,0 | T00T-20P60 |
| C82204-T06P | 0,5 | T00-06P05 |
| CC05 | 0,9 | H00-1509 |
| CC08P-V13 | 2,0 | T00-09P20 |
| CC09P-D11 | 2,0 | T00-09P20 |
| CC12P-S12 | 3,5 | T00-15P35 |
| CC14 | 6,0 | H00T-4060 |
| CC16 | 10,0 | – |
| CC17P | 10,0 | – |
| CC17P-06 | 10,0 | – |
| CC17P-09 | 10,0 | – |
| CC20P | 10,0 | – |
| CC20P-V13 | 10,0 | – |
| CD09-S09 | 2,0 | T00-09P20 |
| CD12-S12 | 3,5 | T00-15P35 |
| CD16-S16 | 5,0 | T00-20P50 |
| CD19-S19 | 5,0 | T00-20P50 |
| CD19-V16 | 5,0 | T00-20P50 |
| CSC8015-T20P | 5,0 | T00-20P50 |
| CSC1015-T20P | 5,0 | T00-20P50 |
| CSP16-T15P | 2,0 | T00-15P20 |
| CSP22-T15P | 3,0 | T00-15P30 |
| CSP27-T25P | 6,0 | T00T-25P60 |
| | | |
| | | |
| | | |
| | | |

| Screw designation | Torque Nm | Torque key |
|---|---|---|
| L84017-T09P | 2,0 | T00-09P20 |
| L85011-T15P | 5,0 | T00-15P50 |
| L85012-T15P | 5,0 | T00-15P50 |
| L85017-T09P | 2,0 | T00-09P20 |
| L85020-T15P | 3,5 | T00-15P35 |
| L85021-T15P | 3,5 | T00-15P35 |
| L86015-T20P | 6,0 | T00T-20P60 |
| L86025-T20P | 6,0 | T00T-20P60 |
| LD1035-T25P | 6,0 | T00T-25P60 |
| LD5020-T09P | 2,0 | T00-09P20 |
| LD6020-T15P | 3,0 | T00-15P30 |
| LD6021-T09P | 2,0 | T00-09P20 |
| LD6024-T20P | 3,0 | T00-15P30 |
| LD6025-T15P | 3,0 | T00-15P30 |
| LD6026-T09P | 2,0 | T00-09P20 |
| LD8025-T25P | 6,0 | T00T-25P60 |
| LD8030-T25P | 6,0 | T00T-25P60 |
| LS0512 | 2,5 | – |
| LS0613 | 3,0 | H00-2530 |
| LS0616 | 3,0 | H00-2530 |
| LS0818 | 4,0 | – |
| LS0822 | 4,0 | – |
| MC6S4X14 | 3,5 | – |
| MC6S4X18 | 3,5 | – |
| MC6S5X14 | 5,0 | H00T-4050 |
| MC6S5X18 | 5,0 | H00T-4050 |
| MN0909L-T09P | 2,0 | T00-09P20 |
| MN1215L-T15P | 3,0 | T00-15P30 |
| MN1215R-T15P | 3,0 | T00-15P30 |
| MN1215S-T15P | 3,0 | T00-15P30 |
| MN1215T-T15P | 3,0 | T00-15P30 |
| MN1515-T15P | 3,0 | T00-15P30 |
| MN1515SL-T15P | 3,0 | T00-15P30 |
| MN1520-T20P | 6,0 | T00T-20P60 |
| MN1920-T20P | 6,0 | T00T-20P60 |
| MN1925-T25P | 5,0 | T00T-25P50 |
| MN2525-T25P | 6,0 | T00T-25P60 |
| PL1403-T09P | 2,5 | T00-09P20 |
| TCEI0409 | 3,5 | – |
| TCEI0509 | 6,0 | H00T-4060 |
| TCEI0513 | 6,0 | H00T-4060 |
| TCEI0609 | 8,0 | H00T-5080 |
| TCEI0613 | 8,0 | H00T-5080 |
| TCEI0614 | 8,0 | H00T-5080 |
| TCEI0620 | 8,0 | H00T-5080 |
| TCEI0815 | 10,0 | H00T-60100 |
| TCEI0825 | 10,0 | H00T-60100 |
| TCEI1020 | 15,0 | – |
| WS1620-T20P | 3,5 | T00-20P35 |
| WS1920-T20P | 3,5 | T00-20P35 |
| WS2325-T25P | 5,0 | T00T-25P50 |

For the Seco range of torque keys, please see next page

# Torque keys

The range of torque keys with fixed torque values are available, in combinations key grip/torque value for insert locking, for most of the Seco turning products. By using a torque key you always ensure the correct tightening force when mounting the insert. The torque value is given on page(s) 37 for each screw. Torque keys are calibrated according to ISO 6789.

**Code key:** T00-15P35

T00 = Torque screwdriver type for Torx Plus blade
T00T = Torque T-handle type for Torx Plus blade
H00 = Torque screwdriver for hexagonal blade
H00T = Torque T-handle type for hexagonal blade

15P = Torx Plus size
35 = Torque value 3,5 Nm

| Torque key* | Replaceable blade | Torx Plus size | Torque value |
|---|---|---|---|
|  |  | | |
| **T00-06P05** | T00-06P | T06P | 0,5 Nm |
| **T00-07P05** | T00-07P | T07P | 0,5 Nm |
| **T00-07P09** | T00-07P | T07P | 0,9 Nm |
| **T00-08P12** | T00-08P | T08P | 1,2 Nm |
| **T00-08P20** | T00-08P | T08P | 2,0 Nm |
| **T00-09P09** | T00-09P | T09P | 0,9 Nm |
| **T00-09P12** | T00-09P | T09P | 1,2 Nm |
| **T00-09P20** | T00-09P | T09P | 2,0 Nm |
| **T00-10P20** | T00-10P | T10P | 2,0 Nm |
| **T00-10P30** | T00-10P | T10P | 3,0 Nm |
| **T00-10P35** | T00-10P | T10P | 3,5 Nm |
| **T00-15P20** | T00-15P | T15P | 2,0 Nm |
| **T00-15P30** | T00-15P | T15P | 3,0 Nm |
| **T00-15P35** | T00-15P | T15P | 3,5 Nm |
| **T00-15P40** | T00-15P | T15P | 4,0 Nm |
| **T00-15P50** | T00-15P | T15P | 5,0 Nm |
| **T00-20P35** | T00-20P | T20P | 3,5 Nm |
| **T00-20P50** | T00-20P | T20P | 5,0 Nm |

*Including blade

| Torque key* | Replaceable blade | Torx Plus size | Torque value |
|---|---|---|---|
|  |  | | |
| **T00T-15P50** | T00T-15P | T15P | 5,0 Nm |
| **T00T-20P50** | T00T-20P | T20P | 5,0 Nm |
| **T00T-20P60** | T00T-20P | T20P | 6,0 Nm |
| **T00T-20P80** | T00T-20P | T20P | 8,0 Nm |
| **T00T-25P50** | T00T-25P | T25P | 5,0 Nm |
| **T00T-25P60** | T00T-25P | T25P | 6,0 Nm |
| **T00T-25P80** | T00T-25P | T25P | 8,0 Nm |
| **T00T-30P80** | T00T-30P | T30P | 8,0 Nm |

*Including blade

| Torque key* | Replaceable blade | Hexagonal size | Torque value |
|---|---|---|---|
|  |  | | |
| **H00-1305** | H00-1.3 | 1,3 mm | 0,5 Nm |
| **H00-1505** | H00-1.5 | 1,5 mm | 0,5 Nm |
| **H00-1509** | H00-1.5 | 1,5 mm | 0,9 Nm |
| **H00-2009** | H00-2.0 | 2,0 mm | 0,9 Nm |
| **H00-2016** | H00-2.0 | 2,0 mm | 1,6 Nm |
| **H00-2020** | H00-2.0 | 2,0 mm | 2,0 Nm |
| **H00-2512** | H00-2.5 | 2,5 mm | 1,2 Nm |
| **H00-2530** | H00-2.5 | 2,5 mm | 3,0 Nm |
| **H00-2535** | H00-2.5 | 2,5 mm | 3,5 Nm |
| **H00-3020** | H00-3.0 | 3,0 mm | 2,0 Nm |
| **H00-3030** | H00-3.0 | 3,0 mm | 3,0 Nm |
| **H00-4030** | H00-4.0 | 4,0 mm | 3,0 Nm |

*Including blade

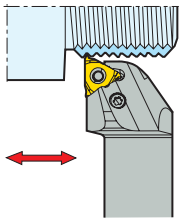
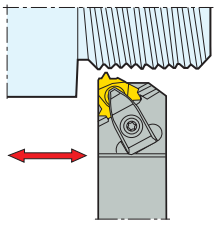
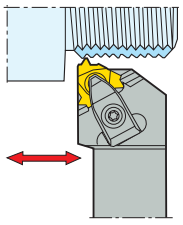
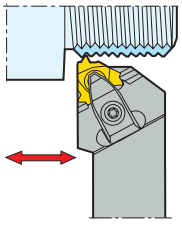
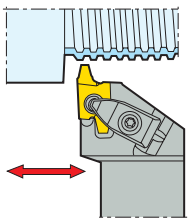
| Torque key* | Replaceable blade | Hexagonal size | Torque value |
|---|---|---|---|
|  |  | | |
| **H00T-3050** | H00T-3.0 | 3 mm | 5,0 Nm |
| **H00T-4050** | H00T-4.0 | 4 mm | 5,0 Nm |
| **H00T-4060** | H00T-4.0 | 4 mm | 6,0 Nm |
| **H00T-5050** | H00T-5.0 | 5 mm | 5,0 Nm |
| **H00T-5080** | H00T-5.0 | 5 mm | 8,0 Nm |
| **H00T-50100** | H00T-5.0 | 5 mm | 10,0 Nm |
| **H00T-60100** | H00T-6.0 | 6 mm | 10,0 Nm |

*Including blade

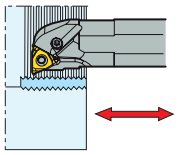
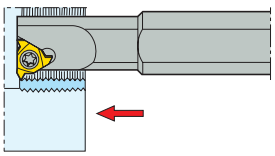
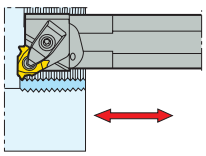
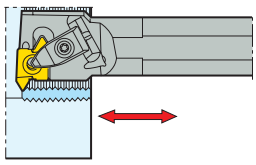
Please note that the blades are not interchangeable between screwdriver type and T-handle type.
Torx Plus® is a registered trade mark belonging to Camcar-Textron (USA)

# Application overview, toolholders

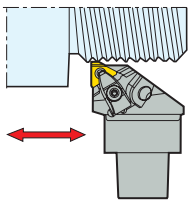
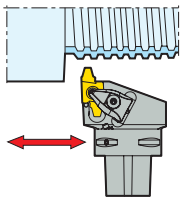
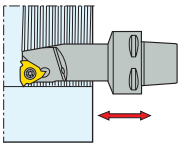
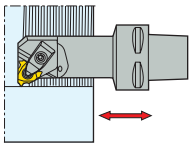
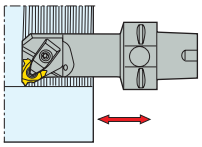
## External toolholders

| PER/L...QHDJETI<br>PER/L...QHDJET | CER/L<br>CER/L...HD | CER/L...Q<br>CER/L...QHD | CER...CQHD | CER...HD<br>CER/L...QHD |
|---|---|---|---|---|
|  |  |  |  |  |
| Page(s) 54-55 | Page(s) 59 | Page(s) 61, 62 | Page(s) 65 | Page(s) 68 |

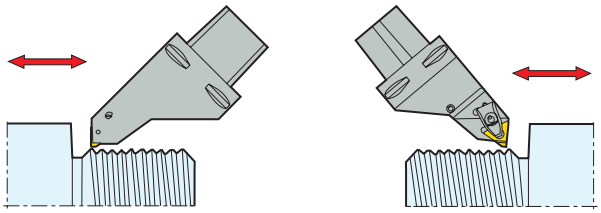
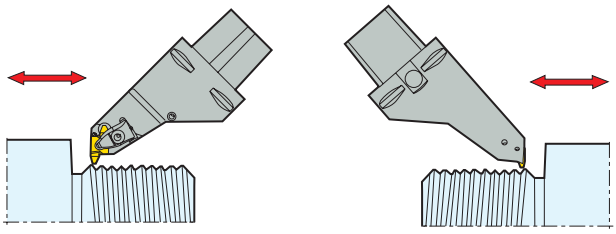
## Internal toolholders

| PNR/L...AHDJET | SNR/L | CNR/L...AHD<br>CNR/L...APIHD | CNR/L...AHD |
|---|---|---|---|
|  |  |  |  |
| Page(s) 56, 57-58 | Page(s) 69 | Page(s) 70, 71 | Page(s) 77 |

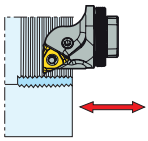
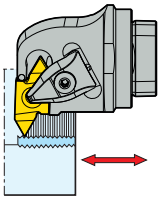
## Seco-Capto™

| CER/L-..HD...CHD Ext. | CER..HD Ext. | SNR Int. | CNR/L-..HD Int. | CNR/L-..CHD Int. |
|---|---|---|---|---|
|  |  |  |  |  |
| Page(s) 78, 79 | Page(s) 82 | Page(s) 83 | Page(s) 84, 85-88 | Page(s) 89-91 |

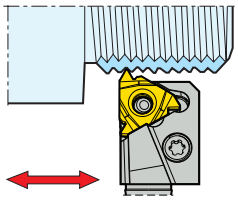
## Seco-Capto™ for MTM

| CER-..HD | CEL..HD |
|---|---|
|  |  |
| Page(s) 92 | Page(s) 93 |

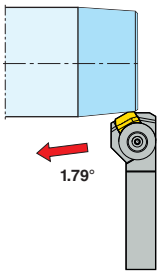
## Steadyline® with GL connection

| GL..-PNR/L...AHDJET | GL50-CNR...26AHD |
|---|---|
|  |  |
| Page(s) 94, 95 | Page(s) 96 |

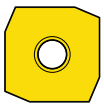
## Quick Change, Jetstream Tooling®, QC-heads, external

| QC..-PER/L-HDJET |
|---|
|  |
| Page(s) 97 |

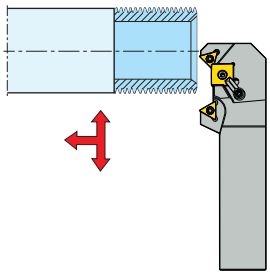
## Toolholders for peeling

| CSXCR... |
|---|
|   |
| Page(s) 98-99 |

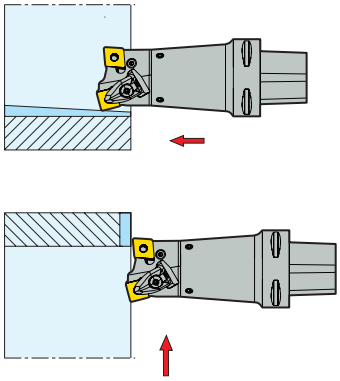
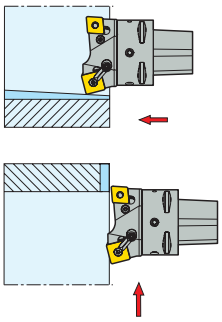
## Inserts for peeling

| SCNN |
|---|
|  |
| Page(s) 122 |

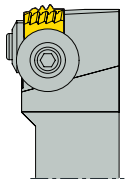
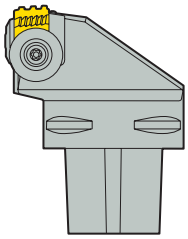
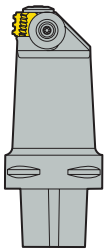
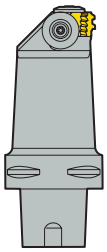
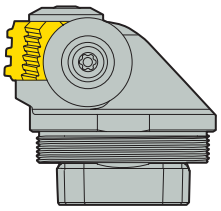
## Toolholders for pipe-facing

| MSGNR... |
|---|
|  |
| Page(s) 100-101 |

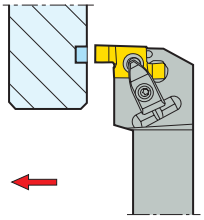
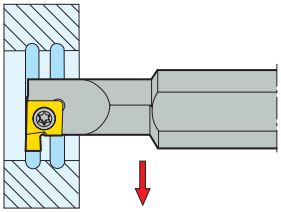
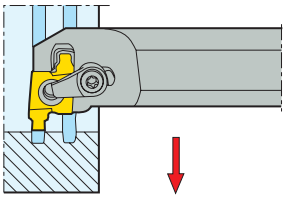
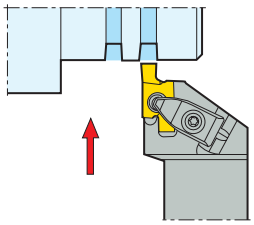
## Toolholders for inserts SNMA, SNMG, SNMM / CNMA, CNMG, CNMM

| C.-DSKNR/L - CLNR/L 75° | C.-MSKNR/L - PCLNR/L 75° |
|---|---|
|  |  |
| Page(s) 102 | Page(s) 103 |

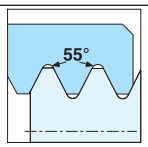
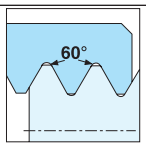
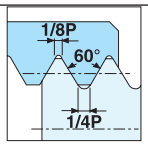
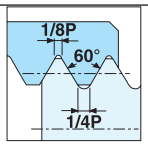
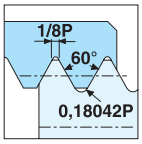
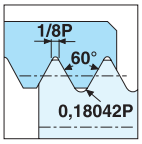
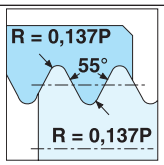
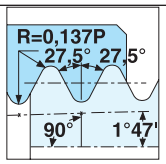
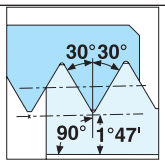
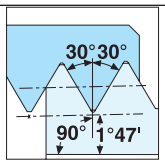
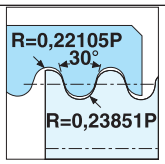
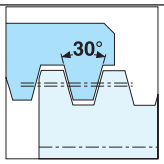
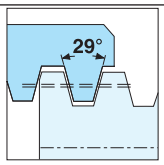
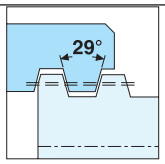
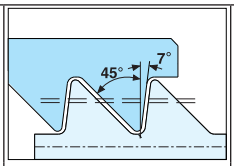
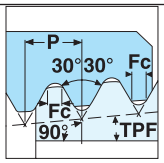
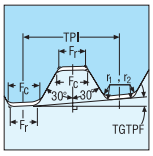
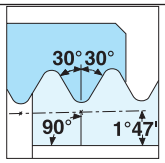
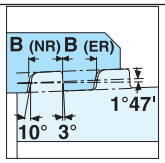
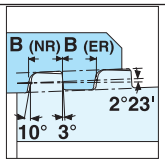
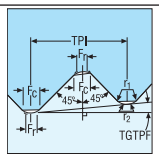
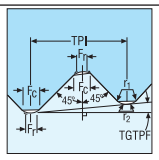
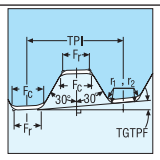
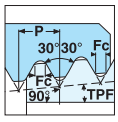
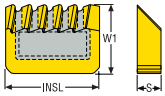
## Toolholders for chasers

| External toolholders for chasers CER...X | Seco-Capto™ CER...X | Seco-Capto™ CNR/L...X | Seco-Capto™ CNL...C-X | Steadyline® GL.. -CNR/L...-I/X |
|---|---|---|---|---|
|  |  |  |  |  |
| Page(s) 104-105 | Page(s) 106 | Page(s) 107-108 | Page(s) 109-110 | Page(s) 111 |

## Toolholders for Precision Grooves

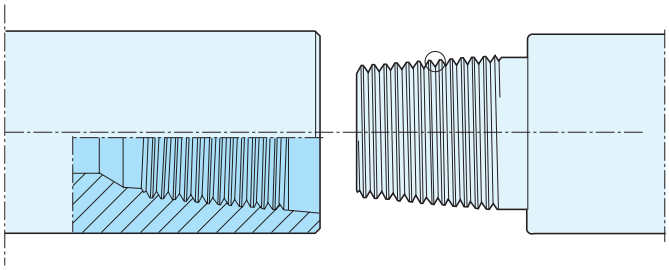
| CEAR/L... | SNR/L... | CNR/L... | CER/L... |
|---|---|---|---|
|  |  |  |  |
| Page(s) 112 | Page(s) 114 | Page(s) 116 | Page(s) 121 |

# Application overview, inserts

| | | | | | |
|---|---|---|---|---|---|
| **Partial profile inserts** | **55° V profile** | **60° V profile** | | | |
| |  Page(s) 123-124 |  Page(s) 125-126 | | | |
| **Full profile inserts** | **ISO metric** | **UN** | | | |
| **Reusable threaded joints** |  Page(s) 127, 128-130, 131, 132 |  Page(s) 133, 134-136, 137 | | | |
| **Full profile inserts** | **UNJ** | **MJ** | | | |
| **Reusable threaded joints for the aerospace industry** |  Page(s) 139-140 |  Page(s) 141-142 | | | |
| **Full profile inserts** | **Whitworth, BSW** | **BSPT** | **NPT** | **NPTF** | **Round-DIN405** |
| **Permanent threaded joints for pipe mountings and couplings** |  Page(s) 143, 144-145, 146 |  Page(s) 147-148 |  Page(s) 149-150 |  Page(s) 151-152 |  Page(s) 153-154 |
| **Partial profile inserts** | **TR-DIN103** | **ACME** | **Stub-ACME** | **American Buttress** | |
| **Motion-transmitting threads** |  Page(s) 155-156 |  Page(s) 157-158 |  Page(s) 159-160 |  Page(s) 161-161 | |
| **Full profile inserts** | **API Rotary Drill Connection** | **Hughes Flush** | **API ROUND** | **API Buttress 1:16** | **API Buttress 1:12** |
| **Threads for the oil industry** |  Page(s) 162-163 |  Page(s) 164-164 |  Page(s) 165-165 |  Page(s) 166-166 |  Page(s) 167-167 |
| **Full profile inserts** | **Hughes H90** | **Hughes Slimline H90** | **P.A.C** | **Chasers API/Gost** | **Chipformers for chasers** |
| **Threads for the oil industry** |  Page(s) 164-164 |  Page(s) 164-164 |  Page(s) 164-164 |  Page(s) 168 |  Page(s) 169, 170 |

# Rotary drilling connections

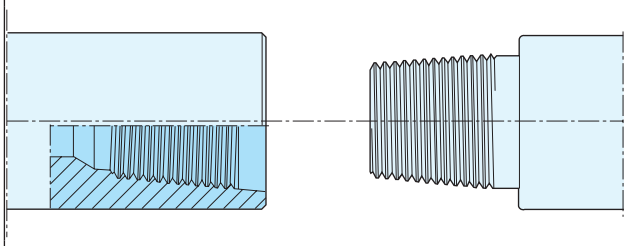
### OCTG pipe and coupling illustration



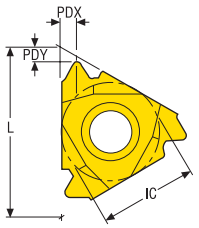
| Connections | Pitch TPI | TGTPF | API code | Snap-Tap® code |
|---|---|---|---|---|
| **API Number** | | | | |
| NC10 - NC16 | 6.0 | 1.5 | V055 | 6API558 |
| NC23 - NC50 | 4.0 | 2.0 | V038R | 4API386 |
| NC56 - NC77 | 4.0 | 3.0 | V038R | 4API384 |
| **API Regular** | | | | |
| 1 - 1 1/2 REG | 6.0 | 1.5 | V055 | 6API558 |
| 2 3/8 REG - 4 1/2 REG | 5.0 | 3.0 | V040 | 5API404 |
| 5 1/2 REG, 7 5/8 REG, 8 5/8 REG | 4.0 | 3.0 | V050 | 4API504 |
| 6 5/8 REG | 4.0 | 2.0 | V050 | 4API506 |
| **Internal Flush** | | | | |
| 2 3/8 IF - 6 5/8 IF | 4.0 | 2.0 | V038R | 4API386 |
| **Full Hole** | | | | |
| 3 1/2 FH, 4 1/2 FH | 5.0 | 3.0 | V040 | 5API404 |
| 4 FH | 4.0 | 2.0 | V038R | 4API386 |
| 5 1/2 FH, 6 5/8 FH | 4.0 | 2.0 | V050 | 4API506 |
| **Hughes External Flush** | | | | |
| 2 3/8, 2 7/8 | 6.0 | 2.0 | – | 6HEF |
| 3 1/2, 4 1/2 | 4.0 | 2.0 | V038R | 4API386 |
| **Hughes Xtra Hole** | | | | |
| 2 7/8 - 5 | 4.0 | 2.0 | V038R | 4API386 |
| **Hughes Slim Hole** | | | | |
| 2 3/8 - 4 1/2 | 4.0 | 2.0 | V038R | 4API386 |
| **Hughes Double Streamline** | | | | |
| 3 1/2 - 5 1/2 | 4.0 | 2.0 | V038R | 4API386 |
| **Hughes H90** | | | | |
| 3 1/2 - 6 5/8 | 3.5 | 2.0 | 90V050 | 3.5H906 |
| 7 - 8 5/8 | 3.5 | 3.0 | 90V050 | 3.5H904 |
| **Hughes Slimline H90** | | | | |
| 2 3/8 - 3 1/2 | 3.0 | 1.25 | 90V050 | 3H90 |
| **Hughes ACME Regular** | | | | |
| 2 3/8 - 6 5/8 | 4.0 | 3.373 | – | 4HACME |
| **Hughes ACME Streamline** | | | | |
| 2 3/8 - 5 1/2 | 4.0 | 3.373 | – | 4HACME |
| **P.A.C.** | | | | |
| 2 3/8 PAC - 3 1/2 PAC | 4.0 | 1.5 | V076 | 4PAC |
| **Macaroni** | | | | |
| MT, AMT, AMMT | 6.0 | 1.5 | V055 | 6API558 |

# Rotary drilling connections

**Connections**



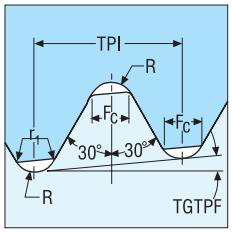
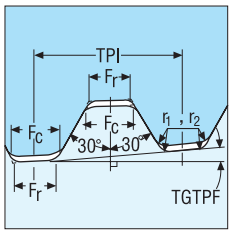
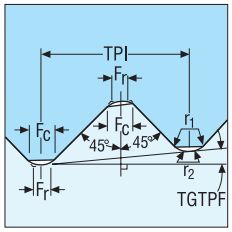
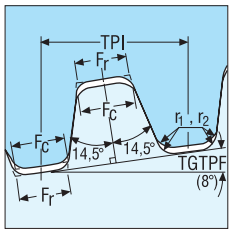
**Insert dimensions**




**Connections**

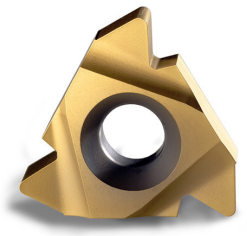
| Snap-Tap® code | API code | Pitch TPI | TGTPF *inch* | L mm | IC mm | PDX mm | PDY mm |
|---|---|---|---|---|---|---|---|
| 6API558 | V055 | 6.0 | *1.5* | 22,0 | 12,700 | 2,5 | 2,0 |
| 5API404 | V040 | 5.0 | *3.0* | 22,0 | 12,700 | 2,5 | 2,0 |
| 5API404 | V040 | 5.0 | *3.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 4API386 | V038R | 4.0 | *2.0* | 22,0 | 12,700 | 2,5 | 1,9 |
| 4API386 | V038R | 4.0 | *2.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 4API384 | V038R | 4.0 | *3.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 4API506 | V050 | 4.0 | *2.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 4API504 | V050 | 4.0 | *3.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 6HEF | – | 6.0 | *2.0* | 22,0 | 12,700 | 2,5 | 2,0 |
| 4PAC | V076 | 4.0 | *1.5* | 27,5 | 15,875 | 3,2 | 2,2 |
| 3,5H906 | 90V050 | 3.5 | *2.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 3,5H904 | 90V050 | 3.5 | *3.0* | 27,5 | 15,875 | 3,2 | 2,2 |
| 3H90 | 90V050 | 3.0 | *1.25* | 27,5 | 15,875 | 3,2 | 2,2 |
| 4HACME | – | 4.0 | *3.373* | 27,5 | 15,875 | 3,2 | 2,2 |

# Thread profile

| Profile | TPI | TGTPF | R/$F_r$ mm (*inch*) | $F_c$ mm (*inch*) | $r_1$ mm (*inch*) | $r_2$ mm (*inch*) | API code | Snap-Tap® code |
|---|---|---|---|---|---|---|---|---|
|  | 5.0 | 3.0 | 0,508 (*0.200*) | 1,016 (*0.0400*) | 0,381 (*0.0150*) | – | V040 | 5API404 |
| | 4.0 | 2.0 | 0,965 (*0.0380*) | 1,651 (*0.0650*) | 0,381 (*0.0150*) | – | V038R | 4API386 |
| | 4.0 | 3.0 | 0,965 (*0.0380*) | 1,651 (*0.0650*) | 0,381 (*0.0150*) | – | V038R | 4API384 |
| | 4.0 | 2.0 | 0,635 (*0.0250*) | 1,270 (*0.0500*) | 0,381 (*0.0150*) | – | V050 | 4API506 |
| | 4.0 | 3.0 | 0,635 (*0.0250*) | 1,270 (*0.0500*) | 0,381 (*0.0150*) | – | V050 | 4API504 |
|  | 6.0 | 1.5 | 1,194 (*0.0470*) | 1,397 (*0.0550*) | 0,381 (*0.0150*) | 0,381 (*0.0150*) | V055 | 6API558 |
| | 6.0 | 2.0 | 0,559 (*0.0220*) | 0,813 (*0.0320*) | 0,381 (*0.0150*) | 0,381 (*0.0150*) | – | 6HEF |
| | 4.0 | 1.5 | 1,702 (*0.0670*) | 1,930 (*0.0760*) | 0,381 (*0.0150*) | 0,381 (*0.0150*) | V076 | 4PAC |
|  | 3.5 | 2.0 | 0,864 (*0.0340*) | 1,270 (*0.0500*) | 0,381 (*0.0150*) | 0,762 | 90V050 | 3,5H906 |
| | 3.5 | 3.0 | 0,864 (*0.0340*) | 1,270 (*0.0500*) | 0,381 (*0.0150*) | 0,762 | 90V050 | 3,5H904 |
| | 3.0 | 1.25 | 1,727 (*0.0680*) | 2,134 (*0.0840*) | 0,381 (*0.0150*) | 0,762 | 90V050 | 3H90 |
|  | 4.0 | 3.373 | 2,253 (*0.0887*) | 2,388 (*0.0940*) | 0,787 (*0.0310*) | 0,787 (0.0310) | – | 4HACME |

# Oil and gas threading

**Seco Snap-Tap® Quality Assurance**



**1. Metallurgical control of substrate**
Check of substrate regarding Hc, MM and porosity.
Measured according to SPM.
Values stored in a database.

**2. Dimension check after sintering**
Measuring of IC and thickness.
Measured according to SPM.
Values stored in a database.

**3. Dimension control after bottom grinding**
Thickness and cutting edge height.
Flatness.
Measured according to SPM.

**4. Dimension control after grinding**
Profile and radius.
Measured according to SPM.

**5. Edge measuring**
Edge radius checked during honing.
Measured according to SPM.
Values stored in a database.

**6. Measuring of coating**
Coating, check of thickness and adhesion.
Measured according to SPM.
Values stored in a database.

**7. Final inspection**
Visual Inspection.
Sampling in accordance to AQL.

**8. Production management System**
SGS (SPM1) - Control specifications.
LS - Production instructions.
Seco Act - System for preventive and corrective actions.
Approved to ISO 9001 and 14001 standard.

**9. Abbreviations**
LS - Local management Systems - contains local process descriptions, routines, procedures and instructions.
SGS - Seco Global Standards - consists of instructions common for all Seco companies.
SPM - Seco Production Manual - Part of SGS is a collection of instructions and documents with the purpose to guide and maintain the quality level of Seco products.
AQL - Accepted Quality Level (Mil-std).
MM - Content of Tungsten in binder.
Hc - Coercivity, describing grainsize.

# Oil and gas threading

**Seco Chasers Quality Assurance**



**1. Metallurgical control of substrate**
Check of substrate regarding Hc, MM and porosity.
Measured according to SPM.
Values stored in a database.

**2. Dimension control after top and bottom grinding**
Thickness.
Roughness Ra.
Flatness.
Measured according to SPM.

**3. Measuring after periphery Grinding**
Optical measuring.
Data stored in a database.

**4. Dimension control after grinding**
Profile and radius.
Measured according to SPM.

**5. Edge measuring**
Edge radius checked during honing.
Measured according to SPM.
Values stored in a database.

**6. Measuring of coating**
Coating (PVD), check of thickness and adhesion.
Measured according to SPM.
Values stored in a database.

**7. Height classification**
Optical measuring of height.
Graphic presentation of values.
Sorted and labelled with height classification.

**8. Final inspection**
Edge inspection 100%.
Profile check with tolerance drawing, sampling in accordance to AQL.

**9. Traceability**
Finished products from each order saved for future reference.
Saved 5 years from production date.
Finished product has full traceability.

**10. Overlay drawings**
Printer for overlays is calibrated with glass scale monthly.
Scaled master printout is saved according to SPM.

**11. Production management System**
SGS (SPM1) - Control specifications.
LS - Production instructions.
Seco Act - System for preventive and corrective actions.
Approved to ISO 9001 and 14001 standard.

**12. Abbreviations**
LS - Local management Systems - contains local process descriptions, routines, procedures and instructions.
SGS - Seco Global Standards - consists of instructions common for all Seco companies.
SPM - Seco Production Manual - Part of SGS is a collection of instructions and documents with the purpose to guide and maintain the quality level of Seco products.
AQL - Accepted Quality Level (Mil-std).
MM - Content of Tungsten in binder.
Hc - Coercivity, describing grainsize.

## ISO attributes

| ISO attribute | Explanation |
|---|---|
| AN | clearance angle major |
| B | shank width |
| BAWS | workpiece side body angle |
| BD | body diameter |
| BLQ | balance quality code |
| CDRX | cutting depth radial maximum |
| CDX | cutting depth maximum |
| CDXI | cutting depth maximum insert |
| CDXSH | cutting depth maximum shank |
| CF | spot chamfer |
| CNT | coolant entry thread size |
| CP | coolant pressure |
| CTMS | connection text machine side |
| CTWS | connection text workpiece side |
| CUTDIA | work piece parting diameter maximum |
| CW | cutting width |
| D1 | fixing hole diameter |
| DCB | connection bore diameter |
| DCB1 | connection bore diameter 1 |
| DCB2 | connection bore diameter 2 |
| DCINN | cutting diameter internal minimum |
| DCINN2 | cutting diameter internal minimum 2 |
| DCINN3 | cutting diameter internal minimum 3 |
| DCP | data chip provision |
| DCSFMS | contact surface diameter machine side |
| DF | flange diameter |
| DIX | tool changer interference diameter maximum |
| DMM | shank diameter |
| EPSR | insert included angle |
| GAMO | rake angle orthogonal |
| H | shank height |
| HF | functional height |
| HRY | measure, Measure from ref. plane of mounting to bottom plane of unit in direction Y m |
| IC | inscribed circle diameter |
| INPLM | minimum initial plunge diameter |
| INPLX | initial plunge maximum |
| INSD | insert diameter |
| INSL | insert length |
| KCHL | corner chamfer angle left hand |
| KCHR | corner chamfer angle right hand |
| L | cutting edge length |
| LAMS | inclination angle |
| LB1 | body length 1 |
| LB2 | body length 2 |
| LCOG | length to center of gravity |
| LF | functional length |
| LF2 | functional length_2 |
| LFS | functional length secondary |
| LH | head length |
| LH2 | head length 2 |
| LIG | insert gauge length |
| LPR | protruding length |

## ISO attributes

| ISO attribute | Explanation |
|---|---|
| LS | shank length |
| LSC | clamping length |
| LU | usable length |
| OAH | overall height |
| OAL | overall length |
| OAW | overall width |
| PDX | profile distance ex |
| PSIRL | cutting edge angle major left hand |
| PHDR | recommended premachined hole diameter |
| PSIRR | cutting edge angle major right hand |
| RADH | radial body height |
| RADW | radial body width |
| RE | corner radius |
| RETL | flank radius left hand |
| RETR | flank radius right hand |
| RPMX | rotational speed maximum |
| S | insert thickness |
| TDZ | thread diameter size |
| TPI | threads per inch |
| W1 | insert width |
| WF | functional width |
| WF2 | functional width 2 |
| WFS | functional width secondary |

## Jetstream Tooling® Introduction

Seco Jetstream Tooling® is a revolutionary solution to the problem of delivering coolant precisely to the cutting zone.

It works by delivering a concentrated high pressure jet of coolant at high velocity straight to the optimum position precisely to the cutting edge.

The jet lifts the chips away from the rake face, improving chip control and tool life, enabling increased cutting data.

It has been proven to show improvements in nearly all material groups with a wide choice of coolant pressures.

Seco Jetstream Tooling® Duo holders, yet another innovation introduced to the market, features both a rake face and a flank face jet, that may provide even better chip control and significantly longer tool life.

For many years, Seco has been supporting the market with Jetstream Tooling® solutions for ISO-turning and grooving applications. Now the Jetstream Tooling® technique will also be available on holders for thread turning (Snap-Tap®).

Coolant can either be supplied to the toolholder externally through a coolant hose, which is attached to one of the inlet positions of the toolholder, or by the new JETI connection.

When it comes to boring bars, the coolant is supplied internally from the back end.

For internal applications, holders for Steadyline® bars are also available, designated GL-. Please see more information regarding Steadyline® in catalog Turning.

Square shank holders for external applications are designed with the Duo technique. They also have the option for coolant supply through JETI connection.

The JETI is developed with a compact assembly in mind, the tooling eliminates the need for any external piping and connections that would otherwise obstruct machine movements in tight workspaces. Coolant hole underneath the square shank holder make it possible for coolant to reach the cutting edge directly from the tool block.



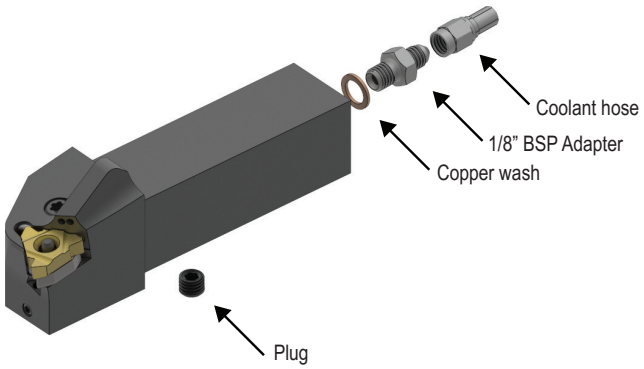
# Jetstream Tooling® Assembly instructions

## Description of parts

For personal safety, Jetstream Tooling® should only be used with the machine door in a fully closed position in accordance with general machine safety procedures.

Please ensure that the coolant hose is located correctly and fully tightened with all seals in position. The unused coolant hole should have a blanking plug fitted. Please note the maximum safe working pressures shown below.

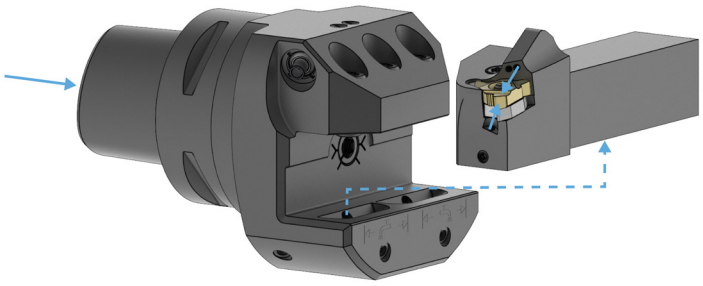
For accessories, see next page.




## JETI Assembly instructions

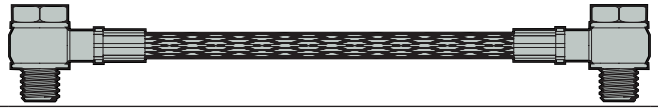
To use the benefits of a JETI-holder there is a need to use a basic holder designed for JETI-connections. Maximum coolant pressure when using this feature is 150 bar.

Note: The unused coolant hole (from the back) should have a blanking plug fitted.



## Accessories and spare parts

**Hoses,** Part No. ordering code includes spare parts

| Connection type | Part No. | Length mm (*inch*) |
|---|---|---|
| **Straight fitting**  | JET-HOSE150SS | 150 *(5.906)* |
| | JET-HOSE200SS | 200 *(7.874)* |
| | JET-HOSE250SS | 250 *(9.843)* |
| | JET-HOSE300SS | 300 *(11.811)* |
| **Banjo fitting**  | JET-HOSE150BS | 150 *(5.906)* |
| | JET-HOSE200BS | 200 *(7.874)* |
| | JET-HOSE250BS | 250 *(9.843)* |
| | JET-HOSE300BS | 300 *(11.811)* |
| **Banjo-to-Banjo fitting**  | JET-HOSE150BB | 150 *(5.906)* |
| | JET-HOSE200BB | 200 *(7.874)* |
| | JET-HOSE250BB | 250 *(9.843)* |
| | JET-HOSE300BB | 300 *(11.811)* |

All hoses are pressure rated to a maximum of 275 bar (3990 psi).

### Spare Parts, included in delivery

| Part No. | ...SS | ...BS | ...BB |
|---|---|---|---|
| JET-CFP1/8BSP  | ■ | ■ | ■ |
| JET-CBP15  | ■ | ■ | ■ |
| JET-AD1/8BSP  | ■ | ■ | |
| JET-ADM10  | ■ | | |
| JET-BBM10  | | ■ | ■ |
| JET-BB1/8BSP  | | ■ | ■ |
| JET-C1/4-1/8BSP  | | ■ | ■ |
| JET-P1/8-5mm  | ■ | ■ | ■ |
| JET-WM10*  | ■ | ■ | ■ |
| JET-ORING10X1*/**  | ■ | ■ | ■ |

Pack of 2, except *Pack of 20
** Not suitable for use in inducer
For assembly instructions, see page(s) 51



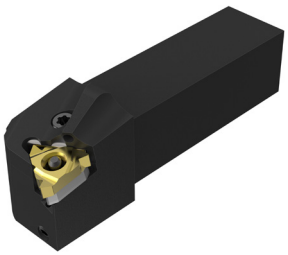
# Thread turning Toolholders

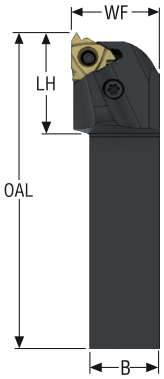
The innovative toolholders made for use with Snap-Tap® inserts offer the best possible holding power available for long tool life and high accuracy. They employ an Anti-Twist insert locking system that features a carbide pin in the back of the insert pocket that resists wear and prevents the insert from turning or twisting under pressure during machining.

- Anti-Twist Toolholders.
- D-style clamp for securely pulls insert down and into the pocket.

## Jetstream Tooling® – Toolholders, external

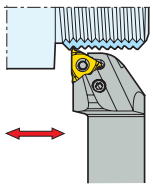
For S-inserts, Snap-Tap®











—Right-hand version shown
—CP* Max coolant pressure (bar) using hose connection otherwise according machine side adapter
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | H | B | LF | OAL | WF | LH | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | kg | bar | |
| PER2020X16QHDJETI | 03007228 | 20,0 | 20,0 | 27,0 | 91,0 | 25,0 | 30,0 | 0,3 | 275,0 | 16 |
| PEL2020X16QHDJETI | 03007229 | 20,0 | 20,0 | 27,0 | 91,0 | 25,0 | 30,0 | 0,3 | 275,0 | 16 |
| PER2525X16QHDJETI | 03007230 | 25,0 | 25,0 | 27,0 | 111,0 | 32,0 | 30,0 | 0,6 | 275,0 | 16 |
| PEL2525X16QHDJETI | 03007231 | 25,0 | 25,0 | 27,0 | 111,0 | 32,0 | 30,0 | 0,6 | 275,0 | 16 |
| PER2525X22QHDJETI | 03007241 | 25,0 | 25,0 | 41,0 | 125,0 | 32,0 | 44,0 | 0,7 | 275,0 | 22 |
| PER2525X27QHDJETI | 03007246 | 25,0 | 25,0 | 41,0 | 125,0 | 32,0 | 44,0 | 0,7 | 275,0 | 27 |

## Spare Parts, included in delivery

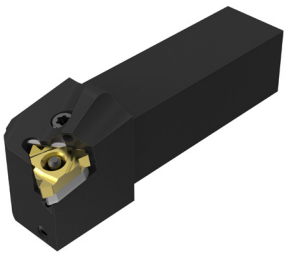
| For holders | Insert lever | Insert shim (S) | Lever screw | Locking key | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ...16QHD... | PP3712 | GXA16-1 | LS0612-T15P | T15P-7 | AC4625 |
| ...22QHD... | PP4816 | NXA22-1 | LS0815-T25P | T25P-7 | AC5035 |
| ...27QHD... | PP6019 | VXA27-1 | LS0820-T25P | T25P-7 | AC6050 |

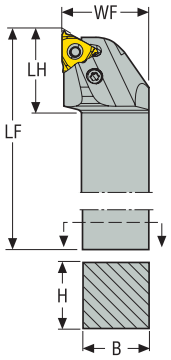
## Accessories

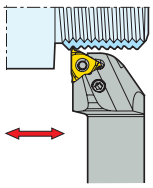
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Plug |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16QHD... | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – | P6SS4X8 |
| ...22QHD... | MXA22-1 | NXA22-0 | NXA22-98 | NXA22-97.5 | NXA22-0.5 | NXA22-1.5 | NXA22-2 | NXA22-3 | NXA22-4 | NXA22-99.5 | NXA22-99 | NXA22-98.5 | P6SS4X8 |
| ...27QHD... | MXA27-1 | VXA27-0 | VXA27-98 | – | VXA27-0.5 | VXA27-1.5 | VXA27-2 | VXA27-3 | VXA27-4 | VXA27-99.5 | VXA27-99 | VXA27-98.5 | P6SS4X8 |

## Jetstream Tooling® – Toolholders, external

For S-inserts, Snap-Tap®



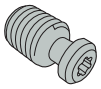


—Right-hand version shown
—CP* Max coolant pressure (bar) using hose connection otherwise according machine side adapter
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | H | B | LF | WF | LH | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | psi | |
| PER075516QHDJET | 03007234 | 0.750 | 0.750 | 5.000 | 0.970 | 1.181 | 0.9 | 10.827 | 16 |
| PEL075516QHDJET | 03007235 | 0.750 | 0.750 | 5.000 | 0.970 | 1.181 | 0.9 | 10.827 | 16 |
| PER100616QHDJET | 03007236 | 1.000 | 1.000 | 6.000 | 1.250 | 1.181 | 1.8 | 10.827 | 16 |
| PEL100616QHDJET | 03007237 | 1.000 | 1.000 | 6.000 | 1.250 | 1.181 | 1.8 | 10.827 | 16 |
| PER125616QHDJET | 03007238 | 1.250 | 1.250 | 6.000 | 1.500 | 1.181 | 2.7 | 10.827 | 16 |
| PEL125616QHDJET | 03007240 | 1.250 | 1.250 | 6.000 | 1.500 | 1.181 | 2.7 | 10.827 | 16 |
| PER100622QHDJET | 03007244 | 0.984 | 0.984 | 6.000 | 1.250 | 1.732 | 1.8 | 10.827 | 22 |
| PER125622QHDJET | 03007245 | 1.250 | 1.250 | 6.000 | 1.500 | 1.732 | 2.7 | 10.827 | 22 |
| PER100627QHDJET | 03007249 | 0.984 | 0.984 | 6.000 | 1.250 | 1.732 | 1.8 | 10.827 | 27 |
| PER125627QHDJET | 03007250 | 1.250 | 1.250 | 6.000 | 1.500 | 1.732 | 2.7 | 10.827 | 27 |

### Spare Parts, included in delivery

| For holders | Insert lever | Insert shim (S) | Lever screw | Locking key | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ..16QHJET | PP3712 | GXA16-1 | LS0612-T15P | T15P-7 | AC4625 |
| ..22QHJET | PP4816 | NXA22-1 | LS0815-T25P | T25P-7 | AC5035 |
| ..27QHJET | PP6019 | VXA27-1 | LS0820-T25P | T25P-7 | AC6050 |

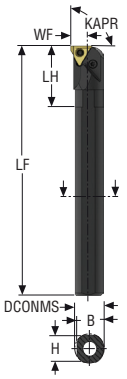
### Accessories

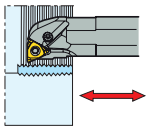
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Plug |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ..16QHJET | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – | P6SS4X8 |
| ..22QHJET | MXA22-1 | NXA22-0 | NXA22-98 | NXA22-97.5 | NXA22-0.5 | NXA22-1.5 | NXA22-2 | NXA22-3 | NXA22-4 | NXA22-99.5 | NXA22-99 | NXA22-98.5 | P6SS4X8 |
| ..27QHJET | MXA27-1 | VXA27-0 | VXA27-98 | – | VXA27-0.5 | VXA27-1.5 | VXA27-2 | VXA27-3 | VXA27-4 | VXA27-99.5 | VXA27-99 | VXA27-98.5 | P6SS4X8 |

## Jetstream Tooling® – Toolholders, internal

For S-inserts, Snap-Tap®



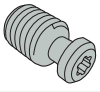


—Right-hand version shown
—CP* Max coolant pressure (bar) using hose connection otherwise according machine side adapter
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 165

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | kg | bar | |
| PNR0020P16AHDJET | 03006930 | 19,0 | 18,0 | 171,0 | 13,8 | 42,0 | 20,0 | 24,0 | 0,4 | 275,0 | 16 |
| PNL0020P16AHDJET | 03006931 | 19,0 | 18,0 | 171,0 | 13,8 | 42,0 | 20,0 | 24,0 | 0,4 | 275,0 | 16 |
| PNR0025R16AHDJET | 03006932 | 24,0 | 23,0 | 200,0 | 16,3 | 42,0 | 25,0 | 29,0 | 0,7 | 275,0 | 16 |
| PNL0025R16AHDJET | 03006933 | 24,0 | 23,0 | 200,0 | 16,3 | 42,0 | 25,0 | 29,0 | 0,6 | 275,0 | 16 |
| PNR0032S16AHDJET | 03006934 | 30,0 | 31,0 | 250,0 | 19,8 | 42,0 | 32,0 | 36,0 | 1,4 | 275,0 | 16 |
| PNL0032S16AHDJET | 03006935 | 30,0 | 31,0 | 250,0 | 19,8 | 42,0 | 32,0 | 36,0 | 1,5 | 275,0 | 16 |
| PNR0040T16AHDJET | 03006936 | 38,5 | 37,0 | 300,0 | 23,8 | 45,0 | 40,0 | 44,0 | 2,2 | 275,0 | 16 |
| PNR0050U16AHDJET | 03006937 | 47,0 | 48,5 | 350,0 | 28,8 | 52,0 | 50,0 | 54,0 | 4,5 | 275,0 | 16 |
| PNR0025R22AHDJET | 03006945 | 23,0 | 24,0 | 200,0 | 17,8 | 42,0 | 25,0 | 30,0 | 0,7 | 275,0 | 22 |
| PNL0025R22AHDJET | 03006946 | 23,0 | 24,0 | 200,0 | 17,8 | 42,0 | 25,0 | 30,0 | 0,7 | 275,0 | 22 |
| PNR0032S22AHDJET | 03006947 | 30,0 | 31,0 | 250,0 | 21,3 | 42,0 | 32,0 | 38,0 | 1,5 | 275,0 | 22 |
| PNL0032S22AHDJET | 03006948 | 30,0 | 31,0 | 250,0 | 21,3 | 42,0 | 32,0 | 38,0 | 1,5 | 275,0 | 22 |
| PNR0040T22AHDJET | 03006949 | 37,0 | 38,5 | 300,0 | 25,3 | 42,0 | 40,0 | 46,0 | 2,9 | 275,0 | 22 |
| PNL0040T22AHDJET | 03006950 | 37,0 | 38,5 | 300,0 | 25,3 | 42,0 | 40,0 | 46,0 | 2,6 | 275,0 | 22 |
| PNR0050U22AHDJET | 03006951 | 47,0 | 48,5 | 350,0 | 30,3 | 48,0 | 50,0 | 56,0 | 4,9 | 275,0 | 22 |
| PNR0040T27AHDJET | 03006955 | 37,0 | 38,5 | 300,0 | 26,8 | 62,0 | 40,0 | 48,0 | 2,6 | 275,0 | 27 |
| PNR0050U27AHDJET | 03006956 | 47,0 | 48,5 | 350,0 | 31,8 | 62,0 | 50,0 | 58,0 | 4,3 | 275,0 | 27 |
| PNR0063V27AHDJET | 03006957 | 60,0 | 61,5 | 400,0 | 38,3 | 62,0 | 63,0 | 70,0 | 8,9 | 275,0 | 27 |

## Spare Parts, included in delivery

| For holders | Insert lever | Insert shim (S) | Lever screw | Locking key | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ...20... | PP3712 | GXA16-1 | LS0610-T15P | T15P-7 | AC4625 |
| ...22... | PP4816 | NXA22-1 | LS0815-T25P | T25P-7 | AC5035 |
| ...25/32/40/50... | PP3712 | GXA16-1 | LS0612-T15P | T15P-7 | AC4625 |
| ...27... | PP6019 | VXA27-1 | LS0820-T25P | T25P-7 | AC6050 |

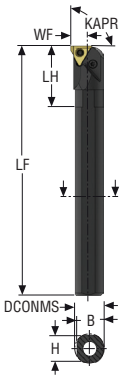
## Accessories

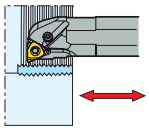
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| ...20... | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – |
| ...22... | MXA22-1 | NXA22-0 | NXA22-98 | NXA22-97.5 | NXA22-0.5 | NXA22-1.5 | NXA22-2 | NXA22-3 | NXA22-4 | NXA22-99.5 | NXA22-99 | NXA22-98.5 |
| ...25/32/40/50... | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – |
| ...27... | MXA27-1 | VXA27-0 | VXA27-98 | – | VXA27-0.5 | VXA27-1.5 | VXA27-2 | VXA27-3 | VXA27-4 | VXA27-99.5 | VXA27-99 | VXA27-98.5 |

## Jetstream Tooling® – Toolholders, internal

For S-inserts, Snap-Tap®



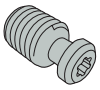


—Right-hand version shown
—CP* Max coolant pressure (bar) using hose connection otherwise according machine side adapter
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 165

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | psi | |
| PNR00075716AHDJET | 03006939 | 0.700 | 0.650 | 7.000 | 0.520 | 1.654 | 0.750 | 0.950 | 0.7 | 10,827 | 16 |
| PNL00075716AHDJET | 03006940 | 0.700 | 0.650 | 7.000 | 0.520 | 1.654 | 0.750 | 0.950 | 1.1 | 10,827 | 16 |
| PNR00100816AHDJET | 03006941 | 0.951 | 0.902 | 8.000 | 0.650 | 1.654 | 1.000 | 1.150 | 1.5 | 10,827 | 16 |
| PNL00100816AHDJET | 03006942 | 0.951 | 0.902 | 8.000 | 0.650 | 1.654 | 1.000 | 1.150 | 1.3 | 10,827 | 16 |
| PNR001251016AHDJET | 03006943 | 1.200 | 1.150 | 10.000 | 0.780 | 1.654 | 1.250 | 1.404 | 3.1 | 10,827 | 16 |
| PNR001501216AHDJET | 03006944 | 1.339 | 1.419 | 12.000 | 0.900 | 1.654 | 1.500 | 1.700 | 5.1 | 10,827 | 16 |
| PNR00100822AHDJET | 03006952 | 0.902 | 0.951 | 8.000 | 0.710 | 1.654 | 1.000 | 1.181 | 2.0 | 10,827 | 22 |
| PNR001251022AHDJET | 03006953 | 1.200 | 1.150 | 10.000 | 0.840 | 1.654 | 1.250 | 1.500 | 3.1 | 10,827 | 22 |
| PNR001501222AHDJET | 03006954 | 1.339 | 1.419 | 12.000 | 0.970 | 1.654 | 1.500 | 1.800 | 5.3 | 10,827 | 22 |
| PNR001501227AHDJET | 03006958 | 1.339 | 1.419 | 12.000 | 1.020 | 2.441 | 1.500 | 1.890 | 5.1 | 10,827 | 27 |

## Spare Parts, included in delivery

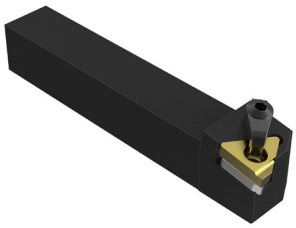
| For holders | Insert lever | Insert shim (S) | Lever screw | Locking key | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ..16AHDJET | PP3712 | GXA16-1 | LS0612-T15P | T15P-7 | AC4625 |
| ..22AHDJET | PP4816 | NXA22-1 | LS0815-T25P | T25P-7 | AC5035 |
| ..27AHDJET | PP6019 | VXA27-1 | LS0820-T25P | T25P-7 | AC6050 |
| PNR/L000757.. | PP3712 | GXA16-1 | LS0610-T15P | T15P-7 | AC4625 |

## Accessories

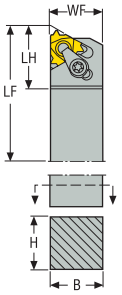
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| ..16AHDJET | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – |
| ..22AHDJET | MXA22-1 | NXA22-0 | NXA22-98 | NXA22-97.5 | NXA22-0.5 | NXA22-1.5 | NXA22-2 | NXA22-3 | NXA22-4 | NXA22-99.5 | NXA22-99 | NXA22-98.5 |
| ..27AHDJET | MXA27-1 | VXA27-0 | VXA27-98 | – | VXA27-0.5 | VXA27-1.5 | VXA27-2 | VXA27-3 | VXA27-4 | VXA27-99.5 | VXA27-99 | VXA27-98.5 |
| PNR/L000757.. | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – |

## Toolholders, external

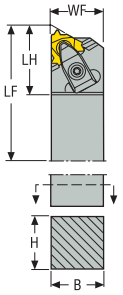
For S-inserts, Snap-Tap®

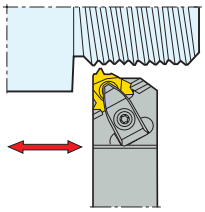


CER/L




CER/L..HD

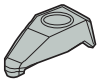
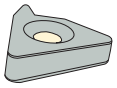


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | kg | |
| CER1616H16 | 02454783 | 16,0 | 16,0 | 100,0 | 16,0 | 22,0 | 0,2 | 16 |
| CER2020K16HD | 02475454 | 20,0 | 20,0 | 125,0 | 20,0 | 32,0 | 0,5 | 16 |
| CER2525M16HD | 02457882 | 25,0 | 25,0 | 150,0 | 25,0 | 32,0 | 0,8 | 16 |
| CER4040R16HD | 02853574 | 40,0 | 40,0 | 200,0 | 40,0 | 37,0 | 2,5 | 16 |
| CEL1616H16 | 02454781 | 16,0 | 16,0 | 100,0 | 16,0 | 22,0 | 0,2 | 16 |
| CEL2020K16HD | 02475482 | 20,0 | 20,0 | 125,0 | 20,0 | 32,0 | 0,4 | 16 |
| CEL2525M16HD | 02457885 | 25,0 | 25,0 | 150,0 | 25,0 | 32,0 | 0,8 | 16 |
| CER2525M22HD | 02457888 | 25,0 | 25,0 | 150,0 | 25,0 | 38,0 | 0,8 | 22 |
| CER4040R22HD | 02853575 | 40,0 | 40,0 | 200,0 | 40,0 | 42,0 | 2,5 | 22 |
| CEL2525M22HD | 02457890 | 25,0 | 25,0 | 150,0 | 25,0 | 38,0 | 0,8 | 22 |
| CER4040R27HD | 02853576 | 40,0 | 40,0 | 200,0 | 40,0 | 48,0 | 2,5 | 27 |

## Spare Parts, included in delivery

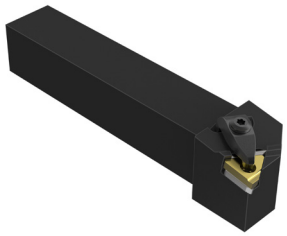
| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16 | – | T15P-2 | CSP16-T15P | – | GX16-1 | CS3507-T09P | – |
| ...16HD | CHD16 | T15P-7 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| ...22HD | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |
| ...27HD | CHD27 | T20P-7L | – | L86025-T20P | VX27-1 | C05012-T15P | S7616 |

## Accessories

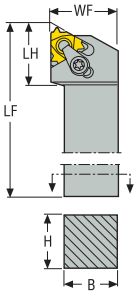
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16 | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22HD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27HD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Toolholders, external

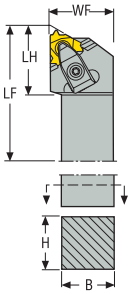
For S-inserts, Snap-Tap®

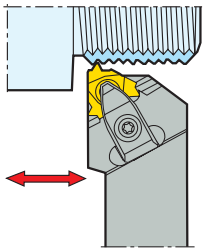


CER/L..Q




CER/L..QHD

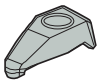
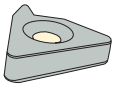


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER03753-16Q | 00072538 | 0.375 | 0.375 | 3.000 | 0.375 | 0.900 | 0.2 | 16ER... |
| CER06254-16Q | 00072498 | 0.625 | 0.625 | 4.000 | 0.750 | 0.900 | 0.7 | 16ER... |
| CEL06254-16Q | 00072544 | 0.625 | 0.625 | 4.000 | 0.750 | 0.900 | 0.7 | 16EL... |
| CER0504-16Q | 00072524 | 0.500 | 0.500 | 4.000 | 0.625 | 0.900 | 0.4 | 16ER... |
| CEL0504-16Q | 00072466 | 0.500 | 0.500 | 4.000 | 0.625 | 0.900 | 0.4 | 16ER... |
| CEL0755-16HD | 02483997 | 0.750 | 0.750 | 5.000 | 1.000 | 0.900 | 0.9 | 16EL... |
| CER0755-16HD | 02483996 | 0.750 | 0.750 | 5.000 | 1.000 | 0.900 | 0.9 | 16ER... |
| CER1006-16QHD | 02462821 | 1.000 | 1.000 | 6.000 | 1.250 | 1.100 | 1.8 | 16ER... |
| CEL1006-16QHD | 02462852 | 1.000 | 1.000 | 6.000 | 1.250 | 1.100 | 1.8 | 16EL... |
| CER1256-16QHD | 02462823 | 1.250 | 1.250 | 6.000 | 1.500 | 1.181 | 2.9 | 16ER... |
| CEL1256-16QHD | 02462853 | 1.250 | 1.250 | 6.000 | 1.500 | 1.100 | 2.9 | 16EL... |
| CER1506-16QHD | 02462825 | 1.500 | 1.500 | 6.000 | 1.750 | 1.100 | 3.8 | 16ER... |

## Spare Parts, included in delivery

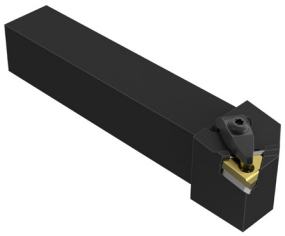
| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| CEL 06254.. | – | T15P-2 | CSP16-T15P | – | GX16-1 | CS3507-T09P | – |
| CER/L 0755..1006.. | CHD16 | T15P-7 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| CER/L 1256..1506.. | CHD16 | T15P-7 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| CER/L 3753..0504.. | – | T15P-2 | CSP16-T15P | – | GX16-1 | CS3507-T09P | – |
| CER 06254.. | – | T15P-2 | CSP16-T15P | – | GX16-1 | CS3507-T09P | – |

## Accessories

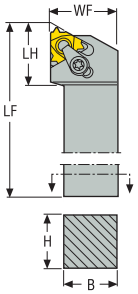
| For holders | Insert shim (K) | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| CEL 06254.. | – | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CER/L 0755..1006.. | – | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CER/L 1256..1506.. | – | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CER/L 3753..0504.. | – | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CER 06254.. | GX16-2 | MX16-1 | GX16-0 | – | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |

## Toolholders, external

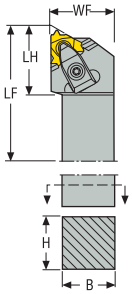
For S-inserts, Snap-Tap®

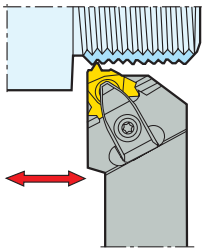


CER/L...Q




CER/L...QHD

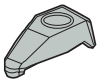
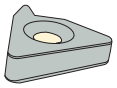


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | kg | |
| CER1212H16Q | 75025274 | 12,0 | 12,0 | 100,0 | 16,0 | 22,0 | 0,2 | 16 |
| CER1616H16Q | 75025276 | 16,0 | 16,0 | 100,0 | 20,0 | 22,0 | 0,3 | 16 |
| CER2020K16QHD | 02475493 | 20,0 | 20,0 | 125,0 | 25,0 | 32,0 | 0,5 | 16 |
| CER2525M16QHD | 00016769 | 25,0 | 25,0 | 150,0 | 32,0 | 32,0 | 0,8 | 16 |
| CER3225P16QHD | 00016771 | 32,0 | 25,0 | 170,0 | 32,0 | 32,0 | 1,1 | 16 |
| CER3232P16QHD | 00016776 | 32,0 | 32,0 | 170,0 | 40,0 | 32,0 | 1,4 | 16 |
| CEL1212H16Q | 75025275 | 12,0 | 12,0 | 100,0 | 16,0 | 22,0 | 0,2 | 16 |
| CEL1616H16Q | 75025277 | 16,0 | 16,0 | 100,0 | 20,0 | 22,0 | 0,3 | 16 |
| CEL2020K16QHD | 02475514 | 20,0 | 20,0 | 125,0 | 25,0 | 32,0 | 0,5 | 16 |
| CEL2525M16QHD | 00016766 | 25,0 | 25,0 | 150,0 | 32,0 | 32,0 | 0,8 | 16 |
| CEL3225P16QHD | 00016770 | 32,0 | 25,0 | 170,0 | 32,0 | 32,0 | 1,1 | 16 |
| CEL3232P16QHD | 00016774 | 32,0 | 32,0 | 170,0 | 40,0 | 32,0 | 1,4 | 16 |
| CER2525M22QHD | 00016781 | 25,0 | 25,0 | 150,0 | 32,0 | 38,0 | 0,8 | 22 |
| CER3225P22QHD | 00016783 | 32,0 | 25,0 | 170,0 | 32,0 | 38,0 | 1,1 | 22 |
| CER3232P22QHD | 00016788 | 32,0 | 32,0 | 170,0 | 40,0 | 38,0 | 1,4 | 22 |
| CEL2525M22QHD | 00016777 | 25,0 | 25,0 | 150,0 | 32,0 | 38,0 | 0,8 | 22 |
| CEL3225P22QHD | 00016782 | 32,0 | 25,0 | 170,0 | 32,0 | 38,0 | 1,1 | 22 |
| CEL3232P22QHD | 00016785 | 32,0 | 32,0 | 170,0 | 40,0 | 38,0 | 1,4 | 22 |
| CER2525M27QHD | 00016800 | 25,0 | 25,0 | 150,0 | 32,0 | 46,0 | 0,9 | 27 |
| CER3225P27QHD | 00016857 | 32,0 | 25,0 | 170,0 | 32,0 | 46,0 | 1,1 | 27 |
| CER3232P27QHD | 00016878 | 32,0 | 32,0 | 170,0 | 40,0 | 46,0 | 1,5 | 27 |
| CEL2525M27QHD | 00016791 | 25,0 | 25,0 | 150,0 | 32,0 | 46,0 | 0,9 | 27 |
| CEL3225P27QHD | 00016830 | 32,0 | 25,0 | 170,0 | 32,0 | 46,0 | 1,2 | 27 |
| CEL3232P27QHD | 00016864 | 32,0 | 32,0 | 170,0 | 40,0 | 46,0 | 1,5 | 27 |

## Spare Parts, included in delivery

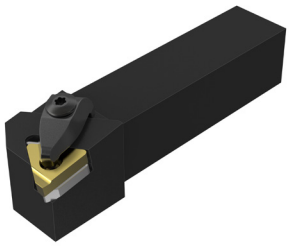
| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16Q | – | T15P-2 | CSP16-T15P | – | GX16-1 | CS3507-T09P | – |
| ...16QHD | CHD16 | T15P-7 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| ...22QHD | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |
| ...27QHD | CHD27 | T20P-7L | – | L86025-T20P | VX27-1 | C05012-T15P | S7616 |

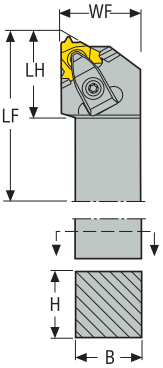
## Accessories

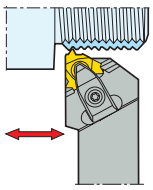
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16Q | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...16QHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22QHD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27QHD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Toolholders, external

For S-inserts, Snap-Tap®



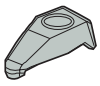
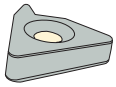


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER1005-22QHD | 02462826 | 1.000 | 1.000 | 5.000 | 1.250 | 1.300 | 1.5 | 22ER... |
| CEL1005-22QHD | 02462854 | 1.000 | 1.000 | 5.000 | 1.250 | 1.300 | 1.8 | 22EL... |
| CER1006-22QHD | 02462827 | 1.000 | 1.000 | 6.000 | 1.250 | 1.300 | 2.0 | 22ER... |
| CEL1006-22QHD | 02462856 | 1.000 | 1.000 | 6.000 | 1.250 | 1.300 | 2.0 | 22EL... |
| CER1256-22QHD | 02462829 | 1.250 | 1.250 | 6.000 | 1.500 | 1.417 | 2.9 | 22ER... |
| CEL1256-22QHD | 02462857 | 1.250 | 1.250 | 6.000 | 1.500 | 1.300 | 3.1 | 22EL... |
| CER1506-22QHD | 02462831 | 1.500 | 1.500 | 6.000 | 1.750 | 1.300 | 4.0 | 22ER... |

## Spare Parts, included in delivery

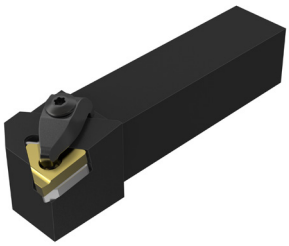
| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| CER/L..22.. | CHD22 | T20P-7L | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |

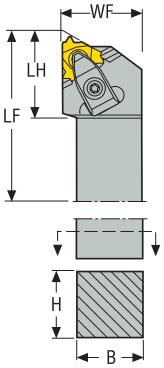
## Accessories

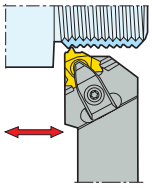
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CER/L..22.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |

## Toolholders, external

For S-inserts, Snap-Tap®



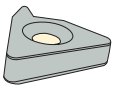


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER1006-27QHD | 02462835 | 1.000 | 1.000 | 6.000 | 1.250 | 1.600 | 2.0 | 27ER... |
| CEL1006-27QHD | 02462859 | 1.000 | 1.000 | 6.000 | 1.250 | 2.000 | 2.2 | 27EL... |
| CER1256-27QHD | 02462837 | 1.250 | 1.250 | 6.000 | 1.500 | 1.732 | 2.9 | 27ER... |
| CEL1256-27QHD | 02462861 | 1.250 | 1.250 | 6.000 | 1.500 | 1.600 | 2.9 | 27EL... |
| CER1506-27QHD | 02462839 | 1.500 | 1.500 | 6.000 | 1.750 | 1.600 | 4.0 | 27ER... |
| CEL1506-27QHD | 02462863 | 1.500 | 1.500 | 6.000 | 1.750 | 1.600 | 4.2 | 27EL... |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| CEL 1006-27.. | CHD27 | T20P-7L | L86025-T20P | VX27-1 | C05012-T15P | S7616 |
| CEL 1506-27 | CHD27 | T20P-7L | L86025-T20P | VX27-1 | C05012-T15P | S7616 |
| CER/L 1256-27 | CHD27 | T20P-7L | L86025-T20P | VX27-1 | C05012-T15P | S7616 |
| CER 1006-27 | CHD27 | T20P-7L | L86025-T20P | VX27-1 | C05012-T15P | S7616 |
| CER 1506-27.. | CHD27 | T20P-7L | L86025-T20P | VX27-1 | C05012-T15P | S7616 |

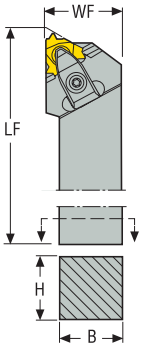
## Accessories

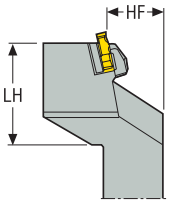
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| CEL 1006-27.. | MX27-1 | VX27-98.5 | – | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | VX27-2 | T15P-2 |
| CEL 1506-27 | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| CER/L 1256-27 | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| CER 1006-27 | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| CER 1506-27.. | MX27-1 | VX27-99.5 | VX27-2 | – | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

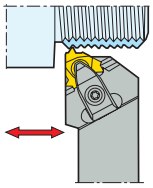
## Toolholders, external

For S-inserts, Snap-Tap®





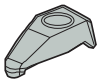
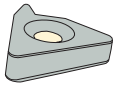



—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 143, 144, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | H | B | LF | HF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | kg | |
| CER2525M16CQHD | 02457892 | 25,0 | 25,0 | 150,0 | 25,0 | 32,0 | 45,0 | 0,9 | 16 |
| CER3232P16CQHD | 02457893 | 32,0 | 32,0 | 170,0 | 32,0 | 40,0 | 45,0 | 1,6 | 16 |
| CER2525M22CQHD | 02457895 | 25,0 | 25,0 | 150,0 | 25,0 | 32,0 | 50,0 | 0,9 | 22 |
| CER3232P22CQHD | 02457897 | 32,0 | 32,0 | 170,0 | 32,0 | 40,0 | 50,0 | 1,6 | 22 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| ..16CQHD | CHD16 | T15P-7 | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| ..22CQHD | CHD22 | T20P-7L | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |

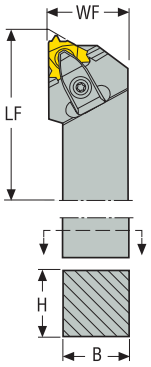
## Accessories

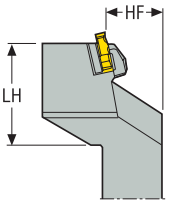
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| ..16CQHD | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| ..22CQHD | MX22-1 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | NX22-98 | NX22-99 | T15P-2 |

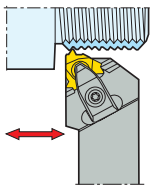
## Toolholders, external

For S-inserts, Snap-Tap®





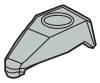
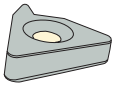



—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 143, 144, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | H | B | LF | HF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER1006-16CQHD | 02467118 | 1.000 | 1.000 | 6.000 | 1.000 | 1.250 | 2.000 | 2.0 | 16ER |
| CEL1006-16CQHD | 02462864 | 1.000 | 1.000 | 6.000 | 1.000 | 1.250 | 2.000 | 2.0 | 16EL |
| CER1256-16CQHD | 02462840 | 1.250 | 1.250 | 6.000 | 1.250 | 1.250 | 2.500 | 2.7 | 16ER |
| CER1006-22CQHD | 02462842 | 1.000 | 1.000 | 6.000 | 1.000 | 1.250 | 2.000 | 2.2 | 22ER |
| CER1006-27CQHD | 02462847 | 1.000 | 1.000 | 6.000 | 1.000 | 1.250 | 2.000 | 2.0 | 27ER |

## Spare Parts, included in delivery

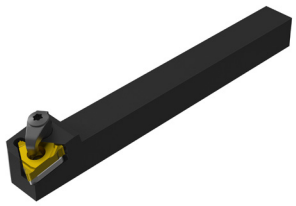
| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..22CQHD | CHD22 | T20P-7L | L86025-T20P | NX22-1 | S7616 | CS4009-T15P | – |
| ..27CQHD | CHD27 | T20P-7L | L86025-T20P | VX27-1 | – | C05012-T15P | S7616 |
| CEL 1006-16.. | CHD16 | T15P-7 | L85020-T15P | GX16-1 | – | CS3507-T09P | S6912 |
| CER 1006-16.. | CHD16 | T15P-7 | L85020-T15P | GX16-1 | – | CS3507-T09P | S6912 |
| CER 1256-16.. | CHD16 | T15P-7 | L85020-T15P | GX16-1 | – | CS3507-T09P | S6912 |

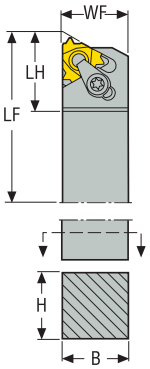
## Accessories

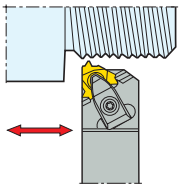
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ..22CQHD | MX22-1 | – | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ..27CQHD | MX27-1 | – | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| CEL 1006-16.. | MX16-1 | – | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| CER 1006-16.. | MX16-1 | GX16-99 | – | – | – | – | – | – | – | – | – | – | – | T09P-2 |
| CER 1256-16.. | MX16-1 | – | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |

## Toolholders, external

For S-inserts, Snap-Tap®



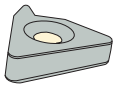


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 164

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER0505-16Q-S | 02508066 | 0.500 | 0.500 | 5.000 | 0.630 | 0.840 | 0.4 | 16ER.. |
| CER06255-16Q-S | 02508068 | 0.625 | 0.625 | 5.000 | 0.750 | 0.840 | 0.9 | 16ER.. |

## Spare Parts, included in delivery

| For holders | Clamp key | Clamp kit | Insert shim (S) | Shim screw |
|---|---|---|---|---|
| |  |  |  |  |
| ..16Q-S | T15P-2 | CSP16-T15P | GX16-1 | CS3507-T09P |

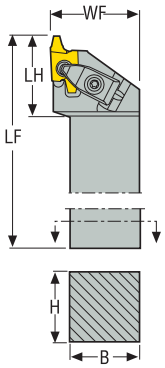
## Accessories

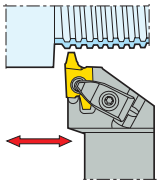
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| ..16Q-S | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |

## Toolholders, external

For K-inserts, Snap-Tap®



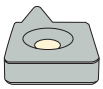


—Right-hand version shown
—For inserts program, see page(s) 155, 157, 159

| Designation | Item number | H | B | CDX | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | kg | |
| CER2525M20QHD | 02528502 | 25,0 | 25,0 | 9999,0 | 150,0 | 32,0 | 34,0 | 0,8 | 20 |
| CER3225P20QHD | 02528504 | 32,0 | 25,0 | 9999,0 | 170,0 | 32,0 | 34,0 | 1,1 | 20 |
| CER3232P20QHD | 02528507 | 32,0 | 32,0 | 9999,0 | 170,0 | 40,0 | 34,0 | 1,4 | 20 |
| CER4040R20HD | 02853577 | 40,0 | 40,0 | 9999,0 | 200,0 | 42,0 | 35,0 | 2,6 | 20 |
| CEL2525M20QHD | 02528503 | 25,0 | 25,0 | 9999,0 | 150,0 | 32,0 | 34,0 | 0,8 | 20 |
| CEL3225P20QHD | 02528505 | 32,0 | 25,0 | 9999,0 | 170,0 | 32,0 | 34,0 | 1,1 | 20 |
| CEL3232P20QHD | 02528508 | 32,0 | 32,0 | 9999,0 | 170,0 | 40,0 | 34,0 | 1,4 | 20 |
| CER2525M26QHD | 02528509 | 25,0 | 25,0 | 9999,0 | 150,0 | 40,0 | 44,0 | 0,9 | 26 |
| CER3225P26QHD | 02528512 | 32,0 | 25,0 | 9999,0 | 170,0 | 40,0 | 44,0 | 1,2 | 26 |
| CER3232P26QHD | 02528516 | 32,0 | 32,0 | 9999,0 | 170,0 | 40,0 | 44,0 | 1,4 | 26 |
| CER4040R26HD | 02853578 | 40,0 | 40,0 | 9999,0 | 200,0 | 42,0 | 45,0 | 2,5 | 26 |
| CEL2525M26QHD | 02528511 | 25,0 | 25,0 | 9999,0 | 150,0 | 40,0 | 44,0 | 0,9 | 26 |
| CEL3225P26QHD | 02528513 | 32,0 | 25,0 | 9999,0 | 170,0 | 40,0 | 44,0 | 1,2 | 26 |
| CEL3232P26QHD | 02528517 | 32,0 | 32,0 | 9999,0 | 170,0 | 40,0 | 44,0 | 1,4 | 26 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (K) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| ...20 | CHD22 | T20P-7 | L86025-T20P | KX20-2 | CS4009-T15P | S7616 |
| ...26 | CHD27 | T20P-7 | L86025-T20P | KX26-2 | C05012-T15P | S7616 |
| ..20 | CHD22 | T20P-7 | L86025-T20P | KX20-2 | CS4009-T15P | S7616 |
| ..26 | CHD27 | T20P-7 | L86025-T20P | KX26-2 | C05012-T15P | S7616 |

## Accessories

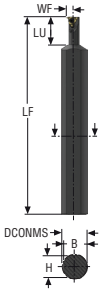
| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...20 | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ...26 | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |
| ..20 | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ..26 | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

## Toolholders, internal

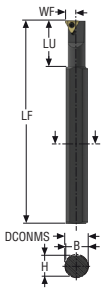
For S-inserts, Snap-Tap®

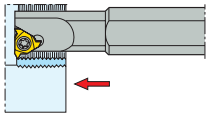


SNR...09A




SNR/L



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | LU | WF | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| SNR0020L09A | 75069222 | 18,0 | 19,0 | 140,0 | 20,0 | 5,1 | 20,0 | 10,2 | – | 0,3 | 09 |
| SNR0010H11 | 75029184 | – | 9,5 | 100,0 | – | 7,5 | 10,0 | 13,0 | 11,0 | 0,1 | 11 |
| SNR0010K11 | 75025251 | 14,0 | 15,5 | 125,0 | 30,0 | 6,5 | 16,0 | 12,0 | 11,0 | 0,2 | 11 |
| SNR0013L11 | 75025249 | 14,0 | 15,5 | 140,0 | 32,0 | 8,0 | 16,0 | 15,0 | 13,0 | 0,2 | 11 |
| SNL0010H11 | 75025415 | – | 9,5 | 100,0 | – | 7,5 | 10,0 | 13,0 | 11,0 | 0,1 | 11 |
| SNL0010K11 | 75025250 | 14,0 | 15,5 | 125,0 | 30,0 | 6,5 | 16,0 | 12,0 | 11,0 | 0,2 | 11 |
| SNL0013L11 | 75025248 | 14,0 | 15,5 | 140,0 | 32,0 | 8,0 | 16,0 | 15,0 | 13,0 | 0,2 | 11 |
| SNR0016M16 | 75025244 | 14,0 | 15,5 | 150,0 | 40,0 | 10,3 | 16,0 | 19,0 | 16,0 | 0,3 | 16 |
| SNL0016M16 | 75025243 | 14,0 | 15,5 | 150,0 | 40,0 | 10,3 | 16,0 | 19,0 | 16,0 | 0,3 | 16 |
| SNR0020Q22 | 75025414 | 18,0 | 19,0 | 180,0 | 45,0 | 13,0 | 20,0 | 24,0 | 22,0 | 0,4 | 22 |
| SNL0020Q22 | 75025416 | 18,0 | 19,0 | 180,0 | 45,0 | 13,0 | 20,0 | 24,0 | 22,0 | 0,4 | 22 |

### Spare Parts, included in delivery

| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| ...09A | T07P-2 | C02205-T07P |
| ...11 | T07P-2 | C02506-T07P |
| ...16 | T15P-2 | C03508-T15P |
| ...22 | T15P-2 | C04011-T15P |

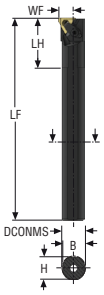
DCINN2, modified. Please see page 35

## Toolholders, internal

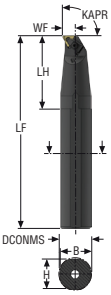
For S-inserts, Snap-Tap®

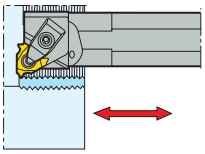


CNR/L...AHD




CNR/L...APIHD

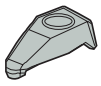
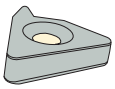


—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CNR0020P16AHD | 02555888 | 18,0 | 19,0 | 170,0 | 13,8 | 41,0 | 20,0 | 24,0 | – | 0,4 | 16.. |
| CNR0025R16AHD | 02555891 | 23,0 | 24,0 | 200,0 | 16,3 | 40,0 | 25,0 | 29,0 | 26,0 | 0,6 | 16.. |
| CNR0032S16AHD | 02555895 | 30,0 | 31,0 | 250,0 | 19,8 | 47,0 | 32,0 | 36,0 | 32,0 | 1,4 | 16.. |
| CNR0040T16AHD | 02555900 | 37,0 | 38,5 | 300,0 | 23,8 | 47,0 | 40,0 | 44,0 | 40,0 | 2,6 | 16.. |
| CNR0050U16AHD | 02555906 | 47,0 | 48,5 | 350,0 | 28,8 | 45,0 | 50,0 | 54,0 | 50,0 | 4,9 | 16.. |
| CNL0020P16AHD | 02555907 | 18,0 | 19,0 | 171,0 | 11,78 | 41,0 | 20,0 | 24,0 | – | 0,4 | 16.. |
| CNL0025R16AHD | 02555908 | 23,0 | 24,0 | 171,0 | 11,78 | 40,0 | 25,0 | 29,0 | 26,0 | 0,6 | 16.. |
| CNL0032S16AHD | 02555909 | 30,0 | 31,0 | 250,0 | 19,8 | 47,0 | 32,0 | 36,0 | 32,0 | 1,4 | 16.. |
| CNL0040T16AHD | 02555910 | 37,0 | 38,5 | 300,0 | 23,8 | 47,0 | 40,0 | 44,0 | 40,0 | 2,6 | 16.. |
| CNR0025R22AHD | 02555913 | 23,0 | 24,0 | 200,0 | 17,8 | 45,0 | 25,0 | 30,0 | – | 0,6 | 22.. |
| CNR0032S22AHD | 02555919 | 30,0 | 31,0 | 250,0 | 21,3 | 46,0 | 32,0 | 38,0 | 32,0 | 1,4 | 22.. |
| CNR0040T22AHD | 02556097 | 37,0 | 38,5 | 300,0 | 25,3 | 53,0 | 40,0 | 46,0 | 40,0 | 2,6 | 22.. |
| CNR0050U22AHD | 02556101 | 47,0 | 48,5 | 350,0 | 30,3 | 51,0 | 50,0 | 56,0 | 50,0 | 4,8 | 22.. |
| CNR0063V22AHD | 02556102 | 60,0 | 61,5 | 400,0 | 36,8 | 56,0 | 63,0 | 69,0 | 63,0 | 9,1 | 22.. |
| CNL0025R22AHD | 02556104 | 23,0 | 24,0 | 200,0 | 17,8 | 45,0 | 25,0 | 30,0 | – | 0,6 | 22.. |
| CNL0032S22AHD | 02556106 | 30,0 | 31,0 | 250,0 | 21,3 | 46,0 | 32,0 | 38,0 | 32,0 | 1,4 | 22.. |
| CNL0040T22AHD | 02556107 | 37,0 | 38,5 | 300,0 | 25,3 | 53,0 | 40,0 | 46,0 | 40,0 | 2,6 | 22.. |
| CNL0050U22AHD | 02556108 | 47,0 | 48,5 | 350,0 | 30,3 | 51,0 | 50,0 | 56,0 | 50,0 | 4,8 | 22.. |
| CNR0050T22APIHD | 02556244 | 47,0 | 48,5 | 300,0 | 20,5 | 114,0 | 50,0 | 49,0 | – | 3,7 | 22.. |
| CNR0063T22APIHD | 02817098 | 60,0 | 61,5 | 300,0 | 22,6 | 119,0 | 63,0 | 50,5 | – | 5,4 | 22.. |
| CNL0063T22APIHD | 02817100 | 60,0 | 61,5 | 300,0 | 22,6 | 119,0 | 63,0 | 50,5 | – | 5,4 | 22.. |
| CNR0040T27AHD | 02556109 | 37,0 | 38,5 | 300,0 | 26,8 | 62,0 | 40,0 | 48,0 | 44,0 | 2,5 | 27.. |
| CNR0050U27AHD | 02556110 | 47,0 | 48,5 | 350,0 | 31,8 | 61,0 | 50,0 | 58,0 | 50,0 | 4,8 | 27.. |
| CNR0063V27AHD | 02556120 | 60,0 | 61,5 | 400,0 | 38,3 | 70,0 | 63,0 | 70,0 | 63,0 | 9,0 | 27.. |
| CNL0040T27AHD | 02556122 | 37,0 | 38,5 | 300,0 | 26,8 | 62,0 | 40,0 | 48,0 | 44,0 | 2,5 | 27.. |
| CNL0050U27AHD | 02556130 | 47,0 | 48,5 | 350,0 | 31,8 | 61,0 | 50,0 | 58,0 | 50,0 | 4,8 | 27.. |
| CNR0063T27APIHD | 02817102 | 60,0 | 61,5 | 300,0 | 23,1 | 119,0 | 63,0 | 50,5 | – | 5,6 | 27.. |
| CNL0063T27APIHD | 02817105 | 60,0 | 61,5 | 300,0 | 23,1 | 119,0 | 63,0 | 50,5 | – | 5,4 | 27.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Plug screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| ...R22, ...S22 | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | P6SS4X4G | CS4009-T15P | – |
| ...T22, ...U22, ...V22 | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | P6SS4X4G | CS4009-T15P | S7616 |
| ..27.. | CHD27 | T20P-7L | – | L86025-T20P | VX27-1 | P6SS4X4G | C05012-T15P | S7616 |
| ..P, ..R16AHD | – | T15P-2 | CSP16HD-T15P | – | GX16-1 | P6SS4X4G | CS3507-T09P | – |
| ..S, ..T, ..U16AHD | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |

## Accessories

| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...R22, ...S22 | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | – |
| ...T22, ...U22, ...V22 | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ..27.. | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| ..P, ..R16AHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ..S, ..T, ..U16AHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |

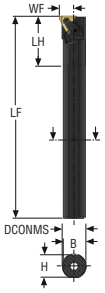
DCINN2, modified. Please see page 35

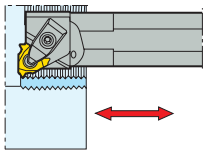
## Toolholders, internal

For S-inserts, Snap-Tap®



CNR/L...AHD

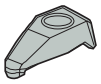
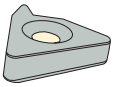


—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CNR000757-16AHD | 02562574 | 0.650 | 0.707 | 6.693 | 0.520 | 1.181 | 0.750 | 0.950 | 0.800 | 0.7 | 16.. |
| CNL000757-16AHD | 02562790 | 0.650 | 0.707 | 6.693 | 0.520 | 1.181 | 0.750 | 0.950 | 0.800 | 0.9 | 16.. |
| CNR001008-16AHD | 02562785 | 0.902 | 0.957 | 7.874 | 0.650 | 2.126 | 1.000 | 1.150 | 1.000 | 1.5 | 16.. |
| CNL001008-16AHD | 02562791 | 0.902 | 0.957 | 7.874 | 0.650 | 2.126 | 1.000 | 1.150 | 1.000 | 1.5 | 16.. |
| CNR0012510-16AHD | 02562786 | 1.150 | 1.209 | 9.843 | 0.780 | 1.811 | 1.250 | 1.400 | 1.200 | 2.9 | 16.. |
| CNL0012510-16AHD | 02562792 | 1.150 | 1.209 | 9.843 | 0.780 | 1.811 | 1.250 | 1.400 | 1.200 | 2.9 | 16.. |
| CNR0015012-16AHD | 02562787 | 1.339 | 1.427 | 11.811 | 0.898 | 1.811 | 1.500 | 1.700 | 1.500 | 5.1 | 16.. |
| CNL0015012-16AHD | 02562793 | 1.339 | 1.427 | 11.811 | 0.898 | 1.811 | 1.500 | 1.700 | 1.500 | 5.1 | 16.. |
| CNR0017514-16AHD | 02562788 | 1.591 | 1.677 | 13.780 | 1.028 | 2.165 | 1.750 | 2.000 | 1.800 | 8.2 | 16.. |
| CNL0017514-16AHD | 02562794 | 1.591 | 1.677 | 13.780 | 1.028 | 2.165 | 1.750 | 2.000 | 1.800 | 7.9 | 16.. |
| CNR0020014-16AHD | 02562789 | 1.843 | 1.929 | 13.780 | 1.150 | 2.244 | 2.000 | 2.200 | 2.000 | 10.8 | 16.. |
| CNL0020014-16AHD | 02562795 | 1.843 | 1.929 | 13.780 | 1.150 | 2.244 | 2.000 | 2.200 | 2.000 | 10.8 | 16.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Plug screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| CNR/L..0757..1008 | – | T15P-2 | CSP16HD-T15P | – | GX16-1 | P6SS4X4G | CS3507-T09P | – |
| CNR..12510 | CHD16 | T15P-7 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |
| CNR/L..12510..15012 | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |
| CNR/L..12510..15012 | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |
| CNR..17514 | CHD16 | – | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |
| CNL..17514 | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |
| CNR/L..20014 | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | P6SS4X4G | CS3507-T09P | S6912 |

## Accessories

| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| CNR/L..0757..1008 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CNR..12510 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CNR/L..12510..15012 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CNR/L..12510..15012 | MX16-1 | GX16-0 | GX16-2 | GX16-4 | GX16-98 | GX16-99 | – | T09P-2 |
| CNR..17514 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CNL..17514 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| CNR/L..20014 | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |

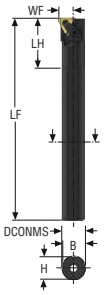
DCINN2, modified. Please see page 35

## Toolholders, internal

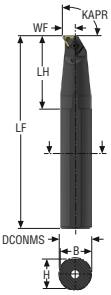
For S-inserts, Snap-Tap®

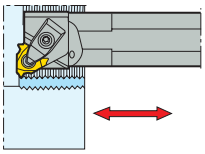


CNR/L...AHD




CNR/L...APIHD

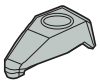
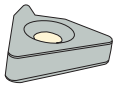


—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CNR001008-22AHD | 02562797 | 0.902 | 0.957 | 7.917 | 0.709 | 1.736 | 1.000 | 1.200 | 1.000 | 1.5 | 22.. |
| CNL001008-22AHD | 02562803 | 0.902 | 0.957 | 7.917 | 0.709 | 1.736 | 1.000 | 1.200 | 1.000 | 1.5 | 22.. |
| CNR0012510-22AHD | 02562798 | 1.150 | 1.209 | 9.843 | 0.839 | 2.126 | 1.250 | 1.500 | 1.200 | 2.9 | 22.. |
| CNL0012510-22AHD | 02562804 | 1.150 | 1.209 | 9.843 | 0.839 | 2.126 | 1.250 | 1.500 | 1.200 | 2.9 | 22.. |
| CNR0015012-22AHD | 02562799 | 1.339 | 1.427 | 11.811 | 0.969 | 2.126 | 1.500 | 1.800 | 1.800 | 5.1 | 22.. |
| CNL0015012-22AHD | 02562805 | 1.339 | 1.427 | 11.811 | 1.183 | 2.126 | 1.500 | 1.800 | 1.800 | 5.3 | 22.. |
| CNR0017514-22AHD | 02562800 | 1.591 | 1.677 | 13.780 | 1.091 | 2.126 | 1.750 | 2.100 | 1.800 | 8.2 | 22.. |
| CNL0017514-22AHD | 02562806 | 1.591 | 1.677 | 13.780 | 1.091 | 2.126 | 1.750 | 2.100 | 1.800 | 8.6 | 22.. |
| CNR0020014-22AHD | 02562801 | 1.843 | 1.929 | 13.780 | 1.209 | 2.323 | 2.000 | 2.300 | 2.000 | 11.0 | 22.. |
| CNL0020014-22AHD | 02562807 | 1.843 | 1.929 | 13.780 | 1.209 | 2.323 | 2.000 | 2.300 | 2.000 | 10.6 | 22.. |
| CNR0025016-22AHD | 02562802 | 2.343 | 2.429 | 15.748 | 1.457 | 2.402 | 2.500 | 2.800 | 2.500 | 20.3 | 22.. |
| CNL0025016-22AHD | 02562808 | 2.343 | 2.429 | 15.748 | 1.457 | 2.402 | 2.500 | 2.800 | 2.500 | 19.8 | 22.. |
| CNR00200T22APIHD | 02562815 | 1.843 | 1.929 | 12.000 | 0.880 | 5.000 | 2.000 | 1.600 | – | 8.4 | 22.. |
| CNR00250T22APIHD | 02562816 | 2.343 | 2.429 | 12.000 | 0.880 | 5.000 | 2.500 | 1.600 | – | 11.9 | 22.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Plug screw | Shim/clamp key | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| CNR..1008..2510.. | – | – | CSP22HD-T15P | – | NX22-1 | P6SS4X4G | T15P-2 | CS4009-T15P | – |
| CNL..1008..2510.. | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | P6SS4X4G | – | CS4009-T15P | – |
| CNR/L..5012..5016.. | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | P6SS4X4G | – | CS4009-T15P | S7616 |
| CNR..200..250T.. | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | P6SS4X4G | – | CS4009-T15P | S7616 |

## Accessories

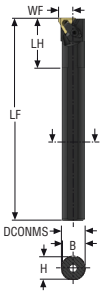
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CNR..1008..2510.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | – |
| CNL..1008..2510.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | – |
| CNR/L..5012..5016.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| CNR..200..250T.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |

## Toolholders, internal

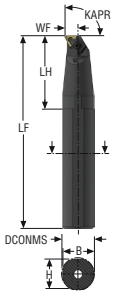
For S-inserts, Snap-Tap®

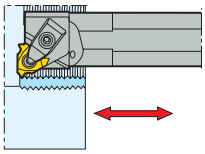


CNR/L...AHD




CNR/L...APIHD

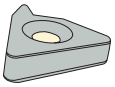


—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CNR0015012-27AHD | 02562809 | 1.339 | 1.427 | 11.811 | 1.020 | 2.441 | 1.500 | 1.900 | 1.500 | 4.9 | 27.. |
| CNL0015012-27AHD | 02562812 | 1.339 | 1.427 | 11.811 | 1.020 | 2.441 | 1.500 | 1.900 | 1.500 | 4.9 | 27.. |
| CNR0017514-27AHD | 02562810 | 1.591 | 1.677 | 13.780 | 1.150 | 2.402 | 1.750 | 2.200 | 1.800 | 8.2 | 27.. |
| CNL0017514-27AHD | 02562813 | 1.591 | 1.677 | 13.780 | 1.150 | 2.402 | 1.750 | 2.200 | 1.800 | 8.4 | 27.. |
| CNR0020014-27HD | 02790281 | 1.843 | 1.929 | 13.780 | 1.346 | 2.283 | 2.000 | 2.362 | 2.000 | 11.5 | 27.. |
| CNR0025016-27AHD | 02562811 | 2.343 | 2.429 | 15.748 | 1.520 | 2.756 | 2.500 | 2.900 | 2.500 | 19.6 | 27.. |
| CNL0025016-27AHD | 02562814 | 2.343 | 2.429 | 15.748 | 1.520 | 2.756 | 2.500 | 2.900 | 2.500 | 20.3 | 27.. |
| CNR00200T27APIHD | 02562819 | 1.843 | 1.929 | 12.000 | 0.900 | 5.000 | 2.000 | 1.600 | 1.600 | 8.4 | 27... |
| CNR00250T27APIHD | 02562820 | 2.343 | 2.429 | 12.000 | 0.900 | 5.000 | 2.500 | 1.600 | 1.600 | 11.9 | 27... |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Plug screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| CNR/L..15012-25016.. | CHD27 | T20P-7L | L86025-T20P | VX27-1 | P6SS4X4G | C05012-T15P | S7616 |
| CNR..200..250T.. | CHD27 | T20P-7 | L86025-T20P | VX27-1 | P6SS4X4G | C05012-T15P | S7616 |

## Accessories

| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| CNR/L..15012-25016.. | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| CNR..200..250T.. | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

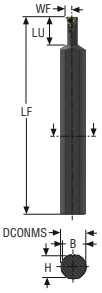
DCINN2, modified. Please see page 35

## Toolholders, internal

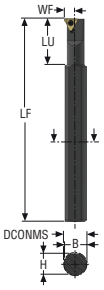
For S-inserts, Snap-Tap®



SNR...09A




SNR/L




—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | H | B | LF | LU | WF | DMM | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| SNR000750-55-09A | 00086856 | 0.691 | 0.707 | 5.500 | – | 0.201 | 0.750 | 0.7 | 09NR.. |
| SNR000375-40-11 | 00072380 | 0.336 | 0.350 | 4.000 | – | 0.285 | 0.375 | 0.2 | 11NR.. |
| SNL00037540-11 | 00072403 | 0.336 | 0.350 | 4.000 | – | 0.285 | 0.375 | 0.2 | 11NL.. |
| SNR00062555-11 | 00072332 | 0.441 | 0.470 | 5.500 | 1.250 | 0.315 | 0.625 | 0.4 | 11NR.. |
| SNL00062555-11 | 00072405 | 0.441 | 0.470 | 5.500 | – | 0.315 | 0.625 | 0.4 | 11NL.. |
| SNR000375-60-11H | 00072376 | 0.336 | 0.350 | 6.000 | – | 0.285 | 0.375 | 0.4 | 11NR.. |
| SNR000625-60-16 | 00072374 | 0.566 | 0.587 | 6.000 | – | 0.406 | 0.625 | 0.7 | 16NR.. |
| SNL00062560-16 | 00072407 | 0.566 | 0.587 | 6.000 | – | 0.406 | 0.625 | 0.7 | 16NL.. |
| SNR000625-80-16H | 00072330 | 0.566 | 0.587 | 8.000 | – | 0.406 | 0.625 | 1.5 | 16NR.. |
| SNR00075-70-22 | 00072314 | 0.691 | 0.707 | 7.000 | – | 0.492 | 0.750 | 0.7 | 22NR.. |
| SNL0007570-22 | 00072411 | 0.691 | 0.707 | 7.000 | – | 0.492 | 0.750 | 0.9 | 22NL.. |
| SNR000750-10-22H | 00072370 | 0.691 | 0.707 | 10.000 | – | 0.492 | 0.750 | 2.7 | 22NR.. |

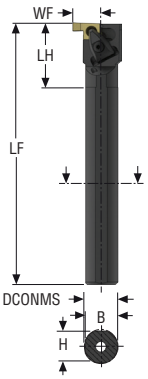
## Spare Parts, included in delivery

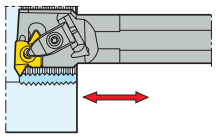
| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| ..09 | T07P-2 | C02205-T07P |
| ..11 | T07P-2 | C02506-T07P |
| ..16 | T15P-2 | C03508-T15P |
| ..22 | T15P-2 | C04011-T15P |

## Toolholders, internal

For K-inserts, Snap-Tap®



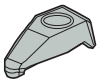
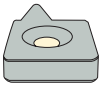


—Right-hand version shown
—For inserts program, see page(s) 124, 126, 156, 158, 160

| Designation | Item number | H | B | CDX | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CNR0025R20AHD | 02556131 | 23,0 | 24,0 | 9999,0 | 200,0 | 20,5 | 50,0 | 25,0 | 38,0 | – | 0,7 | 20 |
| CNR0032S20AHD | 02556132 | 30,0 | 31,0 | 9999,0 | 250,0 | 24,0 | 50,0 | 32,0 | 44,0 | 38,0 | 1,4 | 20 |
| CNR0040T20AHD | 02556133 | 37,0 | 38,5 | 9999,0 | 300,0 | 28,0 | 50,0 | 40,0 | 51,0 | 40,0 | 2,6 | 20 |
| CNL0025R20AHD | 02556134 | 23,0 | 24,0 | 9999,0 | 200,0 | 20,5 | 50,0 | 25,0 | 38,0 | – | 0,7 | 20 |
| CNL0032S20AHD | 02556135 | 30,0 | 31,0 | 9999,0 | 250,0 | 24,0 | 50,0 | 32,0 | 44,0 | 38,0 | 1,4 | 20 |
| CNR0032S26AHD | 02556136 | 30,0 | 31,0 | 9999,0 | 250,0 | 27,0 | 61,0 | 32,0 | 50,0 | 50,0 | 1,5 | 26 |
| CNR0040T26AHD | 02556137 | 37,0 | 38,5 | 9999,0 | 300,0 | 31,0 | 60,0 | 40,0 | 55,0 | 50,0 | 2,6 | 26 |
| CNR0050U26AHD | 02556138 | 47,0 | 48,5 | 9999,0 | 350,0 | 36,0 | 62,0 | 50,0 | 65,0 | – | 4,9 | 26 |
| CNR0063V26AHD | 02556139 | 60,0 | 61,5 | 9999,0 | 400,0 | 42,5 | 64,0 | 63,0 | 80,0 | 63,0 | 8,9 | 26 |
| CNL0040T26AHD | 02556140 | 37,0 | 38,5 | – | 300,0 | 31,0 | 60,0 | 40,0 | 55,0 | 50,0 | 2,5 | 26 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (K) | Plug screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..20 | CHD22 | T20P-7L | L86025-T20P | KX20-2 | P6SS4X4G | CS4009-T15P | S7616 |
| ..26 | CHD27 | T20P-7L | L86025-T20P | KX26-2 | P6SS4X4G | C05012-T15P | S7616 |

## Accessories

| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..20 | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ..26 | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

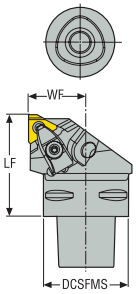
DCINN2, modified. Please see page 35

## Seco-Capto™ – Toolholders, external

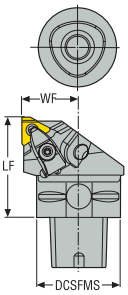
For S-inserts, Snap-Tap®

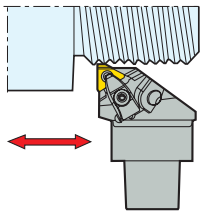


CER/L-..HD




CER/L-..CHD

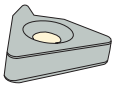


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | DCSFMS<br>mm<br>*Inch* | LF<br>mm<br>*Inch* | WF<br>mm<br>*Inch* | Weight<br>kg<br>*lbs* | CTWS |
|---|---|---|---|---|---|---|
| C4-CER-27050-16HD | 02484547 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 16.. |
| C4-CEL-27050-16HD | 02484655 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 16.. |
| C4-CER-27050-22HD | 02484649 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 22.. |
| C4-CEL-27050-22HD | 02484656 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 22.. |
| C5-CER-35060-16HD | 02484650 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 16.. |
| C5-CEL-35060-16HD | 02484657 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 16.. |
| C5-CER-35060-22HD | 02484652 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,9<br>*1.980* | 22.. |
| C5-CEL-35060-22HD | 02484658 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,9<br>*1.980* | 22.. |
| C5-CER-35060-27HD | 02844418 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 27.. |
| C5-CEL-35060-27HD | 02844420 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 27.. |
| C6-CER-45065-16HD | 02484653 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 16.. |
| C6-CEL-45065-16HD | 02484661 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 16.. |
| C6-CER-45065-22HD | 02484654 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 22.. |
| C6-CEL-45065-22HD | 02484663 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 22.. |
| C6-CER-45065-27HD | 02484848 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 27.. |
| C6-CEL-45065-27HD | 02484860 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 27.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Coolant nozzle | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16HD | CHD16 | T15P-7 | L85020-T15P | CN16 | GX16-1 | CS3507-T09P | S6912 |
| ...22HD | CHD22 | T20P-7L | L86025-T20P | CN16 | NX22-1 | CS4009-T15P | S7616 |
| ...27HD | CHD27 | T20P-7L | L86025-T20P | CN16 | VX27-1 | C05012-T15P | S7616 |
| ...45065-27HD | CHD27 | T20P-7L | L86025-T20P | CN16 | VX27-1 | C05012-T15P | S7616 |

## Accessories

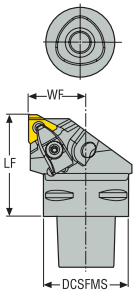
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22HD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27HD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-7 |
| ...45065-27HD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Seco-Capto™ – Toolholders, external

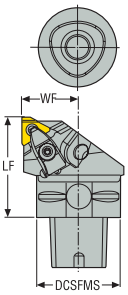
For S-inserts, Snap-Tap®

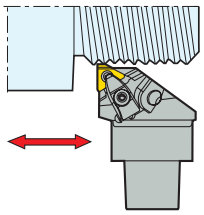


CER/L-..HD




CER/L-..CHD

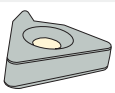


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161

| Designation | Item number | DCSFMS<br>mm<br>*Inch* | LF<br>mm<br>*Inch* | WF<br>mm<br>*Inch* | Weight<br>kg<br>*lbs* | CTWS |
|---|---|---|---|---|---|---|
| C4-CER-27050-16CHD | 02484668 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 16 |
| C4-CEL-27050-16CHD | 02484795 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 16 |
| C5-CER-35060-16CHD | 02484784 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 16 |
| C5-CEL-35060-16CHD | 02484802 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,9<br>*1.980* | 16 |
| C6-CER-45065-16CHD | 02484786 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 16 |
| C6-CEL-45065-16CHD | 02484843 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 16 |
| C4-CER-27050-22CHD | 02484775 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 22 |
| C4-CEL-27050-22CHD | 02484800 | 40,0<br>*1.575* | 50,0<br>*1.969* | 27,0<br>*1.063* | 0,5<br>*1.100* | 22 |
| C5-CER-35060-22CHD | 02484785 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,9<br>*1.980* | 22 |
| C5-CEL-35060-22CHD | 02484804 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 22 |
| C6-CER-45065-22CHD | 02484790 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,4<br>*3.090* | 22 |
| C6-CEL-45065-22CHD | 02484845 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 22 |
| C6-CER-45065-27CHD | 02484854 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,4<br>*3.090* | 27 |
| C6-CEL-45065-27CHD | 02484862 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 27 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Coolant nozzle | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16CHD | CHD16 | T15P-7 | L85020-T15P | CN16 | GX16-1 | CS3507-T09P | S6912 |
| ...22CHD | CHD22 | T20P-7L | L86025-T20P | CN16 | NX22-1 | CS4009-T15P | S7616 |
| ...27CHD | CHD27 | T20P-7L | L86025-T20P | CN16 | VX27-1 | C05012-T15P | S7616 |

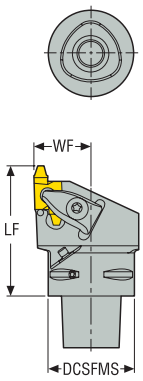
## Accessories

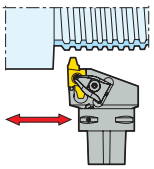
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16CHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22CHD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27CHD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Seco-Capto™ – Toolholders, external

For K-inserts, Snap-Tap®



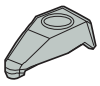


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 155, 157, 159

| Designation | Item number | DCSFMS | LF | WF | Weight | CTWS |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C4-CER-27060-20HD | 02853589 | 40,0<br>*1.575* | 60,0<br>*2.362* | 27,0<br>*1.063* | 0,6<br>*1.320* | 20.. |
| C4-CER-27065-26HD | 02853590 | 40,0<br>*1.575* | 65,0<br>*2.559* | 27,0<br>*1.063* | 0,6<br>*1.320* | 26.. |
| C5-CER-35060-20HD | 02853591 | 50,0<br>*1.969* | 60,0<br>*2.362* | 35,0<br>*1.378* | 0,8<br>*1.760* | 20.. |
| C5-CER-35065-26HD | 02790776 | 50,0<br>*1.969* | 65,0<br>*2.559* | 35,0<br>*1.378* | 0,8<br>*1.760* | 26.. |
| C6-CER-45065-20HD | 02853587 | 63,0<br>*2.480* | 65,0<br>*2.559* | 45,0<br>*1.772* | 1,3<br>*2.870* | 20.. |
| C6-CER-45070-26HD | 02853595 | 63,0<br>*2.480* | 70,0<br>*2.756* | 45,0<br>*1.772* | 1,5<br>*3.310* | 26.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Coolant nozzle | Insert shim (K) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...20HD | CHD22 | T20P-7 | L86025-T20P | CN6 | KX20-2 | CS4009-T15P | S7616 |
| ...26HD | CHD27 | T20P-7 | L86025-T20P | CN6 | KX26-2 | C05012-T15P | S7616 |

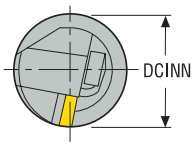
## Accessories

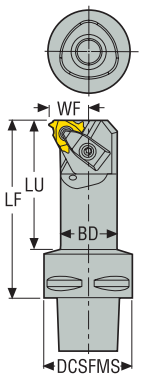
| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...20HD | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ...26HD | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

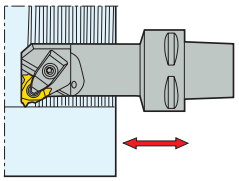
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





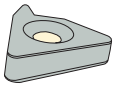



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C4-SNR-10060-16 | 00008610 | 16,0<br>*0.630* | 40,0<br>*1.575* | 19,0<br>*0.748* | 60,0<br>*2.362* | 37,0<br>*1.457* | 10,0<br>*0.394* | 0,3<br>*0.660* | 16.. |
| C4-CNR-14060-16HD | 02555280 | 20,0<br>*0.787* | 40,0<br>*1.575* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,4<br>*0.880* | 16.. |
| C4-CNR-17070-16HD | 02555284 | 25,0<br>*0.984* | 40,0<br>*1.575* | 29,0<br>*1.142* | 70,0<br>*2.756* | 48,0<br>*1.890* | 16,3<br>*0.642* | 0,4<br>*0.880* | 16.. |
| C4-CNR-20090-16HD | 02555320 | 32,0<br>*1.260* | 40,0<br>*1.575* | 36,0<br>*1.417* | 90,0<br>*3.543* | 69,0<br>*2.717* | 19,8<br>*0.780* | 0,6<br>*1.320* | 16.. |
| C4-CNL-14060-16HD | 02555337 | 20,0<br>*0.787* | 40,0<br>*1.575* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,4<br>*0.880* | 16.. |
| C4-CNL-17070-16HD | 02555331 | 25,0<br>*0.984* | 40,0<br>*1.575* | 29,0<br>*1.142* | 70,0<br>*2.756* | 48,0<br>*1.890* | 16,3<br>*0.642* | 0,5<br>*1.100* | 16.. |
| C4-CNL-20090-16HD | 02555371 | 32,0<br>*1.260* | 40,0<br>*1.575* | 36,0<br>*1.417* | 90,0<br>*3.543* | 69,0<br>*2.717* | 19,8<br>*0.780* | 0,7<br>*1.540* | 16.. |
| C4-CNR-22090-22HD | 02555375 | 32,0<br>*1.260* | 40,0<br>*1.575* | 38,0<br>*1.496* | 90,0<br>*3.543* | 69,0<br>*2.717* | 21,3<br>*0.839* | 0,6<br>*1.320* | 22.. |
| C4-CNL-22090-22HD | 02555384 | 32,0<br>*1.260* | 40,0<br>*1.575* | 38,0<br>*1.496* | 90,0<br>*3.543* | 69,0<br>*2.717* | 21,3<br>*0.839* | 0,6<br>*1.320* | 22.. |

### Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert key | Insert screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| ...10060-16 | – | – | – | – | T15P-2 | C03508-T15P | – | – | – |
| ...14060, 17070-16HD | – | T15P-2 | CSP16HD-T15P | – | – | – | GX16-1 | CS3507-T09P | – |
| ...20090-16HD | CHD16 | T15P-2 | – | L85020-T15P | – | – | GX16-1 | CS3507-T09P | S6912 |
| ...22090-22HD | – | T15P-2 | CSP22HD-T15P | – | – | – | NX22-1 | CS4009-T15P | – |

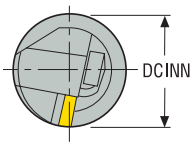
### Accessories

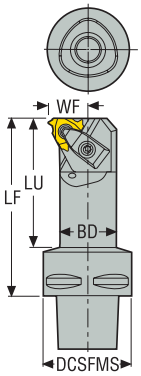
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...10060-16 | – | – | – | – | – | – | – | – | – | – | – | – | – |
| ...14060, 17070-16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...20090-16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22090-22HD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | – |

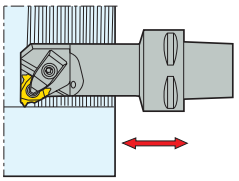
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





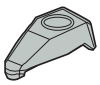
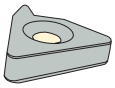



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C5-CNR-14060-16HD | 02555383 | 20,0<br>*0.787* | 50,0<br>*1.969* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,6<br>*1.320* | 16.. |
| C5-CNR-17070-16HD | 02555388 | 25,0<br>*0.984* | 50,0<br>*1.969* | 29,0<br>*1.142* | 70,0<br>*2.756* | 47,0<br>*1.850* | 16,3<br>*0.642* | 0,6<br>*1.320* | 16.. |
| C5-CNR-20090-16HD | 02555391 | 32,0<br>*1.260* | 50,0<br>*1.969* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 0,9<br>*1.980* | 16.. |
| C5-CNL-14060-16HD | 02555739 | 20,0<br>*0.787* | 50,0<br>*1.969* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,6<br>*1.320* | 16.. |
| C5-CNL-17070-16HD | 02555740 | 25,0<br>*0.984* | 50,0<br>*1.969* | 29,0<br>*1.142* | 70,0<br>*2.756* | 47,0<br>*1.850* | 16,3<br>*0.642* | 0,6<br>*1.320* | 16.. |
| C5-CNL-20090-16HD | 02555741 | 32,0<br>*1.260* | 50,0<br>*1.969* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 0,8<br>*1.760* | 16.. |
| C5-CNR-18070-22HD | 02555742 | 25,0<br>*0.984* | 50,0<br>*1.969* | 30,0<br>*1.181* | 70,0<br>*2.756* | 47,0<br>*1.850* | 17,8<br>*0.701* | 0,6<br>*1.320* | 22.. |
| C5-CNR-22090-22HD | 02555743 | 32,0<br>*1.260* | 50,0<br>*1.969* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 0,8<br>*1.760* | 22.. |
| C5-CNL-18070-22HD | 02555745 | 25,0<br>*0.984* | 50,0<br>*1.969* | 30,0<br>*1.181* | 70,0<br>*2.756* | 47,0<br>*1.850* | 17,8<br>*0.701* | 0,6<br>*1.320* | 22.. |
| C5-CNL-22090-22HD | 02555747 | 32,0<br>*1.260* | 50,0<br>*1.969* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 0,8<br>*1.760* | 22.. |
| C5-CNR-26105-27HD | 02823806 | 40,0<br>*1.575* | 50,0<br>*1.969* | 46,0<br>*1.811* | 105,0<br>*4.134* | 83,7<br>*3.295* | 24,78<br>*0.976* | 1,2<br>*2.650* | 27.. |
| C5-CNL-26105-27HD | 02823807 | 40,0<br>*1.575* | 50,0<br>*1.969* | 46,0<br>*1.811* | 105,0<br>*4.134* | 83,7<br>*3.295* | 24,78<br>*0.976* | 1,2<br>*2.650* | 27.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...14060, 17070-16HD | – | T15P-2 | CSP16HD-T15P | – | GX16-1 | CS3507-T09P | – |
| ...20090-16HD | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| ...22HD | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | CS4009-T15P | – |
| ...27HD | CHD27 | T20P-7 | – | L86025-T20P | VX27-1 | C05012-T15P | S7616 |

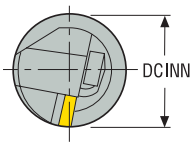
## Accessories

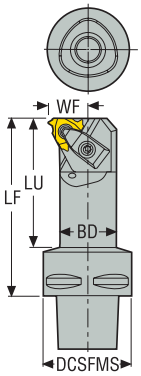
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...14060, 17070-16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...20090-16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22HD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27HD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

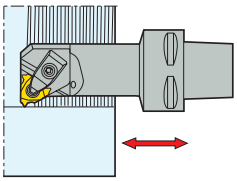
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





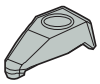
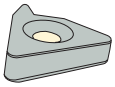



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 165

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CNR-17075-16HD | 02555750 | 25,0<br>*0.984* | 63,0<br>*2.480* | 29,0<br>*1.142* | 75,0<br>*2.953* | 53,0<br>*2.087* | 16,3<br>*0.642* | 0,9<br>*1.980* | 16 |
| C6-CNR-20090-16HD | 02555762 | 32,0<br>*1.260* | 63,0<br>*2.480* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 1,1<br>*2.430* | 16 |
| C6-CNR-24105-16HD | 02555766 | 40,0<br>*1.575* | 63,0<br>*2.480* | 44,0<br>*1.732* | 105,0<br>*4.134* | 80,0<br>*3.150* | 23,8<br>*0.937* | 1,5<br>*3.310* | 16 |
| C6-CNL-17075-16HD | 02555768 | 25,0<br>*0.984* | 63,0<br>*2.480* | 29,0<br>*1.142* | 75,0<br>*2.953* | 53,0<br>*2.087* | 16,3<br>*0.642* | 0,9<br>*1.980* | 16 |
| C6-CNL-20090-16HD | 02555769 | 32,0<br>*1.260* | 63,0<br>*2.480* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 1,1<br>*2.430* | 16 |
| C6-CNL-24105-16HD | 02555771 | 40,0<br>*1.575* | 63,0<br>*2.480* | 44,0<br>*1.732* | 105,0<br>*4.134* | 80,0<br>*3.150* | 23,8<br>*0.937* | 1,5<br>*3.310* | 16 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...17075-16HD | – | T15P-2 | CSP16HD-T15P | – | GX16-1 | CS3507-T09P | – |
| ...20090, 24105-16HD | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |

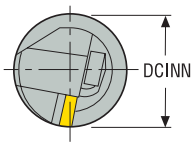
## Accessories

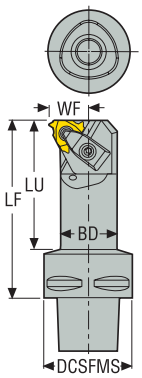
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| ...17075-16HD | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |
| ...20090, 24105-16HD | MX16-1 | GX16-0 | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | T09P-2 |

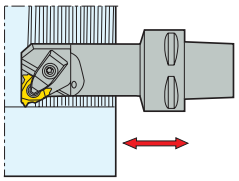
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





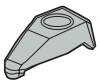
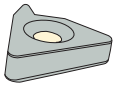



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 150, 154, 156, 158, 160, 161, 163, 164, 166, 167

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CNR-18075-22HD | 02555772 | 25,0<br>*0.984* | 63,0<br>*2.480* | 30,0<br>*1.181* | 75,0<br>*2.953* | 53,0<br>*2.087* | 17,8<br>*0.701* | 0,9<br>*1.980* | 22 |
| C6-CNR-22090-22HD | 02555773 | 32,0<br>*1.260* | 63,0<br>*2.480* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 1,1<br>*2.430* | 22 |
| C6-CNR-26105-22HD | 02555776 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 22 |
| C6-CNL-18075-22HD | 02555777 | 25,0<br>*0.984* | 63,0<br>*2.480* | 30,0<br>*1.181* | 75,0<br>*2.953* | 53,0<br>*2.087* | 17,8<br>*0.701* | 0,9<br>*1.980* | 22 |
| C6-CNL-22090-22HD | 02555832 | 32,0<br>*1.260* | 63,0<br>*2.480* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 1,1<br>*2.430* | 22 |
| C6-CNL-26105-22HD | 02555833 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 22 |

### Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..18075, 22090.. | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | CS4009-T15P | – |
| ..26105.. | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |

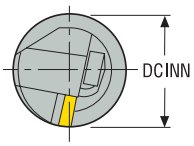
### Accessories

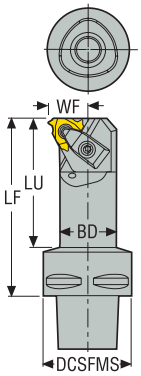
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ..18075, 22090.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ..26105.. | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |

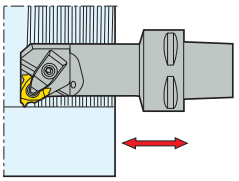
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





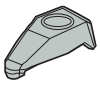
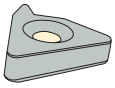



—Right-hand version shown
—For inserts program, see page(s) 130, 131, 132 136, 137, 154, 156, 158, 160, 161, 163, 164, 165

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CNR-26105-27HD | 02644670 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 77,0<br>*3.031* | 25,3<br>*0.996* | 1,5<br>*3.310* | 27 |
| C6-CNR-36182-27HD | 02485584 | 63,0<br>*2.480* | 63,0<br>*2.480* | 70,0<br>*2.756* | 182,0<br>*7.165* | – | 36,0<br>*1.417* | 3,3<br>*7.280* | 27 |
| C6-CNL-26105-27HD | 02644672 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 77,0<br>*3.031* | 25,3<br>*0.996* | 1,4<br>*3.090* | 27 |
| C6-CNL-36182-27HD | 02644681 | 63,0<br>*2.480* | 63,0<br>*2.480* | 70,0<br>*2.756* | 182,0<br>*7.165* | – | 36,0<br>*1.417* | 3,3<br>*7.280* | 27 |
| C8-CNR-36190-27HD | 02644684 | 54,0<br>*2.126* | 80,0<br>*3.150* | 70,0<br>*2.756* | 190,0<br>*7.480* | 160,0<br>*6.299* | 36,0<br>*1.417* | 4,2<br>*9.260* | 27 |
| C8-CNL-36190-27HD | 02644685 | 54,0<br>*2.126* | 80,0<br>*3.150* | 70,0<br>*2.756* | 190,0<br>*7.480* | 160,0<br>*6.299* | 36,0<br>*1.417* | 4,2<br>*9.260* | 27 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Coolant nozzle | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| C6... | CHD27 | T20P-7 | L86025-T20P | – | VX27-1 | C05012-T15P | S7616 |
| C8... | CHD27 | T20P-7 | L86025-T20P | CN8 | VX27-1 | C05012-T15P | S7616 |

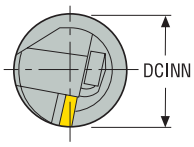
## Accessories

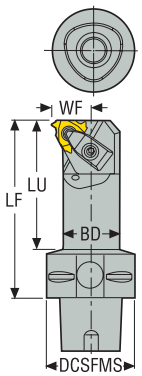
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| C6... | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |
| C8... | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

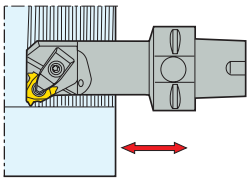
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





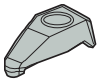
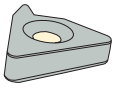



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C4-CNR-14060-16CHD | 02555834 | 20,0<br>*0.787* | 40,0<br>*1.575* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,4<br>*0.880* | 16 |
| C4-CNL-14060-16CHD | 02555835 | 20,0<br>*0.787* | 40,0<br>*1.575* | 24,0<br>*0.945* | 60,0<br>*2.362* | 36,0<br>*1.417* | 13,8<br>*0.543* | 0,4<br>*0.880* | 16 |
| C5-CNR-17070-16CHD | 02555836 | 25,0<br>*0.984* | 50,0<br>*1.969* | 29,0<br>*1.142* | 70,0<br>*2.756* | 47,0<br>*1.850* | 16,3<br>*0.642* | 0,6<br>*1.320* | 16 |
| C5-CNR-20090-16CHD | 02555837 | 32,0<br>*1.260* | 50,0<br>*1.969* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 0,8<br>*1.760* | 16 |
| C5-CNL-17070-16CHD | 02555839 | 25,0<br>*0.984* | 50,0<br>*1.969* | 29,0<br>*1.142* | 70,0<br>*2.756* | 47,0<br>*1.850* | 16,3<br>*0.642* | 0,6<br>*1.320* | 16 |
| C5-CNL-20090-16CHD | 02555840 | 32,0<br>*1.260* | 50,0<br>*1.969* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 0,8<br>*1.760* | 16 |
| C5-CNR-18070-22CHD | 02555841 | 25,0<br>*0.984* | 50,0<br>*1.969* | 30,0<br>*1.181* | 70,0<br>*2.756* | 47,0<br>*1.850* | 17,8<br>*0.701* | 0,6<br>*1.320* | 22 |
| C5-CNL-18070-22CHD | 02555842 | 25,0<br>*0.984* | 50,0<br>*1.969* | 30,0<br>*1.181* | 70,0<br>*2.756* | 47,0<br>*1.850* | 17,8<br>*0.701* | 0,6<br>*1.320* | 22 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..14060/..17070-16CHD | – | T15P-2 | CSP16HD-T15P | – | GX16-1 | CS3507-T09P | – |
| ..18070-22CHD | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | CS4009-T15P | – |
| ..20090-16CHD | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |

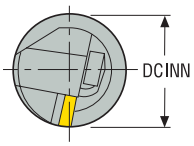
## Accessories

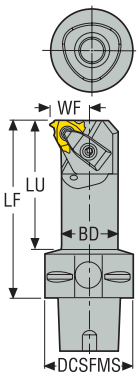
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ..14060/..17070-16CHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ..18070-22CHD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | – |
| ..20090-16CHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |

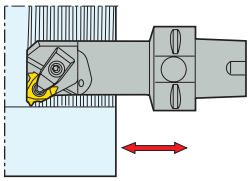
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





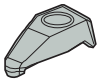
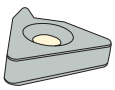



—Right-hand version shown
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 161, 163, 164, 165, 166, 167

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CNR-20090-16CHD | 02555843 | 32,0<br>*1.260* | 63,0<br>*2.480* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 1,1<br>*2.430* | 16 |
| C6-CNR-24105-16CHD | 02555844 | 40,0<br>*1.575* | 63,0<br>*2.480* | 44,0<br>*1.732* | 105,0<br>*4.134* | 80,0<br>*3.150* | 23,8<br>*0.937* | 1,5<br>*3.310* | 16 |
| C6-CNL-20090-16CHD | 02555845 | 32,0<br>*1.260* | 63,0<br>*2.480* | 36,0<br>*1.417* | 90,0<br>*3.543* | 68,0<br>*2.677* | 19,8<br>*0.780* | 1,1<br>*2.430* | 16 |
| C6-CNL-24105-16CHD | 02555847 | 40,0<br>*1.575* | 63,0<br>*2.480* | 44,0<br>*1.732* | 105,0<br>*4.134* | 80,0<br>*3.150* | 23,8<br>*0.937* | 1,5<br>*3.310* | 16 |
| C6-CNR-22090-22CHD | 02555848 | 32,0<br>*1.260* | 63,0<br>*2.480* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 1,1<br>*2.430* | 22 |
| C6-CNR-26105-22CHD | 02555849 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 22 |
| C6-CNL-22090-22CHD | 02555850 | 32,0<br>*1.260* | 63,0<br>*2.480* | 38,0<br>*1.496* | 90,0<br>*3.543* | 68,0<br>*2.677* | 21,3<br>*0.839* | 1,1<br>*2.430* | 22 |
| C6-CNL-26105-22CHD | 02555852 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 22 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16CHD | CHD16 | T15P-2 | – | L85020-T15P | GX16-1 | CS3507-T09P | S6912 |
| ...22090-22CHD | – | T15P-2 | CSP22HD-T15P | – | NX22-1 | CS4009-T15P | – |
| ...26105-22CHD | CHD22 | T20P-7L | – | L86025-T20P | NX22-1 | CS4009-T15P | S7616 |

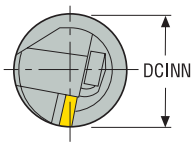
## Accessories

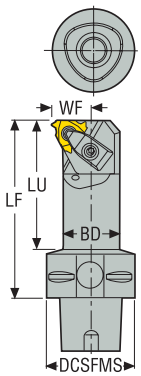
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16CHD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22090-22CHD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...26105-22CHD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |

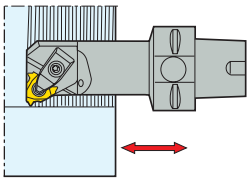
## Seco-Capto™ – Toolholders, internal

For S-inserts, Snap-Tap®





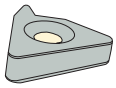



—Right-hand version shown
—For inserts program, see page(s) 130, 131, 132, 136, 137, 154, 156, 158, 160, 161, 163, 164, 165

| Designation | Item number | BD | DCSFMS | DCINN | LF | LU | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CNR-26105-27CHD | 02644674 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 27 |
| C6-CNR-36182-27CHD | 02644686 | 63,0<br>*2.480* | 63,0<br>*2.480* | 70,0<br>*2.756* | 182,0<br>*7.165* | – | 36,0<br>*1.417* | 3,1<br>*6.830* | 27 |
| C6-CNL-26105-27CHD | 02644677 | 40,0<br>*1.575* | 63,0<br>*2.480* | 46,0<br>*1.811* | 105,0<br>*4.134* | 80,0<br>*3.150* | 25,3<br>*0.996* | 1,5<br>*3.310* | 27 |
| C6-CNL-36182-27CHD | 02644687 | 63,0<br>*2.480* | 63,0<br>*2.480* | 70,0<br>*2.756* | 182,0<br>*7.165* | – | 36,0<br>*1.417* | 4,1<br>*9.040* | 27 |

### Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| C6... | CHD27 | T20P-7 | L86025-T20P | VX27-1 | C05012-T15P | S7616 |

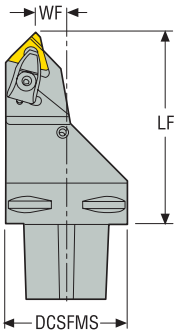
### Accessories

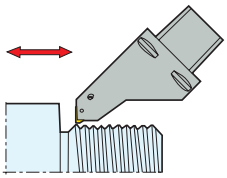
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| C6... | MX27-1 | VX27-98.5 | VX27-2 | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Seco-Capto™ – Toolholders for MTM

For S-inserts, Snap-Tap®



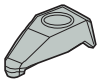
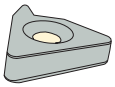


—Right-hand version shown
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 162, 164, 165, 166, 167

| Designation | Item number | DCSFMS | LF | WF | Weight | CTWS |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-CER-18100-16HD | 02509302 | 63,0<br>*2.480* | 100,0<br>*3.937* | 18,0<br>*0.709* | 1,6<br>*3.530* | 16 |
| C6-CER-16100-22HD | 02509303 | 63,0<br>*2.480* | 100,0<br>*3.937* | 16,0<br>*0.630* | 1,6<br>*3.530* | 22 |
| C6-CER-12100-27HD | 02509304 | 63,0<br>*2.480* | 100,0<br>*3.937* | 12,0<br>*0.472* | 1,6<br>*3.530* | 27 |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp screw | Coolant nozzle | Insert shim (S) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ...16HD | CHD16 | T15P-7 | L85020-T15P | CN8 | GX16-1 | CS3507-T09P | S6912 |
| ...22HD | CHD22 | T20P-7L | L86025-T20P | CN8 | NX22-1 | CS4009-T15P | S7616 |
| ...27HD | CHD27 | T20P-7L | L86025-T20P | CN3 | VX27-1 | C05012-T15P | S7616 |

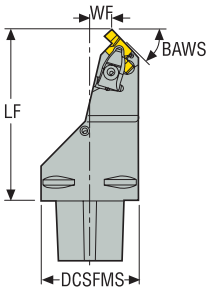
## Accessories

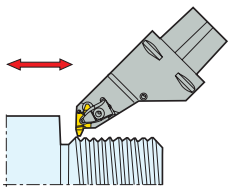
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Shim key |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ...16HD | MX16-1 | GX16-0 | – | – | GX16-2 | GX16-3 | GX16-4 | GX16-98 | GX16-99 | – | – | – | T09P-2 |
| ...22HD | MX22-1 | NX22-97.5 | NX22-98 | NX22-99 | NX22-98.5 | NX22-99.5 | NX22-0.5 | NX22-1.5 | NX22-0 | NX22-2 | NX22-3 | NX22-4 | T15P-2 |
| ...27HD | MX27-1 | VX27-98.5 | VX27-2 | – | VX27-99.5 | VX27-0.5 | VX27-1.5 | VX27-98 | VX27-99 | VX27-3 | VX27-4 | VX27-0 | T15P-2 |

## Seco-Capto™ – Toolholders for MTM

For K-inserts, Snap-Tap®



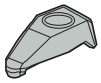


—Left-hand version shown
—For inserts program, see page(s) 123, 125, 155, 157, 159

| Designation | Item number | DCSFMS | LF | WF | Weight | BAWS° | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | | |
| C6-CEL-14110-20HD | 02509308 | 63,0<br>*2.480* | 110,0<br>*4.331* | 14,0<br>*0.551* | 1,7<br>*3.750* | 45 | 20.. |
| C6-CEL-07110-26HD | 02509309 | 63,0<br>*2.480* | 110,0<br>*4.331* | 7,0<br>*0.276* | 1,7<br>*3.750* | 45 | 26.. |
| C6-CEL-18110-14 | 02509306 | 63,0<br>*2.480* | 110,0<br>*4.331* | 18,0<br>*0.709* | 1,7<br>*3.750* | 45 | 14.. |

## Spare Parts, included in delivery

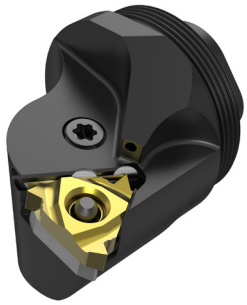
| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Coolant nozzle | Insert shim (K) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| -14 | – | T15P-2 | CSP16-T15P | – | CN8 | KX14-2 | CS3507-T09P | – |
| -20 | CHD22 | T20P-7 | – | L86025-T20P | CN8 | KX20-2 | CS4009-T15P | S7616 |
| -26 | CHD27 | T20P-7 | – | L86025-T20P | CN8 | KX26-2 | C05012-T15P | S7616 |

## Accessories

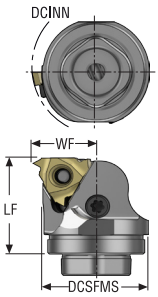
| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| -14 | KX14-0 | KX14-1 | KX14-3 | KX14-4 | KX14-5 | – | T09P-2 |
| -20 | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| -26 | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

## Steadyline®, GL-heads, Jetstream Tooling®

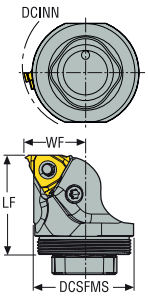
For S-inserts, Snap-Tap®

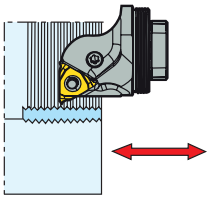


..16AHDJET




..22/32AHDJET

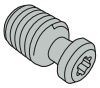


—Right-hand version shown
—CP * Max coolant pressure
—For inserts program, see page(s) 124, 126, 130, 131, 132, 136, 137, 140, 142, 145, 146, 148, 150, 152, 154, 156, 158, 160, 165

| Designation | Item number | DCSFMS<br>mm<br>*Inch* | DCINN<br>mm<br>*Inch* | LF<br>mm<br>*Inch* | WF<br>mm<br>*Inch* | CP<br>bar<br>*psi* | Weight<br>kg<br>*lbs* | CTWS |
|---|---|---|---|---|---|---|---|---|
| GL25-PNR-17025-16AHDJET | 03212499 | 25,0<br>*0.984* | 29,0<br>*1.142* | 25,0<br>*0.984* | 16,3<br>*0.642* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |
| GL25-PNL-17025-16AHDJET | 03212502 | 25,0<br>*0.984* | 29,0<br>*1.142* | 25,0<br>*0.984* | 16,3<br>*0.642* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |
| GL32-PNR-20032-16AHDJET | 03007255 | 32,0<br>*1.260* | 36,0<br>*1.417* | 32,0<br>*1.260* | 19,8<br>*0.780* | 200,0<br>*7.874* | 0,2<br>*0.440* | 16 |
| GL32-PNL-20032-16AHDJET | 03007256 | 32,0<br>*1.260* | 36,0<br>*1.417* | 32,0<br>*1.260* | 19,8<br>*0.780* | 200,0<br>*7.874* | 0,2<br>*0.440* | 16 |
| GL40-PNR-24032-16AHDJET | 03007261 | 40,0<br>*1.575* | 44,0<br>*1.732* | 32,0<br>*1.260* | 23,8<br>*0.937* | 200,0<br>*7.874* | 0,3<br>*0.660* | 16 |
| GL40-PNL-24032-16AHDJET | 03007262 | 40,0<br>*1.575* | 44,0<br>*1.732* | 32,0<br>*1.260* | 23,8<br>*0.937* | 200,0<br>*7.874* | 0,3<br>*0.660* | 16 |
| GL50-PNR-29032-16AHDJET | 03007264 | 50,0<br>*1.969* | 54,0<br>*2.126* | 32,0<br>*1.260* | 28,8<br>*1.134* | 200,0<br>*7.874* | 0,4<br>*0.880* | 16 |
| GL50-PNL-29032-16AHDJET | 03007265 | 50,0<br>*1.969* | 54,0<br>*2.126* | 32,0<br>*1.260* | 28,8<br>*1.134* | 200,0<br>*7.874* | 0,5<br>*1.100* | 16 |
| GL32-PNR-22032-22AHDJET | 03007257 | 32,0<br>*1.260* | 38,0<br>*1.496* | 32,0<br>*1.260* | 21,3<br>*0.839* | 200,0<br>*7.874* | 0,2<br>*0.440* | 22 |
| GL32-PNL-22032-22AHDJET | 03007258 | 32,0<br>*1.260* | 38,0<br>*1.496* | 32,0<br>*1.260* | 21,3<br>*0.839* | 200,0<br>*7.874* | 0,2<br>*0.440* | 22 |
| GL40-PNR-26032-22AHDJET | 03007263 | 40,0<br>*1.575* | 46,0<br>*1.811* | 32,0<br>*1.260* | 25,3<br>*0.996* | 200,0<br>*7.874* | 0,2<br>*0.440* | 22 |
| GL40-PNL-26032-22AHDJET | 03007468 | 40,0<br>*1.575* | 46,0<br>*1.811* | 32,0<br>*1.260* | 25,3<br>*0.996* | 200,0<br>*7.874* | 0,3<br>*0.660* | 22 |
| GL50-PNR-31032-22AHDJET | 03007266 | 50,0<br>*1.969* | 56,0<br>*2.205* | 32,0<br>*1.260* | 30,3<br>*1.193* | 200,0<br>*7.874* | 0,4<br>*0.880* | 22 |
| GL50-PNL-31032-22AHDJET | 03007267 | 50,0<br>*1.969* | 56,0<br>*2.205* | 32,0<br>*1.260* | 30,3<br>*1.193* | 200,0<br>*7.874* | 0,5<br>*1.100* | 22 |
| GL40-PNR-27037-27AHDJET | 03007260 | 40,0<br>*1.575* | 48,0<br>*1.890* | 37,0<br>*1.457* | 26,8<br>*1.055* | 200,0<br>*7.874* | 0,3<br>*0.660* | 27 |
| GL50-PNR-32037-27AHDJET | 03007259 | 50,0<br>*1.969* | 58,0<br>*2.283* | 37,0<br>*1.457* | 31,8<br>*1.252* | 200,0<br>*7.874* | 0,4<br>*0.880* | 27 |

## Spare Parts, included in delivery

| For holders | Insert lever | Insert shim (S) | Lever screw | Locking key | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ..16.. | PP3712 | GXA16-1 | LS0612-T15P | T15P-2 | AC4625 |
| ..22A.. | PP4816 | NXA22-1 | LS0815-T25P | T25P-7 | AC5035 |
| ..27A.. | PP6019 | VXA27-1 | LS0820-T25P | T25P-7 | AC6050 |

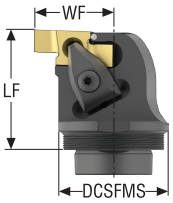
## Accessories

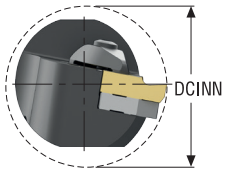
| For holders | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| ..16.. | MXA16-1 | GXA16-0 | – | – | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | – | – | – |
| ..22A.. | MXA22-1 | NXA22-0 | NXA22-98 | NXA22-97.5 | NXA22-0.5 | NXA22-1.5 | NXA22-2 | NXA22-3 | NXA22-4 | NXA22-99.5 | NXA22-99 | NXA22-98.5 |
| ..27A.. | MXA27-1 | VXA27-0 | VXA27-98 | – | VXA27-0.5 | VXA27-1.5 | VXA27-2 | VXA27-3 | VXA27-4 | VXA27-99.5 | VXA27-99 | VXA27-98.5 |

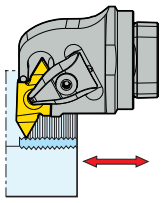
## Steadyline®, GL-heads

For K-inserts, Snap-Tap®





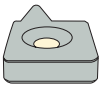



—Right-hand version shown
—For inserts program, see page(s)123, 124, 125, 125, 126, 156, 158, 160
—CP * Max coolant pressure

| Designation | Item number | DCSFMS | DCINN | LF | WF | CP | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | bar<br>*psi* | kg<br>*lbs* | |
| GL50-CNR-36055-26AHD | 03051391 | 50,0<br>*1.969* | 65,0<br>*2.559* | 55,0<br>*2.165* | 36,0<br>*1.417* | 200,0<br>*7.874* | 0,6<br>*1.320* | 26 NR.. |

### Spare Parts, included in delivery

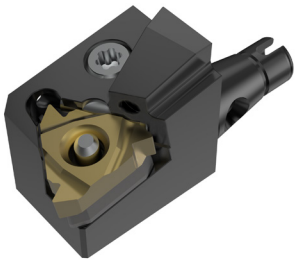
| For holders | Cantilever clamp | Clamp screw | Insert shim (K) | Key, clamp | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| GL50... | CHD27 | L86025-T20P | KX26-2 | T20P-2D | C05012-T15P | S7616 |

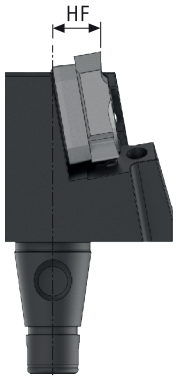
### Accessories

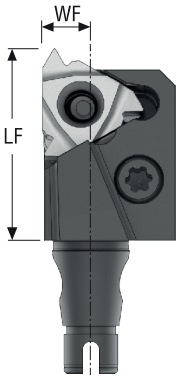
| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| GL50... | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | KX26-2 | T15P-2 |

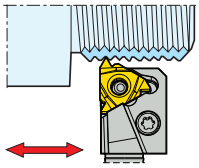
## Quick Change, Jetstream Tooling® QC-heads – External

For S-inserts, Snap-Tap®





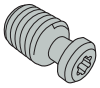



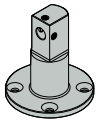
—Right-hand version shown
—CP * Max coolant pressure
—For Technical Guide, se catalog Turning
—For inserts program, see page(s) 123, 125, 127, 128, 133, 134, 139, 141, 143, 144, 147, 149, 151, 153, 155, 157, 159, 161, 167

| Designation | Item number | HF | LF | WF | CP | Weight | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | bar<br>*psi* | kg<br>*lbs* | |
| QC12-PER-16HDJET | 03280772 | 5,975<br>*0.235* | 25,0<br>*0.984* | 6,0<br>*0.236* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |
| QC12-PEL-16HDJET | 03280773 | 5,975<br>*0.235* | 25,0<br>*0.984* | 6,0<br>*0.236* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |
| QC16-PER-16HDJET | 03280774 | 7,9<br>*0.311* | 25,0<br>*0.984* | 8,0<br>*0.315* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |
| QC16-PEL-16HDJET | 03280775 | 7,9<br>*0.311* | 25,0<br>*0.984* | 8,0<br>*0.315* | 200,0<br>*7.874* | 0,1<br>*0.220* | 16 |

## Spare Parts, included in delivery

| For holders | Insert lever | Insert shim (S) | Lever key | Lever screw | Shim pin |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ..-16 | PP3712 | GXA16-1 | T15P-2 | LS0612-T15P | AC4625 |

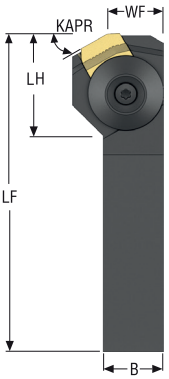
## Accessories

| For holders | Insert clamping torque | Insert shim (M) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Insert shim (S) | Mounting fixture | Torque key |
|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |
| ..-16 | 3.0NM | MXA16-1 | GXA16-0 | GXA16-2 | GXA16-3 | GXA16-4 | GXA16-99 | GXA16-98 | SECO-MF7075-QC | T00-15P30 |

## Toolholder for peeling

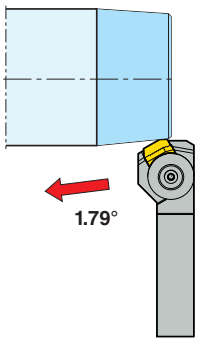
Metric







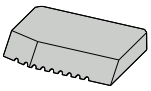
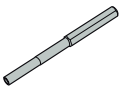





—Right-hand version shown
—For inserts program, see page(s) 122

| Designation | Item number | KAPR° | H | B | LF | HF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | kg | |
| CSXCR3232P25-R30 | 03120990 | 30 | 32,0 | 32,0 | 170,0 | 32,0 | 29,53 | 64,61 | 0,5 | SCNN-R30 |

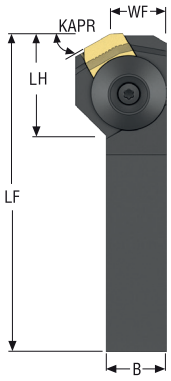
## Spare Parts, included in delivery

| For holders | Anvil screw | Chipbreaker | Insert screw | Key | Key (T-handle) | Plug | Shim |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| CSXCR... | CA4012 | PS2518 | W400820-T30P | H6B-T30PL | DOUBLE-T | JET-P1/8-5MM | SSN250630 |

## Toolholder for peeling

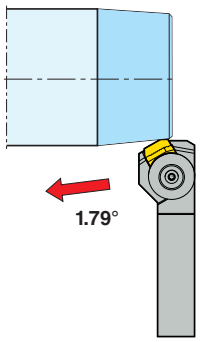
Inch







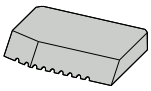
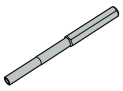





—Right-hand version shown
—For inserts program, see page(s) 122

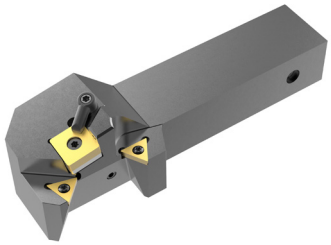
| Designation | Item number | KAPR° | H | B | LF | HF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CSXCR20-8D-R30 | 03120991 | 30 | 1.250 | 1.250 | 6.693 | 1.250 | 1.163 | 2.545 | 3.3 | SCNN-R30 |

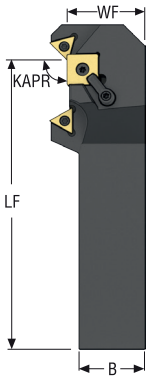
## Spare Parts, included in delivery

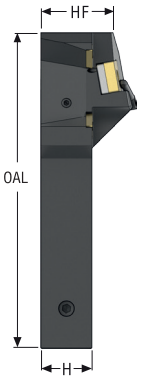
| For holders | Anvil screw | Chipbreaker | Insert screw | Key | Key (T-handle) | Plug | Shim |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| CSXCR... | CA4012 | PS2518 | W400820-T30P | H6B-T30PL | DOUBLE-T | JET-P1/8-5MM | SSN250630 |

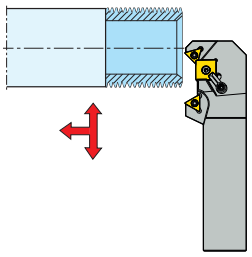
## Toolholder for pipe-facing

Metric





—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | KAPR° | H | B | LF | OAL | HF | WF | Weight | CTWS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | kg | | |
| MSGNR3240R19-TC-45-60 | 03120992 | 90 | 32,0 | 40,0 | 174,0 | 195,6 | 32,0 | 47,0 | 0,7 | SN...1906... TCMT16T3... | SN...1906... TCMT16T3... |

## Spare Parts, included in delivery

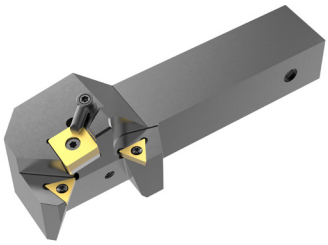
| For holders | Cantilever clamp | Clamp screw | Insert key | Insert screw | Insert shim | Key | Key (T-handle) | Plug | Shim pin |
|---|---|---|---|---|---|---|---|---|---|
| MSGNR... | MC22 | LD6024-T20P | H4B-T15P | C03508-T15P | SSN190412 | H6B-T20P | DOUBLE-T | JET-P1/8-5MM | MN1920-T20P |

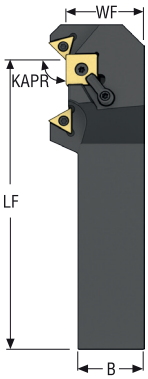
## Accessories

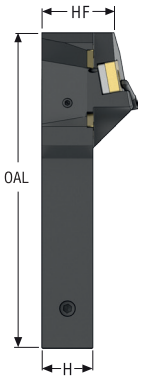
| For holders | Insert clamping torque |
|---|---|
| MSGNR... | 3.0NM |

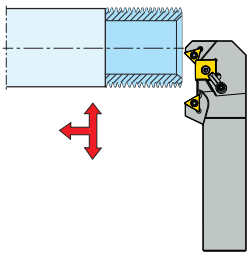
## Toolholder for pipe-facing

Inch





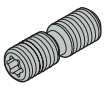
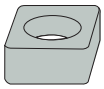
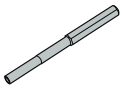



—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | KAPR° | H | B | LF | OAL | HF | WF | Weight | CTWS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | | |
| MSGNR-125-6-TC-45-60 | 03120993 | 90 | 1.250 | 1.500 | 6.850 | 7.701 | 1.260 | 1.850 | 5.1 | SN...1906... TCMT16T3... | SN...1906... TCMT16T3... |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp screw | Insert key | Insert screw | Insert shim | Key | Key (T-handle) | Plug | Shim pin |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| MSGNR... | MC22 | LD6024-T20P | H4B-T15P | C03508-T15P | SSN190412 | H6B-T20P | DOUBLE-T | JET-P1/8-5MM | MN1920-T20P |

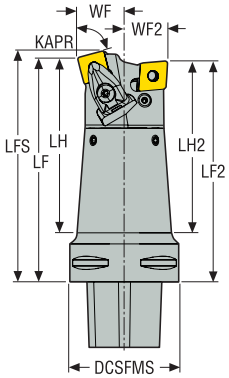
## Accessories

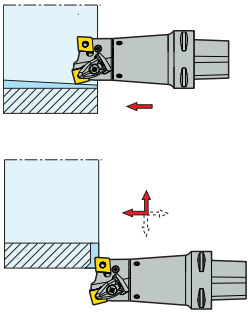
| For holders | Insert clamping torque |
|---|---|
| |  |
| MSGNR... | 3.0NM |

## Seco-Capto™, Multi insert pocket tools, internal

Toolholders for inserts SNMA, SNMG, SNMM / CNMA, CNMG, CNMM



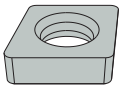


—Right-hand version shown
—GAMO -5° = Rake angle
—LAMS -10°= Inclination angle
—KAPR = 75°
—C.-DSKNR/L - CLNR/L 75°
—For inserts program, see catalog Turning

| Designation | Item number | Seco-Capto size | DCSFMS | LF | LF2 | LFS | LH | LH2 | WF | WF2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-DSKNR2713015-PCLNL2512816 | 03031406 | C6 | 63,0<br>*2.480* | 130,0<br>*5.118* | 128,0<br>*5.039* | 134,0<br>*5.276* | 101,5<br>*3.996* | 99,5<br>*3.917* | 27,0<br>*1.063* | 25,0<br>*0.984* | 0,9<br>*1.980* | SN1506-CN1606/SN..54-CN..54 |
| C6-DSKNL2713015-PCLNR2512816C | 03032390 | C6 | 63,0<br>*2.480* | 130,0<br>*5.118* | 128,0<br>*5.039* | 134,0<br>*5.276* | 101,5<br>*3.996* | 99,5<br>*3.917* | 27,0<br>*1.063* | 25,0<br>*0.984* | 2,3<br>*5.070* | SN1506-CN1606/SN..54-CN..54 |

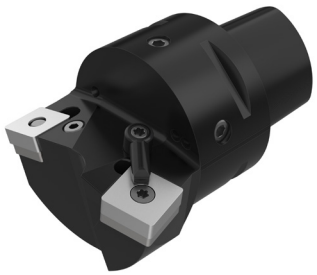
### Spare Parts, included in delivery

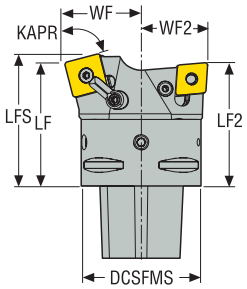
| For holders | Clamp | Clamp pin | Clamp screw | Insert shim | Lever pin | Lever screw | Plug | Shim pin | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |
| C6 | CD16-S | FP2012 | L86026-T20P | PCN160412 | PP6017 | LS0820 | P6SS6X5G | RP8286 | C05010-T20P | S7010 |

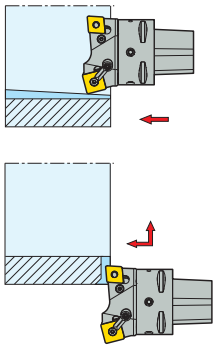
### Accessories

| For holders | Clamp kit | Key | Lever key |
|---|---|---|---|
| |  |  |  |
| C6 | CD16-S16 | T20P-7L | 3SMS795 |

## Seco-Capto™, Multi insert pocket tools, internal



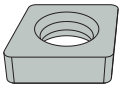
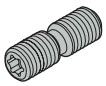


—Right-hand version shown
—GAMO -5° = Rake angle
—LAMS -10°= Inclination angle
—KAPR = 75°
—C.-DSKNR/L - CLNR/L 75°
—For inserts program, see catalog Turning

| Designation | Item number | Seco-Capto size | DCSFMS | LF | LF2 | LFS | WF | WF2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | kg<br>*lbs* | |
| C6-MSKNR4006519-PCLNL3506516 | 03032391 | C6 | 63,0<br>*2.480* | 65,0<br>*2.559* | 65,0<br>*2.559* | 69,8<br>*2.748* | 40,0<br>*1.575* | 35,0<br>*1.378* | 0,7<br>*1.540* | SN1906-CN1606/ SN..64-CN..54 |
| C6-MSKNL4006519-PCLNR3506516C | 03032405 | C6 | 63,0<br>*2.480* | 65,0<br>*2.559* | 65,0<br>*2.559* | 69,8<br>*2.748* | 40,0<br>*1.575* | 35,0<br>*1.378* | 1,5<br>*3.310* | SN1906-CN1606/ SN..64-CN..54 |
| C8-MSKNR4508019-PCLNL4508016 | 03032403 | C8 | 80,0<br>*3.150* | 80,0<br>*3.150* | 80,0<br>*3.150* | 85,0<br>*3.346* | 45,0<br>*1.772* | 45,0<br>*1.772* | 3,3<br>*7.280* | SN1906-CN1606/ SN..64-CN..54 |
| C8-MSKNL4508019-PCLNR4508016C | 03031407 | C8 | 80,0<br>*3.150* | 80,0<br>*3.150* | 80,0<br>*3.150* | 85,0<br>*3.346* | 45,0<br>*1.772* | 45,0<br>*1.772* | 3,1<br>*6.830* | SN1906-CN1606/ SN..64-CN..54 |

## Spare Parts, included in delivery

| For holders | Clamp | Coolant nozzle | Insert shim | Lever pin | Lever screw | Pin | Plug | Screw | Shim pin |
|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |
| C6/C8 | MC22 | CN6 | SSN190412 | PP6017 | LS0820 | MN1920-T20P | P6SS6X5G | LD6024-T20P | RP8286 |

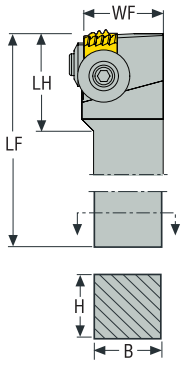
## Accessories

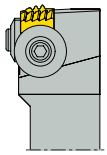
| For holders | Key | Lever key |
|---|---|---|
| |  |  |
| C6/C8 | T20P-7L | 3SMS795 |

## Toolholders for chasers, External

Snap-Tap®





—Right-hand version shown
—For inserts program, see page(s) 168

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | kg | |
| CER3232P1-X | 03048363 | 32,0 | 32,0 | 170,24 | 37,25 | 47,54 | 1,4 | 15.875 |
| CER3232P5-X | 03048364 | 32,0 | 32,0 | 170,24 | 37,25 | 47,54 | 1,4 | 25.000 |

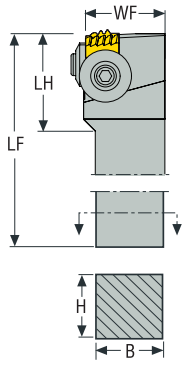
## Spare Parts, included in delivery

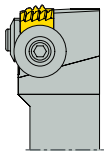
| For holders | Clamp kit side | Clamp kit top | Key, side clamp | Key, top clamp |
|---|---|---|---|---|
| |  |  |  |  |
| CER | W200613-T20P | W240618-T25P | T20P-7 | T25P-7 |

## Toolholders for chasers, External

Snap-Tap®





—Right-hand version shown
—For inserts program, see page(s) 168

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER1256-1-X | 03048365 | 1.250 | 1.250 | 6.702 | 1.467 | 1.872 | 3.3 | 15.875 |
| CER1256-5-X | 03048366 | 1.250 | 1.250 | 6.702 | 1.467 | 1.872 | 3.3 | 25.000 |

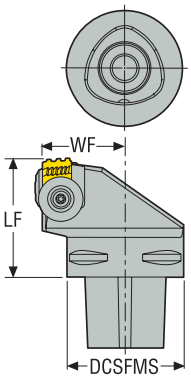
## Spare Parts, included in delivery

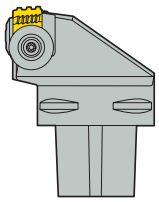
| For holders | Clamp kit side | Clamp kit top | Key, side clamp | Key, top clamp |
|---|---|---|---|---|
| |  |  |  |  |
| CER | W200613-T20P | W240618-T25P | T20P-7 | T25P-7 |

## Seco-Capto™ – Toolholders for chasers, external

Snap-Tap®





—Right-hand version shown
—For inserts program, see page(s) 168

| Designation | Item number | LF | WF | DCSFMS | Weight | CTWS |
|---|---|---|---|---|---|---|
| | | mm | mm | mm | kg | |
| C6-CER-45065-1-X | 02995827 | 65,0 | 45,0 | 63,0 | 1,4 | 15.875 |
| C6-CER-45065-5-X | 02995828 | 65,0 | 45,0 | 63,0 | 1,4 | 25.000 |
| C8-CER-55080-1-X | 02995821 | 80,0 | 55,0 | 80,0 | 2,7 | 15.875 |
| C8-CER-55080-5-X | 02995822 | 80,0 | 55,0 | 80,0 | 2,8 | 25.000 |

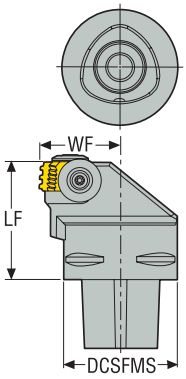
### Spare Parts, included in delivery

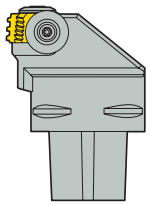
| For holders | Clamp kit side | Clamp kit top | Key, side clamp | Key, top clamp |
|---|---|---|---|---|
| |  |  |  |  |
| C6/C8-X | W200613-T20P | W240618-T25P | T20P-7 | T25P-7 |

## Seco-Capto™ – Toolholders for chasers, internal

Snap-Tap®





–Right-hand version shown
–For inserts program, see page(s) 168

| Designation | Item number | LF | WF | DCSFMS | Weight | CTWS |
|---|---|---|---|---|---|---|
| | | mm | mm | mm | kg | |
| C6-CNR-45065-1-X | 02995829 | 65,0 | 45,0 | 63,0 | 1,5 | 15.875 |
| C6-CNR-45065-5-X | 02995831 | 65,0 | 45,0 | 63,0 | 1,5 | 25.000 |
| C8-CNR-55080-1-X | 02995823 | 80,0 | 55,0 | 80,0 | 2,9 | 15.875 |
| C8-CNR-55080-5-X | 02995825 | 80,0 | 55,0 | 80,0 | 3,0 | 25.000 |
| C8-CNL-55080-1-X | 03118011 | 80,0 | 55,0 | 80,0 | 1,9 | 15.875 |
| C8-CNL-55080-5-X | 03118015 | 80,0 | 55,0 | 80,0 | 1,7 | 25.000 |

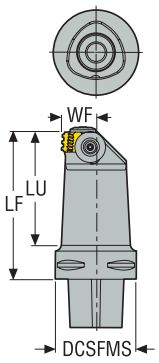
### Spare Parts, included in delivery

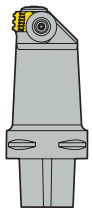
| For holders | Clamp kit side | Clamp kit top | Coolant nozzle | Key, side clamp | Key, top clamp |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ...CNL... | W200613-T20P | W240618-T25P | – | T20P-7 | T25P-7 |
| ...CNR... | W200613-T20P | W240618-T25P | CN6 | T20P-7 | T25P-7 |

## Seco-Capto™ – Toolholders for chasers, internal

Snap-Tap®





—Right-hand version shown
—For inserts program, see page(s) 168

| Designation | Item number | LF | LU | WF | DCSFMS | Weight | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | kg | |
| C6-CNR-27115-1-X | 03003765 | 115,0 | 88,0 | 27,0 | 63,0 | 1,9 | 15.875 |
| C6-CNR-27115-5-X | 03010914 | 115,0 | 88,0 | 27,0 | 63,0 | 1,9 | 25.000 |

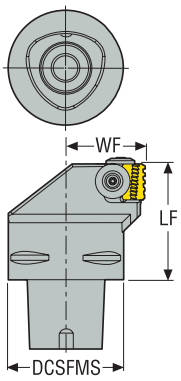
### Spare Parts, included in delivery

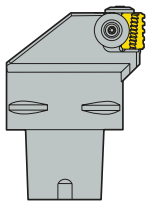
| For holders | Clamp kit side | Clamp kit top | Coolant nozzle | Key, side clamp | Key, top clamp |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| C6... | W200613-T20P | W240618-T25P | CN6 | T20P-7 | T25P-7 |

## Seco-Capto™ – Toolholders for chasers, internal

Snap-Tap®





—Left-hand version shown
—For inserts program, see page(s) 168

| Designation | Item number | LF | WF | DCSFMS | Weight | CTWS |
|---|---|---|---|---|---|---|
| | | mm | mm | mm | kg | |
| C6-CNL-45065-1C-X | 02995830 | 65,0 | 45,0 | 63,0 | 1,4 | 15.875 |
| C6-CNL-45065-5C-X | 02995832 | 65,0 | 45,0 | 63,0 | 1,3 | 25.000 |
| C8-CNL-55080-1C-X | 02995824 | 80,0 | 55,0 | 80,0 | 2,9 | 15.875 |
| C8-CNL-55080-5C-X | 02995826 | 80,0 | 55,0 | 80,0 | 0,7 | 25.000 |

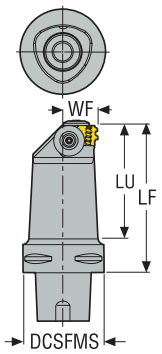
### Spare Parts, included in delivery

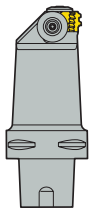
| For holders | Clamp kit side | Clamp kit top | Coolant nozzle | Key, side clamp | Key, top clamp |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| C6/C8... | W200613-T20P | W240618-T25P | CN6 | T20P-7 | T25P-7 |

## Seco-Capto™ – Toolholders for chasers, internal

Snap-Tap®





—Left-hand version shown
—For inserts program, see page(s) 168

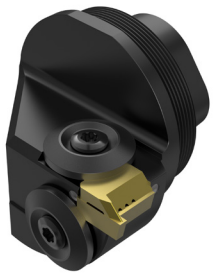
| Designation | Item number | LF | LU | WF | DCSFMS | Weight | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | kg | |
| C6-CNL-27115-1C-X | 03003766 | 115,0 | 88,0 | 27,0 | 63,0 | 2,0 | 15.875 |
| C6-CNL-27115-5C-X | 03010915 | 115,0 | 88,0 | 27,0 | 63,0 | 1,9 | 25.000 |

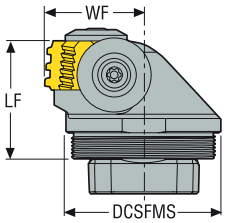
## Spare Parts, included in delivery

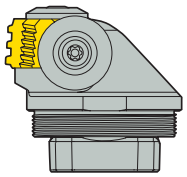
| For holders | Clamp kit side | Clamp kit top | Coolant nozzle | Key, side clamp | Key, top clamp |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| C6... | W200613-T20P | W240618-T25P | CN6 | T20P-7 | T25P-7 |

## Steadyline®, GL-heads – Toolholders for chasers, internal

Snap-Tap®





—Right-hand version shown
—For inserts program, see page(s) 168

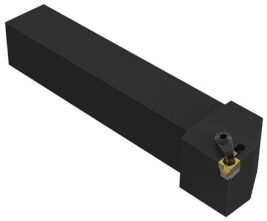
| Designation | Item number | LF | WF | DCSFMS | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | kg | bar | |
| GL50-CNR-32035-9-I | 03011855 | 35,0 | 32,0 | 50,0 | 0,4 | 200,0 | 12.700 |
| GL50-CNR-32038-1-X | 03008525 | 38,0 | 32,0 | 50,0 | 0,5 | 200,0 | 15.875 |
| GL50-CNR-32044-5-X | 03008552 | 44,0 | 32,0 | 50,0 | 0,5 | 200,0 | 25.000 |
| GL50-CNL-32035-9-I | 03011856 | 35,0 | 32,0 | 50,0 | 0,5 | 200,0 | 12.700 |
| GL50-CNL-32038-1-X | 03008526 | 38,0 | 32,0 | 50,0 | 0,5 | 200,0 | 15.875 |
| GL50-CNL-32044-5-X | 03008553 | 44,0 | 32,0 | 50,0 | 0,4 | 200,0 | 25.000 |

## Spare Parts, included in delivery

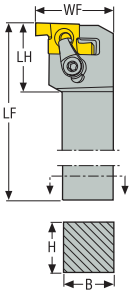
| For holders | Clamp kit side | Clamp kit top | Key, clamp | Key, side clamp | Key, top clamp |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ...1-X, ...5-X | W200613-T20P | W240618-T25P | – | T20P-2D | T25P-7 |
| ...9-1 | – | W200613-T20P | T20P-2D | – | – |

## Toolholders for Precision Axial Grooves

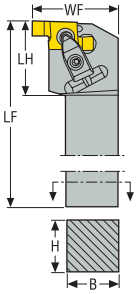
Snap-Tap®

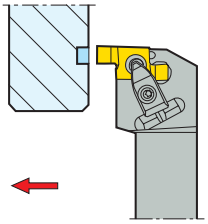


CEAR/L...D




CEAR/L...HD/QHD

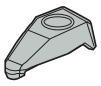


—Right-hand version shown
—For inserts program and INPLM, se catalog Turning

| Designation | Item number | H | B | LF | WF 10../14../20.. | WF2 12 | LH 10../14.. | INPLM 10../14../20.. | INPLM2 12.. | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CEAR2525M10D | 02411447 | 25,0 | 25,0 | 150,0 | 35,35 | 38,35 | 22,0 | 16,0 | 18,0 | 0,8 | 10../ 12.. |
| CEAL2525M10D | 02411448 | 25,0 | 25,0 | 150,0 | 35,35 | 38,35 | 22,0 | 16,0 | 18,0 | 0,8 | 10../ 12.. |
| CEAR2525M14HD | 02627517 | 25,0 | 25,0 | 150,0 | 36,85 | – | 31,0 | 22,0 | – | 0,8 | 14.. |
| CEAL2525M14HD | 02627516 | 25,0 | 25,0 | 150,0 | 36,85 | – | 31,0 | 22,0 | – | 0,9 | 14.. |
| CEAR2525M20QHD | 02528518 | 25,0 | 25,0 | 150,0 | 39,35 | – | 35,0 | 28,0 | – | 0,9 | 20.. |
| CEAL2525M20QHD | 02528519 | 25,0 | 25,0 | 150,0 | 39,35 | – | 35,0 | 28,0 | – | 0,9 | 20.. |

## Spare Parts, included in delivery

| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (KL) | Insert shim (KR) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |
| CEAR..10 | – | T15P-2 | CSP16-T15P | – | – | AKR10 | CS2507-T07P | – |
| CEAL..10 | – | T15P-2 | CSP16-T15P | – | AKL10 | – | CS2507-T07P | – |
| CEAR..14 | CHD16 | T15P-2 | – | L85020-T15P | – | AKR14 | CS3507-T09P | S6912 |
| CEAL..14 | CHD16 | T15P-2 | – | L85020-T15P | AKL14 | – | CS3507-T09P | S6912 |
| CEAR..20 | CHD22 | T20P-7 | – | L86025-T20P | – | AKR20 | CS4009-T15P | S7616 |
| CEAL..20 | CHD22 | T20P-7 | – | L86025-T20P | AKL20 | – | CS4009-T15P | S7616 |

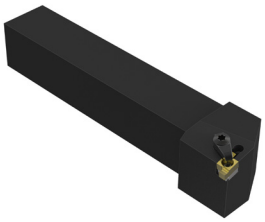
## Accessories

| For holders | Insert shim (K) | Shim key |
|---|---|---|
| |  |  |
| CEAR..10 | KX12-2 | T07P-2 |
| CEAL..10 | KX12-2 | T07P-2 |
| CEAR..14 | – | T09P-2 |
| CEAL..14 | – | T09P-2 |
| CEAR..20 | – | T15P-2 |
| CEAL..20 | – | T15P-2 |

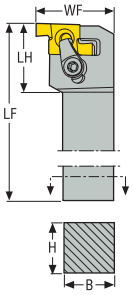
Shim KX12-2 for insert 12..

# Toolholders for Precision Axial Grooves

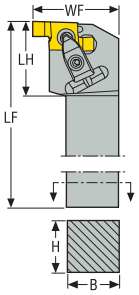
Snap-Tap®

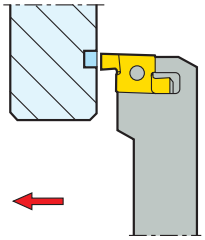


CEAR/L...D




CEAR/L...HD/QHD



—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CEAR1006-10 | 00072625 | 1.000 | 1.000 | 6.000 | 1.392 | 1.110 | 2.0 | 10/12EAR |
| CEAL1006-10 | 00072613 | 1.000 | 1.000 | 6.000 | 1.392 | 1.110 | 2.0 | 10/12EAL |
| CEAR1006-14 | 00072623 | 1.000 | 1.000 | 6.000 | 1.451 | 1.110 | 2.2 | 14EAR |

## Spare Parts, included in delivery

| For size | Clamp key | Clamp kit | Insert shim | Insert shim (KL) | Insert shim (KR) | Shim key | Shim screw |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| CEAL..-10 | T15P-2 | CSP16-T15P | – | AKL10 | – | – | CS2507-T07P |
| CEAR..-10 | T15P-2 | CSP16-T15P | – | – | AKR10 | – | CS2507-T07P |
| CEAR..-14 | T15P-2 | CSP16-T15P | AKR14 | – | – | T09P-2 | CS3507-T09P |

## Accessories

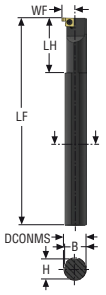
| For size | Insert shim (K) | Shim key |
|---|---|---|
| |  |  |
| CEAL..-10 | KX12-2 | T07P-2 |
| CEAR..-10 | – | T07P-2 |
| CEAR..-14 | – | – |

## Toolholders for Precision Grooves

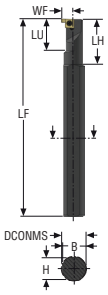
Snap-Tap®

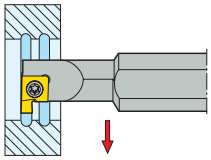


SNR/L..H09




SNR/L



—Right-hand version shown
—DCINN - minimum bore diameter
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | LU | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| SNR0010H9 | 75025330 | 9,5 | 9,5 | 100,0 | – | 7,5 | 20,0 | 10,0 | 14,0 | 0,1 | 9.. |
| SNR0010K9 | 75025332 | 15,5 | 15,5 | 125,0 | 23,0 | 6,5 | 25,0 | 16,0 | 14,0 | 0,2 | 9.. |
| SNR0013L9 | 75025334 | 15,5 | 15,5 | 140,0 | 30,0 | 8,0 | 32,0 | 16,0 | 17,0 | 0,2 | 9.. |
| SNR0016M9 | 75025336 | 15,5 | 15,5 | 150,0 | 38,0 | 9,5 | 40,0 | 16,0 | 20,0 | 0,3 | 9.. |
| SNL0010H9 | 75025331 | 9,5 | 9,5 | 100,0 | – | 7,5 | 20,0 | 10,0 | 14,0 | 0,1 | 9.. |
| SNL0010K9 | 75025333 | 15,5 | 15,5 | 125,0 | 23,0 | 6,5 | 25,0 | 16,0 | 14,0 | 0,2 | 9.. |
| SNL0013L9 | 75025335 | 15,5 | 15,5 | 140,0 | 30,0 | 8,0 | 32,0 | 16,0 | 17,0 | 0,2 | 9.. |
| SNL0016M9 | 75025337 | 15,5 | 15,5 | 150,0 | 38,0 | 9,5 | 40,0 | 16,0 | 20,0 | 0,3 | 9.. |

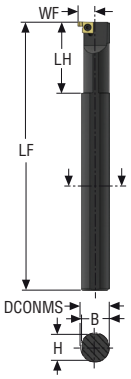
## Spare Parts, included in delivery

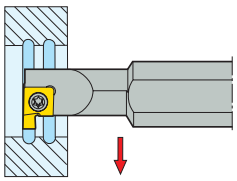
| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| ..9 | T07P-2 | C02506-T07P |

## Toolholders for Precision Grooves

Snap-Tap®





—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | DMM | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| SNR000375-50-9 | 00072560 | 0.625 | 0.654 | 5.000 | 0.266 | 1.000 | 0.375 | 0.4 | 9.. |
| SNR00050-55-9 | 00072586 | 0.441 | 0.470 | 5.500 | 0.319 | 1.250 | 0.500 | 0.4 | 9.. |
| SNR000625-60-9 | 00072588 | 0.566 | 0.587 | 6.000 | 0.378 | 1.500 | 0.625 | 0.7 | 9.. |
| SNL00037540-9 | 00072552 | 0.336 | 0.350 | 4.000 | 0.299 | – | 0.375 | 0.2 | 9.. |
| SNL00037550-9 | 00072595 | 0.336 | 0.350 | 5.000 | 0.259 | 1.000 | 0.375 | 0.4 | 9.. |
| SNR000375-60-9H | 00072562 | 0.441 | 0.350 | 6.000 | 0.299 | – | 0.375 | 0.4 | 9.. |

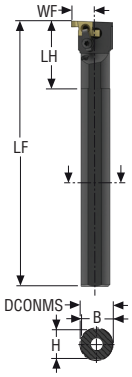
## Spare Parts, included in delivery

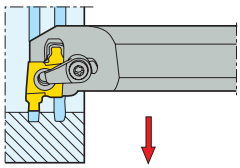
| For size | Insert key | Insert screw |
|---|---|---|
| |  |  |
| ..-9 | T07P-2 | C02506-T07P |

## Toolholders for Precision Grooves

Snap-Tap®





—Right-hand version shown
—DCINN - minimum bore diameter
—WF (10../14../20../26..) = WF2 (12..)
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | WF2 | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CNR0020P10DA | 02411454 | 18,0 | 19,0 | 170,0 | 13,5 | 16,5 | 26,0 | 20,0 | 26,0 | 29,0 | 0,4 | 10../12.. |
| CNR0025R10DA | 02411459 | 23,0 | 24,0 | 200,0 | 16,0 | 19,0 | 28,0 | 25,0 | 31,0 | 34,0 | 0,6 | 10../12.. |
| CNR0032S10DA | 02411467 | 30,0 | 31,0 | 250,0 | 19,5 | 22,5 | 31,0 | 32,0 | 38,0 | 41,0 | 1,4 | 10../12.. |
| CNL0020P10DA | 02411456 | 18,0 | 19,0 | 170,0 | 13,5 | 16,5 | 26,0 | 20,0 | 26,0 | 29,0 | 0,4 | 10../12.. |
| CNL0025R10DA | 02411464 | 23,0 | 24,0 | 200,0 | 16,0 | 19,0 | 28,0 | 25,0 | 31,0 | 34,0 | 0,6 | 10../12.. |
| CNL0032S10DA | 02411468 | 30,0 | 31,0 | 250,0 | 19,5 | 22,5 | 31,0 | 32,0 | 38,0 | 41,0 | 1,4 | 10../12.. |
| CNR0020P14A | 00040041 | 18,0 | 19,0 | 170,0 | 15,0 | – | 32,0 | 20,0 | 30,0 | – | 0,4 | 14.. |
| CNR0025R14A | 00040042 | 23,0 | 24,0 | 200,0 | 17,5 | – | 45,0 | 25,0 | 34,0 | – | 0,7 | 14.. |
| CNR0032S14A | 00040043 | 30,0 | 31,0 | 250,0 | 21,0 | – | 48,0 | 32,0 | 40,0 | – | 1,4 | 14.. |
| CNR0040T14A | 00040044 | 37,0 | 38,5 | 300,0 | 25,0 | – | 50,0 | 40,0 | 48,0 | – | 2,6 | 14.. |
| CNL0020P14A | 00040045 | 18,0 | 19,0 | 170,0 | 15,0 | – | 32,0 | 20,0 | 30,0 | – | 0,4 | 14.. |
| CNL0025R14A | 00040046 | 23,0 | 24,0 | 200,0 | 17,5 | – | 45,0 | 25,0 | 34,0 | – | 0,7 | 14.. |
| CNL0032S14A | 00040047 | 30,0 | 31,0 | 250,0 | 21,0 | – | 48,0 | 32,0 | 40,0 | – | 1,4 | 14.. |

## Spare Parts, included in delivery

| For holders | Clamp key | Clamp kit | Insert shim (K) | Shim screw |
|---|---|---|---|---|
| |  |  |  |  |
| ..10 | T15P-2 | CSP16-T15P | KX10-2 | CS2507-T07P |
| ..14 | T15P-2 | CSP16-T15P | KX14-2 | CS3507-T09P |

## Accessories

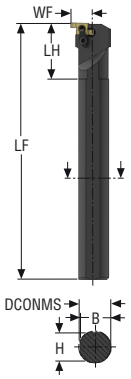
| For holders | Insert shim (K) | Shim key |
|---|---|---|
| |  |  |
| ..10 | KX12-2 | T07P-2 |
| ..14 | – | T09P-2 |

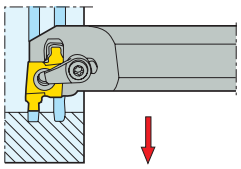
Shim KX12-2 for insert 12..

## Toolholders for Precision Grooves

Snap-Tap®



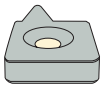


—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | DMM | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CNR000757-10 | 00072573 | 0.691 | 0.707 | 7.000 | 0.490 | 1.480 | 0.750 | 0.9 | 10../12.. |
| CNL000757-10 | 00072624 | 0.650 | 0.707 | 7.000 | 0.490 | 1.480 | 0.750 | 0.9 | 10../12.. |
| CNR001008-10 | 00072569 | 0.921 | 0.957 | 8.000 | 0.618 | 2.500 | 1.000 | 1.8 | 10../12.. |
| CNL001008-10 | 00072610 | 0.902 | 0.957 | 8.000 | 0.620 | 1.559 | 1.000 | 1.8 | 10../12.. |
| CNR0012510-10 | 00072563 | 1.150 | 1.209 | 10.000 | 0.750 | 1.772 | 1.250 | 3.3 | 10../12.. |
| CNR0015012-10 | 00072592 | 1.339 | 1.427 | 12.008 | 0.858 | 1.772 | 1.500 | 0.4 | 10../12.. |
| CNR00075010-10-H | 00072583 | 0.691 | 0.730 | 10.000 | 0.490 | 1.480 | 0.750 | 2.2 | 10../12.. |
| CNR000757-14 | 00072571 | 0.691 | 0.707 | 7.000 | 0.570 | 1.693 | 0.750 | 0.9 | 14.. |
| CNR001008-14 | 00072567 | 0.921 | 0.957 | 8.000 | 0.700 | 1.732 | 1.000 | 1.8 | 14.. |
| CNL001008-14 | 00072582 | 1.000 | 0.961 | 8.000 | 0.704 | – | 1.000 | 1.8 | 14.. |
| CNR0012510-14 | 00072561 | 1.150 | 1.209 | 10.000 | 0.831 | 1.969 | 1.250 | 3.3 | – |

## Spare Parts, included in delivery

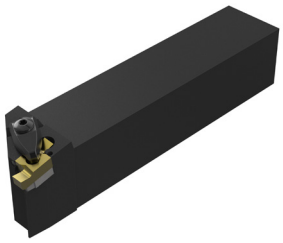
| For size | Clamp key | Clamp kit | Insert shim (K) | Shim screw |
|---|---|---|---|---|
| |  |  |  |  |
| ..-10 | T15P-2 | CSP16-T15P | KX10-2 | CS2507-T07P |
| ..-10-10-H | T15P-2 | CSP16-T15P | KX10-2 | CS2507-T07P |
| ..-14 | T15P-2 | CSP16-T15P | KX14-2 | CS3507-T09P |

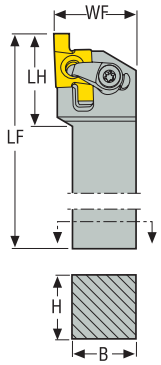
## Accessories

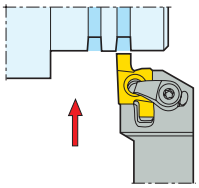
| For size | Insert shim (K) | Shim key |
|---|---|---|
| |  |  |
| ..-10 | KX12-2 | T07P-2 |
| ..-10-10-H | – | T07P-2 |
| ..-14 | – | – |

## Toolholders for Precision Grooves

Snap-Tap



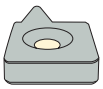


—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER0504-10Q | 00072566 | 0.500 | 0.500 | 4.000 | 0.625 | 0.900 | 0.4 | 10../12.. |
| CER0755-10Q | 00072564 | 0.750 | 0.750 | 5.000 | 1.000 | 0.900 | 0.9 | 10../12.. |
| CEL0755-10Q | 00072559 | 0.750 | 0.750 | 5.000 | 1.000 | 0.900 | 1.1 | 10../12.. |
| CER1006-10Q | 00072600 | 1.000 | 1.000 | 6.000 | 1.250 | 0.900 | 1.8 | 10../12.. |
| CEL1006-10Q | 00072596 | 1.000 | 1.000 | 6.000 | 1.250 | 0.900 | 1.8 | 10../12.. |
| CER1006-14Q | 00072634 | 1.000 | 1.000 | 6.000 | 1.250 | 1.100 | 1.8 | 14.. |
| CEL1006-14Q | 00072628 | 1.000 | 1.000 | 6.000 | 1.250 | 1.100 | 2.0 | 14.. |

## Spare Parts, included in delivery

| For size | Clamp key | Clamp kit | Insert shim (K) | Shim screw |
|---|---|---|---|---|
| |  |  |  |  |
| ..-10 | T15P-2 | CSP16-T15P | KX10-2 | CS2507-T07P |
| ..-14 | T15P-2 | CSP16-T15P | KX14-2 | CS3507-T09P |

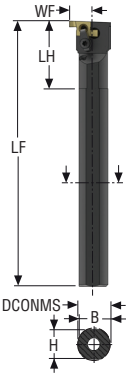
## Accessories

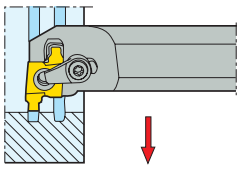
| For size | Insert shim (K) | Shim key |
|---|---|---|
| |  |  |
| ..-10 | KX12-2 | T07P-2 |
| ..-14 | – | T09P-2 |

## Toolholders for Precision Grooves

Snap-Tap®



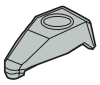


—Right-hand version shown
—DCINN - minimum bore diameter
—WF (10../14../20../26..) = WF2 (12..)
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | DMM | DCINN | DCINN2 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| CNR001008-20AHD | 02562823 | 0.902 | 0.957 | 7.992 | 0.705 | 1.969 | 1.000 | 1.400 | – | 1.8 | 20.. |
| CNL001008-20AHD | 02562826 | 1.268 | 1.268 | 7.992 | 0.705 | 1.969 | 1.250 | 1.400 | – | 1.5 | 20.. |
| CNR0012510-20AHD | 02562824 | 1.150 | 1.209 | 10.000 | 0.945 | 2.165 | 1.250 | 1.700 | 1.400 | 3.3 | 20.. |
| CNL0012510-20AHD | 02562827 | 1.268 | 1.268 | 10.000 | 0.945 | 2.165 | 1.250 | 1.700 | 1.400 | 2.9 | 20.. |
| CNR0015012-20AHD | 02562825 | 1.268 | 1.268 | 12.008 | 1.063 | 2.165 | 1.250 | 2.000 | 1.600 | 5.5 | 20.. |
| CNL0015012-20AHD | 02562828 | 1.339 | 1.427 | 12.008 | 1.063 | 2.165 | 1.500 | 2.000 | 1.600 | 5.1 | 20.. |
| CNR0012510-26AHD | 02562830 | 1.150 | 1.209 | 10.000 | 1.063 | 2.323 | 1.250 | 2.000 | 1.600 | 2.9 | 26.. |
| CNL0012510-26AHD | 02564043 | 1.268 | 1.268 | 10.000 | 1.063 | 2.323 | 1.250 | 2.000 | 1.600 | 3.1 | 26.. |
| CNR0015012-26AHD | 02562831 | 1.339 | 1.427 | 12.008 | 1.183 | 2.323 | 1.500 | 2.100 | 2.100 | 5.1 | 26.. |
| CNL0015012-26AHD | 02563555 | 1.268 | 1.268 | 12.008 | 1.177 | 2.323 | 1.250 | 2.100 | 2.100 | 4.9 | 26.. |
| CNR0017514-26AHD | 02562832 | 1.591 | 1.677 | 13.976 | 1.307 | 2.283 | 1.750 | 2.300 | 1.800 | 8.2 | 26.. |
| CNL0017514-26AHD | 02563563 | 1.268 | 1.268 | 13.976 | 1.307 | 2.283 | 1.250 | 2.300 | 1.800 | 8.4 | 26.. |
| CNR0020014-26AHD | 02562833 | 1.268 | 1.268 | 13.976 | 1.433 | 2.283 | 1.250 | 2.500 | 2.000 | 11.5 | 26.. |
| CNR0025016-26AHD | 02562834 | 2.343 | 2.429 | 15.984 | 1.683 | 2.283 | 2.500 | 3.000 | 2.500 | 20.7 | 26.. |
| CNL0025016-26AHD | 02563564 | 1.268 | 1.268 | 15.984 | 1.683 | 2.283 | 1.250 | 3.000 | 2.500 | 20.7 | 26.. |

## Spare Parts, included in delivery

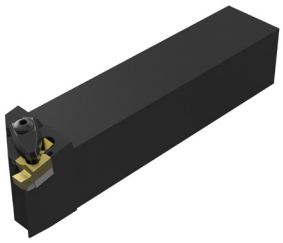
| For holders | Cantilever clamp | Clamp key | Clamp screw | Insert shim (K) | Plug screw | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..-20 | CHD22 | T20P-7 | L86025-T20P | KX20-2 | P6SS4X4G | CS4009-T15P | S7616 |
| ..-26 | CHD27 | T20P-7 | L86025-T20P | KX26-2 | P6SS4X4G | C05012-T15P | S7616 |

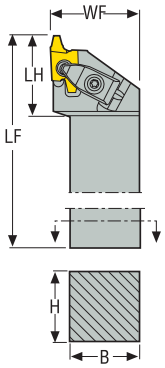
## Accessories

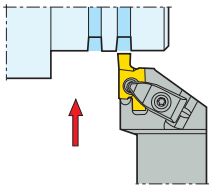
| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..-20 | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ..-26 | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

## Toolholders for Precision Grooves

Snap-Tap



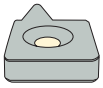


—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | |
| CER1006-20QHD | 02529045 | 1.000 | 1.000 | 6.000 | 1.250 | 1.300 | 1.8 | 20.. |
| CEL1006-20QHD | 02529053 | 1.000 | 1.000 | 6.000 | 1.250 | 1.300 | 1.8 | 20.. |
| CER1256-20QHD | 02529057 | 1.250 | 1.250 | 6.000 | 1.500 | 1.417 | 2.7 | 20.. |
| CEL1256-20QHD | 02529061 | 1.250 | 1.250 | 6.000 | 1.500 | 1.300 | 2.9 | 20.. |
| CER1006-26QHD | 02529063 | 1.000 | 1.000 | 6.000 | 1.250 | 1.800 | 2.0 | 26.. |
| CEL1006-26QHD | 02529064 | 1.000 | 1.000 | 6.000 | 1.250 | 1.800 | 2.2 | 26.. |
| CER1256-26QHD | 02529066 | 1.250 | 1.250 | 6.000 | 1.500 | 1.800 | 2.9 | 26.. |
| CER1506-26QHD | 02529069 | 1.500 | 1.500 | 6.000 | 1.750 | 1.800 | 4.0 | 26.. |

## Spare Parts, included in delivery

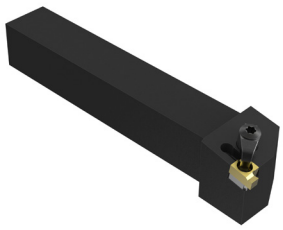
| For size | Cantilever clamp | Clamp key | Clamp screw | Insert shim (K) | Shim screw | Spring |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| ..-20Q | CHD22 | T20P-7 | L86025-T20P | KX20-2 | CS4009-T15P | S7616 |
| ..-26Q | CHD27 | T20P-7 | L86025-T20P | KX26-2 | C05012-T15P | S7616 |

## Accessories

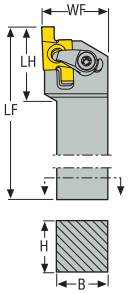
| For size | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..-20Q | KX20-99 | KX20-0 | KX20-1 | KX20-3 | KX20-4 | KX20-5 | T15P-2 |
| ..-26Q | KX26-99 | KX26-0 | KX26-1 | KX26-3 | KX26-4 | KX26-5 | T15P-2 |

## Toolholders for Precision Grooves

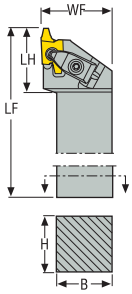
Snap-Tap®



CER/L...D



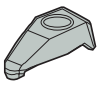

CER/L...QHD




—Right-hand version shown
—For inserts program, see catalog Turning

| Designation | Item number | H | B | LF 10../14.. | LF2 12 | WF | LH 10../14.. | LH2 12 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | kg | |
| CER1212M10D | 02435850 | 12,0 | 12,0 | 150,0 | 153,0 | 16,0 | 21,5 | 24,5 | 0,2 | 10../ 12.. |
| CER1616H10D | 02411427 | 16,0 | 16,0 | 100,0 | 103,0 | 16,0 | 21,5 | 24,5 | 0,3 | 10../ 12.. |
| CER2020K10D | 02411428 | 20,0 | 20,0 | 125,0 | 128,0 | 25,0 | 21,5 | 24,5 | 0,4 | 10../ 12.. |
| CER2525M10D | 02411430 | 25,0 | 25,0 | 150,0 | 153,0 | 32,0 | 21,5 | 24,5 | 0,8 | 10../ 12.. |
| CER3225P10D | 02411432 | 32,0 | 25,0 | 170,0 | 173,0 | 32,0 | 22,5 | 25,5 | 1,1 | 10../ 12.. |
| CEL1212M10D | 02435852 | 12,0 | 12,0 | 150,0 | 153,0 | 16,0 | 21,5 | 24,5 | 0,2 | 10../ 12.. |
| CEL1616H10D | 02411436 | 16,0 | 16,0 | 100,0 | 103,0 | 16,0 | 21,5 | 24,5 | 0,3 | 10../ 12.. |
| CEL2020K10D | 02411437 | 20,0 | 20,0 | 125,0 | 128,0 | 25,0 | 21,5 | 24,5 | 0,4 | 10../ 12.. |
| CEL2525M10D | 02411438 | 25,0 | 25,0 | 150,0 | 153,0 | 32,0 | 21,5 | 24,5 | 0,8 | 10../ 12.. |
| CEL3225P10D | 02411440 | 32,0 | 25,0 | 170,0 | 173,0 | 32,0 | 22,5 | 25,5 | 1,1 | 10../ 12.. |
| CER2525M14QHD | 02538606 | 25,0 | 25,0 | 150,0 | – | 32,0 | 26,0 | – | 0,8 | 14.. |
| CER3225P14QHD | 02627519 | 32,0 | 25,0 | 170,0 | – | 32,0 | 26,0 | – | 1,1 | 14.. |
| CER3232P14QHD | 02627520 | 32,0 | 32,0 | 170,0 | – | 32,0 | 26,0 | – | 1,4 | 14.. |
| CEL2525M14QHD | 02627518 | 25,0 | 25,0 | 150,0 | – | 32,0 | 26,0 | – | 0,8 | 14.. |

## Spare Parts, included in delivery

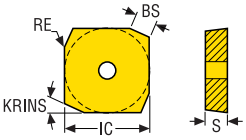
| For holders | Cantilever clamp | Clamp key | Clamp kit | Clamp screw | Insert shim (K) | Shim screw | Spring |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..10 | – | T15P-2 | CSP16-T15P | – | KX10-2 | CS2507-T07P | – |
| ..14 | CHD16 | T15P-2 | – | L85020-T15P | KX14-2 | CS3507-T09P | S6912 |

## Accessories

| For holders | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Insert shim (K) | Shim key |
|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |
| ..10 | KX12-2 | – | – | – | – | – | T07P-2 |
| ..14 | – | KX14-0 | KX14-1 | KX14-3 | KX14-4 | KX14-5 | T09P-2 |

Shim KX12-2 for insert 12..

## SCNN for peeling

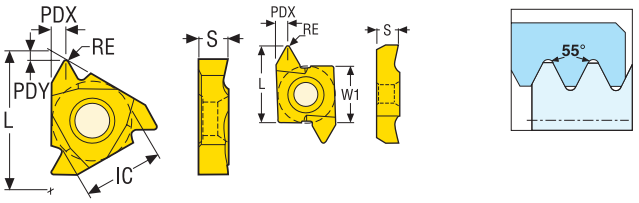



| | | | | | | | Grades |
|---|---|---|---|---|---|---|---|
| **Designation** | **Note** | **RE** | **BS** | **IC** | **S** | **KRINS°** | **Coated** |
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | TP250T |
| SCNN250640-R25 | * | 4,0<br>*0.157* | 6,2<br>*0.244* | 25,0<br>*0.984* | 6,35<br>*0.250* | 23 | ■ |
| SCNN250640-R30 | | 4,0<br>*0.157* | 6,6<br>*0.260* | 25,0<br>*0.984* | 6,35<br>*0.250* | 28 | ■ |

* R25 for use in 25 degree pockets only - not the 30 degree - R30
■ Stock standard.

## Partial Profile 55° – External Threading

Snap-Tap®




16ER.. 16ER..A 16ER..A1 16ER..A2 16V55* 22ER.. 26ER/26NR..



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ERA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG55 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ERAG55-A | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG55-A1 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG55-A2 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERG55 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ERG55-A | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERG55-A1 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERG55-A2 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ERN55 | 3,5-5 | 7-5 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 26ERK55 | 5,5-10 | 4.5-2.5 | 0,7<br>*0.028* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26NRK55 | 5,5-10 | 4.5-2.5 | 0,7<br>*0.028* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |
| 16V55 | – | – | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | | | ■ | | |

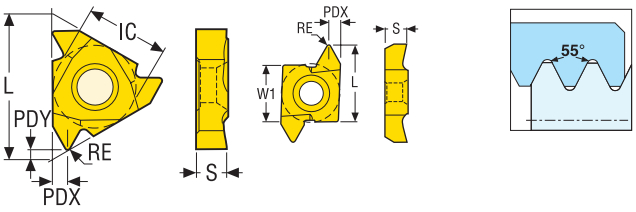
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ELA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ELAG55 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ELG55 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ELN55 | 3,5-5 | 7-5 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

* Toolset contents: 3 pcs 16ERG55, CP500, 3 pcs 16NRG55, CP500, 2 pcs 16ERA55, CP500 and 2 pcs 16NRA55, CP500

## Partial Profile 55° – Internal Threading

Snap-Tap®




09NR/11Nx/16Nx/22Nx..



16NR..A



16NR..A1



16NR..A2



26ER/26NR..





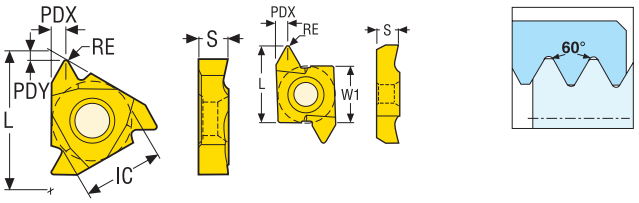
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 09NRA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | –<br>– | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NRA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NRA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NRAG55 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16NRAG55-A | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRAG55-A1 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRAG55-A2 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRG55 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16NRG55-A | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRG55-A1 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRG55-A2 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NRN55 | 3,5-5 | 7-5 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 26ERK55 | 5,5-10 | 4.5-2.5 | 0,7<br>*0.028* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |

| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 11NLA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NLA55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NLAG55 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NLG55 | 1,75-3 | 14-8 | 0,2<br>*0.008* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NLN55 | 3,5-5 | 7-5 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## Partial Profile 60° – External Threading

Snap-Tap®




16ER..A | 16ER..A1 | 16ER..A2 | 16Ex/22Ex.. | 16V60* | 26ER/26NR



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ERA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ERA60-A | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ERA60-A1 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERA60-A2 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG60-A | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ERAG60-A1 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG60-A2 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERAG60 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ERG60 | 1,75-3 | 14-8 | 0,18<br>*0.007* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ERG60-A | 1,75-3 | 14-8 | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ERG60-A1 | 1,75-3 | 14-8 | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ERG60-A2 | 1,75-3 | 14-8 | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ERN60 | 3,5-5 | 7-5 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | ■ | ■ | | ■ |
| 26ERK60 | 5,5-10 | 4.5-2.5 | 0,4<br>*0.016* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26NRK60 | 5,5-10 | 4.5-2.5 | 0,4<br>*0.016* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 16V60 | – | – | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | –<br>– | | | ■ | | |

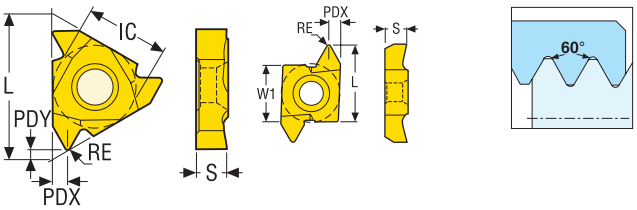
■ Stock standard.

* Toolset contents: 3 pcs 16ERG60, CP500, 3 pcs 16NRG60, CP500, 2 pcs 16ERA60, CP500 and 2 pcs 16NRA60, CP500

| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ELA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,6<br>*0.024* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ELAG60 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ELG60 | 1,75-3 | 8-14 | 0,18<br>*0.007* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ELN60 | 3,5-5 | 5-7 | 0,4<br>*0.016* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## Partial Profile 60° – Internal Threading

Snap-Tap®




**11NR/16NR..A**



**11NR/16NR..A1**



**11NR/16NR..A2**



**26ER/26NR**



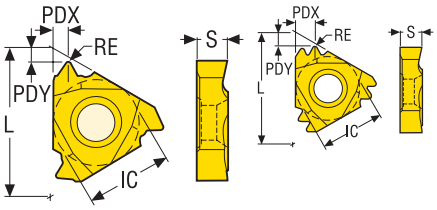


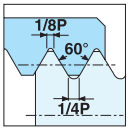
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 09NRA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | –<br>– | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NRA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 16NRA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 11NRA60-A | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 11NRA60-A1 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NRA60-A2 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NRAG60 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NRAG60-A | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NRAG60-A1 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRAG60-A2 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRG60 | 1,75-3 | 14-8 | 0,12<br>*0.005* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NRG60-A | 1,75-3 | 14-8 | 0,12<br>*0.005* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NRG60-A1 | 1,75-3 | 14-8 | 0,12<br>*0.005* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NRG60-A2 | 1,75-3 | 14-8 | 0,12<br>*0.005* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NRN60 | 3,5-5 | 7-5 | 0,25<br>*0.010* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | ■ | ■ | | ■ |
| 26NRK60 | 5,5-10 | 4.5-2.5 | 0,4<br>*0.016* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26ERK60 | 5,5-10 | 4.5-2.5 | 0,4<br>*0.016* | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |

| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 11NLA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | –<br>– | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NLA60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NLAG60 | 0,5-3 | 48-8 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NLG60 | 1,75-3 | 14-8 | 0,12<br>*0.005* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NLN60 | 3,5-5 | 7-5 | 0,25<br>*0.010* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## ISO Metric – External Threading

Full profile – Snap-Tap®




ISO965/1 - 1980
3h/4h

16ER/22ER/27ER..M



16ER..A



16ER..A1



16ER..A2



16ER..TT



16Ex/22Ex/27ER



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER0.5ISO | 0,5 | – | 0,06<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER0.75ISO | 0,75 | – | 0,11<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER0.8ISO | 0,8 | – | 0,11<br>*0.004* | 0,8<br>*0.031* | 0,6<br>*0.024* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.0ISO | 1 | – | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER1.25ISO | 1,25 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER1.5ISO | 1,5 | – | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER1.75ISO | 1,75 | – | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER2.0ISO | 2 | – | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER2.5ISO | 2,5 | – | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER3.0ISO | 3 | – | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 22ER3.5ISO | 3,5 | – | 0,47<br>*0.019* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | ■ | ■ | | ■ |
| 22ER4.0ISO | 4 | – | 0,53<br>*0.021* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | ■ | ■ | | ■ |
| 22ER4.5ISO | 4,5 | – | 0,59<br>*0.023* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22ER5.0ISO | 5 | – | 0,66<br>*0.026* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | | ■ | | ■ |
| 27ER5.5ISO | 5,5 | – | 0,72<br>*0.028* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27ER6.0ISO | 6 | – | 0,79<br>*0.031* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |
| 16ER1.0ISO-A | 1 | – | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER1.25ISO-A | 1,25 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER1.5ISO-A | 1,5 | – | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER1.75ISO-A | 1,75 | – | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER2.0ISO-A | 2 | – | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER2.5ISO-A | 2,5 | – | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER3.0ISO-A | 3 | – | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER1.0ISO-A1 | 1 | – | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.25ISO-A1 | 1,25 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER1.5ISO-A1 | 1,5 | – | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.75ISO-A1 | 1,75 | – | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.0ISO-A1 | 2 | – | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.5ISO-A1 | 2,5 | – | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER3.0ISO-A1 | 3 | – | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.0ISO-A2 | 1 | – | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.25ISO-A2 | 1,25 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.5ISO-A2 | 1,5 | – | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.75ISO-A2 | 1,75 | – | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.0ISO-A2 | 2 | – | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.5ISO-A2 | 2,5 | – | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER3.0ISO-A2 | 3 | – | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.0ISO-TT | 1 | – | 0,14<br>*0.006* | 1,3<br>*0.051* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.5ISO-TT | 1,5 | – | 0,22<br>*0.009* | 1,3<br>*0.051* | 1,8<br>*0.071* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.0ISO-TT | 2 | – | 0,29<br>*0.011* | 1,6<br>*0.063* | 2,4<br>*0.094* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.0ISO3M | 1 | – | 0,14<br>*0.006* | 1,5<br>*0.059* | 2,4<br>*0.094* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER1.5ISO2M | 1,5 | – | 0,22<br>*0.009* | 1,5<br>*0.059* | 2,2<br>*0.087* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER1.5ISO3M | 1,5 | – | 0,22<br>*0.009* | 2,3<br>*0.091* | 3,6<br>*0.142* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER2.0ISO2M | 2 | – | 0,29<br>*0.011* | 2,0<br>*0.079* | 2,9<br>*0.114* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER2.0ISO3M | 2 | – | 0,29<br>*0.011* | 3,0<br>*0.118* | 4,8<br>*0.189* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 27ER3.0ISO2M | 3 | – | 0,42<br>*0.017* | 2,8<br>*0.110* | 4,3<br>*0.169* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |

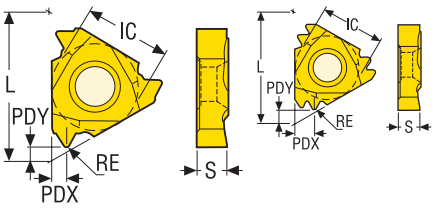
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL0.5ISO | 0,5 | – | 0,06<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL0.75ISO | 0,75 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL0.8ISO | 0,8 | – | 0,11<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL1.0ISO | 1 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL1.25ISO | 1,25 | – | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL1.5ISO | 1,5 | – | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | ■ | ■ | | |
| 16EL1.75ISO | 1,75 | – | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL2.0ISO | 2 | – | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL2.5ISO | 2,5 | – | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

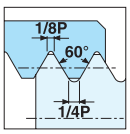
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL3.0ISO | 3 | – | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22EL3.5ISO | 3,5 | – | 0,47<br>*0.019* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL4.0ISO | 4 | – | 0,53<br>*0.021* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL4.5ISO | 4,5 | – | 0,59<br>*0.023* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL5.0ISO | 5 | – | 0,66<br>*0.026* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## ISO Metric – Internal Threading

Full profile – Snap-Tap®




ISO965/1 - 1980
3h/4h

09NR/11Nx/16Nx/22Nx/27NR



11NR/16NR..A



11NR/16NR..A1



11NR/16NR..A2



16NR/22NR..M



16NR..TT



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 09NR0.5ISO | 0,5 | – | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,6<br>*0.024* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR0.8ISO | 0,8 | – | 0,07<br>*0.003* | 0,7<br>*0.028* | 0,6<br>*0.024* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR1.0ISO | 1 | – | 0,07<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR1.25ISO | 1,25 | – | 0,11<br>*0.004* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR1.5ISO | 1,5 | – | 0,12<br>*0.005* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR1.75ISO | 1,75 | – | 0,12<br>*0.005* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 09NR2.0ISO | 2 | – | 0,17<br>*0.007* | 0,7<br>*0.028* | 0,9<br>*0.035* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR0.5ISO | 0,5 | – | 0,03<br>*0.001* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 11NR0.75ISO | 0,75 | – | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 11NR1.0ISO | 1 | – | 0,08<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 11NR1.25ISO | 1,25 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 11NR1.5ISO | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 11NR1.75ISO | 1,75 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 11NR2.0ISO | 2 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 16NR0.5ISO | 0,5 | – | 0,03<br>*0.001* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR0.75ISO | 0,75 | – | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR1.0ISO | 1 | – | 0,08<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR1.25ISO | 1,25 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16NR1.5ISO | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR1.75ISO | 1,75 | – | 0,12<br>*0.005* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR2.0ISO | 2 | – | 0,17<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR2.5ISO | 2,5 | – | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR3.0ISO | 3 | – | 0,21<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 22NR3.5ISO | 3,5 | – | 0,25<br>*0.010* | 1,9<br>*0.075* | 2,3<br>*0.091* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | | ■ | | ■ |
| 22NR4.0ISO | 4 | – | 0,28<br>*0.011* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | ■ | ■ | | ■ |

| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR4.5ISO | 4,5 | – | 0,32<br>*0.013* | 2,1<br>*0.083* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22NR5.0ISO | 5 | – | 0,35<br>*0.014* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | ■ | | ■ | | ■ |
| 27NR5.5ISO | 5,5 | – | 0,38<br>*0.015* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27NR6.0ISO | 6 | – | 0,42<br>*0.017* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |
| 11NR1.0ISO-A | 1 | – | 0,08<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 11NR1.5ISO-A | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 11NR2.0ISO-A | 2 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 16NR1.0ISO-A | 1 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR1.5ISO-A | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR2.0ISO-A | 2 | – | 0,16<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR2.5ISO-A | 2,5 | – | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR3.0ISO-A | 3 | – | 0,21<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 11NR1.0ISO-A1 | 1 | – | 0,08<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NR1.5ISO-A1 | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NR2.0ISO-A1 | 2 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR1.0ISO-A1 | 1 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.5ISO-A1 | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.0ISO-A1 | 2 | – | 0,16<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.5ISO-A1 | 2,5 | – | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR3.0ISO-A1 | 3 | – | 0,21<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR1.0ISO-A2 | 1 | – | 0,08<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NR1.5ISO-A2 | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NR2.0ISO-A2 | 2 | – | 0,17<br>*0.007* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR1.0ISO-A2 | 1 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.5ISO-A2 | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.0ISO-A2 | 2 | – | 0,16<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.5ISO-A2 | 2,5 | – | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR3.0ISO-A2 | 3 | – | 0,21<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.0ISO-TT | 1 | – | 0,09<br>*0.004* | 1,3<br>*0.051* | 1,2<br>*0.047* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.5ISO-TT | 1,5 | – | 0,12<br>*0.005* | 1,3<br>*0.051* | 1,8<br>*0.071* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.0ISO-TT | 2 | – | 0,18<br>*0.007* | 1,6<br>*0.063* | 2,4<br>*0.094* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.0ISO3M | 1 | – | 0,08<br>*0.003* | 1,5<br>*0.059* | 2,4<br>*0.094* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR1.5ISO2M | 1,5 | – | 0,12<br>*0.005* | 1,4<br>*0.055* | 2,1<br>*0.083* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR1.5ISO3M | 1,5 | – | 0,12<br>*0.005* | 2,3<br>*0.091* | 3,6<br>*0.142* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

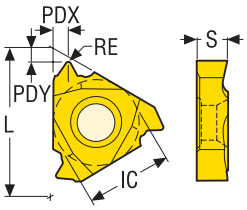
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR2.0ISO2M | 2 | – | 0,17<br>*0.007* | 2,0<br>*0.079* | 2,9<br>*0.114* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR2.0ISO3M | 2 | – | 0,17<br>*0.007* | 3,0<br>*0.118* | 4,8<br>*0.189* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 27NR3.0ISO2M | 3 | – | 0,21<br>*0.008* | 2,8<br>*0.110* | 4,3<br>*0.169* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |

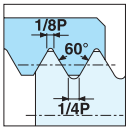
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 11NL0.5ISO | 0,5 | – | 0,03<br>*0.001* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NL0.75ISO | 0,75 | – | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NL1.0ISO | 1 | – | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NL1.25ISO | 1,25 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NL1.5ISO | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL0.5ISO | 0,5 | – | 0,03<br>*0.001* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL0.75ISO | 0,75 | – | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL1.0ISO | 1 | – | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16NL1.25ISO | 1,25 | – | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL1.5ISO | 1,5 | – | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16NL1.75ISO | 1,75 | – | 0,12<br>*0.005* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL2.0ISO | 2 | – | 0,17<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL2.5ISO | 2,5 | – | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL3.0ISO | 3 | – | 0,21<br>*0.008* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NL3.5ISO | 3,5 | – | 0,25<br>*0.010* | 1,9<br>*0.075* | 2,3<br>*0.091* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL4.0ISO | 4 | – | 0,28<br>*0.011* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL4.5ISO | 4,5 | – | 0,32<br>*0.013* | 2,1<br>*0.083* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL5.0ISO | 5 | – | 0,35<br>*0.014* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## UN – External Threading

Full profile – Snap-Tap®




ANSI B1.1 - 1983
3A

16ER..A



16ER..A1



16ER..A2



16ER..TT



16Ex/22Ex/27ER



22ER..M



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27ER4UN | – | 4 | 0,79<br>*0.031* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22ER5UN | – | 5 | 0,6<br>*0.024* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER6UN | – | 6 | 0,52<br>*0.020* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22ER7UN | – | 7 | 0,47<br>*0.019* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 16ER8UN | – | 8 | 0,38<br>*0.015* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER8UN-A | – | 8 | 0,43<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER8UN-A1 | – | 8 | 0,43<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER8UN-A2 | – | 8 | 0,43<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER9UN | – | 9 | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER10UN | – | 10 | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER11UN | – | 11 | 0,28<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER12UN | – | 12 | 0,26<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER12UN-A | – | 12 | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER12UN-A1 | – | 12 | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER12UN-A2 | – | 12 | 0,29<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER12UN-TT | – | 12 | 0,29<br>*0.011* | 1,7<br>*0.067* | 2,6<br>*0.102* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER12UN2M | – | 12 | 0,26<br>*0.010* | 2,0<br>*0.079* | 3,1<br>*0.122* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER13UN | – | 13 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14UN | – | 14 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER14UN-A | – | 14 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER14UN-A1 | – | 14 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14UN-A2 | – | 14 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER16UN | – | 16 | 0,22<br>*0.009* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER16UN-A | – | 16 | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER16UN-A1 | – | 16 | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER16UN-A2 | – | 16 | 0,22<br>*0.009* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER16UN-TT | – | 16 | 0,21<br>*0.008* | 1,4<br>*0.055* | 1,9<br>*0.075* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER16UN3M | – | 16 | 0,21<br>*0.008* | 2,5<br>*0.098* | 4,0<br>*0.157* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER18UN | – | 18 | 0,18<br>*0.007* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | ■ |
| 16ER18UN-A | – | 18 | 0,18<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER18UN-A1 | – | 18 | 0,18<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER18UN-A2 | – | 18 | 0,18<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER20UN | – | 20 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | ■ |
| 16ER20UN-A | – | 20 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER20UN-A1 | – | 20 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER20UN-A2 | – | 20 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER20UN-TT | – | 20 | 0,16<br>*0.006* | 1,2<br>*0.047* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER24UN | – | 24 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | ■ | ■ | | ■ |
| 16ER28UN | – | 28 | 0,11<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | ■ | ■ | | ■ |
| 16ER32UN | – | 32 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER40UN | – | 40 | 0,08<br>*0.003* | 1,2<br>*0.047* | 0,5<br>*0.020* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

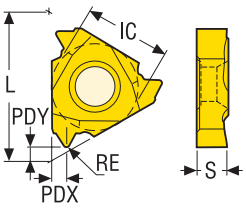
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22EL5UN | – | 5 | 0,6<br>*0.024* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL6UN | – | 6 | 0,52<br>*0.020* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL7UN | – | 7 | 0,47<br>*0.019* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16EL8UN | – | 8 | 0,38<br>*0.015* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL9UN | – | 9 | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL10UN | – | 10 | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL11UN | – | 11 | 0,28<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL12UN | – | 12 | 0,26<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL14UN | – | 14 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL16UN | – | 16 | 0,22<br>*0.009* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL18UN | – | 18 | 0,18<br>*0.007* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL20UN | – | 20 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL24UN | – | 24 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL28UN | – | 28 | 0,11<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

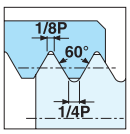
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL32UN | – | 32 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## UN – Internal Threading

Full profile – Snap-Tap®




ANSI B1.1 - 1983
3B

**09NR/11Nx/16Nx/22Nx/27NR**



**16NR/22NR..M**



**16NR..A**



**16NR..A1**



**16NR..A2**



**16NR..TT**



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27NR4UN | – | 4 | 0,45<br>*0.018* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22NR5UN | – | 5 | 0,36<br>*0.014* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR6UN | – | 6 | 0,3<br>*0.012* | 2,2<br>*0.087* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22NR7UN | – | 7 | 0,25<br>*0.010* | 2,0<br>*0.079* | 2,4<br>*0.094* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NR8UN | – | 8 | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR8UN-A | – | 8 | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR8UN-A1 | – | 8 | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR8UN-A2 | – | 8 | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR9UN | – | 9 | 0,19<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR10UN | – | 10 | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16NR11UN | – | 11 | 0,16<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR12UN | – | 12 | 0,15<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR12UN-A | – | 12 | 0,15<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR12UN-A1 | – | 12 | 0,15<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR12UN-A2 | – | 12 | 0,15<br>*0.006* | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR12UN-TT | – | 12 | 0,16<br>*0.006* | 1,65<br>*0.065* | 2,45<br>*0.096* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR12UN2M | – | 12 | 0,15<br>*0.006* | 2,0<br>*0.079* | 3,0<br>*0.118* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR12UN3M | – | 12 | 0,15<br>*0.006* | 3,0<br>*0.118* | 5,0<br>*0.197* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 09NR13UN | – | 13 | 0,15<br>*0.006* | 0,7<br>*0.028* | 0,9<br>*0.035* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 16NR13UN | – | 13 | 0,15<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR14UN | – | 14 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR14UN | – | 14 | 0,14<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16NR14UN-A | – | 14 | 0,14<br>*0.006* | 1,2<br>*0.047* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR14UN-A1 | – | 14 | 0,14<br>*0.006* | 1,2<br>*0.047* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14UN-A2 | – | 14 | 0,14<br>*0.006* | 1,2<br>*0.047* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 11NR16UN | – | 16 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NR16UN | – | 16 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR16UN-A | – | 16 | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR16UN-A1 | – | 16 | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR16UN-A2 | – | 16 | 0,12<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR16UN-TT | – | 16 | 0,13<br>*0.005* | 1,4<br>*0.055* | 1,9<br>*0.075* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR16UN2M | – | 16 | 0,13<br>*0.005* | 1,5<br>*0.059* | 2,3<br>*0.091* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR16UN3M | – | 16 | 0,13<br>*0.005* | 2,4<br>*0.094* | 3,8<br>*0.150* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 09NR18UN | – | 18 | 0,1<br>*0.004* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR18UN | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NR18UN | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR18UN-A | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR18UN-A1 | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR18UN-A2 | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 09NR20UN | – | 20 | 0,09<br>*0.004* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR20UN | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR20UN | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16NR20UN-A | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR20UN-A1 | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR20UN-A2 | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR24UN | – | 24 | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NR24UN | – | 24 | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 11NR28UN | – | 28 | 0,05<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NR28UN | – | 28 | 0,05<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR32UN | – | 32 | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | ■ |
| 16NR32UN | – | 32 | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16NR40UN | – | 40 | 0,04<br>*0.002* | 1,2<br>*0.047* | 0,5<br>*0.020* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

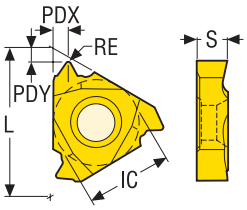
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NL6UN | – | 6 | 0,3<br>*0.012* | 2,2<br>*0.087* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL7UN | – | 7 | 0,25<br>*0.010* | 2,0<br>*0.079* | 2,4<br>*0.094* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NL8UN | – | 8 | 0,25<br>*0.010* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

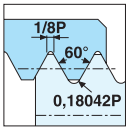
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NL10UN | – | 10 | 0,18<br>*0.007* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL12UN | – | 12 | 0,15<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NL14UN | – | 14 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL14UN | – | 14 | 0,14<br>*0.006* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 11NL16UN | – | 16 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL16UN | – | 16 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 11NL18UN | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL18UN | – | 18 | 0,1<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NL20UN | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL20UN | – | 20 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NL24UN | – | 24 | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL24UN | – | 24 | 0,07<br>*0.003* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL28UN | – | 28 | 0,05<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL32UN | – | 32 | 0,04<br>*0.002* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## UNJ – External Threading

Full profile – Snap-Tap®




BS4084 - 1996
MIL-SPECS - 8879A
3A

16Ex



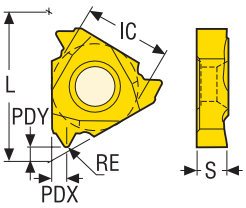
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER8UNJ | – | 8 | 0,5<br>*0.020* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER10UNJ | – | 10 | 0,405<br>*0.016* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER12UNJ | – | 12 | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ER14UNJ | – | 14 | 0,295<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER16UNJ | – | 16 | 0,255<br>*0.010* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ER18UNJ | – | 18 | 0,23<br>*0.009* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER20UNJ | – | 20 | 0,208<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ER24UNJ | – | 24 | 0,175<br>*0.007* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER28UNJ | – | 28 | 0,148<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |
| 16ER32UNJ | – | 32 | 0,13<br>*0.005* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | |

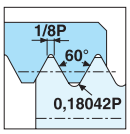
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL12UNJ | – | 12 | 0,34<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |

■ Stock standard.

## UNJ – Internal Threading

Full profile – Snap-Tap®




BS4084 - 1996
MIL-SPECS - 8879A
3B

16Ex

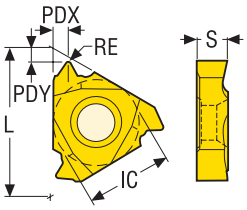


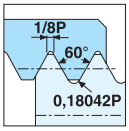
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR8UNJ | – | 8 | 0,22<br>*0.009* | 1,2<br>*0.047* | 1,2<br>*0.047* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR10UNJ | – | 10 | 0,17<br>*0.007* | 1,2<br>*0.047* | 1,0<br>*0.039* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR12UNJ | – | 12 | 0,12<br>*0.005* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR14UNJ | – | 14 | 0,11<br>*0.004* | 1,2<br>*0.047* | 0,7<br>*0.028* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR16UNJ | – | 16 | 0,1<br>*0.004* | 1,2<br>*0.047* | 0,6<br>*0.024* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR18UNJ | – | 18 | 0,09<br>*0.004* | 1,2<br>*0.047* | 0,6<br>*0.024* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR20UNJ | – | 20 | 0,08<br>*0.003* | 1,2<br>*0.047* | 0,5<br>*0.020* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR24UNJ | – | 24 | 0,06<br>*0.002* | 1,2<br>*0.047* | 0,5<br>*0.020* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR28UNJ | – | 28 | 0,04<br>*0.002* | 1,2<br>*0.047* | 0,4<br>*0.016* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR32UNJ | – | 32 | 0,03<br>*0.001* | 1,2<br>*0.047* | 0,4<br>*0.016* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |

■ Stock standard.

## MJ – External Threading

Full profile – Snap-Tap®




ISO5855 - 1983
4h/6h

16Ex



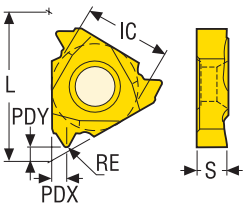
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER1.0MJ | 1 | – | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ER1.25MJ | 1,25 | – | 0,21<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16ER1.5MJ | 1,5 | – | 0,25<br>*0.010* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 16ER2.0MJ | 2 | – | 0,32<br>*0.013* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |

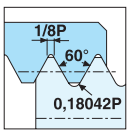
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL1.0MJ | 1 | – | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16EL1.5MJ | 1,5 | – | 0,25<br>*0.010* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |

■ Stock standard.

## MJ – Internal Threading

Full profile – Snap-Tap®




ISO5855 - 1983
4H/5H

16Ex

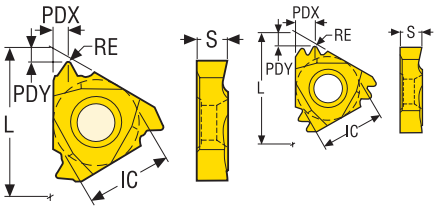


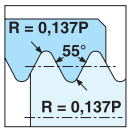
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR1.0MJ | 1 | – | 0,06<br>*0.002* | 1,2<br>*0.047* | 0,4<br>*0.016* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR1.25MJ | 1,25 | – | 0,08<br>*0.003* | 1,2<br>*0.047* | 0,5<br>*0.020* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR1.5MJ | 1,5 | – | 0,09<br>*0.004* | 1,2<br>*0.047* | 0,6<br>*0.024* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |
| 16NR2.0MJ | 2 | – | 0,12<br>*0.005* | 1,2<br>*0.047* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | | | |

■ Stock standard.

## Whitworth, BSW – External Threading

Full profile – Snap-Tap®




BS84 -1956
ISO228 - 1982
BS2779 - 1973

16ER..A



16ER..A1



16ER..A2



16ER..TT



16Ex/22Ex



22ER..M



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22ER5W | – | 5 | 0,63<br>*0.025* | 1,7<br>*0.067* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22ER6W | – | 6 | 0,5<br>*0.020* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER7W | – | 7 | 0,43<br>*0.017* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER8W | – | 8 | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER9W | – | 9 | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER10W | – | 10 | 0,27<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER11W | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER11W-A | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER11W-A1 | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER11W-A2 | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER11W-TT | – | 11 | 0,3<br>*0.012* | 1,8<br>*0.071* | 2,8<br>*0.110* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER11W2M | – | 11 | 0,3<br>*0.012* | 2,3<br>*0.091* | 3,5<br>*0.138* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER12W | – | 12 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER14W | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER14W-A | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER14W-A1 | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14W-A2 | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14W-TT | – | 14 | 0,24<br>*0.009* | 1,5<br>*0.059* | 2,2<br>*0.087* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER16W | – | 16 | 0,2<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER18W | – | 18 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16ER19W-A | – | 19 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16ER19W-A1 | – | 19 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER19W-A2 | – | 19 | 0,16<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER20W | – | 20 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |

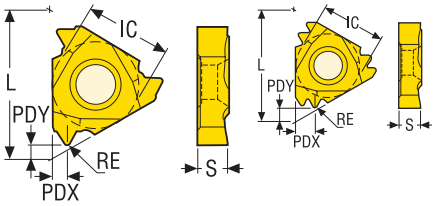
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER28W | – | 28 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |

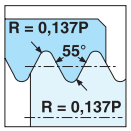
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22EL5W | – | 5 | 0,63<br>*0.025* | 1,7<br>*0.067* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL6W | – | 6 | 0,5<br>*0.020* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL7W | – | 7 | 0,43<br>*0.017* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16EL8W | – | 8 | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL9W | – | 9 | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL10W | – | 10 | 0,27<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL11W | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL12W | – | 12 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL14W | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL16W | – | 16 | 0,2<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL20W | – | 20 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL28W | – | 28 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## Whitworth, BSW – Internal Threading

Full profile – Snap-Tap®




BS84 -1956
ISO228 - 1982
BS2779 - 1973

**09NR/11Nx/16Nx/22Nx**



**11NR/16NR..A**



**11NR/16NR..A1**



**11NR/16NR..A2**



**16NR..TT**



**22NR..M**



| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR5W | – | 5 | 0,63<br>*0.025* | 1,7<br>*0.067* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22NR6W | – | 6 | 0,5<br>*0.020* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | ■ |
| 22NR7W | – | 7 | 0,43<br>*0.017* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NR8W | – | 8 | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR9W | – | 9 | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR10W | – | 10 | 0,27<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR11W | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 16NR11W-A | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 16NR11W-A1 | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR11W-A2 | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR11W-TT | – | 11 | 0,31<br>*0.012* | 1,8<br>*0.071* | 2,8<br>*0.110* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR11W2M | – | 11 | 0,3<br>*0.012* | 2,3<br>*0.091* | 3,5<br>*0.138* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NR12W | – | 12 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR12W-TT | – | 12 | 0,24<br>*0.009* | 1,7<br>*0.067* | 2,7<br>*0.106* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 09NR14W | – | 14 | 0,24<br>*0.009* | 0,7<br>*0.028* | 0,9<br>*0.035* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR14W | – | 14 | 0,24<br>*0.009* | 0,7<br>*0.028* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 16NR14W | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | ■ | ■ |
| 11NR14W-A | – | 14 | 0,24<br>*0.009* | 0,7<br>*0.028* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 16NR14W-A | – | 14 | 0,23<br>*0.009* | 1,2<br>*0.047* | 1,1<br>*0.043* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | ■ | |
| 11NR14W-A1 | – | 14 | 0,24<br>*0.009* | 0,7<br>*0.028* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR14W-A1 | – | 14 | 0,23<br>*0.009* | 1,2<br>*0.047* | 1,1<br>*0.043* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR14W-A2 | – | 14 | 0,24<br>*0.009* | 0,7<br>*0.028* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR14W-A2 | – | 14 | 0,23<br>*0.009* | 1,2<br>*0.047* | 1,1<br>*0.043* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14W-TT | – | 14 | 0,23<br>*0.009* | 1,5<br>*0.059* | 2,2<br>*0.087* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR16W | – | 16 | 0,2<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |

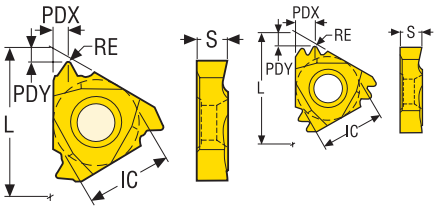
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 09NR19W | – | 19 | 0,15<br>*0.006* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | ■ | | ■ | ■ | ■ |
| 16NR19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | ■ | | ■ | | ■ |
| 11NR19W-A | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | ■ | |
| 11NR19W-A1 | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 11NR19W-A2 | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR20W | – | 20 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR28W | – | 28 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

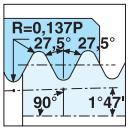
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NL6W | – | 6 | 0,5<br>*0.020* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL7W | – | 7 | 0,43<br>*0.017* | 1,8<br>*0.071* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NL8W | – | 8 | 0,42<br>*0.017* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL9W | – | 9 | 0,31<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL10W | – | 10 | 0,27<br>*0.011* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL11W | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL12W | – | 12 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NL14W | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 0,9<br>*0.035* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL14W | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL16W | – | 16 | 0,2<br>*0.008* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NL19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NL19W | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL20W | – | 20 | 0,14<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL28W | – | 28 | 0,09<br>*0.004* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## BSPT – External Threading

Full profile – Snap-Tap®




ISO228/1 35 21 1959 ISO7/1

16ER..TT



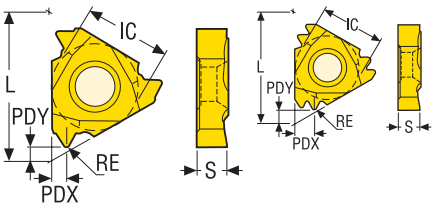
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER11BSPT | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER11BSPT-TT | – | 11 | 0,3<br>*0.012* | 1,8<br>*0.071* | 2,8<br>*0.110* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14BSPT | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14BSPT-TT | – | 14 | 0,24<br>*0.009* | 1,5<br>*0.059* | 2,2<br>*0.087* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER19BSPT | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER28BSPT | – | 28 | 0,08<br>*0.003* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

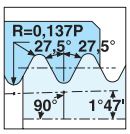
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL11BSPT | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL14BSPT | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## BSPT – Internal Threading

Full profile – Snap-Tap®




ISO228/1 35 21 1959 ISO7/1

**09NR/16Nx..**



**16NR..TT**



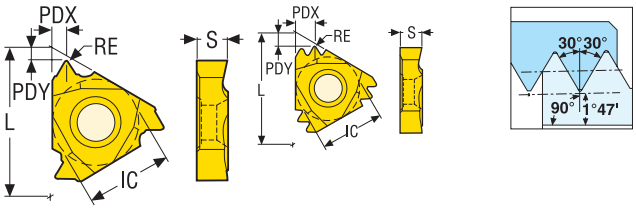
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR11BSPT | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR11BSPT-TT | – | 11 | 0,3<br>*0.012* | 1,8<br>*0.071* | 2,8<br>*0.110* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14BSPT | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14BSPT-TT | – | 14 | 0,24<br>*0.009* | 1,5<br>*0.059* | 2,2<br>*0.087* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 09NR19BSPT | – | 19 | 0,15<br>*0.006* | 0,8<br>*0.031* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |

| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NL11BSPT | – | 11 | 0,3<br>*0.012* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL14BSPT | – | 14 | 0,24<br>*0.009* | 1,2<br>*0.047* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## NPT– External Threading

Full profile – Snap-Tap®




ANSI B1.20.1 - 1983

**16ER..A1**



**16ER..A2**



**16Ex..**



**22ER/27ER..M**



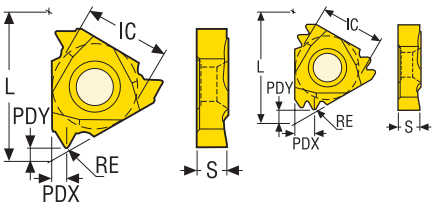
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER8NPT | – | 8 | 0,07<br>*0.003* | 1,1<br>*0.043* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER11.5NPT | – | 11.5 | 0,07<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER11.5NPT-A1 | – | 11.5 | 0,09<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER11.5NPT-A2 | – | 11.5 | 0,09<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER11.5NPT2M | – | 11.5 | 0,07<br>*0.003* | 2,1<br>*0.083* | 3,3<br>*0.130* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER14NPT | – | 14 | 0,07<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER18NPT | – | 18 | 0,06<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16ER27NPT | – | 27 | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

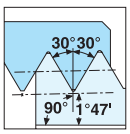
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL8NPT | – | 8 | 0,09<br>*0.004* | 1,1<br>*0.043* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL11.5NPT | – | 11.5 | 0,07<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL14NPT | – | 14 | 0,07<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL18NPT | – | 18 | 0,06<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## NPT – Internal Threading

Full profile – Snap-Tap®




ANSI B1.20.1 - 1983

**16NR..A1**



**16NR..A2**



**22NR..M**



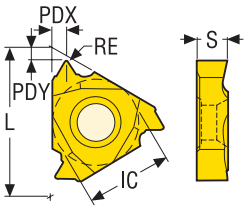
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR8NPT | – | 8 | 0,1<br>*0.004* | 1,1<br>*0.043* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR8NPT-A2 | – | 8 | 0,12<br>*0.005* | 1,1<br>*0.043* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR11.5NPT | – | 11.5 | 0,09<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR11.5NPT-A1 | – | 11.5 | 0,1<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR11.5NPT-A2 | – | 11.5 | 0,1<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR11.5NPT2M | – | 11.5 | 0,05<br>*0.002* | 2,1<br>*0.083* | 3,3<br>*0.130* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 11NR14NPT | – | 14 | 0,07<br>*0.003* | 0,7<br>*0.028* | 1,0<br>*0.039* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 16NR14NPT | – | 14 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | ■ |
| 16NR14NPT-A2 | – | 14 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 09NR18NPT | – | 18 | 0,06<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |
| 11NR18NPT | – | 18 | 0,06<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |
| 09NR27NPT | – | 27 | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 5,56<br>*0.219* | 9,6<br>*0.378* | 2,4<br>*0.094* | | | ■ | | |

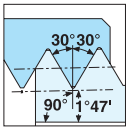
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NL8NPT | – | 8 | 0,1<br>*0.004* | 1,2<br>*0.047* | 1,6<br>*0.063* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 27ER8NPT2M | – | 8 | 0,07<br>*0.003* | 3,0<br>*0.118* | 4,8<br>*0.189* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 16NL11.5NPT | – | 11.5 | 0,09<br>*0.004* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL14NPT | – | 14 | 0,08<br>*0.003* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## NPTF– External Threading

Full profile – Snap-Tap®




ANSI B1.4 - 1976
ANSI B1.20.3 - 1976

16ER..

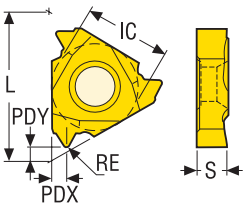


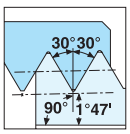
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER11.5NPTF | – | 11.5 | 0,06<br>*0.002* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14NPTF | – | 14 | 0,05<br>*0.002* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER18NPTF | – | 18 | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER27NPTF | – | 27 | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## NPTF – Internal Threading

Full profile – Snap-Tap®




ANSI B1.4 - 1976
ANSI B1.20.3 - 1976

**11NR/16Nx**



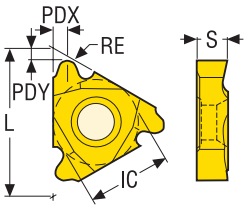
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR11.5NPTF | – | 11.5 | 0,06<br>*0.002* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14NPTF | – | 14 | 0,05<br>*0.002* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 11NR18NPTF | – | 18 | 0,04<br>*0.002* | 0,7<br>*0.028* | 0,8<br>*0.031* | 6,35<br>*0.250* | 11,0<br>*0.433* | 3,0<br>*0.118* | | | ■ | | |

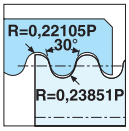
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NL11.5NPTF | – | 11.5 | 0,06<br>*0.002* | 1,1<br>*0.043* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## Round-DIN405 – External Threading

Full profile – Snap-Tap®




DIN405 - 1981
7h/6h

**16ER/22Ex/27ER**



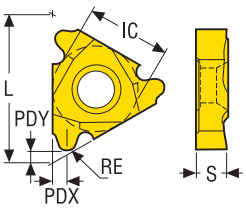
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27ER4RD | – | 4 | 1,46<br>*0.057* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 16ER6RD | – | 6 | 0,97<br>*0.038* | 1,3<br>*0.051* | 1,8<br>*0.071* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER6RD | – | 6 | 0,97<br>*0.038* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER8RD | – | 8 | 0,73<br>*0.029* | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER10RD | – | 10 | 0,58<br>*0.023* | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

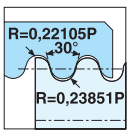
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22EL6RD | – | 6 | 0,97<br>*0.038* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## Round-DIN405 – Internal Threading

Full profile – Snap-Tap®




DIN405 - 1981
7h/6h

**16NR/22Nx/27NR**



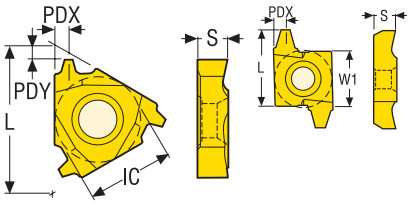
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27NR4RD | – | 4 | 1,31<br>*0.052* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 16NR6RD | – | 6 | 0,87<br>*0.034* | 1,3<br>*0.051* | 1,8<br>*0.071* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR6RD | – | 6 | 0,87<br>*0.034* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NR8RD | – | 8 | 0,69<br>*0.027* | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR10RD | – | 10 | 0,51<br>*0.020* | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

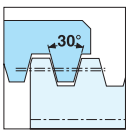
| Insert Part No. Left | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NL6RD | – | 6 | 0,87<br>*0.034* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## TR-DIN103 – External Threading

Partial profile – Snap-Tap®




DIN103 - 1977
ISO2901/3 - 1977
7e

16Ex/22Ex27ER



20ER/26ER



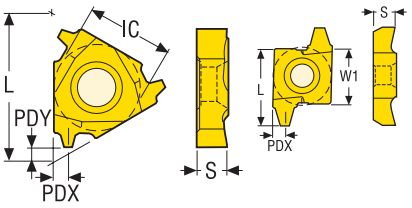
| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER1.5TR | 1,5 | – | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER2.0TR | 2 | – | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER3.0TR | 3 | – | 1,3<br>*0.051* | 1,6<br>*0.063* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER4.0TR | 4 | – | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER5.0TR | 5 | – | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |
| 27ER6.0TR | 6 | – | 2,5<br>*0.098* | 3,2<br>*0.126* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 20ER7.0TR | 7 | – | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 20ER8.0TR | 8 | – | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 26ER9.0TR | 9 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |
| 26ER10.0TR | 10 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26ER12.0TR | 12 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26ER14.0TR | 14 | – | –<br>– | 5,1<br>*0.201* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |

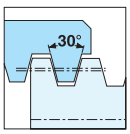
| Insert Part No. Left | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16EL1.5TR | 1,5 | – | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL2.0TR | 2 | – | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL3.0TR | 3 | – | 1,3<br>*0.051* | 1,6<br>*0.063* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22EL4.0TR | 4 | – | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL5.0TR | 5 | – | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## TR-DIN103 – Internal Threading

Partial profile – Snap-Tap®




DIN103 - 1977
ISO2901/3 - 1977
7H

**16Nx/22Nx/27NR**



**20NR/26NR**



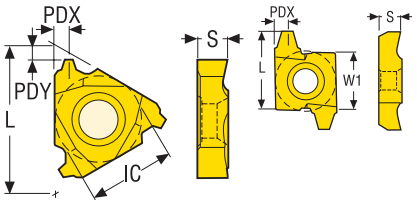
| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR1.5TR | 1,5 | – | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR2.0TR | 2 | – | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR3.0TR | 3 | – | 1,3<br>*0.051* | 1,6<br>*0.063* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NR4.0TR | 4 | – | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR5.0TR | 5 | – | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 27NR6.0TR | 6 | – | 2,5<br>*0.098* | 3,2<br>*0.126* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 20NR7.0TR | 7 | – | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 20NR8.0TR | 8 | – | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 26NR9.0TR | 9 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |
| 26NR10.0TR | 10 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26NR12.0TR | 12 | – | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 26NR14.0TR | 14 | – | –<br>– | 5,1<br>*0.201* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |

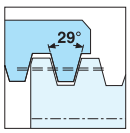
| Insert Part No. Left | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NL1.5TR | 1,5 | – | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL2.0TR | 2 | – | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NL3.0TR | 3 | – | 1,3<br>*0.051* | 1,6<br>*0.063* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22NL4.0TR | 4 | – | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NL5.0TR | 5 | – | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## ACME – External Threading

Partial profile – Snap-Tap®




ANSI B1.5 - 1988
3G

**16Ex/22Ex/27Ex**



**20ER/26ER**



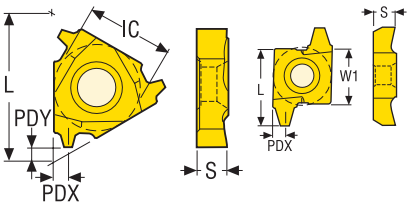
| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 26ER2ACME | – | 2 | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | ■ | | |
| 20ER3ACME | – | 3 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 20ER3.5ACME | – | 3.5 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | | ■ | | |
| 27ER4ACME | – | 4 | 2,5<br>*0.098* | 3,0<br>*0.118* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22ER5ACME | – | 5 | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER6ACME | – | 6 | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER8ACME | – | 8 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER10ACME | – | 10 | 1,4<br>*0.055* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER12ACME | – | 12 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14ACME | – | 14 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER16ACME | – | 16 | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

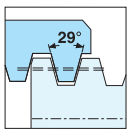
| Insert Part No. Left | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27EL4ACME | – | 4 | 2,5<br>*0.098* | 3,0<br>*0.118* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22EL5ACME | – | 5 | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22EL6ACME | – | 6 | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16EL8ACME | – | 8 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16EL10ACME | – | 10 | 1,4<br>*0.055* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## ACME – Internal Threading

Partial profile – Snap-Tap®




ANSI B1.5 - 1988
3G

**16NR/22Nx/27NR**



**20NR/26NR**



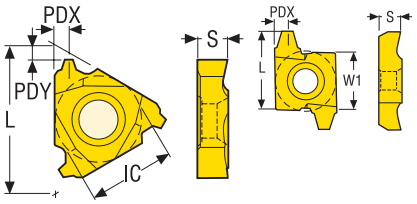
| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 26NR2ACME | – | 2 | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | ■ | | | |
| 20NR3ACME | – | 3 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 20NR3.5ACME | – | 3.5 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | ■ | ■ | | |
| 27NR4ACME | – | 4 | 2,5<br>*0.098* | 3,0<br>*0.118* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |
| 22NR5ACME | – | 5 | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR6ACME | – | 6 | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |
| 16NR8ACME | – | 8 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR10ACME | – | 10 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR12ACME | – | 12 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR16ACME | – | 16 | 0,9<br>*0.035* | 0,8<br>*0.031* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

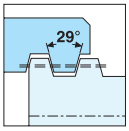
| Insert Part No. Left | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NL5ACME | – | 5 | 2,0<br>*0.079* | 2,3<br>*0.091* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## Stub-ACME – External Threading

Partial profile – Snap-Tap®




ANSI B1.8 - 1988
2G

**16ER**



**16ER/22Ex/27ER**





**20ER/26ER**



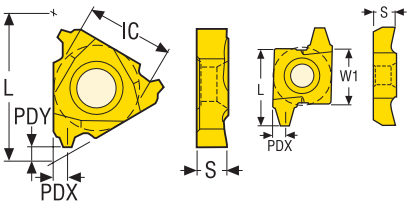
| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 26ER2STACME | – | 2 | –<br>– | 5,0<br>*0.197* | –<br>– | 15,875<br>*0.625* | 26,0<br>*1.024* | 7,88<br>*0.310* | | | ■ | | |
| 20ER3STACME | – | 3 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | | ■ | | |
| 27ER4STACME | – | 4 | 2,6<br>*0.102* | 2,8<br>*0.110* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |
| 22ER5STACME | – | 5 | 2,0<br>*0.079* | 2,1<br>*0.083* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22ER6STACME | – | 6 | 2,4<br>*0.094* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16ER8STACME | – | 8 | 1,8<br>*0.071* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | ■ | ■ | | |
| 16ER10STACME | – | 10 | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER12STACME | – | 12 | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16ER14STACME | – | 14 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

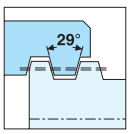
| Insert Part No. Left | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22EL6STACME | – | 6 | 2,4<br>*0.094* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## Stub-ACME – Internal Threading

Partial profile – Snap-Tap®




ANSI B1.8 - 1988
2G

**16NR**



**16NR/22NR/27NR**



**20NR**

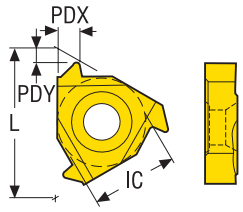


| Insert Part No. Right | Pitch | | PDY | PDX | IC | W1 | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 20NR3STACME | – | 3 | –<br>– | 3,2<br>*0.126* | –<br>– | 12,7<br>*0.500* | 20,0<br>*0.787* | 6,3<br>*0.248* | | | ■ | | |
| 27NR4STACME | – | 4 | 2,6<br>*0.102* | 2,8<br>*0.110* | 15,875<br>*0.625* | –<br>– | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |
| 22NR5STACME | – | 5 | 2,0<br>*0.079* | 2,1<br>*0.083* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 22NR6STACME | – | 6 | 2,4<br>*0.094* | 2,5<br>*0.098* | 12,7<br>*0.500* | –<br>– | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 16NR8STACME | – | 8 | 1,8<br>*0.071* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | ■ | ■ | | |
| 16NR10STACME | – | 10 | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR12STACME | – | 12 | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 16NR14STACME | – | 14 | 1,3<br>*0.051* | 1,5<br>*0.059* | 9,525<br>*0.375* | –<br>– | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## AMERICAN BUTTRESS – External Threading

Partial profile – Snap-Tap®




**16ER**

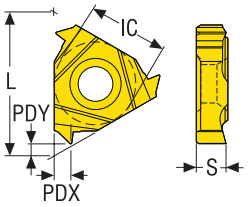


| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER12BUT-S31217 | – | 12 | 2,0<br>*0.079* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## AMERICAN BUTTRESS – Internal Threading

Partial profile – Snap-Tap®




**16NR**

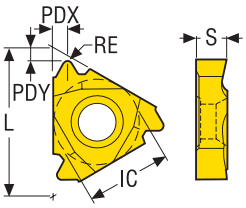


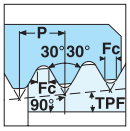
| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR12BUT-S31220 | – | 12 | 2,0<br>*0.079* | 1,3<br>*0.051* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## API Rotary Drilling connection - External threading

Full profile – Snap-Tap®




API Spec 7-2 2017

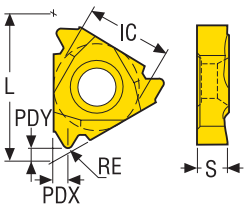
22ER/27ER

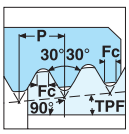


| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27ER4API384 | – | 4 | 0,965<br>*0.038* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | | ■ | | |
| 22ER4API386 | – | 4 | 0,965<br>*0.038* | 1,95<br>*0.077* | 2,55<br>*0.100* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |
| 27ER4API386 | – | 4 | 0,965<br>*0.038* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 27ER4API504 | – | 4 | 0,635<br>*0.025* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 27ER4API506 | – | 4 | 0,635<br>*0.025* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 22ER5API404 | – | 5 | 0,508<br>*0.020* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |
| 27ER5API404 | – | 5 | 0,508<br>*0.020* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | ■ | | |

## API Rotary Drilling connection – Internal threading

Full profile – Snap-Tap®




API Spec 7-2 2017

**22NR/27NR**

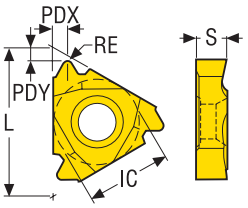


| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR4API386 | – | 4 | 0,965<br>*0.038* | 1,9<br>*0.075* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | ■ |
| 27NR4API384 | – | 4 | 0,965<br>*0.038* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | | ■ | | |
| 27NR4API386 | – | 4 | 0,965<br>*0.038* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 27NR4API504 | – | 4 | 0,635<br>*0.025* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 27NR4API506 | – | 4 | 0,635<br>*0.025* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | ■ | ■ | ■ | | |
| 22NR5API404 | – | 5 | 0,508<br>*0.020* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |
| 27NR5API404 | – | 5 | 0,508<br>*0.020* | 2,2<br>*0.087* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | | | |

■ Stock standard.

## Rotary drill connection - External threading

Full profile – Snap-Tap®




HEF = Hughes External Flush
904/906 = Hughes H90
H90 = Hughes Slimline H90
PAC = P.A.C.

904/906 HEF PAC

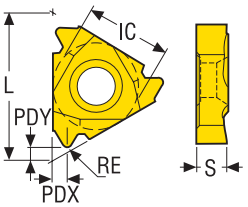




| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27ER3H90 | – | 3 | –<br>– | 3,5<br>*0.138* | 3,6<br>*0.142* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27ER3.5H904 | – | 3.5 | –<br>– | 2,7<br>*0.106* | 3,5<br>*0.138* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27ER3.5H906 | – | 3.5 | –<br>– | 2,7<br>*0.106* | 3,5<br>*0.138* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22ER4PAC | – | 4 | –<br>– | 2,4<br>*0.094* | 2,63<br>*0.104* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 27ER4PAC | – | 4 | –<br>– | 2,75<br>*0.108* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22ER6HEF | – | 6 | 0,382<br>*0.015* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## Rotary drill connection - Internal threading

Full profile – Snap-Tap®




HEF = Hughes External Flush
904/906 = Hughes H90
H90 = Hughes Slimline H90
PAC = P.A.C.

904/906 HEF PAC



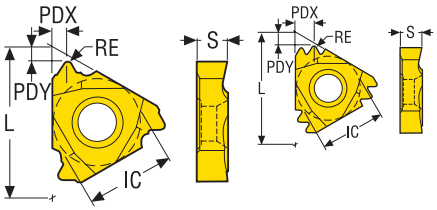


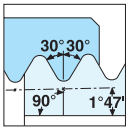
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 27NR3H90 | – | 3 | –<br>– | 3,5<br>*0.138* | 3,6<br>*0.142* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27NR3.5H904 | – | 3.5 | –<br>– | 2,7<br>*0.106* | 3,5<br>*0.138* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 27NR3.5H906 | – | 3.5 | –<br>– | 2,7<br>*0.106* | 3,5<br>*0.138* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22NR4PAC | – | 4 | –<br>– | 2,4<br>*0.094* | 2,6<br>*0.102* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |
| 27NR4PAC | – | 4 | –<br>– | 2,75<br>*0.108* | 3,2<br>*0.126* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | | ■ | | |
| 22NR6HEF | – | 6 | 0,381<br>*0.015* | 2,0<br>*0.079* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

## API Spec. 5B ROUND – External Threading

Full profile – Snap-Tap®




API spec. 5B – 1988

**16ER**



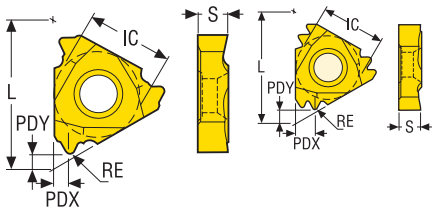
**22ER/27ER..M**

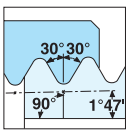


| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16ER8APIRD | – | 8 | 0,46<br>*0.018* | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 27ER8APIRD2M | – | 8 | 0,46<br>*0.018* | 2,9<br>*0.114* | 4,5<br>*0.177* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | | | |
| 16ER10APIRD | – | 10 | 0,38<br>*0.015* | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 22ER10APIRD2M | – | 10 | 0,38<br>*0.015* | 2,4<br>*0.094* | 3,7<br>*0.146* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## API Spec. 5B ROUND – Internal Threading

Full profile – Snap-Tap®




API spec. 5B – 1988

**16NR**



**27NR..M**

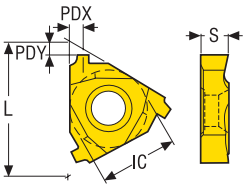


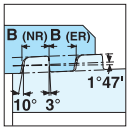
| Insert Part No. Right | Pitch | | RE | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 16NR8APIRD | – | 8 | 0,46<br>*0.018* | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |
| 27NR8APIRD2M | – | 8 | 0,46<br>*0.018* | 2,9<br>*0.114* | 4,5<br>*0.177* | 15,875<br>*0.625* | 27,0<br>*1.063* | 6,15<br>*0.242* | | ■ | | | |
| 16NR10APIRD | – | 10 | 0,38<br>*0.015* | 1,5<br>*0.059* | 1,5<br>*0.059* | 9,525<br>*0.375* | 16,5<br>*0.650* | 3,47<br>*0.137* | | | ■ | | |

■ Stock standard.

## API 5B BUTTRESS, 1:16 Taper – External Threading

Full profile – Snap-Tap®




Vallourec ST-D453.02
API spec. 5B - 1988

Crest and root are parallel to taper

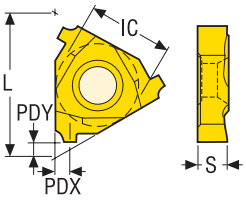
22ER

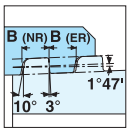


| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22ER5BUT2.5 | – | 5 | 2,2<br>*0.087* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## API 5B BUTTRESS, 1:16 Taper - Internal Threading

Full profile – Snap-Tap®




Vallourec ST-D453.02
API spec. 5B - 1988

Crest and root are parallel to taper

22NR

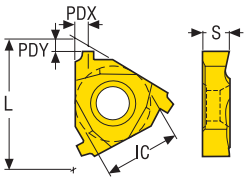


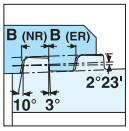
| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR5BUT2.5 | – | 5 | 2,0<br>*0.079* | 2,1<br>*0.083* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | ■ | ■ | | |

■ Stock standard.

## API BUTTRESS 1:12 Taper – External Threading

Full profile – Snap-Tap®




API spec. 5B – 1988
Crest and root are parallel to axis

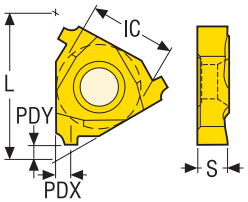
**22ER**

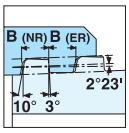


| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22ER5BUT2.6 | – | 5 | 2,2<br>*0.087* | 2,5<br>*0.098* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

## API BUTTRESS 1:12 Taper – Internal Threading

Full profile – Snap-Tap®




API spec. 5B – 1988
Crest and root are parallel to axis

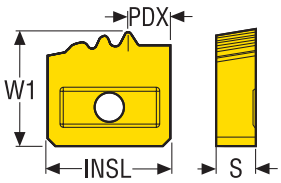
**22NR**



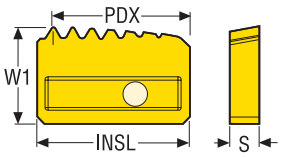
| Insert Part No. Right | Pitch | | PDY | PDX | IC | L | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| 22NR5BUT2.6 | – | 5 | 2,0<br>*0.079* | 2,1<br>*0.083* | 12,7<br>*0.500* | 22,0<br>*0.866* | 4,71<br>*0.185* | | | ■ | | |

■ Stock standard.

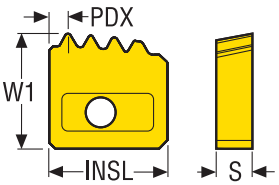
## Full profile – Chasers



Type 1



Type 2

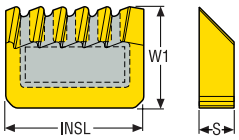


Type 3

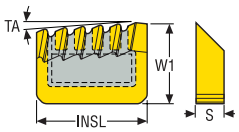
| Designation | Pitch | Thread Form Product | INSL | W1 | PDX | S | NT | Int./Ext. | Type | CHF1 | Grades | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Coated | | | |
| | TPI | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | CP250T | CP500T | TP150T | TTP1550 |
| 5-1102 | 5,0 | API_BUTTRESS_5TPI_1/16_EXT | 15,875<br>*0.625* | 15,875<br>*0.625* | 2,1<br>*0.083* | 4,76<br>*0.187* | 3 | External | 1 | C-1004-4 | ■ | | | |
| 5-5102 | 5,0 | API_BUTTRESS_5TPI_1/16_EXT, | 25,0<br>*0.984* | 15,875<br>*0.625* | 2,0<br>*0.079* | 5,0<br>*0.197* | 5 | External | 1 | C-5003-4 | ■ | | | ■ |
| 5-1113 | 5,0 | API_BUTTRESS_5TPI_1/16_INT, | 15,875<br>*0.625* | 15,875<br>*0.625* | 2,5<br>*0.098* | 4,76<br>*0.187* | 3 | Internal | 3 | C-1018-96 | ■ | | | |
| 5-5112-C | 5,0 | API_BUTTRESS_5TPI_1/16_INT | 25,0<br>*0.984* | 15,875<br>*0.625* | 1,964<br>*0.077* | 5,0<br>*0.197* | 5 | Internal | 3 | C-5003-96 | ■ | ■ | | |
| 5-5108 | 5,0 | API_BUTTRESS_5TPI_1/16_INT | 25,0<br>*0.984* | 15,875<br>*0.625* | 2,5<br>*0.098* | 5,0<br>*0.197* | 5 | Internal | 3 | C-5003-96 | ■ | | | |
| 5-1134 | 5,0 | API_BUTT_5TPI_CAS_1/16_INTPUL | 15,875<br>*0.625* | 15,875<br>*0.625* | 13,375<br>*0.527* | 4,76<br>*0.187* | 3 | Internal | 2 | C-1018-96 | ■ | | | ■ |
| 5-5110 | 5,0 | API_BUTT_5TPI_1/16_INTPULLING | 25,0<br>*0.984* | 15,875<br>*0.625* | 22,5<br>*0.886* | 5,0<br>*0.197* | 5 | Internal | 2 | C-5003-96 | ■ | | | |
| 5-4131-1 | 5,0 | API_BUTTRESS_1/16_5TPI_EXT_1 | 20,0<br>*0.787* | 15,692<br>*0.618* | 4,84<br>*0.191* | 4,76<br>*0.187* | 3 | External | 1 | C-4001-4 | ■ | | | |
| 5-4131-2 | 5,0 | API_BUTTRESS_1/16_5TPI_EXT_2 | 20,0<br>*0.787* | 15,875<br>*0.625* | 2,3<br>*0.091* | 4,76<br>*0.187* | 4 | External | 1 | C-4001-4 | ■ | | | |
| 5-3105-1 | 5,0 | API_BUTTRESS_5TPI_1/16_PMC_1 | 17,0<br>*0.669* | 14,57<br>*0.574* | 5,552<br>*0.219* | 5,2<br>*0.205* | 3 | External | 1 | C-3901-1 | ■ | | | |
| 5-3105-2 | 5,0 | API_BUTTRESS_5TPI_1/16_PMC_2 | 17,0<br>*0.669* | 14,825<br>*0.584* | 3,858<br>*0.152* | 5,2<br>*0.205* | 3 | External | 1 | C-3901-2 | ■ | | | |
| 5-3105-3 | 5,0 | API_BUTTRESS_5TPI_1/16_PMC_3 | 17,0<br>*0.669* | 14,98<br>*0.590* | 2,165<br>*0.085* | 5,2<br>*0.205* | 3 | External | 1 | C-3901-3 | ■ | | | |
| 8-1116 | 8,0 | API_RD_CAS_8TPI_EXT, | 15,875<br>*0.625* | 15,875<br>*0.625* | 5,6<br>*0.220* | 4,76<br>*0.187* | 3 | External | 1 | C-1005-4 | ■ | | | |
| 8-1128 | 8,0 | API_RD_8TPI_INT, | 15,875<br>*0.625* | 15,875<br>*0.625* | 2,5<br>*0.098* | 4,76<br>*0.187* | 4 | Internal | 3 | C-1002-96 | ■ | | | |
| 8-5111 | 8,0 | API_RD_8TPI_INT | 25,0<br>*0.984* | 15,875<br>*0.625* | 2,5<br>*0.098* | 5,0<br>*0.197* | 7 | Internal | 3 | C-5002-96 | ■ | | | |
| 8-4133-1 | 8,0 | API_RD_8TPI_EXT_CASING_1 | 20,0<br>*0.787* | 15,875<br>*0.625* | 10,19<br>*0.401* | 4,76<br>*0.187* | 3 | External | 1 | C-4003-4 | ■ | | | |
| 8-4133-2 | 8,0 | API_RD_8TPI_EXT_CASING_2 | 20,0<br>*0.787* | 15,875<br>*0.625* | 8,6<br>*0.339* | 4,76<br>*0.187* | 3 | External | 1 | C-4003-4 | ■ | | | |
| 8-2115-1 | 8,0 | API_RD_8TPI_CAS_3/4_TPF_PMC_1 | 16,0<br>*0.630* | 14,62<br>*0.576* | 7,697<br>*0.303* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-2115-2 | 8,0 | API_RD_8TPI_CAS_3/4_TPF_PMC_2 | 16,0<br>*0.630* | 14,87<br>*0.585* | 6,638<br>*0.261* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-2115-3 | 8,0 | API_RD_8TPI_CAS_3/4_TPF_PMC_3 | 16,0<br>*0.630* | 15,0<br>*0.591* | 5,58<br>*0.220* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-1117 | 8,0 | API_RD_TUBING_8TPI_EXT, | 15,875<br>*0.625* | 15,875<br>*0.625* | 5,6<br>*0.220* | 4,76<br>*0.187* | 3 | External | 1 | C-1005-4 | ■ | | | |
| 8-2118-1 | 8,0 | API_RD_8TPI_TUB_3/4_TPF_PMC_1 | 16,0<br>*0.630* | 14,62<br>*0.576* | 7,697<br>*0.303* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-2118-2 | 8,0 | API_RD_8TPI_TUB_3/4_TPF_PMC_2 | 16,0<br>*0.630* | 14,87<br>*0.585* | 6,638<br>*0.261* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-2118-3 | 8,0 | API_RD_8TPI_TUB_3/4_TPF_PMC_3 | 16,0<br>*0.630* | 15,0<br>*0.591* | 5,58<br>*0.220* | 5,2<br>*0.205* | 3 | External | 1 | – | ■ | | | |
| 8-5114 | 8,0 | API_RD_8TPI_INTPULLING | 25,0<br>*0.984* | 15,875<br>*0.625* | 22,5<br>*0.886* | 5,0<br>*0.197* | 7 | Internal | 2 | C-5002-96 | ■ | | | |
| 10-1120 | 10,0 | API_RD_10TPI_TUB_INT | 15,875<br>*0.625* | 15,875<br>*0.625* | 5,0<br>*0.197* | 4,76<br>*0.187* | 4 | Internal | 3 | C-1001-96 | ■ | | | |
| 10-1133-2 | 10,0 | API_RD_10TPI_TUB_EXT_2 | 15,875<br>*0.625* | 15,875<br>*0.625* | 4,4<br>*0.173* | 4,76<br>*0.187* | 3 | External | 1 | C-1001-4 | ■ | | | |

■ Stock standard.

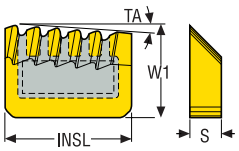
## Chipformers



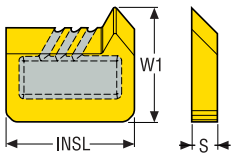
Type 1



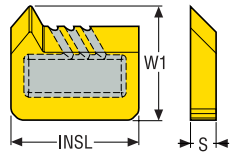
Type 2



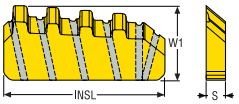
Type 3



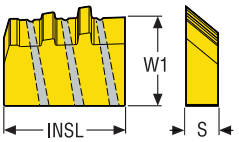
Type 4



Type 5



Type 6



Type 7

| Designation | Type | INSL | W1 | S |
|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* |
| C-1001 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1001-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1001-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1002 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1002-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1002-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1003 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1004 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1004-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1004-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1005-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1005-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1006-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1009 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1009-4 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1009-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1010 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1010-4 | 2 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1010-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1013-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1018 | 1 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1018-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1021-96 | 3 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1022 | 4 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |
| C-1023 | 5 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |

| Designation | Type | INSL | W1 | S |
|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* |
| C-1024 | 4 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1025 | 5 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-1032 | 5 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |
| C-1033 | 4 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |
| C-1034 | 5 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |
| C-1035 | 4 | 15,7<br>*0.618* | 11,5<br>*0.453* | 3,18<br>*0.125* |
| C-1601-96 | 3 | 15,7<br>*0.618* | 12,5<br>*0.492* | 3,97<br>*0.156* |
| C-1604-4 | 2 | 15,7<br>*0.618* | 12,5<br>*0.492* | 3,97<br>*0.156* |
| C-1X37-I-145 | 4 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-1X38-I-145 | 5 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-1X39-I-145 | 4 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-1X40-I-145 | 5 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-1X41-I-145 | 4 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-1X42-I-145 | 5 | 15,7<br>*0.618* | 14,5<br>*0.571* | 3,18<br>*0.125* |
| C-3901-1 | 7 | 16,9<br>*0.665* | 13,9<br>*0.547* | 4,47<br>*0.176* |
| C-3901-2 | 7 | 16,9<br>*0.665* | 14,0<br>*0.551* | 4,47<br>*0.176* |
| C-3901-3 | 7 | 16,9<br>*0.665* | 14,2<br>*0.559* | 4,47<br>*0.176* |
| C-4001-4 | 2 | 19,8<br>*0.780* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-4003-4 | 2 | 19,8<br>*0.780* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5001-4 | 2 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5001-96 | 3 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5002-4 | 2 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5002-96 | 3 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5003 | 1 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5003-4 | 2 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5003-96 | 3 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,97<br>*0.156* |
| C-5005 | 1 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,0<br>*0.118* |
| C-5006 | 1 | 24,8<br>*0.976* | 11,5<br>*0.453* | 3,0<br>*0.118* |
| C-5705-G | 6 | 24,8<br>*0.976* | 13,0<br>*0.512* | 3,0<br>*0.118* |
| C-5803-4 | 6 | 24,8<br>*0.976* | 13,5<br>*0.531* | 3,97<br>*0.156* |
| C-5805-G | 6 | 24,8<br>*0.976* | 13,5<br>*0.531* | 3,0<br>*0.118* |
| C-5905-G | 6 | 24,8<br>*0.976* | 14,0<br>*0.551* | 3,0<br>*0.118* |
| C-9001-I | 4 | 12,6<br>*0.496* | 11,5<br>*0.453* | 3,18<br>*0.125* |



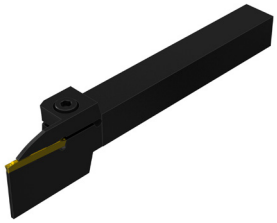
# Thread turning MDT

The highly stable and reliable Seco MDT (Multi-Directional Turning) system consists of holders and inserts that offers excellent performance in thread-turning operations. Products are available for both external and internal threads. Its unique clamping method is a combination of V-shaped top clamp and serrated contact surfaces between the underside of the insert and toolholder, resulting in superb stability.

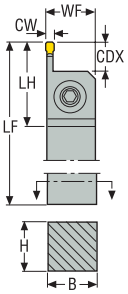
- External and Internal threads.
- Unique clamping method.
- V-shaped top clamp secure stability.

## MDT Toolholders, external

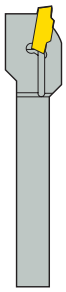
Toolholders for inserts LCGN



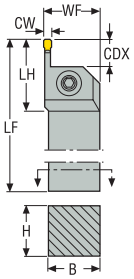
CFIR/ L1212../1616

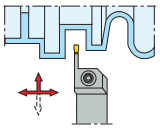



CFIR/L1212..



CFIR/L



—Right-hand version shown
—$a_r = 3 \times a_p$
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

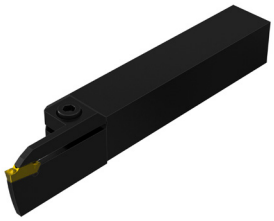
| Designation | Item number | H | B | CDX | CW | LF | WF | LH | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | kg | |
| CFIR1212M03 | 02435854 | 12,0 | 12,0 | 9,0 | 3,0 | 150,0 | 12,0 | 31,0 | 0,2 | LC..1603.. |
| CFIR1616H03 | 00091799 | 16,0 | 16,0 | 9,0 | 3,0 | 100,0 | 16,0 | 28,0 | 0,2 | LC..1603.. |
| CFIR2020K03 | 00068771 | 20,0 | 20,0 | 9,0 | 3,0 | 125,0 | 21,5 | 28,0 | 0,4 | LC..1603.. |
| CFIR2525M03 | 00068773 | 25,0 | 25,0 | 9,0 | 3,0 | 150,0 | 26,5 | 28,0 | 0,7 | LC..1603.. |
| CFIR3225P03 | 00013453 | 32,0 | 25,0 | 9,0 | 3,0 | 170,0 | 26,5 | 28,0 | 1,0 | LC..1603.. |
| CFIL1212M03 | 02435855 | 12,0 | 12,0 | 9,0 | 3,0 | 150,0 | 12,0 | 31,0 | 0,2 | LC..1603.. |
| CFIL1616H03 | 00091798 | 16,0 | 16,0 | 9,0 | 3,0 | 100,0 | 16,0 | 28,0 | 0,2 | LC..1603.. |
| CFIL2020K03 | 00068770 | 20,0 | 20,0 | 9,0 | 3,0 | 125,0 | 21,5 | 28,0 | 0,4 | LC..1603.. |
| CFIL2525M03 | 00068772 | 25,0 | 25,0 | 9,0 | 3,0 | 150,0 | 26,5 | 28,0 | 0,7 | LC..1603.. |
| CFIL3225P03 | 00013452 | 32,0 | 25,0 | 9,0 | 3,0 | 170,0 | 26,5 | 28,0 | 1,0 | LC..1603.. |

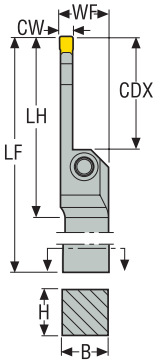
## Spare Parts, included in delivery

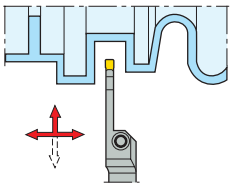
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| ..1212M03 | 3SMS795 | TCEI0409 |
| ..1616H03 | 4SMS795 | TCEI0509 |
| ..2020K03 | 4SMS795 | TCEI0513 |
| ..2525M03 | 4SMS795 | TCEI0513 |
| ..3225P03 | 4SMS795 | TCEI0513 |

## MDT Toolholders, external

Toolholders for inserts LCGF, LCGN, LCMF and LCMR





CDX = 8 x CW

—Right-hand version shown
—DCINN3 - minimum bore diameter for internal application, see catalog Turning
—CDX – Max depth of cut for LCGF/LCMF16.. = 14 mm,
LCGF/LCMF30.. = 28
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

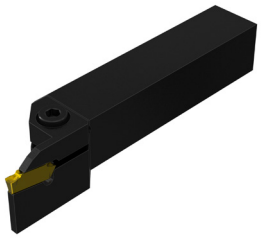
| Designation | Item number | H | B | CDX | CW | LF | WF | LH | DCINN3 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CFSR2525M03 | 02703367 | 25,0 | 25,0 | 24,0 | 3,0 | 150,0 | 26,5 | 46,0 | 195,0 | 0,7 | LC..1603.. |
| CFSR3225P03 | 02703375 | 32,0 | 25,0 | 24,0 | 3,0 | 170,0 | 26,1 | 46,0 | 195,0 | 1,0 | LC..1603.. |
| CFSL2525M03 | 02703363 | 25,0 | 25,0 | 24,0 | 3,0 | 150,0 | 26,5 | 46,0 | 195,0 | 0,7 | LC..1603.. |
| CFSL3225P03 | 02703371 | 32,0 | 25,0 | 24,0 | 3,0 | 170,0 | 26,1 | 46,0 | 195,0 | 1,0 | LC..1603.. |

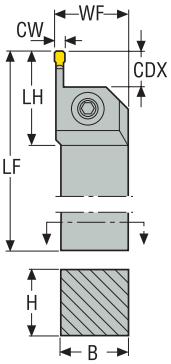
## Spare Parts, included in delivery

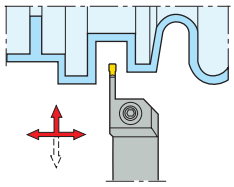
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| CFSR/L..03 | 4SMS795 | TCEI0513 |

## MDT Toolholders, external

Toolholders for inserts LCGF, LCGN, LCMF and LCMR





CDX = 5 x CW

—Right-hand version shown
—DCINN3 - minimum bore diameter for internal application, see catalog Turning
—CDX – Max depth of cut for LCGF/LCMF16.. = 14 mm
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

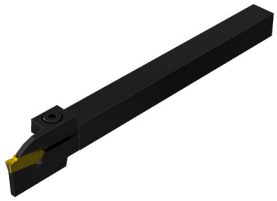
| Designation | Item number | H | B | CDX | CW | LF | WF | LH | DCINN3 | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| CFMR2020K03 | 00068777 | 20,0 | 20,0 | 15,0 | 3,0 | 125,0 | 21,5 | 36,0 | – | 0,4 | LC..1603.. |
| CFMR2525M03 | 00068779 | 25,0 | 25,0 | 15,0 | 3,0 | 150,0 | 26,5 | 36,0 | 195,0 | 0,7 | LC..1603.. |
| CFMR3225P03 | 00013460 | 32,0 | 25,0 | 15,0 | 3,0 | 170,0 | 26,5 | 36,0 | 195,0 | 1,0 | LC..1603.. |
| CFML2020K03 | 00068776 | 20,0 | 20,0 | 15,0 | 3,0 | 125,0 | 21,5 | 36,0 | – | 0,4 | LC..1603.. |
| CFML2525M03 | 00068778 | 25,0 | 25,0 | 15,0 | 3,0 | 150,0 | 26,5 | 36,0 | 195,0 | 0,7 | LC..1603.. |
| CFML3225P03 | 00013459 | 32,0 | 25,0 | 15,0 | 3,0 | 170,0 | 26,5 | 36,0 | 195,0 | 1,0 | LC..1603.. |

## Spare Parts, included in delivery

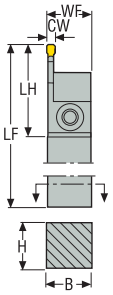
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| CFMR/L..-03 | 4SMS795 | TCEI0513 |

## MDT Toolholders, external

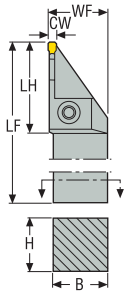
Toolholders for inserts LCGN and LCMR

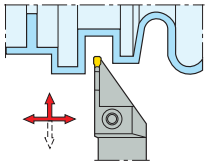


CF..1212, 1616




CF..2020, 2525



—Right-hand version shown
—CUTDIA – Due to the design, grooving depth is limited, see catalog Turning
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

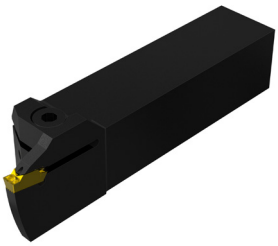
| Designation | Item number | H | B | CW | LF | WF | LH | CUTDIA | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | kg | |
| CFOR1212M03 | 00053367 | 12,0 | 12,0 | 3,0 | 150,0 | 12,0 | 32,1 | 37,0 | 0,2 | LC..1603.. |
| CFOL1212M03 | 00053357 | 12,0 | 12,0 | 3,0 | 150,0 | 12,0 | 32,1 | 37,0 | 0,2 | LC..1603.. |
| CFTR1616M03 | 00054058 | 16,0 | 16,0 | 3,0 | 150,0 | 16,0 | 42,0 | 50,0 | 0,3 | LC..1603.. |
| CFTR2020K03 | 00054060 | 20,0 | 20,0 | 3,0 | 125,0 | 21,5 | 43,0 | 50,0 | 0,4 | LC..1603.. |
| CFTR2525M03 | 00054066 | 25,0 | 25,0 | 3,0 | 150,0 | 26,5 | 42,5 | 50,0 | 0,7 | LC..1603.. |
| CFTL1616M03 | 00054057 | 16,0 | 16,0 | 3,0 | 150,0 | 16,0 | 42,0 | 50,0 | 0,3 | LC..1603.. |
| CFTL2020K03 | 00054059 | 20,0 | 20,0 | 3,0 | 125,0 | 21,5 | 43,0 | 50,0 | 0,4 | LC..1603.. |
| CFTL2525M03 | 00054063 | 25,0 | 25,0 | 3,0 | 150,0 | 26,5 | 42,5 | 50,0 | 0,7 | LC..1603.. |

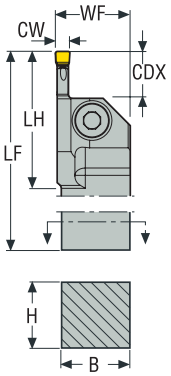
## Spare Parts, included in delivery

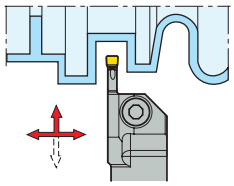
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| CFOR/L..-03 | 3SMS795 | TCEI0409 |
| CFTR/L..-03 | 4SMS795 | TCEI0513 |

## MDT Toolholders, external

Toolholders for inserts LCGF, LCGN, LCMF and LCMR





—Right-hand version shown
—CDX – Max depth of cut for LCGF/LCMF16.. = 14 mm, LCGF/LCMF30.. = 28
—CP – Max coolant pressure (bar) using hose connection
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

CFIR/L CDX = 3 x CW
CFMR/L CDX = 5 x CW

| Designation | Item number | H | B | CDX | CW | LF | WF | LH | DCINN3 | Weight | CP | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | kg | bar | |
| CFIR3225P03JET | 02599873 | 32,0 | 25,0 | 9,0 | 3,0 | 170,0 | 26,5 | 33,0 | 195,0 | 1,1 | 275,0 | LC..1603.. |
| CFIL3225P03JET | 02599874 | 32,0 | 25,0 | 9,0 | 3,0 | 170,0 | 26,5 | 33,0 | 195,0 | 1,0 | 275,0 | LC..1603.. |
| CFMR3225P03JET | 02702825 | 32,0 | 25,0 | 15,0 | 3,0 | 170,0 | 26,5 | 41,0 | 195,0 | 1,0 | 275,0 | LC..1603.. |
| CFML3225P03JET | 02702829 | 32,0 | 25,0 | 15,0 | 3,0 | 170,0 | 26,5 | 41,0 | 195,0 | 1,0 | 275,0 | LC..1603.. |

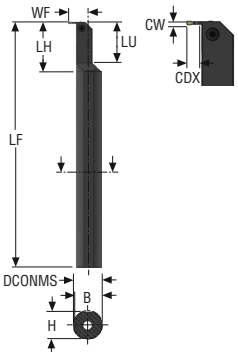
## Spare Parts, included in delivery

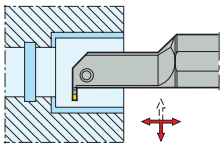
| For holders | Clamp key | Clamp screw | Plug |
|---|---|---|---|
| |  |  |  |
| CFIR/L..-03 | 4SMS795 | TCEI0513 | JET-P1/8-5MM |
| CFMR/L..-03 | 4SMS795 | TCEI0513 | JET-P1/8-5MM |

## MDT Toolholders, internal

Toolholders for inserts LCGF, LCGN, LCMF and LCMR





—Right-hand version shown
—DCINN - minimum bore diameter
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

| Designation | Item number | H | B | CDX | CW | LF | LU | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| A32T-CGIR1603 | 02717661 | 30,0 | 31,0 | 9,0 | 3,0 | 300,0 | 50,0 | 24,0 | 60,0 | 32,0 | 32,0 | 1,5 | LC..1603.. |
| A32T-CGIL1603 | 02718385 | 30,0 | 31,0 | 9,0 | 3,0 | 300,0 | 50,0 | 24,0 | 60,0 | 32,0 | 32,0 | 1,5 | LC..1603.. |

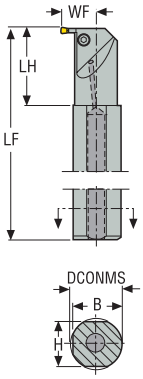
## Spare Parts, included in delivery

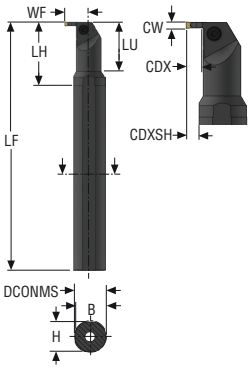
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| CG.R/L..03 | T15P-7 | L85011-T15P |

## MDT Toolholders, internal

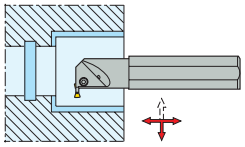
Toolholders for inserts LCGF, LCGN, LCMF and LCMR





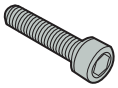

CDX = 2 x CW



—Right-hand version shown
—DCINN – minimum bore diameter
—CDXSH – If toolholder enters bore more than LH
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

| Designation | Item number | H | B | CDX | CDXSH | CW | LF | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| A40T-CGGR03 | 00093896 | 37,0 | 38,5 | 6,0 | 5,5 | 3,0 | 300,0 | 26,0 | 60,0 | 40,0 | 45,0 | 2,5 | LC..1603.. |
| A40T-CGGL03 | 00093897 | 37,0 | 38,5 | 6,0 | 5,5 | 3,0 | 300,0 | 26,0 | 60,0 | 40,0 | 45,0 | 2,5 | LC..1603.. |

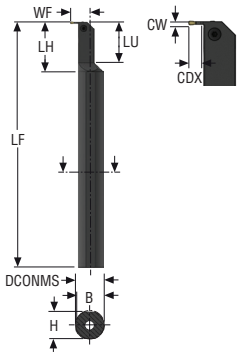
## Spare Parts, included in delivery

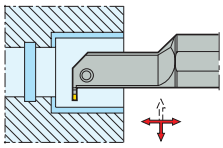
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| -..03 | 3SMS795 | MC6S4X14 |

## MDT Toolholders, internal

Toolholders for inserts LCGF, LCGN, LCMF and LCMR





—Right-hand version shown
—DCINN - minimum bore diameter
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

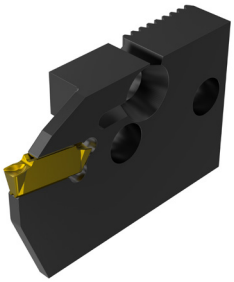
| Designation | Item number | H | B | CDX | CW | LF | LU | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| A20-CGIR03 | 02717401 | 1.171 | 1.211 | 0.354 | 0.118 | 12.000 | 1.969 | 0.929 | 2.362 | 1.250 | 1.260 | 3.3 | LC..1603.. |
| A20-CGIL03 | 02718392 | 1.171 | 1.211 | 0.354 | 0.118 | 12.000 | 1.969 | 0.929 | 2.362 | 1.250 | 1.260 | 3.3 | LC..1603.. |

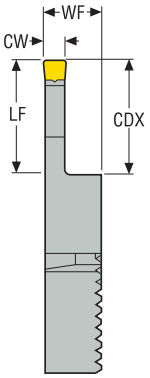
## Spare Parts, included in delivery

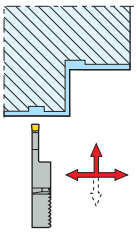
| For holders | Clamp key | Clamp screw |
|---|---|---|
| |  |  |
| ..03 | T15P-7 | L85011-T15P |

## MDT Blades modular

Blades for inserts LCGF, LCGN, LCMF and LCMR



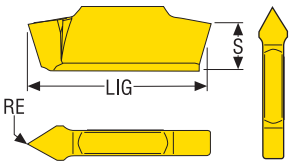


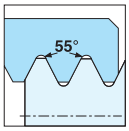



—Right-hand version shown
—CDX – Max depth of cut for LCGF/LCMF13.. = 11 mm
LCGF/LCMF16.. = 14 mm
—CW = indicative Cutting Width, may vary depending on the chosen insert
—For inserts program, see page(s) 181

| Designation | Item number | CDX | CW | LF | WF | Weight | CTWS |
|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | kg | |
| V21-CMR1603 | 00030310 | 15,0 | 3,0 | 16,2 | 9,2 | 0,1 | LC..1603.. |
| V21-CML1603 | 02719038 | 15,0 | 3,0 | 16,2 | 9,2 | 0,1 | LC..1603.. |

## MDT Inserts LCGN – Partial profile 55°

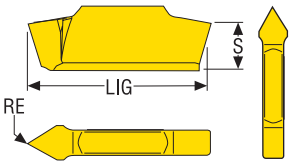


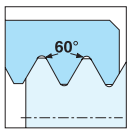




Tolerances:
LIG = ±0,025
RE = ±0,025
Helix angle not to exceed λ +2°

| Designation | Pitch | | RE | LIG | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCGN1603-A55 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 16,6<br>*0.654* | 4,5<br>*0.177* | | | ■ | | |
| LCGN1603-G55 | 1,75-3 | 14-8 | 0,18<br>*0.007* | 16,6<br>*0.654* | 4,5<br>*0.177* | | | ■ | | |

## MDT Inserts LCGN – Partial profile 60°

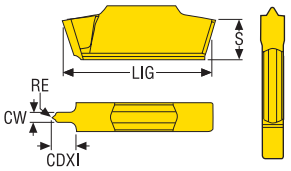


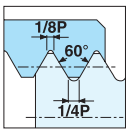




Tolerances:
LIG = ±0,025
RE = ±0,025
Helix angle not to exceed λ +2°

| Designation | Pitch | | RE | LIG | S | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCGN1603-A60 | 0,5-1,5 | 48-16 | 0,08<br>*0.003* | 16,6<br>*0.654* | 4,5<br>*0.177* | | | ■ | | |
| LCGN1603-G60 | 1,75-3 | 14-8 | 0,18<br>*0.007* | 16,6<br>*0.654* | 4,5<br>*0.177* | | | ■ | | |

## MDT Inserts – LCGN – ISO Metric




Tolerances:
LIG = ±0,025
Helix angle not to exceed λ +2°

| Designation | Note | Pitch | | RE | LIG | S | CW | CDXI | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Coated | | | | Uncoated |
| | | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCGN1603-E0.5ISO | * | 0,5 | | 0,07<br>*0.003* | 16,6<br>*0.654* | 4,5<br>*0.177* | 0,75<br>*0.030* | 1,9<br>*0.075* | | | ■ | | |
| LCGN1603-E0.8ISO | * | 0,8 | | 0,11<br>*0.004* | 16,6<br>*0.654* | 4,5<br>*0.177* | 1,2<br>*0.047* | 3,0<br>*0.118* | | | ■ | | |
| LCGN1603-E1.0ISO | * | 1,0 | | 0,13<br>*0.005* | 16,6<br>*0.654* | 4,5<br>*0.177* | 1,5<br>*0.059* | 3,75<br>*0.148* | | | ■ | | |
| LCGN1603-E1.25ISO | * | 1,25 | | 0,17<br>*0.007* | 16,6<br>*0.654* | 4,5<br>*0.177* | 1,88<br>*0.074* | 4,2<br>*0.165* | | | ■ | | |
| LCGN1603-E1.5ISO | | 1,5 | | 0,21<br>*0.008* | 16,6<br>*0.654* | 4,5<br>*0.177* | 2,4<br>*0.094* | 0,92<br>*0.036* | | | ■ | | |

*Toolholders have to be modified
■ Stock standard.



# Thread turning Mini-Shaft™

The highly versatile Mini-Shaft™ consists of inserts and holders providing stable, high-precision internal threading operations. Mini-Shaft™ features a special double-serrated joint that creates a secure connection point for its exchangeable inserts and toolholders, resulting in a repeatability of +/- 0.02 mm ( +/- .0008 inch).

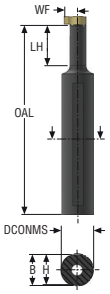
- All toolholders can accommodate R- and L-handed inserts.
- Through coolant possibility.
- Use in holes as small as 8 mm (0.315 inch).

## Mini-Shaft™ Holders

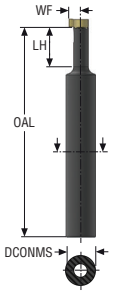
Toolholders for inserts LCEX

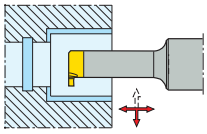


A..-SGXN




A..-SGXN-R



—Right-hand version shown
—For inserts program, see page(s) 186–190

| Designation | Item number | H | B | OAL | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | kg | |
| A12G-SGXN08-20 | 02411140 | 11,0 | 11,5 | 86,5 | 4,8 | 16,5 | 12,0 | 8,0 | 0,1 | LCEX08.. |
| A12G-SGXN08-20-R | 02511871 | – | – | 86,5 | 4,8 | 16,5 | 12,0 | 8,0 | 0,1 | LCEX08.. |
| A16H-SGXN11-25 | 02411142 | 15,0 | 15,5 | 96,0 | 6,7 | 21,0 | 16,0 | 11,0 | 0,2 | LCEX11.. |
| A16H-SGXN11-25-R | 02511872 | – | – | 96,0 | 6,7 | 21,0 | 16,0 | 11,0 | 0,2 | LCEX11.. |

## Spare Parts, included in delivery

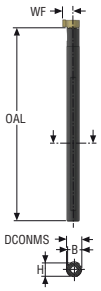
| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| A12G-.. | T08P-2 | C02506-T08P |
| A16H-.. | T10P-2 | C03509-T10P |

## Mini-Shaft™ Holders

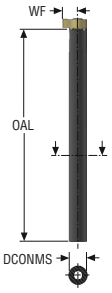
Toolholders for inserts LCEX

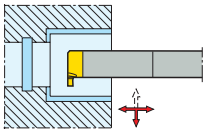


E...-SGXN




E...-SGXN-R



—Right-hand version shown
—For inserts program, see page(s) 186–190

| Designation | Item number | H | B | OAL | WF | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | kg | |
| E06G-SGXN08 | 02411141 | 5,5 | 5,75 | 86,5 | 4,8 | 6,0 | 8,0 | 0,1 | LCEX08.. |
| E06G-SGXN08-R | 02513692 | – | – | 86,5 | 4,8 | 6,0 | 8,0 | 0,1 | LCEX08.. |
| E08H-SGXN11 | 02411143 | 7,3 | 7,65 | 96,0 | 6,7 | 8,0 | 11,0 | 0,1 | LCEX11.. |
| E08H-SGXN11-R | 02513696 | – | – | 96,0 | 6,7 | 8,0 | 11,0 | 0,1 | LCEX11.. |

## Spare Parts, included in delivery

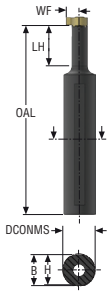
| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| E06G-.. | T08P-2 | C02506-T08P |
| E08H-.. | T10P-2 | C03509-T10P |

## SGXN Mini-Shaft™ Holders

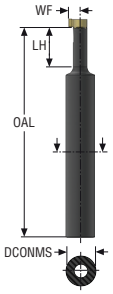
Toolholders for inserts LCEX



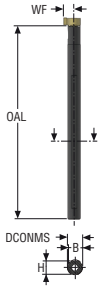
A..-SGXN



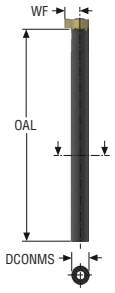

A..-SGXN-R




E..-SGXN




E..-SGXN-R




—Right-hand version shown
—For inserts program, see page(s) 186–190

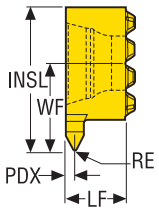
| Designation | Item number | H | B | OAL | WF | LH | DMM | DCINN | Weight | CTWS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | |
| A10G-SGXN08-078 | 02450441 | 0.586 | 0.605 | 3.406 | 0.188 | 0.650 | 0.625 | 0.315 | 0.4 | LCEX08.. |
| E04G-SGXN08 | 02450442 | 0.217 | 0.233 | 3.406 | 0.189 | – | 0.250 | 0.315 | 0.2 | LCEX08.. |
| A10H-SGXN11-098 | 02450443 | 0.586 | 0.605 | 3.780 | 0.264 | 0.827 | 0.625 | 0.433 | 0.4 | LCEX11.. |
| E05H-SGXN11 | 02450445 | 0.287 | 0.300 | 3.780 | 0.264 | – | 0.312 | 0.433 | 0.2 | LCEX11.. |
| A10G-SGXN08-078-R | 02511873 | – | – | 3.406 | 0.188 | 0.650 | 0.625 | 0.315 | 0.2 | LCEX08.. |
| A10H-SGXN11-098-R | 02511874 | – | – | 3.780 | 0.264 | 0.827 | 0.625 | 0.433 | 0.4 | LCEX11.. |
| E04G-SGXN08-R | 02513700 | – | – | 3.406 | 0.189 | – | 0.250 | 0.315 | 0.2 | LCEX08.. |
| E05H-SGXN11-R | 02513704 | – | – | 3.780 | 0.264 | – | 0.312 | 0.433 | 0.2 | LCEX11.. |

### Spare Parts, included in delivery

| For holders | Insert key | Insert screw |
|---|---|---|
| |  |  |
| A10G-../E04G-.. | T08P-2 | C02506-T08P |
| A10H-../E05H-.. | T10P-2 | C03509-T10P |

## Mini-Shaft™ Inserts

Partial profile 60°







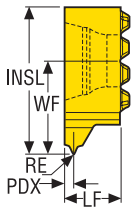



| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX0804-A60R | 0,5-0,75 | 48,0-36,0 | 0,03<br>*0.001* | 0,48<br>*0.019* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-A60L | 0,5-0,75 | 48,0-36,0 | 0,03<br>*0.001* | 0,48<br>*0.019* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-AG60R | 0,75-1,25 | 36,0-20,0 | 0,07<br>*0.003* | 0,73<br>*0.029* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-AG60L | 0,75-1,25 | 36,0-20,0 | 0,07<br>*0.003* | 0,73<br>*0.029* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-G60R | 1,25-1,75 | 20,0-16,0 | 0,12<br>*0.005* | 0,98<br>*0.039* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-G60L | 1,25-1,75 | 20,0-16,0 | 0,12<br>*0.005* | 0,98<br>*0.039* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX1105-A60R | 0,5-0,75 | 48,0-36,0 | 0,03<br>*0.001* | 0,48<br>*0.019* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-A60L | 0,5-0,75 | 48,0-36,0 | 0,03<br>*0.001* | 0,48<br>*0.019* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-AG60R | 0,75-1,25 | 36,0-20,0 | 0,07<br>*0.003* | 0,73<br>*0.029* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-AG60L | 0,75-1,25 | 36,0-20,0 | 0,07<br>*0.003* | 0,73<br>*0.029* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-G60R | 1,25-1,75 | 16,0-20,0 | 0,12<br>*0.005* | 0,98<br>*0.039* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-G60L | 1,25-1,75 | 20,0-16,0 | 0,12<br>*0.005* | 0,98<br>*0.039* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |

■ Stock standard.

## Mini-Shaft™ Inserts

ISO Metric




..L



..R

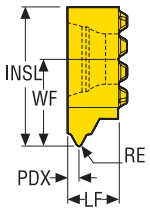


| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX1105-1.0ISOR | 1,0-1,0 | | 0,07<br>*0.003* | 0,6<br>*0.024* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-1.0ISOL | 1,0-1,0 | | 0,07<br>*0.003* | 0,6<br>*0.024* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-1.5ISOR | 1,5-1,5 | | 0,12<br>*0.005* | 0,85<br>*0.033* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-1.5ISOL | 1,5-1,5 | | 0,12<br>*0.005* | 0,8<br>*0.031* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.0ISOR | 2,0-2,0 | | 0,17<br>*0.007* | 1,1<br>*0.043* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.0ISOL | 2,0-2,0 | | 0,17<br>*0.007* | 1,1<br>*0.043* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.5ISOR | 2,5-2,5 | | 0,18<br>*0.007* | 1,35<br>*0.053* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.5ISOL | 2,5-2,5 | | 0,18<br>*0.007* | 1,35<br>*0.053* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-3.0ISOR | 3,0-3,0 | | 0,21<br>*0.008* | 1,6<br>*0.063* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-3.0ISOL | 3,0-3,0 | | 0,21<br>*0.008* | 1,6<br>*0.063* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |

■ Stock standard.

## Mini-Shaft™ Inserts

Whitworth, BSW




..L



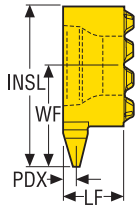
..R



| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX1105-14WR | | 14,0-14,0 | 0,24<br>*0.009* | 1,0<br>*0.039* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-14WL | | 14,0-14,0 | 0,24<br>*0.009* | 1,0<br>*0.039* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-19WR | | 19,0-19,0 | 0,15<br>*0.006* | 0,77<br>*0.030* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-19WL | | 19,0-19,0 | 0,15<br>*0.006* | 0,77<br>*0.030* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |

## Mini-Shaft™ Inserts

TR-DIN103




..RL



..RR

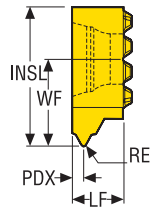


| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX1105-1.5TRR | 1,5-1,5 | | 0,1<br>*0.004* | 0,8<br>*0.031* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-1.5TRL | 1,5-1,5 | | 0,1<br>*0.004* | 0,8<br>*0.031* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.0TRR | 2,0-2,0 | | 0,15<br>*0.006* | 1,1<br>*0.043* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-2.0TRL | 2,0-2,0 | | 0,15<br>*0.006* | 1,1<br>*0.043* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-3.0TRR | 3,0-3,0 | | 0,15<br>*0.006* | 1,6<br>*0.063* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |
| LCEX1105-3.0TRL | 3,0-3,0 | | 0,15<br>*0.006* | 1,6<br>*0.063* | 6,7<br>*0.264* | 10,7<br>*0.421* | 4,0<br>*0.157* | | | ■ | | |

■ Stock standard.

## Mini-Shaft™ Inserts

UN




..L



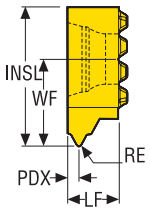
..R



| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX0804-16UNR | | 16,0-16,0 | 0,13<br>*0.005* | 0,9<br>*0.035* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-16UNL | | 16,0-16,0 | 0,13<br>*0.005* | 0,9<br>*0.035* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-20UNR | | 20,0-20,0 | 0,09<br>*0.004* | 0,7<br>*0.028* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-20UNL | | 20,0-20,0 | 0,09<br>*0.004* | 0,7<br>*0.028* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-24UNR | | 24,0-24,0 | 0,07<br>*0.003* | 0,6<br>*0.024* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-24UNL | | 24,0-24,0 | 0,07<br>*0.003* | 0,6<br>*0.024* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-32UNR | | 32,0-32,0 | 0,04<br>*0.002* | 0,5<br>*0.020* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-32UNL | | 32,0-32,0 | 0,04<br>*0.002* | 0,5<br>*0.020* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |

■ Stock standard.

## Mini-Shaft™ Inserts
NPT

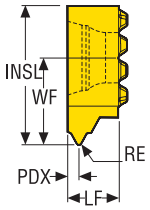



..R



| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX0804-27NPTR | | 27,0-27,0 | 0,03<br>*0.001* | 0,57<br>*0.022* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |

## Mini-Shaft™ Inserts
NPTF




..L



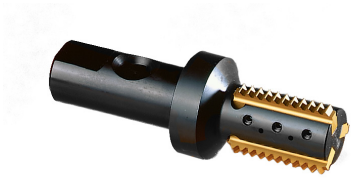
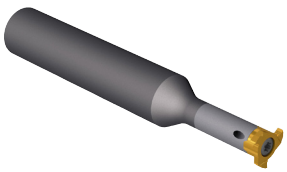
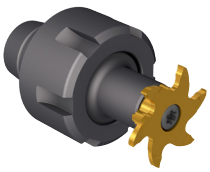
..R



| Designation | Pitch | | RE | PDX | WF | INSL | LF | Grades | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Coated | | | | Uncoated |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | CP200 | CP300 | CP500 | TTP2050 | H15 |
| LCEX0804-27NPTFR | | 27,0-27,0 | 0,04<br>*0.002* | 0,57<br>*0.022* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |
| LCEX0804-27NPTFL | | 27,0-27,0 | 0,04<br>*0.002* | 0,57<br>*0.022* | 4,78<br>*0.188* | 7,78<br>*0.306* | 3,3<br>*0.130* | | | ■ | | |

■ Stock standard.

## Range overview

| | Range ∅ | Length |
|---|---|---|
| **Threadmaster™**<br>  <br>**Page(s) 200, 201-204** | M1-M20 | ~ 1,5-2 x D |
| **R396.18/19/20**<br>  <br>**Page(s) 212-217** | 14 ≤ | ~ 2 - 3.5 x D |
| **R335.14**<br>  <br>  <br>**Page(s) 224-226** | 12< | ~1xD< |
| **Threadmaster™ Taps**<br>  <br>**Page(s) 242-468** | M1-M64 | ~ 1,5–3,5 x D |

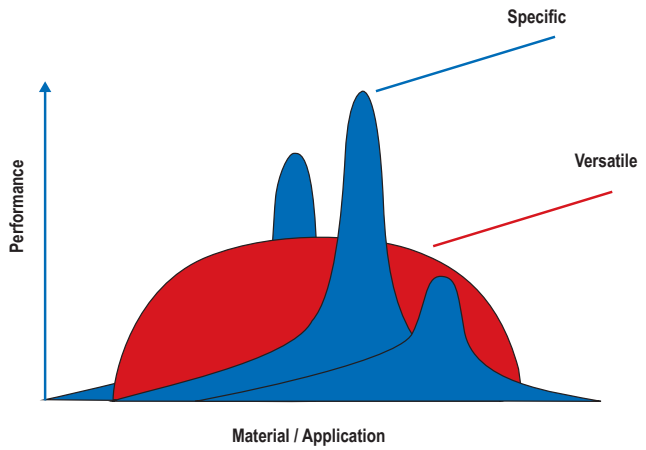
## Versatile & Specific

### Thread milling and Tapping – Choice of tool

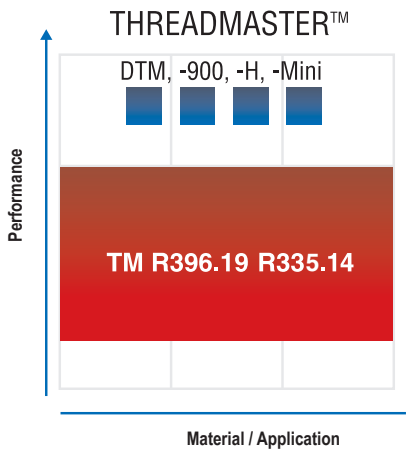
Continuous research and development of better materials, coatings and optimal geometries help fulfil customer's requirements.

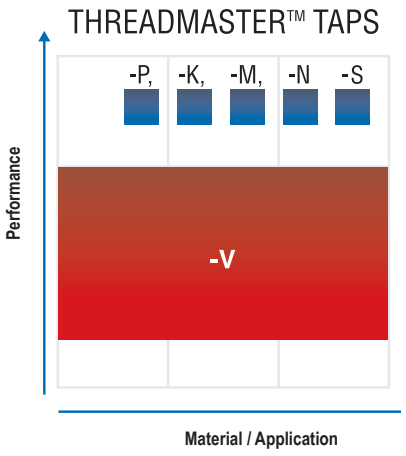
Our product strategy is to provide the market with versatile first choice tools and specific optimized solutions for threading.

**Product Strategy**




**Product Assortment**



# Thread milling – Choice of cutter, inserts and cutting data

## Solid carbide cutter – Threadmaster™

### 1. General

The same cutter can be used for machining both right and left hand threads. Metric and UN versions are only for internal threading. The remaining of the range can be used for both external and internal threading.

- The cutters are regrindable

### 2. Select cutter diameter

- Look up the pages with the Threadmaster programmes
- Look up the column for the required thread type
- Look up the required pitch
- When more alternatives are available note that:

- Smaller cutter diameter allows smaller threading diameter (minimum thread diameter is found in the designation).
- Larger cutter diameter allows larger threading depth (maximum threading depth is 2 x cutter diameter, $D_c$).

### 3. Selection of cutter

- TM: Basic choice
- TM...-900: Choice for steel and stainless steel with tensile strength > 900 N/mm$^2$
- TM...-H: Choice for hardened steel with hardness 45-60 HRC
- DTM: Drill, thread and chamfer with same tool. To be used in aluminium and cast iron

### 4. Select cutting data

- Use the tables beginning on page 473 to classify the workpiece material into a SMG (Seco Material Group)
- Cutting speed recommendations are found on the cutting data page for Threadmaster
- Feed per tooth (= flute) recommendations are found on the cutting data page for Threadmaster
- Formulae for cutting data calculation are on page 195
- For best suggestion and performance use Seco Suggest https://www.secotools.com/dashboard/Suggest/Suggest.

### 5. Machining methods

- Helical interpolation must be used to create the pitch
- Clockwise or counterclockwise feed direction can be used depending on thread type and machining method (right or left hand), external or internal thread
- Climb milling is recommended
- Coolant supply is recommended. Except when threading hardened material
- Special machining recommendations for certain workpiece materials are found on the cutting data page for Threadmaster

## Feed recommendations

### Threadmaster™

- Feed recommendations for TM-M4X0.7ISO-6R1 except for TM-Mini, that recommendation is for TM-M1.0X0.25ISO-3R1-H and only a start value
- For best suggestion and performance use Seco Suggest https://www.secotools.com/dashboard/Suggest/Suggest
- All feed are related to the centre of the cutter and not the periphery
- In the entrance loop reduce feed by 50%. In the exit loop increase feed by 50%
- In the entrance and exit loop feed the cutter 15% of the pitch axially
- For free cutting steel, low alloy and ferritic steel, quench & temper steel, low to medium alloy stainless steels and austenitic cast irons, leave 0,05 mm in $a_e$ for a finishing cut
- For high strength steels, martensitic and high alloy stainless steels, Ni-based superalloys and titanium alloys remove 2/3 of $a_e$ in the first cut and the remaining 1/3 in the second cut
- For hardened steels remove 1/3 of $a_e$ in the first cut, 1/3 of $a_e$ in the second cut and the remaining 1/3 in the third cut
- For NPT and NPTF threads take the whole $a_e$ in one cut
- Coolant is recommended (except when using -H in hardened materials)
- The Metric and UN thread mills are only for internal threads

**TM-Mini:**

- Left-hand cutting (M4)
- Do the entrance loop before entering into the workpiece

**DTM:**

- Use peck drilling

# Choice of cutter, inserts and cutting data

### 1. General

- The same cutter can be used for machining external and internal, right-hand and left-hand threads

### 2. Select cutter diameter

- Look up the pages for thread milling cutters and choose a suitable diameter in the tool data table
- The insert size varies with the cutter diameters. Check the available insert programme for the different sizes before deciding cutter diameter
- For internal thread milling check the 'minimum thread diameter' table before deciding cutter diameter. This table shows the relation between the cutter diameter and the smallest thread diameter to be machined

### 3. Select insert

- Look up the thread milling inserts pages and choose the required thread type in the correct insert size for the cutter. Choose the grade F30M/CP500 for general machining

### 4. Select cutting data

**Radial cutting depth**

- Use the formulae to calculate the radial cutting depth ($a_e$). (See figures)

**Feed rate**

- Divide the radial cutting depth with the cutter diameter to get the actual cutter engagement percentage ($a_e/D_c$%). Use the cutting data table to get a feed per tooth recommendation, see page(s) 205 - 208.

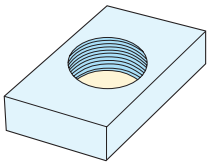
**Cutting speed**

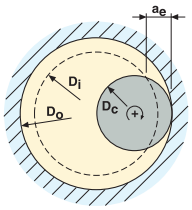
- Use the tables beginning at page 473 to classify the workpiece material into a Seco Material Group.
- Cutting speed recommendations (for 10% engagement) are in the basic cutting speed table in the catalogue
- For safety reasons, maximum rpm that should never be exceeded
- Formulae for cutting data calculation are found on page 195

### 5. Machining methods

- Helical interpolation must be used to create the pitch
- Clockwise or counterclockwise feed direction can be used depending on thread type and machining method (right or left hand, external or internal thread)
- Climb milling and coolant is recommended. Coolant supply is recommended except when threading hardened material

## Internal






**$D_i = D_o$ - 2h**

| Thread | |
|---|---|
| ISO | 0,60 x p |
| UN | 0,60 x p |
| W | 0,69 x p |
| BSPT | 0,69 x p |
| NPT | 0,78 x p |

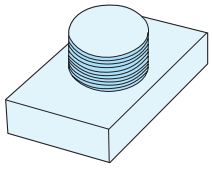
**Radial infeed value $a_e$:**

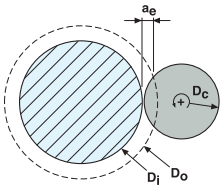
$$a_e = \frac{D_o^2 - D_i^2}{4\,(D_o - D_c)}$$

p = pitch (mm)
h = depth of thread

$D_c$ = Cutter dia
$D_o$ = Major dia
$D_i$ = Minor dia

## External






**$D_i = D_o$ - 2h**

| Thread | |
|---|---|
| ISO | 0,65 x p |
| UN | 0,65 x p |
| W | 0,69 x p |
| BSPT | 0,69 x p |
| NPT | 0,78 x p |

**Radial infeed value $a_e$:**

$$a_e = \frac{D_o^2 - D_i^2}{4\,(D_i + D_c)}$$

p = pitch (mm)
h = depth of thread

$D_c$ = Cutter dia
$D_o$ = Major dia
$D_i$ = Minor dia

## Choice of cutter, inserts and cutting data

| RPM | |
|---|---|
| $n = \frac{v_c \cdot 1000}{\pi \cdot D_c}$ | (rev/min) |
| **Cutting speed** | |
| $v_c = \frac{n \cdot \pi \cdot D_c}{1000}$ | (m/min) |
| **Feed speed** | |
| $v_f = n \cdot z_n \cdot f_z$ | (mm/min) |
| $v_f = n \cdot z_c \cdot f_z$ | (mm/min) |
| **Feed per revolution** | |
| $f = z_n \cdot f_z$ | (mm/rev) |
| $f = z_c \cdot f_z$ | (mm/rev) |

| RPM | |
|---|---|
| $n = \frac{v_c \cdot 3.82}{D_c}$ | (rev/min) |
| **Cutting speed** | |
| $v_c = \frac{n \cdot D_c}{3.82}$ | (sf/min) |
| **Feed speed** | |
| $v_f = n \cdot z_n \cdot f_z$ | (in/min) |
| $v_f = n \cdot z_c \cdot f_z$ | (in/min) |
| **Feed per revolution** | |
| $f = z_n \cdot f_z$ | (in/rev) |
| $f = z_c \cdot f_z$ | (in/rev) |

$D_c$ = Cutter diameter (mm)
f = Feed per revolution (mm)
$f_z$ = Feed per tooth (mm/tooth)
$z_c$ = Effective No. of teeth for calculation of feed speed or feed per rev

n = RPM (rev/min)
$v_c$ = Cutting speed (m/min)
$v_f$ = Feed speed (mm/min)
$z_n$ = No. of teeth

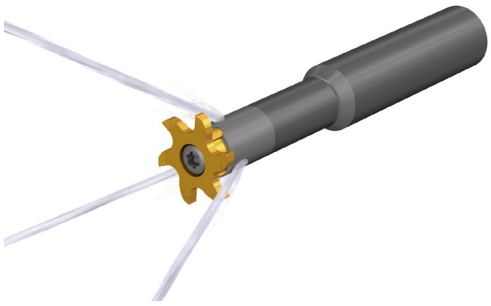
$D_c$ = Cutter diameter (inch)
f = Feed per revolution (inch)
$f_z$ = Feed per tooth (in/tooth)
$z_c$ = Effective No. of teeth for calculation of feed speed or feed per rev

n = RPM (rev/min)
$v_c$ = Cutting speed (sf/min)
$v_f$ = Feed speed (sf/min)
$z_n$ = No. of teeth

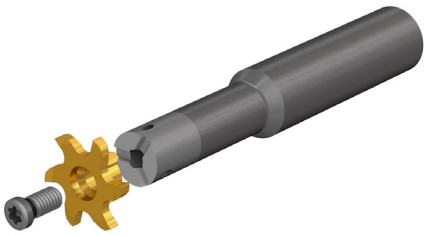
# Disc Milling cutter 335.14

Disc milling cutter with exchangeable carbide head from diameter 9,7 mm *(0.382")*

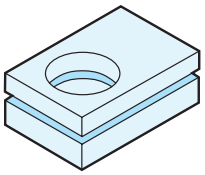
A broad range of heads and shanks available for all your disc milling operation by circular interpolation or linear slotting.



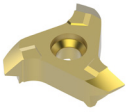
Strong, reliable and precise connection between the head and the cutter body.

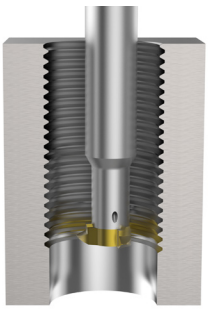


Cover all type of material with universal M geometry and F32M grade.

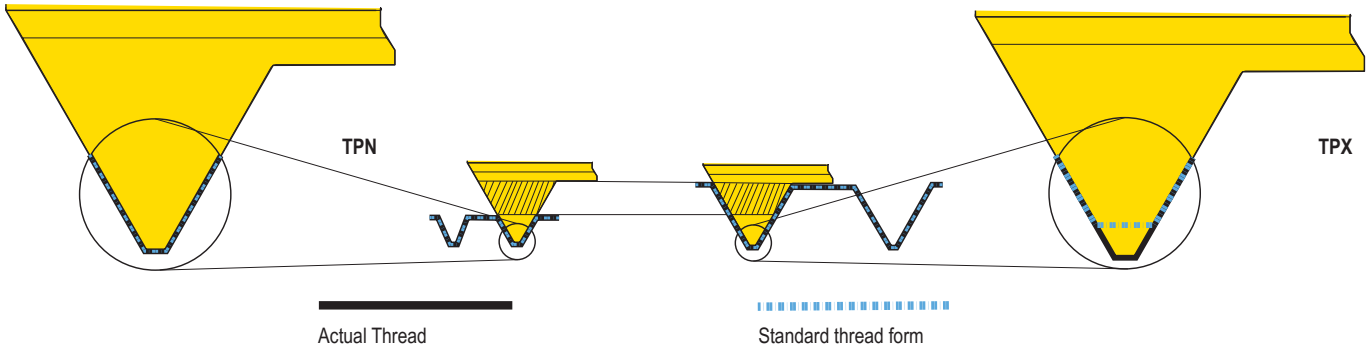


**Threading:**
Head from dia 11,7 to 27,7 mm *(0.461 to 1.091")* for partial metric threads with pitch 1-6 mm *(0.039-0.236")* and full profile whitworth threads with pitch 19 to 11 tpi and UN threads with pitch 24 to 6 tpi.





## Deviation from standard thread profile




Thread milling by circular interpolation can cause thread profile violation when using insert designed for partial thread. Keep this in mind while selecting a tool. The tool diameter needs to be small enough compared to the hole diameter. The pitch also needs to be considered.

Insert with partial profile for Metric ISO-Threads are multi tools. That means that each insert could machine different pitches. The insert is designed to meet the minimum pitch size (TPN); Machining this pitch will result in a thread form that conforms to the standard.

The recommended maximum pitch size (TPX) can also be machined with this insert at the expense of standard conformity: The result will be a slightly deeper thread than the standard. The deeper thread is normally accepted, but the application and use needs to be evaluated.

Following table is a recommendation over maximum tool diameter in relation to the thread size and pitch:

**ISO-Thread, partial profile**

| Pitch | M12 | M16 | M20 | M24 | M27 | M30 | M36 | M42 | M48 | M56 | M60 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10 | 14 | 18 | 22 | 25 | 28 | 34 | 40 | 45 | 53 | 57 |
| 1,5 | 8 | 12 | 16 | 20 | 24 | 26 | 32 | 37 | 43 | 51 | 55 |
| 2 | 7 | 10 | 14 | 18 | 22 | 24 | 30 | 35 | 40 | 48 | 52 |
| 2,5 | 6 | 8 | 12 | 16 | 20 | 22 | 28 | 32 | 37 | 45 | 48 |
| 3 | | 6 | 10 | 14 | 18 | 20 | 26 | 30 | 36 | 43 | 47 |
| 3,5 | | | | 12 | 16 | 18 | 24 | 29 | 35 | 42 | 46 |
| 4 | | | | | | | 22 | 27 | 32 | 39 | 43 |
| 4,5 | | | | | | | | 24 | 30 | 37 | 40 |
| 5 | | | | | | | | 22 | 27 | 34 | 37 |
| 5,5 | | | | | | | | 20 | 25 | 31 | 35 |
| 6 | | | | | | | | 19 | 23 | 29 | 32 |

### Code key Threading insert

| R | 335 | . | 14 | 217 | M | N | P | 250500 | - | 12 | Z3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | 10 |

**1.**
Right hand

**2.**
Disc Milling code

**3.**
System

**4.**
Head diameter, ex. 21,7 mm

**5.**
Thread type (W and UN)

**6.**
Internal thread
(E = external, X = internal/external)

**7.**
Partial profile (F = full profile)

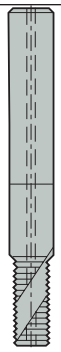
**8.**
Pitch size (2,50-5,00 mm or ex. only a fixed pitch 2,5 mm, 16 tpi...)

**9.**
Connection size

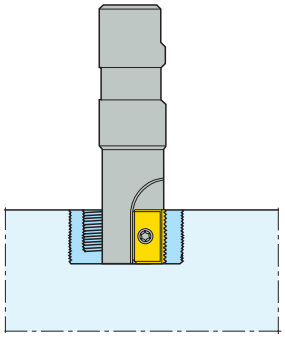
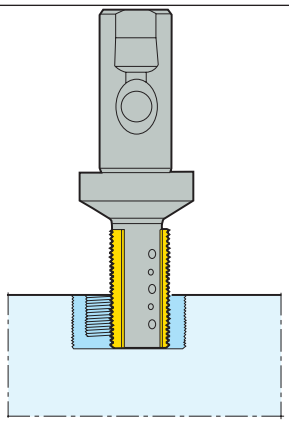
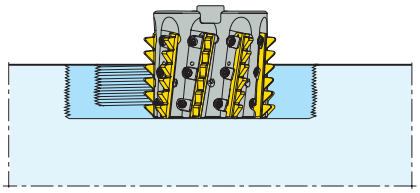
**10.**
No. of teeth

# Application overview milling cutters

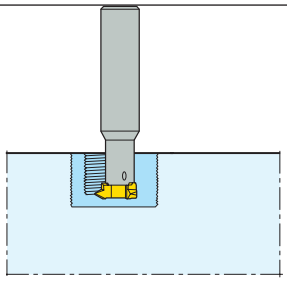
## Solid carbide

| Threadmaster™ |
|---|
|  <br>TM - Thread size M1-M20<br>Solid carbide thread milling cutters |
| Page(s) 200, 201-204 |

## Cutter with inserts

| 396.18 | 396.19 | 396.20 |
|---|---|---|
|  <br>Ø 12 mm (0.472")<br>Thread milling cutters with indexable insert |  <br>Ø 17-58 mm (0.669-2.283")<br>Thread milling cutters with indexable inserts |  <br>Ø 63 mm (2.480")<br>Thread milling cutters with indexable inserts |
| Page(s) 212-213 | Page(s) 212-215 | Page(s) 217 |

## Cutter with changeable head

| 335.14 |
|---|
|  <br>Ø 11,7-27,7 mm (0.461-1.091")<br>Thread milling cutters with changeable head |
| Page(s) 224 |



# Threadmaster™

Threadmaster™ thread mills provide high thread quality at low cost per hole. Machining up to 100 percent depth, Threadmasters have high helix angles that reduce cutting forces and eliminate chatter. They feature an excellent carbide substrate and TiCN-coating (TM and TM-900) or TiAlN-coating (TM-H and DTM) for high toughness and wear resistance milling aluminum, steel, stainless steel and cast iron.

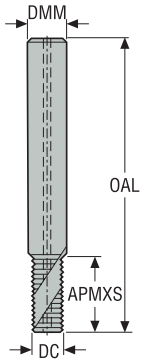
Drilling Threadmaster is a multi-tool producing a thread by drilling and chamfering in a single pass for high thread quality at a low cost per hole.

- Some versions with through-coolant holes.
- Threads range from M4 to M20.
- Mini thread mills for thread sizes from M1 - M2.5.

## Threadmaster™

Solid carbide thread milling cutters






**Thread profile**
Metric coarse, for Internal Threading
Metric fine, for Internal Threading
UNC, for Internal Threading

–TM; 2 x D
–Chamfer angle STA = 45°
–For cutting data see page(s) 205

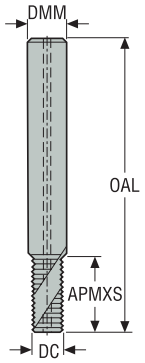
| Designation | Item number | TDZ | Pitch | | Thread profile | DC | DMM | OAL | APMXS | NOF | Through coolant |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPX | TPIX | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | |
| TM-M12X1.75ISO-12R1-H | 02827354 | M12 | 1,75 | – | Metric coarse | 9,4<br>*0.370* | 12,0<br>*0.472* | 76,0<br>*2.992* | 17,5<br>*0.689* | 5 | |
| TM-M12X1.75ISO-12R1 | 02827403 | M12 | 1,75 | – | Metric coarse | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 24,5<br>*0.965* | 3 | ✓ |
| TM-M12X1.75ISO-12R1-900 | 02827363 | M12 | 1,75 | – | Metric coarse | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 24,5<br>*0.965* | 3 | ✓ |
| TM-M10X1.5ISO-10R1-H | 02827353 | M10 | 1,5 | – | Metric coarse | 7,8<br>*0.307* | 10,0<br>*0.394* | 66,0<br>*2.598* | 15,0<br>*0.591* | 5 | |
| TM-M10X1.5ISO-10R1 | 02827404 | M10 | 1,5 | – | Metric coarse | 7,8<br>*0.307* | 10,0<br>*0.394* | 74,0<br>*2.913* | 20,3<br>*0.799* | 3 | ✓ |
| TM-M10X1.5ISO-10R1-900 | 02827362 | M10 | 1,5 | – | Metric coarse | 7,8<br>*0.307* | 10,0<br>*0.394* | 74,0<br>*2.913* | 20,3<br>*0.799* | 3 | ✓ |
| TM-M8X1.25ISO-8R1-H | 02827352 | M8 | 1,25 | – | Metric coarse | 6,2<br>*0.244* | 8,0<br>*0.315* | 57,0<br>*2.244* | 12,5<br>*0.492* | 4 | |
| TM-M8X1.25ISO-8R1 | 02827405 | M8 | 1,25 | – | Metric coarse | 6,2<br>*0.244* | 8,0<br>*0.315* | 62,0<br>*2.441* | 16,9<br>*0.665* | 3 | ✓ |
| TM-M8X1.25ISO-8R1-900 | 02827361 | M8 | 1,25 | – | Metric coarse | 6,2<br>*0.244* | 8,0<br>*0.315* | 62,0<br>*2.441* | 16,9<br>*0.665* | 3 | ✓ |
| TM-M6X1.0ISO-6R1-H | 02827351 | M6 | 1,0 | – | Metric coarse | 4,7<br>*0.185* | 6,0<br>*0.236* | 52,0<br>*2.047* | 8,5<br>*0.335* | 4 | |
| TM-M6X1.0ISO-6R1 | 02827406 | M6 | 1,0 | – | Metric coarse | 4,7<br>*0.185* | 6,0<br>*0.236* | 55,0<br>*2.165* | 12,5<br>*0.492* | 3 | |
| TM-M6X1.0ISO-6R1-900 | 02827360 | M6 | 1,0 | – | Metric coarse | 4,7<br>*0.185* | 6,0<br>*0.236* | 55,0<br>*2.165* | 12,5<br>*0.492* | 3 | |
| TM-M5X0.8ISO-6R1-H | 02827350 | M5 | 0,8 | – | Metric coarse | 3,95<br>*0.156* | 6,0<br>*0.236* | 47,0<br>*1.850* | 7,2<br>*0.283* | 4 | |
| TM-M5X0.8ISO-6R1 | 02827407 | M5 | 0,8 | – | Metric coarse | 3,95<br>*0.156* | 6,0<br>*0.236* | 49,0<br>*1.929* | 10,0<br>*0.394* | 3 | |
| TM-M5X0.8ISO-6R1-900 | 02827359 | M5 | 0,8 | – | Metric coarse | 3,95<br>*0.156* | 6,0<br>*0.236* | 49,0<br>*1.929* | 10,0<br>*0.394* | 3 | |
| TM-M4X0.7ISO-6R1-H | 02827349 | M4 | 0,7 | – | Metric coarse | 3,15<br>*0.124* | 6,0<br>*0.236* | 46,0<br>*1.811* | 6,3<br>*0.248* | 4 | |
| TM-M4X0.7ISO-6R1 | 02827408 | M4 | 0,7 | – | Metric coarse | 3,15<br>*0.124* | 6,0<br>*0.236* | 49,0<br>*1.929* | 8,0<br>*0.315* | 3 | |
| TM-M4X0.7ISO-6R1-900 | 02827358 | M4 | 0,7 | – | Metric coarse | 3,15<br>*0.124* | 6,0<br>*0.236* | 49,0<br>*1.929* | 8,0<br>*0.315* | 3 | |
| TM-M20X2.5ISO-20R1 | 02827348 | M20 | 2,5 | – | Metric coarse | 15,83<br>*0.623* | 20,0<br>*0.787* | 108,0<br>*4.252* | 40,0<br>*1.575* | 4 | ✓ |
| TM-M14X2.0ISO-14R1 | 02827402 | M14 | 2,0 | – | Metric coarse | 10,9<br>*0.429* | 14,0<br>*0.551* | 89,0<br>*3.504* | 29,0<br>*1.142* | 4 | ✓ |
| TM-M14X2.0ISO-14R1-900 | 02827364 | M14 | 2,0 | – | Metric coarse | 10,9<br>*0.429* | 14,0<br>*0.551* | 89,0<br>*3.504* | 29,0<br>*1.142* | 4 | ✓ |
| TM-MF12X1.5ISO-12R1-H | 02827355 | M12 | 1,5 | – | Metric fine | 9,4<br>*0.370* | 12,0<br>*0.472* | 76,0<br>*2.992* | 17,9<br>*0.705* | 5 | |
| TM-MF12X1.5ISO-12R1 | 02827400 | M12 | 1,5 | – | Metric fine | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 24,8<br>*0.976* | 3 | ✓ |
| TM-MF12X1.5ISO-12R1-900 | 02827365 | M12 | 1,5 | – | Metric fine | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 24,8<br>*0.976* | 3 | ✓ |

| Designation | Item number | TDZ | Pitch | | Thread profile | DC | DMM | OAL | APMXS | NOF | Through coolant |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPX | TPIX | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | |
| TM-MF10X1.0ISO-10R1 | 02827401 | M10 | 1,0 | – | Metric fine | 7,8<br>*0.307* | 10,0<br>*0.394* | 74,0<br>*2.913* | 20,5<br>*0.807* | 3 | ✓ |
| TM-MF6X0.75ISO-6R1 | 02827429 | M6 | 0,75 | – | Metric fine | 4,7<br>*0.185* | 6,0<br>*0.236* | 55,0<br>*2.165* | 12,4<br>*0.488* | 3 | |
| TM-MF5X0.5ISO-6R1 | 02827430 | M5 | 0,5 | – | Metric fine | 3,95<br>*0.156* | 6,0<br>*0.236* | 49,0<br>*1.929* | 10,3<br>*0.406* | 3 | |
| TM-MF4X0.5ISO-6R1 | 02827392 | M4 | 0,5 | – | Metric fine | 3,15<br>*0.124* | 6,0<br>*0.236* | 49,0<br>*1.929* | 8,3<br>*0.327* | 3 | |
| TM-MF16X1.5ISO-16R1-H | 02827357 | M16 | 1,5 | – | Metric fine | 12,82<br>*0.505* | 16,0<br>*0.630* | 94,0<br>*3.701* | 23,9<br>*0.941* | 5 | |
| TM-MF14X1.5ISO-14R1-H | 02827356 | M14 | 1,5 | – | Metric fine | 10,92<br>*0.430* | 14,0<br>*0.551* | 82,0<br>*3.228* | 21,4<br>*0.843* | 5 | |
| TM-1/2X13UNC-12R1 | 02827494 | 1/2 | – | 13.0 | UNC | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 26,4<br>*1.039* | 3 | ✓ |
| TM-7/16X14UNC-12R1 | 02827398 | 7/16 | – | 14.0 | UNC | 8,55<br>*0.337* | 12,0<br>*0.472* | 79,0<br>*3.110* | 22,7<br>*0.894* | 3 | ✓ |
| TM-3/8X16UNC-10R1 | 02827399 | 3/8 | – | 16.0 | UNC | 7,35<br>*0.289* | 10,0<br>*0.394* | 74,0<br>*2.913* | 19,8<br>*0.780* | 3 | ✓ |
| TM-5/16X18UNC-8R1 | 02827495 | 5/16 | – | 18.0 | UNC | 6,2<br>*0.244* | 8,0<br>*0.315* | 62,0<br>*2.441* | 16,2<br>*0.638* | 3 | ✓ |
| TM-1/4X20UNC-6R1 | 02827511 | 1/4 | – | 20.0 | UNC | 4,7<br>*0.185* | 6,0<br>*0.236* | 55,0<br>*2.165* | 14,6<br>*0.575* | 3 | |
| TM-NR.10X24UNC-6R1 | 02827491 | No.10 | – | 24.0 | UNC | 3,7<br>*0.146* | 6,0<br>*0.236* | 49,0<br>*1.929* | 10,1<br>*0.398* | 3 | |
| TM-9/16X12UNC-14R1 | 02827493 | 9/16 | – | 12.0 | UNC | 10,9<br>*0.429* | 14,0<br>*0.551* | 89,0<br>*3.504* | 30,7<br>*1.209* | 4 | ✓ |

## Threadmaster™

Solid carbide thread milling cutters






**Thread profile**
UNF, for Internal Threading
NPT, for Internal and External Threading
NPTF, for Internal and External Threading
BSP, for Internal and External Threading

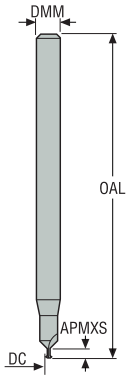
—TM; 2 x D
—Chamfer angle = 45°
—For cutting data see page(s) 205

| Designation | Item number | TDZ | Pitch | | Thread profile | DC | DMM | OAL | APMXS | NOF | Through coolant |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPX | TPIX | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | |
| TM-1/8X28W-10R1 | 02827431 | 1/8 | – | 28.0 | BSP | 7,8<br>*0.307* | 10,0<br>*0.394* | 74,0<br>*2.913* | 20,4<br>*0.803* | 3 | ✓ |
| TM-3/8X19W-18R1 | 02765294 | 3/8 | – | 19.0 | BSP | 13,9<br>*0.547* | 18,0<br>*0.709* | 102,0<br>*4.016* | 35,4<br>*1.394* | 4 | ✓ |
| TM-1/4X19W-14R1 | 02543519 | 1/4 | – | 19.0 | BSP | 10,9<br>*0.429* | 14,0<br>*0.551* | 89,0<br>*3.504* | 27,4<br>*1.079* | 4 | ✓ |
| TM-1/8X27NPT-12R1 | 02827435 | 1/8 | – | 27.0 | NPT | 7,8<br>*0.307* | 12,0<br>*0.472* | 70,0<br>*2.756* | 8,9<br>*0.350* | 3 | ✓ |
| TM-3/8X18NPT-18R1 | 02827409 | 3/8 | – | 18.0 | NPT | 13,45<br>*0.530* | 18,0<br>*0.709* | 81,0<br>*3.189* | 13,4<br>*0.528* | 4 | ✓ |
| TM-1/4X18NPT-16R1 | 02827434 | 1/4 | – | 18.0 | NPT | 10,05<br>*0.396* | 16,0<br>*0.630* | 81,0<br>*3.189* | 13,4<br>*0.528* | 4 | ✓ |
| TM-1/8X27NPTF-12R1 | 02827433 | 1/8 | – | 27.0 | NPTF | 7,7<br>*0.303* | 12,0<br>*0.472* | 70,0<br>*2.756* | 8,9<br>*0.350* | 3 | ✓ |
| TM-3/8X18NPTF-18R1 | 02827410 | 3/8 | – | 18.0 | NPTF | 13,4<br>*0.528* | 18,0<br>*0.709* | 81,0<br>*3.189* | 13,4<br>*0.528* | 4 | ✓ |
| TM-1/4X18NPTF-16R1 | 02827432 | 1/4 | – | 18.0 | NPTF | 10,0<br>*0.394* | 16,0<br>*0.630* | 81,0<br>*3.189* | 13,4<br>*0.528* | 4 | ✓ |
| TM-1/2X20UNF-12R1 | 02827393 | 1/2 | – | 20.0 | UNF | 9,4<br>*0.370* | 12,0<br>*0.472* | 79,0<br>*3.110* | 26,0<br>*1.024* | 3 | ✓ |
| TM-7/16X20UNF-12R1 | 02827394 | 7/16 | – | 20.0 | UNF | 9,32<br>*0.367* | 12,0<br>*0.472* | 79,0<br>*3.110* | 22,2<br>*0.874* | 3 | ✓ |
| TM-3/8X24UNF-10R1 | 02827395 | 3/8 | – | 24.0 | UNF | 7,8<br>*0.307* | 10,0<br>*0.394* | 74,0<br>*2.913* | 19,6<br>*0.772* | 3 | ✓ |
| TM-5/16X24UNF-8R1 | 02765298 | 5/16 | – | 24.0 | UNF | 6,2<br>*0.244* | 8,0<br>*0.315* | 62,0<br>*2.441* | 16,4<br>*0.646* | 3 | ✓ |
| TM-1/4X28UNF-6R1 | 02827396 | 1/4 | – | 28.0 | UNF | 4,7<br>*0.185* | 6,0<br>*0.236* | 55,0<br>*2.165* | 14,1<br>*0.555* | 3 | |
| TM-NR.10X32UNF-6R1 | 02827397 | No.10 | – | 32.0 | UNF | 3,95<br>*0.156* | 6,0<br>*0.236* | 49,0<br>*1.929* | 9,9<br>*0.390* | 3 | |
| TM-9/16X18UNF-14R1 | 02827492 | 9/16 | – | 18.0 | UNF | 10,9<br>*0.429* | 14,0<br>*0.551* | 89,0<br>*3.504* | 28,9<br>*1.138* | 4 | ✓ |

## Threadmaster™ – TM-Mini

Solid carbide thread milling cutters






**Thread profile**
Metric coarse, for Internal Threading

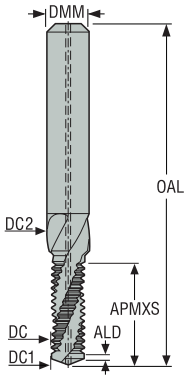
—Left-hand cutter
—TM : 1.5 x D
—Chamfer angle = 90°
—For cutting data see page(s) 205

| Designation | Item number | TDZ | Pitch | | Thread profile | DC | DMM | OAL | APMXS | NOF |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPX | TPIX | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | |
| TM-M2.5X0.45ISO-3R1-H | 02807944 | M2.5 | 0,45 | – | Metric coarse | 2,01<br>*0.079* | 3,0<br>*0.118* | 40,0<br>*1.575* | 4,45<br>*0.175* | 3 |
| TM-M2.2X0.45ISO-3R1-H | 02807943 | M2.2 | 0,45 | – | Metric coarse | 1,71<br>*0.067* | 3,0<br>*0.118* | 40,0<br>*1.575* | 3,9<br>*0.154* | 2 |
| TM-M2.0X0.40ISO-3R1-H | 02807942 | M2.0 | 0,4 | – | Metric coarse | 1,56<br>*0.061* | 3,0<br>*0.118* | 40,0<br>*1.575* | 3,74<br>*0.147* | 2 |
| TM-M1.6X0.35ISO-3R1-H | 02807941 | M1.6 | 0,35 | – | Metric coarse | 1,15<br>*0.045* | 3,0<br>*0.118* | 40,0<br>*1.575* | 3,07<br>*0.121* | 2 |
| TM-M1.4X0.30ISO-3R1-H | 02807940 | M1.4 | 0,3 | – | Metric coarse | 0,97<br>*0.038* | 3,0<br>*0.118* | 40,0<br>*1.575* | 2,63<br>*0.104* | 2 |

## Drilling Threadmaster™

Solid carbide thread milling cutters






**Thread profile**
* = Metric coarse
** = Metric fine
*** = UNC
**** = UNF
***** = BSP

—DTM: 2 x D
—Chamfer angle = 90°
—Drill Point = 140°
—For cutting data see page(s) 206

| Designation | Item number | TDZ | Pitch | | Thread profile | DC | DC1 | DC2 | DMM | OAL | ALD | APMXS | NOF | Through coolant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPX | TPIX | | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | |
| DTM-M12X1.75ISO-14R1 | 02827371 | M12 | 1,75 | – | * | 9,74<br>*0.383* | 10,25<br>*0.404* | 12,3<br>*0.484* | 14,0<br>*0.551* | 89,0<br>*3.504* | 1,5<br>*0.059* | 27,06<br>*1.065* | 2 | ✓ |
| DTM-M10X1.5ISO-12R1 | 02827370 | M10 | 1,5 | – | * | 8,08<br>*0.318* | 8,5<br>*0.335* | 10,3<br>*0.406* | 12,0<br>*0.472* | 79,0<br>*3.110* | 1,5<br>*0.059* | 23,37<br>*0.920* | 2 | ✓ |
| DTM-M8X1.25ISO-10R1 | 02827369 | M8 | 1,25 | – | * | 6,45<br>*0.254* | 6,75<br>*0.266* | 8,3<br>*0.327* | 10,0<br>*0.394* | 74,0<br>*2.913* | 1,2<br>*0.047* | 18,17<br>*0.715* | 2 | ✓ |
| DTM-M6X1.0ISO-8R1 | 02827368 | M6 | 1,0 | – | * | 4,85<br>*0.191* | 5,0<br>*0.197* | 6,3<br>*0.248* | 8,0<br>*0.315* | 62,0<br>*2.441* | 1,0<br>*0.039* | 14,49<br>*0.570* | 2 | ✓ |
| DTM-M5X0.8ISO-6R1 | 02827367 | M5 | 0,8 | – | * | 4,1<br>*0.161* | 4,2<br>*0.165* | 5,3<br>*0.209* | 6,0<br>*0.236* | 55,0<br>*2.165* | 0,8<br>*0.031* | 11,65<br>*0.459* | 2 | ✓ |
| DTM-M4X0.7ISO-6R1 | 02827366 | M4 | 0,7 | – | * | 3,24<br>*0.128* | 3,3<br>*0.130* | 4,3<br>*0.169* | 6,0<br>*0.236* | 49,0<br>*1.929* | 0,7<br>*0.028* | 9,42<br>*0.371* | 2 | ✓ |
| DTM-M16X2.0ISO-18R1 | 02827373 | M16 | 2,0 | – | * | 13,28<br>*0.523* | 14,0<br>*0.551* | 16,3<br>*0.642* | 18,0<br>*0.709* | 102,0<br>*4.016* | 1,5<br>*0.059* | 37,12<br>*1.461* | 2 | ✓ |
| DTM-M14X2.0ISO-16R1 | 02827372 | M14 | 2,0 | – | * | 11,36<br>*0.447* | 12,0<br>*0.472* | 14,3<br>*0.563* | 16,0<br>*0.630* | 102,0<br>*4.016* | 1,5<br>*0.059* | 32,77<br>*1.290* | 2 | ✓ |
| DTM-MF10X1.0ISO-12R1 | 02827375 | M10 | 1,0 | – | ** | 8,75<br>*0.344* | 9,0<br>*0.354* | 10,3<br>*0.406* | 12,0<br>*0.472* | 79,0<br>*3.110* | 1,5<br>*0.059* | 23,18<br>*0.913* | 2 | ✓ |
| DTM-MF8X1.0ISO-10R1 | 02827374 | M8 | 1,0 | – | ** | 6,79<br>*0.267* | 7,0<br>*0.276* | 8,3<br>*0.327* | 10,0<br>*0.394* | 74,0<br>*2.913* | 1,0<br>*0.039* | 18,8<br>*0.740* | 2 | ✓ |
| DTM-MF12X1.5ISO-14R1 | 02827376 | M12 | 1,5 | – | ** | 10,06<br>*0.396* | 10,5<br>*0.413* | 12,3<br>*0.484* | 14,0<br>*0.551* | 89,0<br>*3.504* | 1,5<br>*0.059* | 28,19<br>*1.110* | 2 | ✓ |
| DTM-1/2X13UNC-14R1 | 02827380 | 1/2 | – | 13.0 | *** | 9,87<br>*0.389* | 10,75<br>*0.423* | 13,0<br>*0.512* | 14,0<br>*0.551* | 89,0<br>*3.504* | 1,5<br>*0.059* | 30,07<br>*1.184* | 2 | ✓ |
| DTM-3/8X16UNC-12R1 | 02827379 | 3/8 | – | 16.0 | *** | 7,36<br>*0.290* | 7,94<br>*0.313* | 9,83<br>*0.387* | 12,0<br>*0.472* | 79,0<br>*3.110* | 1,5<br>*0.059* | 22,97<br>*0.904* | 2 | ✓ |
| DTM-5/16X18UNC-10R1 | 02827378 | 5/16 | – | 18.0 | *** | 6,01<br>*0.237* | 6,53<br>*0.257* | 8,24<br>*0.324* | 10,0<br>*0.394* | 74,0<br>*2.913* | 1,4<br>*0.055* | 19,0<br>*0.748* | 2 | ✓ |
| DTM-1/4X20UNC-8R1 | 02827377 | 1/4 | – | 20.0 | *** | 4,7<br>*0.185* | 5,08<br>*0.200* | 6,65<br>*0.262* | 8,0<br>*0.315* | 62,0<br>*2.441* | 1,2<br>*0.047* | 15,71<br>*0.619* | 2 | ✓ |
| DTM-3/8X24UNF-12R1 | 02827383 | 3/8 | – | 24.0 | **** | 8,07<br>*0.318* | 8,47<br>*0.333* | 9,83<br>*0.387* | 12,0<br>*0.472* | 79,0<br>*3.110* | 1,1<br>*0.043* | 21,2<br>*0.835* | 2 | ✓ |
| DTM-5/16X24UNF-10R1 | 02827382 | 5/16 | – | 24.0 | **** | 6,51<br>*0.256* | 6,88<br>*0.271* | 8,24<br>*0.324* | 10,0<br>*0.394* | 74,0<br>*2.913* | 1,1<br>*0.043* | 18,83<br>*0.741* | 2 | ✓ |
| DTM-1/4X28UNF-8R1 | 02827381 | 1/4 | – | 28.0 | **** | 5,17<br>*0.204* | 5,44<br>*0.214* | 6,65<br>*0.262* | 8,0<br>*0.315* | 62,0<br>*2.441* | 0,9<br>*0.035* | 15,16<br>*0.597* | 2 | ✓ |
| DTM-1/2X20UNF-14R1 | 02827384 | 1/2 | – | 20.0 | **** | 10,88<br>*0.428* | 11,43<br>*0.450* | 13,0<br>*0.512* | 14,0<br>*0.551* | 89,0<br>*3.504* | 1,3<br>*0.051* | 28,19<br>*1.110* | 2 | ✓ |
| DTM-1/8X28W-12R1 | 02827385 | 1/8 | – | 28.0 | ***** | 8,4<br>*0.331* | 8,71<br>*0.343* | 10,03<br>*0.395* | 12,0<br>*0.472* | 79,0<br>*3.110* | 0,9<br>*0.035* | 22,03<br>*0.867* | 2 | ✓ |
| DTM-1/4X19W-16R1 | 02827386 | 1/4 | – | 19.0 | ***** | 11,44<br>*0.450* | 11,67<br>*0.459* | 13,46<br>*0.530* | 16,0<br>*0.630* | 102,0<br>*4.016* | 1,3<br>*0.051* | 29,45<br>*1.159* | 2 | ✓ |

## Threadmaster™ – Cutting data metric *Inch*

| SMG | TM | | TM-900 | | TM-H | | TM-MINI | |
|---|---|---|---|---|---|---|---|---|
| | $f_z$ | $v_c$ | $f_z$ | $v_c$ | $f_z$ | $v_c$ | $f_z$ | $v_c$ |
| P1 | 0,010 | 145 | — | — | — | — | — | — |
| | *0.00040* | *475* | — | — | — | — | — | — |
| P2 | 0,010 | 140 | — | — | — | — | — | — |
| | *0.00040* | *460* | — | — | — | — | — | — |
| P3 | 0,0095 | 120 | — | — | — | — | — | — |
| | *0.00038* | *395* | — | — | — | — | — | — |
| P4 | 0,0095 | 105 | 0,0040 | 105 | — | — | — | — |
| | *0.00038* | *345* | *0.00016* | *345* | — | — | — | — |
| P5 | 0,0090 | 100 | 0,0040 | 100 | — | — | — | — |
| | *0.00036* | *330* | *0.00016* | *330* | — | — | — | — |
| P6 | 0,0090 | 115 | 0,0040 | 115 | — | — | — | — |
| | *0.00036* | *375* | *0.00016* | *375* | — | — | — | — |
| P7 | 0,0090 | 110 | 0,0040 | 110 | — | — | — | — |
| | *0.00036* | *360* | *0.00016* | *360* | — | — | — | — |
| P8 | 0,0095 | 100 | 0,0042 | 100 | — | — | — | — |
| | *0.00038* | *330* | *0.00017* | *330* | — | — | — | — |
| P11 | 0,0090 | 105 | 0,0040 | 105 | — | — | — | — |
| | *0.00036* | *345* | *0.00016* | *345* | — | — | — | — |
| P12 | 0,0060 | 60 | 0,0028 | 60 | — | — | — | — |
| | *0.00024* | *195* | *0.00011* | *195* | — | — | — | — |
| M1 | 0,010 | 100 | 0,0044 | 100 | — | — | — | — |
| | *0.00040* | *330* | *0.00017* | *330* | — | — | — | — |
| M2 | 0,0090 | 80 | 0,0040 | 80 | — | — | — | — |
| | *0.00036* | *260* | *0.00016* | *260* | — | — | — | — |
| M3 | 0,0075 | 60 | 0,0032 | 60 | — | — | — | — |
| | *0.00030* | *195* | *0.00013* | *195* | — | — | — | — |
| M4 | 0,0065 | 47 | 0,0028 | 47 | — | — | — | — |
| | *0.00026* | *155* | *0.00011* | *155* | — | — | — | — |
| M5 | 0,0065 | 39 | 0,0028 | 39 | — | — | — | — |
| | *0.00026* | *130* | *0.00011* | *130* | — | — | — | — |
| K1 | 0,010 | 145 | 0,0044 | 100 | — | — | — | — |
| | *0.00040* | *475* | *0.00017* | *330* | — | — | — | — |
| K2 | 0,0090 | 125 | 0,0040 | 90 | — | — | — | — |
| | *0.00036* | *410* | *0.00016* | *295* | — | — | — | — |
| K3 | 0,0090 | 105 | 0,0040 | 75 | — | — | — | — |
| | *0.00036* | *345* | *0.00016* | *245* | — | — | — | — |
| K4 | 0,0090 | 100 | 0,0040 | 70 | — | — | — | — |
| | *0.00036* | *330* | *0.00016* | *230* | — | — | — | — |
| K5 | 0,0080 | 60 | 0,0036 | 42 | — | — | — | — |
| | *0.00032* | *195* | *0.00014* | *140* | — | — | — | — |
| K6 | 0,0090 | 90 | 0,0040 | 65 | — | — | — | — |
| | *0.00036* | *295* | *0.00016* | *215* | — | — | — | — |
| K7 | 0,0080 | 80 | 0,0036 | 55 | — | — | — | — |
| | *0.00032* | *260* | *0.00014* | *180* | — | — | — | — |
| N1 | 0,013 | 395 | 0,0055 | 335 | — | — | — | — |
| | *0.00050* | *1300* | *0.00022* | *1100* | — | — | — | — |
| N2 | 0,013 | 255 | 0,0055 | 215 | — | — | — | — |
| | *0.00050* | *840* | *0.00022* | *710* | — | — | — | — |
| N3 | 0,013 | 170 | 0,0055 | 145 | — | — | — | — |
| | *0.00050* | *560* | *0.00022* | *475* | — | — | — | — |
| N11 | 0,013 | 225 | 0,0055 | 195 | — | — | — | — |
| | *0.00050* | *740* | *0.00022* | *640* | — | — | — | — |
| S1 | 0,0065 | 50 | 0,0028 | 20 | — | — | — | — |
| | *0.00026* | *165* | *0.00011* | *65* | — | — | — | — |
| S2 | 0,0065 | 41 | 0,0028 | 15 | — | — | — | — |
| | *0.00026* | *135* | *0.00011* | *49* | — | — | — | — |
| S3 | 0,0060 | 20 | 0,0026 | 10 | — | — | — | — |
| | *0.00024* | *65* | *0.00010* | *33* | — | — | — | — |
| S11 | 0,0075 | 105 | 0,0032 | 40 | — | — | — | — |
| | *0.00030* | *345* | *0.00013* | *130* | — | — | — | — |
| S12 | 0,0075 | 80 | 0,0032 | 31 | — | — | — | — |
| | *0.00030* | *260* | *0.00013* | *100* | — | — | — | — |
| S13 | 0,0065 | 65 | 0,0028 | 24 | — | — | — | — |
| | *0.00026* | *215* | *0.00011* | *80* | — | — | — | — |
| H3 | — | — | — | — | 0,0016 | 19 | 0,0022 | 11 |
| | — | — | — | — | *0.000065* | *60* | *0.000085* | *36* |
| H5 | — | — | — | — | 0,0025 | 36 | 0,0032 | 21 |
| | — | — | — | — | *0.00010* | *120* | *0.00013* | *70* |
| H7 | — | — | — | — | 0,0016 | 19 | 0,0022 | 11 |
| | — | — | — | — | *0.000065* | *60* | *0.000085* | *36* |
| H8 | — | — | — | — | 0,0019 | 36 | 0,0025 | 21 |
| | — | — | — | — | *0.000075* | *120* | *0.00010* | *70* |
| H11 | — | — | — | — | 0,0025 | 45 | 0,0032 | 26 |
| | — | — | — | — | *0.00010* | *150* | *0.00013* | *85* |
| H12 | — | — | — | — | 0,0019 | 41 | 0,0025 | 24 |
| | — | — | — | — | *0.000075* | *135* | *0.00010* | *80* |
| H21 | — | — | — | — | 0,0019 | 36 | 0,0025 | 21 |
| | — | — | — | — | *0,0019* | *36* | *0,0025* | *21* |
| H31 | — | — | — | — | – | – | – | – |

## Drilling Threadmaster™ – Cutting data, threadmilling metric *inch*

| SMG | DTM | |
|---|---|---|
| | $f_z$ | $v_c$ |
| K1 | 0,0065<br>*0.00026* | 175<br>*570* |
| K2 | 0,0060<br>*0.00024* | 155<br>*510* |
| K3 | 0,0060<br>*0.00024* | 130<br>*425* |
| K4 | 0,0060<br>*0.00024* | 125<br>*410* |
| K5 | 0,0055<br>*0.00022* | 75<br>*245* |
| K6 | 0,0060<br>*0.00024* | 110<br>*360* |
| K7 | 0,0055<br>*0.00022* | 95<br>*310* |
| N1 | 0,0085<br>*0.00034* | 400<br>*1300* |
| N2 | 0,0085<br>*0.00034* | 255<br>*840* |
| N3 | 0,0085<br>*0.00034* | 170<br>*560* |
| N11 | 0,0085<br>*0.00034* | 225<br>*740* |

## Drilling Threadmaster™ – Cutting data, drilling metric *inch*

| SMG | f | | | | | | $v_c$ |
|---|---|---|---|---|---|---|---|
| | Ø 3.01-5.0<br>Ø 0.118-0.196 | Ø 5.01-7.0<br>Ø 0.197-0.275 | Ø 7.01-9.0<br>Ø 0.276-0.354 | Ø 9.01-11.0<br>Ø 0.355-0.433 | Ø 11.01-13.0<br>Ø 0.434-0.511 | Ø 13.01-15.0<br>Ø 0.512-0.590 | |
| K1 | 0,12<br>*0.0048* | 0,15<br>*0.0060* | 0,18<br>*0.0070* | 0,19<br>*0.0075* | 0,22<br>*0.0085* | 0,25<br>*0.010* | 170<br>*560* |
| K2 | 0,11<br>*0.0044* | 0,13<br>*0.0050* | 0,16<br>*0.0065* | 0,17<br>*0.0065* | 0,20<br>*0.0080* | 0,22<br>*0.0085* | 150<br>*490* |
| K3 | 0,11<br>*0.0044* | 0,13<br>*0.0050* | 0,16<br>*0.0065* | 0,17<br>*0.0065* | 0,20<br>*0.0080* | 0,22<br>*0.0085* | 125<br>*410* |
| K4 | 0,11<br>*0.0044* | 0,13<br>*0.0050* | 0,16<br>*0.0065* | 0,17<br>*0.0065* | 0,20<br>*0.0080* | 0,22<br>*0.0085* | 120<br>*395* |
| K5 | 0,095<br>*0.0038* | 0,12<br>*0.0048* | 0,14<br>*0.0055* | 0,16<br>*0.0065* | 0,18<br>*0.0070* | 0,20<br>*0.0080* | 70<br>*230* |
| K6 | 0,11<br>*0.0044* | 0,13<br>*0.0050* | 0,16<br>*0.0065* | 0,17<br>*0.0065* | 0,20<br>*0.0080* | 0,22<br>*0.0085* | 105<br>*345* |
| K7 | 0,095<br>*0.0038* | 0,12<br>*0.0048* | 0,14<br>*0.0055* | 0,16<br>*0.0065* | 0,18<br>*0.0070* | 0,20<br>*0.0080* | 90<br>*295* |
| N1 | 0,15<br>*0.0060* | 0,19<br>*0.0075* | 0,22<br>*0.0085* | 0,24<br>*0.0095* | 0,28<br>*0.011* | 0,32<br>*0.013* | 390<br>*1275* |
| N2 | 0,15<br>*0.0060* | 0,19<br>*0.0075* | 0,22<br>*0.0085* | 0,24<br>*0.0095* | 0,28<br>*0.011* | 0,32<br>*0.013* | 250<br>*820* |
| N3 | 0,15<br>*0.0060* | 0,19<br>*0.0075* | 0,22<br>*0.0085* | 0,24<br>*0.0095* | 0,28<br>*0.011* | 0,32<br>*0.013* | 165<br>*540* |
| N11 | 0,15<br>*0.0060* | 0,19<br>*0.0075* | 0,22<br>*0.0085* | 0,24<br>*0.0095* | 0,28<br>*0.011* | 0,32<br>*0.013* | 220<br>*720* |

SMG = Seco Material Group
$f_z$ = mm/tooth (mm/flute)
f = mm/rev
$v_c$= m/min
All cutting data are start values

Feed are related to the centre of the cutter and not the periphery.

## Thread Milling 396.18/19/20 Cutting data metric *inch*

| SMG | CP500 | | F30M | | H15 | |
|---|---|---|---|---|---|---|
| | $f_z$ | $v_c$ | $f_z$ | $v_c$ | $f_z$ | $v_c$ |
| P1 | 0,050 | 385 | 0,050 | 385 | — | — |
| | *0.0020* | *1275* | *0.0020* | *1275* | — | — |
| P2 | 0,055 | 375 | 0,055 | 375 | — | — |
| | *0.0022* | *1225* | *0.0022* | *1225* | — | — |
| P3 | 0,050 | 325 | 0,050 | 325 | — | — |
| | *0.0020* | *1075* | *0.0020* | *1075* | — | — |
| P4 | 0,050 | 285 | 0,050 | 285 | — | — |
| | *0.0020* | *940* | *0.0020* | *940* | — | — |
| P5 | 0,048 | 275 | 0,048 | 275 | — | — |
| | *0.0019* | *900* | *0.0019* | *900* | — | — |
| P6 | 0,048 | 305 | 0,048 | 305 | — | — |
| | *0.0019* | *1000* | *0.0019* | *1000* | — | — |
| P7 | 0,048 | 290 | 0,048 | 290 | — | — |
| | *0.0019* | *950* | *0.0019* | *950* | — | — |
| P8 | 0,050 | 275 | 0,050 | 275 | — | — |
| | *0.0020* | *900* | *0.0020* | *900* | — | — |
| P11 | 0,048 | 280 | 0,048 | 280 | — | — |
| | *0.0019* | *920* | *0.0019* | *920* | — | — |
| P12 | 0,032 | 165 | 0,032 | 165 | — | — |
| | *0.0013* | *540* | *0.0013* | *540* | — | — |
| M1 | 0,055 | 285 | 0,055 | 285 | — | — |
| | *0.0022* | *940* | *0.0022* | *940* | — | — |
| M2 | 0,048 | 230 | 0,048 | 230 | — | — |
| | *0.0019* | *750* | *0.0019* | *750* | — | — |
| M3 | 0,038 | 175 | 0,038 | 175 | — | — |
| | *0.0015* | *570* | *0.0015* | *570* | — | — |
| M4 | 0,034 | 130 | 0,034 | 130 | — | — |
| | *0.0013* | *425* | *0.0013* | *425* | — | — |
| M5 | 0,034 | 110 | 0,034 | 110 | — | — |
| | *0.0013* | *360* | *0.0013* | *360* | — | — |
| K1 | 0,055 | 300 | 0,055 | 300 | 0,040 | 270 |
| | *0.0022* | *980* | *0.0022* | *980* | *0.0016* | *890* |
| K2 | 0,048 | 260 | 0,048 | 260 | 0,038 | 235 |
| | *0.0019* | *850* | *0.0019* | *850* | *0.0015* | *770* |
| K3 | 0,048 | 220 | 0,048 | 220 | 0,038 | 200 |
| | *0.0019* | *720* | *0.0019* | *720* | *0.0015* | *660* |
| K4 | 0,048 | 210 | 0,048 | 210 | 0,038 | 190 |
| | *0.0019* | *690* | *0.0019* | *690* | *0.0015* | *620* |
| K5 | 0,044 | 125 | 0,044 | 125 | 0,034 | 115 |
| | *0.0017* | *410* | *0.0017* | *410* | *0.0013* | *375* |
| K6 | 0,048 | 185 | 0,048 | 185 | 0,038 | 170 |
| | *0.0019* | *610* | *0.0019* | *610* | *0.0015* | *560* |
| K7 | 0,044 | 160 | 0,044 | 160 | 0,034 | 145 |
| | *0.0017* | *520* | *0.0017* | *520* | *0.0013* | *475* |
| N1 | 0,070 | 1375 | 0,070 | 1375 | 0,050 | 1375 |
| | *0.0028* | *4500* | *0.0028* | *4500* | *0.0020* | *4500* |
| N2 | 0,070 | 890 | 0,070 | 890 | 0,050 | 890 |
| | *0.0028* | *2925* | *0.0028* | *2925* | *0.0020* | *2925* |
| N3 | 0,070 | 590 | 0,070 | 590 | 0,050 | 590 |
| | *0.0028* | *1925* | *0.0028* | *1925* | *0.0020* | *1925* |
| N11 | 0,070 | 780 | 0,070 | 780 | — | — |
| | *0.0028* | *2550* | *0.0028* | *2550* | — | — |

SMG = Seco Material Group
$f_z$ = mm/tooth (mm/flute)
$v_c$= m/min (for holder types -065AM, -079AM and -080AM use factor 0,75 on vc).
All cutting data are start values.
All feed are related to the centre of the cutter and not the periphery.

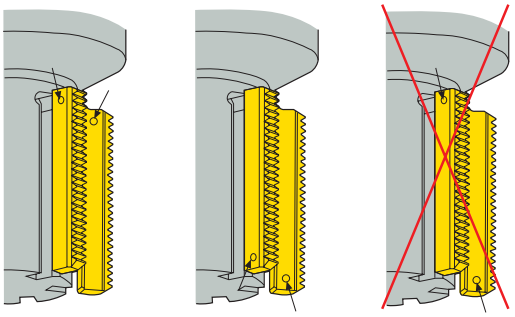
**Feed related to the centre of the cutter**

When calculating feed and feed/tooth from average chip thickness using circular interpolation or helical interpolation ramping in an operation, the feed and feed/tooth are always related to the centre and not to the periphery of the cutter.

**Tolerance on the machined component.**

The tolerance on the thread diameter is 6H when using a cutter with more than one tooth. With a single cutting insert the tolerance is 4H. If a multi-tooth milling cutter is used with one cutting insert, the other insert seat(s) must be equipped with non-cutting blank insert(s) to stabilise the milling cutter during the cutting process.

As all 396.19 inserts are double sided, it is important that all inserts are mounted in the same position to achieve best possible tolerance. It must be done by indexing the identification dots in the same position. See figure.



## Cutting speed Thread milling 335.14 metric *inch*

| SMG | R335.14 | |
|---|---|---|
| | $f_z$ | $v_c$ |
| P1 | 0,070<br>*0.0028* | 275<br>*900* |
| P2 | 0,070<br>*0.0028* | 270<br>*890* |
| P3 | 0,070<br>*0.0028* | 230<br>*750* |
| P4 | 0,065<br>*0.0026* | 205<br>*670* |
| P5 | 0,065<br>*0.0026* | 195<br>*640* |
| P6 | 0,065<br>*0.0026* | 215<br>*710* |
| P7 | 0,065<br>*0.0026* | 205<br>*670* |
| P8 | 0,070<br>*0.0028* | 195<br>*640* |
| P11 | 0,065<br>*0.0026* | 200<br>*660* |
| P12 | 0,044<br>*0.0017* | 120<br>*395* |
| M1 | 0,070<br>*0.0028* | 215<br>*710* |
| M2 | 0,065<br>*0.0026* | 175<br>*570* |
| M3 | 0,050<br>*0.0020* | 130<br>*425* |
| M4 | 0,046<br>*0.0018* | 100<br>*330* |
| M5 | 0,046<br>*0.0018* | 80<br>*260* |
| K1 | 0,070<br>*0.0028* | 210<br>*690* |
| K2 | 0,065<br>*0.0026* | 185<br>*610* |
| K3 | 0,065<br>*0.0026* | 180<br>*590* |
| K4 | 0,065<br>*0.0026* | 150<br>*490* |
| K5 | 0,060<br>*0.0024* | 90<br>*295* |
| K6 | 0,065<br>*0.0026* | 130<br>*425* |
| K7 | 0,060<br>*0.0024* | 115<br>*375* |
| N1 | 0,090<br>*0.0036* | 970<br>*3175* |
| N2 | 0,090<br>*0.0036* | 620<br>*2025* |
| N3 | 0,090<br>*0.0036* | 415<br>*1350* |
| N11 | 0,090<br>*0.0036* | 475<br>*1550* |
| S1 | 0,046<br>*0.0018* | 50<br>*165* |
| S2 | 0,046<br>*0.0018* | 41<br>*135* |
| S3 | 0,042<br>*0.0017* | 35<br>*115* |
| S11 | 0,050<br>*0.0020* | 65<br>*215* |
| S12 | 0,050<br>*0.0020* | 50<br>*165* |
| S13 | 0,046<br>*0.0018* | 39<br>*130* |
| H5 | 0,044<br>*0.0017* | 43<br>*140* |
| H8 | 0,034<br>*0.0013* | 45<br>*150* |
| H11 | 0,044<br>*0.0017* | 60<br>*195* |
| H12 | 0,034<br>*0.0013* | 55<br>*180* |
| H21 | 0,034<br>*0.0013* | 45<br>*150* |

# Code keys

## Threadmaster™

| TM | M10 | x | 1.5 | ISO | – | 10 | R1 | – | 900 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | 4 | | 5 | 6 | | 7 |

**1.** DTM = Drilling Threadmaster™
TM = Threadmaster™ (2 x D)

**2.** Thread diameter (tdz) min

**3.** Pitch

**4.** Thread form

**5.** Shank dia

**6.** Hand/shank style
R1 = Cylindrical

**7.** Additional info

## R396.18/19/20

| R396.19 | – | 25 | 22 | . | 3S | – | 4003 | – | 3 | – | 065 | A | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2 | 3 | | 4 | | 5 | | 6 | | 7 | 8 | 9 |

**1.** Cutter

**2.** Shank dia

**3.** Cutter dia

**4.** Seco-Weldon

**5.** Insert size

**6.** No. of inserts

**7.** Usable length

**8.** Through coolant

**9.** Upgraded design

## Insert 396.19/20

| R | 396.19 | – | 4003.0 | E | – | 1.0 | ISO |
|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | 4 | | 5 | 6 |

**1.** Hand of tool used on taper thread

**2.** Insert type

**3.** Insert size

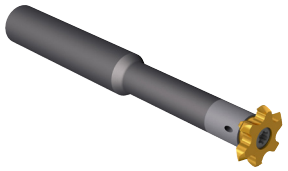
**4.** E = External
N = Internal
X = Ext. and Int.

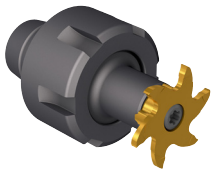
**5.** Pitch

**6.** Thread form

# Code keys

## Disc Milling cutter 335.14





2 types of shanks available: cylindrical available both in steel and carbide, or ER collet chuck system

### Mini disc

| R | 335 | . | 14 | – | 217 | M | N | P | 250500 | – | 12 | Z3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | | 4 | 5 | 6 | 7 | 8 | | 9 | 10 |

**1.**
Right hand

**2.**
Disc milling code

**3.**
System

**4.**
Head diameter,
e.g. 21,7 mm

**5.**
Thread type (W and UN)

**6.**
Internal thread
(E = external
X = internal/external)

**7.**
Partial profile (F = full profile)

**8.**
Pitch size (2,50-5,00 mm or ex. only a fixed pitch 2,5 mm, 16 tpi...)

**9.**
Connection size

**10.**
No. of teeth

### Cylindrical shank

| 335 | . | 14 | – | 16 | 9 | 0 | 45 | 110 | – | E |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2 | | 3 | 4 | 5 | 6 | 7 | | 8 |

**1.**
Disc milling code

**2.**
System

**3.**
Shank diameter
DMM = 16 mm
Alternative inch, example 0625 for DMM = 0.625”

**4.**
Connection size (insert/shank)
Example: 9 mm

**5.**
.0 cylindrical connection type

**6.**
Access length including insert 45 mm
Alternative inch, example 177 for 1.77”

**7.**
Overall length including insert 110 mm
Alternative inch, example 433 for 4.33”

**8.**
-E for carbide shank otherwise steel shank

### Collet chuck

| 335 | . | 14 | – | ER25 | 12 | 30 |
|---|---|---|---|---|---|---|
| 1 | | 2 | | 3 | 4 | 5 |

**1.**
Disc milling code

**2.**
System

**3.**
ER collet chuck size

**4.**
Connection size (insert / shank)
Example: 12 mm

**5.**
Access length including insert Example 30 mm



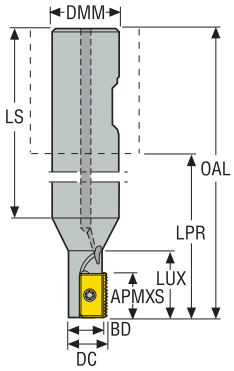
# Thread milling Indexable

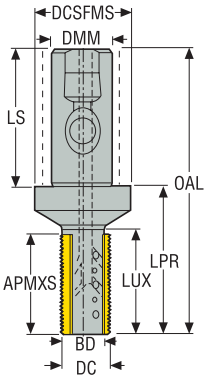
Seco 396.18/19/20 thread mills are versatile, cost-effective process tools for anyone facing a variety of threads, parts and workpiece materials on the same machine. Multi-tooth indexable insert cutters use a double sided multi-tooth insert usable above Ø 14 mm for both internal and external threads.

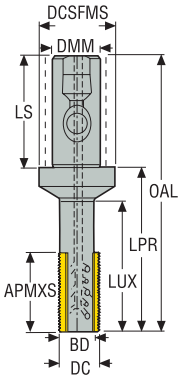
- Inserts available with different thread profiles and pitches.
- Multi-tooth cutters for high productivity.
- Arbor, Weldon and SecoWeldon shanktypes.

## R396.18/R396.19






—For cutting data see page(s) 207
—For insert information see page(s) 219-221
—Min thread diameter, see page(s) 218
—Note: Type of mounting * = Weldon
—Note: Type of mounting ** = Seco-Weldon
—GAMO -15°
—GAMP 0°
—GAMF -15°

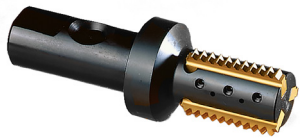
| Designation | Item number | DC | APMXS | BD | LPR | LUX | LS | OAL | DCSFMS | DMM | Weight | NOF | RPMX | Note | Insert |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | | | | |
| R396.19-3236.3S-4005-6AM | 02546917 | 36,0 | 40,0 | 28,2 | 60,0 | 42,0 | 60,0 | 120,0 | 50,0 | 32,0 | 0,7 | 6 | 11200 | ** | 396.19-4005 |
| R396.19-3232.3S-4003-6AM | 02546915 | 32,0 | 40,0 | 27,4 | 60,0 | 43,0 | 60,0 | 120,0 | 50,0 | 32,0 | 0,7 | 6 | 16800 | ** | 396.19-4003 |
| R396.19-2530.3S-4005-3AM | 02546916 | 30,0 | 40,0 | 23,0 | 60,0 | 43,0 | 56,0 | 116,0 | 40,0 | 25,0 | 0,5 | 3 | 12000 | ** | 396.19-4005 |
| R396.19-2530.3S-4005-3-080AM | 02544662 | 30,0 | 40,0 | 22,2 | 98,0 | 80,0 | 56,0 | 154,0 | 40,0 | 25,0 | 0,6 | 3 | 12000 | ** | 396.19-4005 |
| R396.19-2525.3S-4005-2AM | 02544660 | 25,0 | 40,0 | 19,0 | 60,0 | 43,0 | 56,0 | 116,0 | 40,0 | 25,0 | 0,4 | 2 | 13600 | ** | 396.19-4005 |
| R396.19-2522.3S-4003-3AM | 02514532 | 22,0 | 40,0 | 17,6 | 60,0 | 43,0 | 56,0 | 116,0 | 40,0 | 25,0 | 0,4 | 3 | 20000 | ** | 396.19-4003 |
| R396.19-2522.3S-4003-3-065AM | 02546918 | 22,0 | 40,0 | 17,6 | 84,0 | 65,0 | 56,0 | 140,0 | 40,0 | 25,0 | 0,5 | 3 | 20000 | ** | 396.19-4003 |
| R396.19-2517.3S-4003-2AM | 02534461 | 17,0 | 25,0 | 13,0 | 60,0 | 26,0 | 56,0 | 116,0 | 40,0 | 25,0 | 0,5 | 2 | 22400 | ** | 396.19-4003 |
| R396.18-2012.3-13A | 75036662 | 12,0 | 13,0 | 10,0 | 38,0 | 20,0 | 67,0 | 105,0 | – | 20,0 | 0,3 | 1 | 30000 | * | 13.MS |

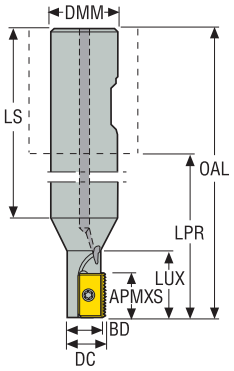
## Spare Parts, included in delivery

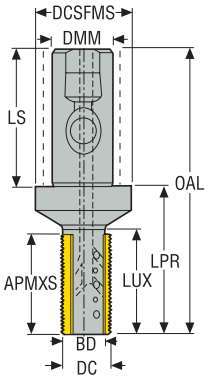
| For holders | Fastening screw | Insert key | Insert screw | Key (T-handle) |
|---|---|---|---|---|
| |  |  |  |  |
| R396.18 | – | H4B-T07P | C02506-T07P | DOUBLE-T |
| R396.19 | P6SS4X4-T09P | T09P-2 | – | – |

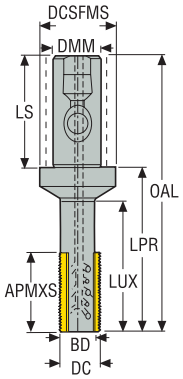
**Note!** When milling threads to smaller diameters than indicated for a certain pitch/cutter combination, an incorrect thread form will result.
**Note!** R396.19-2525.3S-4005-2AM Max pitch sze 4,5 ISO/6 TPI can be used.
*Torque key T00-07P09, T00-09P20.

## R396.18/R396.19






—For cutting data see page(s) 207
—For insert information see page(s) 219–221
—Min thread diameter, see page(s) 218
—Note: Type of mounting * = Weldon
—Note: Type of mounting ** = Seco-Weldon
—GAMO -15°
—GAMP 0°
—GAMF -15°

| Designation | Item number | DC | APMXS | BD | LPR | LUX | LS | OAL | DCSFMS | DMM | Weight | NOF | RPMX | Note | Insert |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | Inch | lbs | | | | |
| R396.18-00.39-3-13AT | 00087568 | 0.390 | 0.510 | 0.310 | – | 0.530 | 3.610 | 4.140 | – | 0.750 | 0.4 | 1 | 30000 | * | 13.. |
| R396.19-01.42-3S-4005-6AM | 02546947 | 1.417 | 1.575 | 1.142 | 2.362 | 1.654 | 2.343 | 4.705 | 1.969 | 1.250 | 1.5 | 6 | 11200 | ** | 396.19-4005 |
| R396.19-01.25-3S-4003-6AM | 02546941 | 1.260 | 1.575 | 1.102 | 2.362 | 1.654 | 2.343 | 4.547 | 1.969 | 1.250 | 1.5 | 6 | 16800 | ** | 396.19-4003 |
| R396.19-01.18-3S-4005-3AM | 02546946 | 1.181 | 1.575 | 0.906 | 2.362 | 1.693 | 2.185 | 4.547 | 1.575 | 1.000 | 1.1 | 3 | 12000 | ** | 396.19-4005 |
| R396.19-01.18-3S-4005-LAM | 02546954 | 1.181 | 1.575 | 0.906 | 3.858 | 3.150 | 2.185 | 6.043 | 1.575 | 1.000 | 1.3 | 3 | 12000 | ** | 396.19-4005 |
| R396.19-01.00-3S-4005-2AM | 02546944 | 0.984 | 1.575 | 0.748 | 2.362 | 1.693 | 2.185 | 4.547 | 1.575 | 1.000 | 1.1 | 2 | 13600 | ** | 396.19-4005 |
| R396.19-00.87-3S-4003-3AM | 02546938 | 0.866 | 1.575 | 0.709 | 2.362 | 1.693 | 2.185 | 4.547 | 1.575 | 1.000 | 0.9 | 3 | 20000 | ** | 396.19-4003 |
| R396.19-00.87-3S-4003-LAM | 02546950 | 0.866 | 1.575 | 0.709 | 3.307 | 2.559 | 2.185 | 5.512 | 1.575 | 1.000 | 1.1 | 3 | 20000 | ** | 396.19-4003 |
| R396.19-00.67-3S-4003-2AM | 02546937 | 0.669 | 0.984 | 0.512 | 2.362 | 1.024 | 2.185 | 4.547 | 1.575 | 1.000 | 1.1 | 2 | 22000 | ** | 396.19-4003 |
| R396.19-00.58-3S-1AM | 02546957 | 0.591 | 1.102 | 0.450 | 2.362 | 1.024 | 2.441 | 4.803 | 1.575 | 1.000 | 1.1 | 1 | 22400 | ** | 396.19-4003 |
| R396.18-00.50-3-13AT | 00074293 | 0.509 | 0.512 | 0.310 | – | 0.746 | 2.997 | 4.134 | – | 0.750 | 0.4 | 1 | 30000 | * | 13.. |
| R396.18-00.50-3-13A | 75054862 | 0.472 | 0.510 | 0.390 | – | 0.780 | 3.360 | 4.140 | – | 0.750 | 0.4 | 1 | 30000 | * | 13.. |

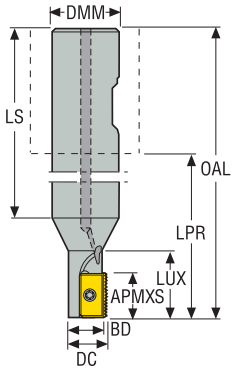
## Spare Parts, included in delivery

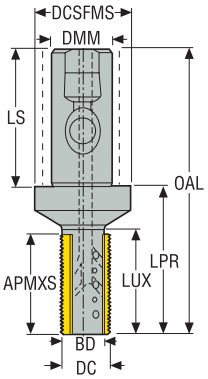
| For holders | Fastening screw | Insert key | Insert screw | Key (T-handle) | Screw |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| ..18-00.39.. | – | H4B-T07P | – | DOUBLE-T | C02505-T07P |
| ..18-00.50..A | – | H4B-T07P | C02506-T07P | DOUBLE-T | – |
| ..18-00.50..AT | – | H4B-T07P | C02505-T07P | DOUBLE-T | – |
| ..19-00.58..–..19-01.42.. | P6SS4X4-T09P | T09P-2 | – | – | – |

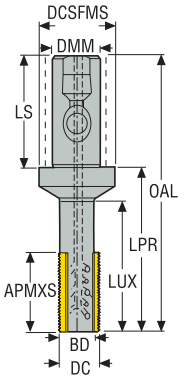
**Note!** When milling threads to smaller diameters than indicated for a certain pitch/cutter combination, an incorrect thread form will result.
**Note!** R396.19-2525.3S-4005-2AM Max pitch sze 4,5 ISO/6 TPI can be used.
*Torque key T00-07P09, T00-09P20.

## R396.19






—For cutting data see page(s) 207
—For insert information see page(s) 219-221
—Min thread diameter, see page(s) 218
—Note: Type of mounting ** = Seco-Weldon
—GAMO -15°
—GAMP 0°
—GAMF -15°

| Designation | Item number | DC | APMXS | BD | LPR | LUX | LS | OAL | DCSFMS | DMM | Weight | NOF | RPMX | Note | Insert |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | | | | |
| R396.19-3232.3S-4003-3-079AM | 02963138 | 32,0 | 40,0 | 27,4 | 96,0 | 79,57 | 60,0 | 156,0 | 50,0 | 32,0 | 0,9 | 3 | 20000 | ** | 396.19-4003 |
| R396.19-3232.3S-4005-3-079AM | 02963139 | 32,0 | 40,0 | 24,2 | 96,0 | 79,0 | 60,0 | 156,0 | 50,0 | 32,0 | 0,8 | 3 | 11200 | ** | 396.19-4005 |

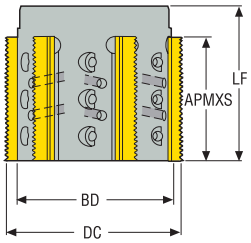
### Spare Parts, included in delivery

| For holders | Fastening screw | Insert key |
|---|---|---|
| |  |  |
| R396.19 | P6SS4X4-T09P | T09P-2 |

**Note!** When milling threads to smaller diameters than indicated for a certain pitch/cutter combination, an incorrect thread form will result.
**Note!** R396.19-2525.3S-4005-2AM Max pitch sze 4,5 ISO/6 TPI can be used.
*Torque key T00-07P09, T00-09P20.

R396.19

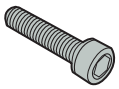





—For cutting data see page(s) 207
—For insert information see page(s) 219–221
—Min thread diameter, see page(s) 218
—GAMO -15°
—GAMP 0°
—GAMF -15°

| Designation | Item number | DC | APMXS | BD | LF | Weight | NOF | RPMX | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | kg | | | |
| R396.19-0058-4003-6AM | 02546921 | 58,0 | 40,0 | 53,0 | 50,0 | 0,7 | 6 | 8600 | 396.19-4003 |
| R396.19-0058-4005-6AM | 02546920 | 58,0 | 40,0 | 50,0 | 50,0 | 0,6 | 6 | 8600 | 396.19-4005 |

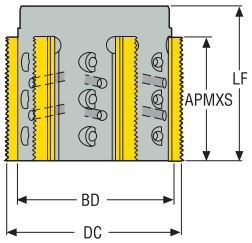
## Spare Parts, included in delivery

| For holders | Arbor screw | Fastening screw | Insert key |
|---|---|---|---|
| |  |  |  |
| ...6AM | MC6S12X40 | P6SS4X4-T09P | T09P-2 |

***Torque values 2 Nm**. Torque key, T00-09P20.

## R396.19

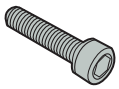





—For cutting data see page(s) 207
—For insert information see page(s) 219–221
—Min thread diameter, see page(s) 218
—GAMO -15°
—GAMP 0°
—GAMF -15°

| Designation | Item number | DC | APMXS | BD | LF | Weight | NOF | RPMX | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | lbs | | | |
| R396.19-02.28-4003-6AM | 02546955 | 2.283 | 1.575 | 2.087 | 1.969 | 1.5 | 6 | 8600 | 396.19-4003 |
| R396.19-02.28-4005-6AM | 02546956 | 2.283 | 1.575 | 1.969 | 1.969 | 1.3 | 6 | 8600 | 396.19-4005 |

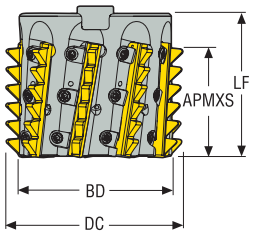
## Spare Parts, included in delivery

| For holders | Arbor screw | Fastening screw | Insert key |
|---|---|---|---|
| |  |  |  |
| R396.19-02.28 | UC6S1/2UNFX1-1/4 | P6SS4X4-T09P | T09P-2 |

***Torque values 2 Nm.** Torque key, T00-09P20.

# R396.20

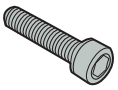
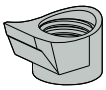
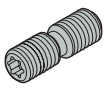





—For cutting data see page(s) 207
—For insert information see page(s) 219–221
—Min thread diameter, see page(s) 218
—GAMO -15°
—GAMP -15°
—GAMF -15°

| Designation | Item number | DC | APMXS | BD | LF | Weight | NOF | RPMX | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | lbs | | | |
| R396.20-02.478-4005-9AW | 03013869 | 2.478 | 1.575 | 2.106 | 1.992 | 1.5 | 9 | 8600 | 396.20-4005 |

## Spare Parts, included in delivery

| For holders | Arbor screw | Key | Key (T-handle) | Wedge clamp | Wedge screw |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| R396.20 | UC6S1/2UNFX1-1/2 | H4B-T08P | DOUBLE-T | CW0405M | LD4012-T08P |

***Torque values 2 Nm**. Torque key, T00-09P20.

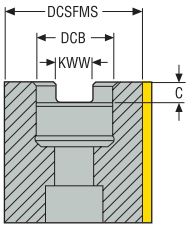
# Min thread diameter (major dia), for different pitch and cutter combinations

## R396.18/R396.19/R396.20

| For cutter | Pitch mm / TPI | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1<br>24 | 1,5<br>16 | 2<br>12 | 2,5<br>10 | 3<br>8 | 3,5<br>7 | 4<br>6 | 4,5 | 5<br>5 | 5,5 | 6<br>4 |
| R396.18-2012.3-13A | 14 | 15 | 16 | – | – | – | – | – | – | – | – |
| R396.19-2517.3S-4003-2AM | 19 | 20 | 21 | 22 | 24 | – | – | – | – | – | – |
| R396.19-2522.3S-4003-3AM | 24 | 25 | 26 | 27 | 27 | – | – | – | – | – | – |
| R396.19-2522.3S-4003-3-065AM | 24 | 25 | 26 | 27 | 27 | – | – | – | – | – | – |
| R396.19-3232.3S-4003-6AM | 34 | 35 | 36 | 39 | 40 | – | – | – | – | – | – |
| R396.19-2525.3S-4005-2AM | – | – | – | – | 30 | 33 | 35 | 37 | – | – | – |
| R396.19-2530.3S-4005-3AM | – | – | – | – | 38 | 40 | 42 | 44 | 45 | 47 | 48 |
| R396.19-2530.3S-4005-3-080AM | – | – | – | – | 38 | 40 | 42 | 44 | 45 | 47 | 48 |
| R396.19-3236.3S-4005-6AM | – | – | – | – | 43 | 45 | 47 | 47 | 48 | 50 | 53 |
| R396.19-0058-4003-6AM | 62 | 63 | 65 | 66 | 67 | – | – | – | – | – | – |
| R396.19-0058-4005-6AM | – | – | – | – | 67 | 69 | 70 | 71 | 72 | 73 | 74 |
| R396.19-3232.3S-4003-3-079AM | 34 | 35 | 36 | 39 | 40 | – | – | – | – | – | – |
| R396.19-3232.3S-4005-3-079AM | – | – | – | – | 39 | 41 | 43 | 45 | 46 | 48 | 49 |
| R396.20-02.478-4005-9AW | – | – | – | – | 80 | – | 84 | – | – | – | 89 |

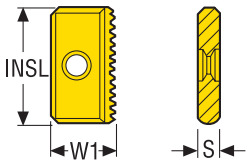
**Note!** When milling threads to smaller diameters than indicated for a certain pitch/cutter combination, an incorrect thread form will result.

## Dimensions of mounting




| For cutter | Item number | DCB | DCSFMS | KWW | C | For arbor |
|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | |
| R396.19-0058-4003-6AM | 02546921 | 27,0 | 53,0 | 12,4 | 7,0 | 27 |
| R396.19-0058-4005-6AM | 02546920 | 27,0 | 50,0 | 12,4 | 7,0 | 27 |
| R396.20-02.478-4005-9AW | 03013869 | 25,4 | 53,5 | 9,7 | 5,7 | 25,4 |

## 13NMS/XMS

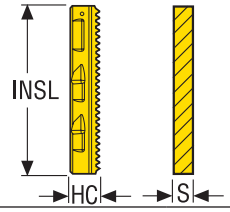



Tolerances:
INSL = ± 0,012 mm
HC = ± 0,012 mm
S = ± 0,025 mm

| Designation | Insert | INSL | S | Grades | | |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | CP500 | F30M | H15 |
| 13NMS1.0ISO | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13NMS1.5ISO | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13NMS2.0ISO | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13NMS24UN | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13NMS20UN | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13NMS16UN | For internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13XMS19W | For external and internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |
| 13XMS14W | For external and internal threading | 13,0<br>*0.512* | 2,5<br>*0.098* | ■ | | |

■ Stock standard.

## 396.19-4003

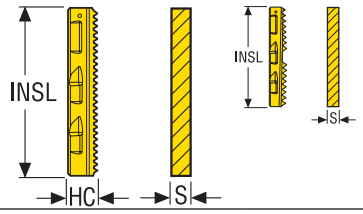



Tolerances:
INSL = ± 0,007 mm
HC = ± 0,012 mm
S = ± 0,05 mm

| Designation | Insert | INSL | S | Grades | | |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | CP500 | F30M | H15 |
| 396.19-4003.0E1.0ISO | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E1.5ISO | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E2.0ISO | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E18UN | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E16UN | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E14UN | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0E12UN | For external threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N1.0ISO | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N1.5ISO | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N2.0ISO | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N2.5ISO | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N3.0ISO | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N20UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N18UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N16UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N14UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N12UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | ■ |
| 396.19-4003.0N10UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N9UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0N8UN | For internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0X16W | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0X14W | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0X12W | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003.0X11W | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |

■ Stock standard.

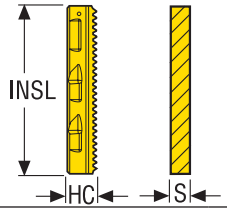
## 396.19-4003/4005




| Designation | Insert | INSL | S | Grades | | |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | CP500 | F30M | H15 |
| 396.19-4005.0N3.5ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N4.0ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N4.5ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N5.0ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N5.5ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N6.0ISO | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N7UN | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N6UN | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N5UN | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N4.5UN | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0N4UN | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| 396.19-4005.0X8W | For external and internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| R396.19-4003.0X14NPT | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| R396.19-4003.0X11.5NPT | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| R396.19-4005.0X8NPT | For external and internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |
| R396.19-4003.0X14NPTF | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| R396.19-4003.0X11.5NPTF | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| R396.19-4003.0X14BSPT | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| R396.19-4003.0X11BSPT | For external and internal threading | 40,0<br>*1.575* | 3,5<br>*0.138* | | ■ | |
| 396.19-4003XX | Non cutting blank | 40,0<br>*1.575* | 3,5<br>*0.138* | | | ■ |
| 396.19-4005XX | Non cutting blank | 40,0<br>*1.575* | 4,85<br>*0.191* | | | ■ |

■ Stock standard.

## 396.20-4005




| Designation | Insert | INSL | S | Grades | | |
|---|---|---|---|---|---|---|
| | | mm<br>*Inch* | mm<br>*Inch* | CP500 | F30M | H15 |
| 396.20-4005.0N3ACME | For internal threading | 40,0<br>*1.575* | 4,9<br>*0.193* | | ■ | |
| 396.20-4005.0N4ACME | For internal threading | 40,0<br>*1.575* | 4,9<br>*0.193* | | ■ | |
| 396.20-4005.0N8ACME | For internal threading | 40,0<br>*1.575* | 4,9<br>*0.193* | | ■ | |
| 396.20-4005.0N4BUT | For internal threading | 40,0<br>*1.575* | 4,85<br>*0.191* | | ■ | |

■ Stock standard.

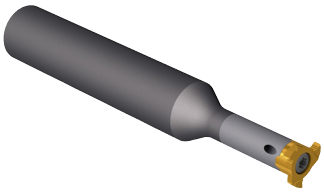


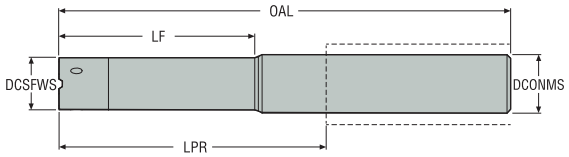
# Thread milling Shanks

Generate precision threads in holes as deep as 106 mm with Seco's new single raw Disc Mill 335.14 interchangeable threading heads and matching holder shanks. You will also be able to boost processing speed and versatility, as each head performs both chamfering and threading operations. Additionally, performing two operations with the same tool helps reduce required tooling inventories.

- Both carbide and steel shank types.
- Internal coolant capability.
- Over 31 different carbide-coated heads.

## 335.14 Shank - Cylindrical version






—For cutting data see page(s) 208
—Technical information, see page 197
—-E = Carbide shank with DMM tolerance = h6
—Steel shank: DMM tolerance = g6
—Max RPM = 30 000 rev/min

| Designation | Item number | LF | OAL | DCSFWS | DCONMS | LPR | Weight | Through coolant | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | kg | | |
| 335.14-1006.0-015-060 | 03042024 | 11,5 | 56,5 | 6,0 | 10,0 | 16,5 | 0,1 | | R335.14...06Z.. |
| 335.14-1206.0-021-080-E | 03042025 | 17,5 | 76,5 | 6,0 | 12,0 | 31,5 | 0,2 | ✓ | R335.14...06Z.. |
| 335.14-1206.0-030-090-E | 03042026 | 26,5 | 86,5 | 6,0 | 12,0 | 41,5 | 0,2 | ✓ | R335.14...06Z.. |
| 335.14-1206.0-042-100-E | 03042027 | 38,5 | 96,5 | 6,0 | 12,0 | 51,5 | 0,2 | ✓ | R335.14...06Z.. |
| 335.14-1008.0-017-060 | 03042040 | 12,5 | 55,5 | 8,0 | 10,0 | 15,5 | 0,1 | | R335.14...08Z.. |
| 335.14-1208.0-029-095-E | 03042041 | 24,5 | 90,5 | 8,0 | 12,0 | 45,5 | 0,2 | ✓ | R335.14...08Z.. |
| 335.14-1208.0-042-110-E | 03042042 | 37,5 | 105,5 | 8,0 | 12,0 | 60,5 | 0,2 | ✓ | R335.14...08Z.. |
| 335.14-1208.0-056-120-E | 03042043 | 51,5 | 115,5 | 8,0 | 12,0 | 70,5 | 0,2 | ✓ | R335.14...08Z.. |
| 335.14-1609.0-018-080 | 03042028 | 12,2 | 74,2 | 9,0 | 16,0 | 26,2 | 0,2 | ✓ | R335.14...09Z.. |
| 335.14-1609.0-032-100-E | 03042029 | 26,2 | 94,2 | 9,0 | 16,0 | 46,2 | 0,3 | ✓ | R335.14...09Z.. |
| 335.14-1609.0-045-110-E | 03042030 | 39,2 | 104,2 | 9,0 | 16,0 | 56,2 | 0,3 | ✓ | R335.14...09Z.. |
| 335.14-1609.0-064-130-E | 03042031 | 58,2 | 124,2 | 9,0 | 16,0 | 76,2 | 0,3 | ✓ | R335.14...09Z.. |
| 335.14-1612.0-024-080 | 03042032 | 18,3 | 74,3 | 12,0 | 16,0 | 26,3 | 0,2 | ✓ | R335.14...12Z.. |
| 335.14-1612.0-042-100-E | 03042033 | 36,3 | 94,3 | 12,0 | 16,0 | 46,3 | 0,2 | ✓ | R335.14...12Z.. |
| 335.14-1612.0-060-130-E | 03042034 | 54,3 | 124,3 | 12,0 | 16,0 | 76,3 | 0,3 | ✓ | R335.14...12Z.. |
| 335.14-1612.0-085-160-E | 03042035 | 76,3 | 154,3 | 12,0 | 16,0 | 106,3 | 0,4 | ✓ | R335.14...12Z.. |
| 335.14-1614.0-042-100-E | 03042036 | 35,5 | 93,5 | 14,3 | 16,0 | 45,5 | 0,3 | ✓ | R335.14...14Z.. |
| 335.14-1614.0-060-130-E | 03042037 | 53,5 | 123,5 | 14,3 | 16,0 | 75,5 | 0,3 | ✓ | R335.14...14Z.. |
| 335.14-1614.0-085-160-E | 03042038 | 78,5 | 153,5 | 14,3 | 16,0 | 105,5 | 0,4 | ✓ | R335.14...14Z.. |
| 335.14-2014.0-036-100 | 03042039 | 29,2 | 93,5 | 14,0 | 20,0 | 43,5 | 0,2 | ✓ | R335.14...14Z.. |

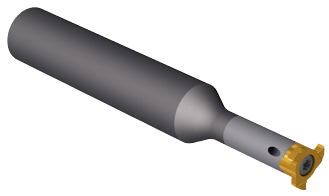
### Spare Parts, included in delivery

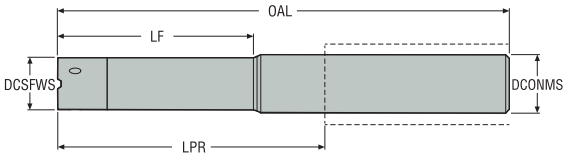
| For holders | Insert key | Insert screw | Key (T-handle) |
|---|---|---|---|
| |  |  |  |
| 335.14-..06 | H4B-T08P | C92608-T08P | DOUBLE-T |
| 335.14-..08 | H4B-T10P | C93510-T10P | DOUBLE-T |
| 335.14-..09 | H4B-T15P | C94012-T15P | DOUBLE-T |
| 335.14-..14 | H6B-T20P | C95012-T20P | DOUBLE-T |
| 335.14-..1612 | H6B-T20P | C95012-T20P | DOUBLE-T |

### Accessories

| Insert clamping torque | Torque key |
|---|---|
|  |  |
| 2.0NM | T00-08P20 |
| 3.5NM | T00-10P35 |
| 5.0NM | T00-15P50 |
| 7.0NM | – |
| 7.0NM | – |

## 335.14 Shank - Cylindrical version






—For cutting data see page(s) 208
—Technical information, see page 197
—-E = Carbide shank with DMM tolerance = h6
—Steel shank: DMM tolerance = g6
—Max RPM = 30 000 rev/min

| Designation | Item number | LF | OAL | DCSFWS | DCONMS | LPR | Weight | Through coolant | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | Inch | Inch | Inch | Inch | Inch | lbs | | |
| 335.14-050006.0-083-315-E | 03042121 | 0.689 | 3.012 | 0.236 | 0.500 | 1.240 | 0.2 | ✓ | R334.14...06Z.. |
| 335.14-050006.0-118-354-E | 03042122 | 1.043 | 3.406 | 0.236 | 0.500 | 1.634 | 0.4 | ✓ | R334.14...06Z.. |
| 335.14-050006.0-165-394-E | 03042107 | 1.516 | 3.799 | 0.236 | 0.500 | 2.028 | 0.4 | ✓ | R334.14...06Z.. |
| 335.14-050008.0-114-374-E | 03042123 | 0.965 | 3.563 | 0.315 | 0.500 | 1.791 | 0.4 | ✓ | R334.14...08Z.. |
| 335.14-050008.0-165-433-E | 03042124 | 1.476 | 4.154 | 0.315 | 0.500 | 2.382 | 0.4 | ✓ | R334.14...08Z.. |
| 335.14-050008.0-220-472-E | 03042119 | 2.028 | 4.547 | 0.315 | 0.500 | 2.776 | 0.4 | ✓ | R334.14...08Z.. |
| 335.14-062509.0-071-315 | 03042108 | 0.480 | 2.921 | 0.354 | 0.625 | 1.031 | 0.4 | ✓ | R334.14...09Z.. |
| 335.14-062509.0-126-394-E | 03042109 | 1.031 | 3.709 | 0.354 | 0.625 | 1.819 | 0.4 | ✓ | R334.14...09Z.. |
| 335.14-062509.0-177-433-E | 03042110 | 1.543 | 4.102 | 0.354 | 0.625 | 2.213 | 0.4 | ✓ | R334.14...09Z.. |
| 335.14-062509.0-252-512-E | 03042111 | 2.291 | 4.890 | 0.354 | 0.625 | 3.000 | 0.7 | ✓ | R334.14...09Z.. |
| 335.14-062512.0-094-315 | 03042112 | 0.720 | 2.925 | 0.472 | 0.625 | 1.035 | 0.4 | ✓ | R334.14...12Z.. |
| 335.14-062512.0-165-394-E | 03042113 | 1.429 | 3.713 | 0.472 | 0.625 | 1.823 | 0.4 | ✓ | R334.14...12Z.. |
| 335.14-062512.0-236-512-E | 03042114 | 2.138 | 4.894 | 0.472 | 0.625 | 3.004 | 0.7 | ✓ | R334.14...12Z.. |
| 335.14-062512.0-335-630-E | 03042115 | 3.122 | 6.075 | 0.472 | 0.625 | 4.185 | 0.9 | ✓ | R334.14...12Z.. |
| 335.14-062514.0-165-394-E | 03042116 | 1.398 | 3.681 | 0.551 | 0.625 | 1.791 | 0.7 | ✓ | R334.14...14Z.. |
| 335.14-062514.0-236-512-E | 03042117 | 2.106 | 4.862 | 0.551 | 0.625 | 2.972 | 0.9 | ✓ | R334.14...14Z.. |
| 335.14-062514.0-335-630-E | 03042118 | 3.091 | 6.043 | 0.551 | 0.625 | 4.154 | 0.9 | ✓ | R334.14...14Z.. |

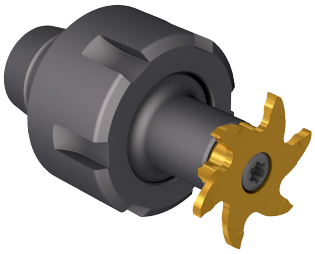
### Spare Parts, included in delivery

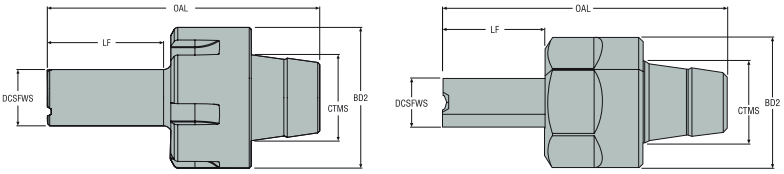
| For holders | Insert key | Insert screw | Key (T-handle) |
|---|---|---|---|
| |  |  |  |
| 335.14-..06 | H4B-T08P | C92608-T08P | DOUBLE-T |
| 335.14-..08 | H4B-T10P | C93510-T10P | DOUBLE-T |
| 335.14-..09 | H4B-T15P | C94012-T15P | DOUBLE-T |
| 335.14-..12/14 | H6B-T20P | C95012-T20P | DOUBLE-T |

### Accessories

| Insert clamping torque | Torque key |
|---|---|
|  |  |
| 2.0NM | T00-08P20 |
| 3.5NM | T00-10P35 |
| 5.0NM | T00-15P50 |
| 7.0NM | – |

## 335.14 Shank with ER collet






—For cutting data see page(s) 208
—Technical information, see page 197

| Designation | Item number | LF | OAL | DCSFWS | BD2 | DCONMS | CTMS | Weight | Insert |
|---|---|---|---|---|---|---|---|---|---|
| | | mm | mm | mm | mm | mm | mm | kg | |
| 335.14-ER11-06-016 | 03042072 | 12,5 | 34,9 | 6,0 | 16,0 | 11,0 | ER 11 | 0,1 | R335.14...06Z.. |
| 335.14-ER11-08-016 | 03042085 | 11,5 | 33,8 | 8,0 | 16,0 | 11,0 | ER 11 | 0,1 | R335.14...08Z.. |
| 335.14-ER16-08-022 | 03042086 | 17,5 | 49,6 | 8,0 | 32,0 | 16,0 | ER 16 | 0,2 | R335.14...08Z.. |
| 335.14-ER11-09-022 | 03042073 | 16,2 | 38,5 | 9,0 | 16,0 | 11,0 | ER 11 | 0,1 | R335.14...09Z.. |
| 335.14-ER16-09-022 | 03042074 | 16,2 | 48,3 | 9,0 | 32,0 | 16,0 | ER 16 | 0,2 | R335.14...09Z.. |
| 335.14-ER25-09-022 | 03042075 | 16,2 | 55,3 | 9,0 | 35,0 | 25,0 | ER 25 | 0,2 | R335.14...09Z.. |
| 335.14-ER16-12-030 | 03042076 | 24,3 | 56,4 | 12,0 | 32,0 | 16,0 | ER 16 | 0,2 | R335.14...12Z.. |
| 335.14-ER25-12-030 | 03042078 | 24,3 | 63,4 | 12,0 | 35,0 | 25,0 | ER 25 | 0,2 | R335.14...12Z.. |
| 335.14-ER32-12-030 | 03042079 | 24,3 | 69,4 | 12,0 | 50,0 | 32,0 | ER 32 | 0,4 | R335.14...12Z.. |
| 335.14-ER25-14-019 | 03042080 | 12,5 | 52,3 | 14,0 | 35,0 | 25,0 | ER 25 | 0,2 | R335.14...14Z.. |
| 335.14-ER25-14-035 | 03042081 | 28,5 | 67,6 | 14,0 | 35,0 | 25,0 | ER 25 | 0,2 | R335.14...14Z.. |
| 335.14-ER32-14-019 | 03042082 | 12,5 | 58,3 | 14,0 | 50,0 | 32,0 | ER 32 | 0,5 | R335.14...14Z.. |
| 335.14-ER32-14-035 | 03042083 | 28,5 | 73,6 | 14,0 | 50,0 | 32,0 | ER 32 | 0,4 | R335.14...14Z.. |

### Spare Parts, included in delivery

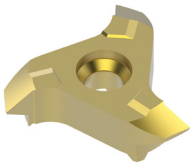
| For holders | Insert key | Insert screw | Key (T-handle) |
|---|---|---|---|
| |  |  |  |
| 335.14-ER..-06 | H4B-T08P | C92608-T08P | DOUBLE-T |
| 335.14-ER..-08 | H4B-T10P | C93510-T10P | DOUBLE-T |
| 335.14-ER..-09 | H4B-T15P | C94012-T15P | DOUBLE-T |
| 335.14-ER..-12/14 | H6B-T20P | C95012-T20P | DOUBLE-T |

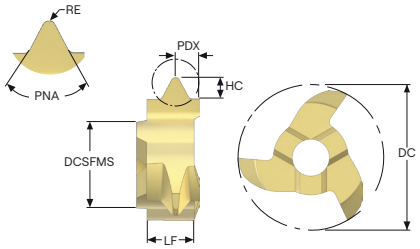
### Accessories

| Insert clamping torque | Torque key |
|---|---|
|  |  |
| 2.0NM | T00-08P20 |
| 3.5NM | T00-10P35 |
| 5.0NM | T00-15P50 |
| 7.0NM | – |

## 335.14 Inserts

Thread profile Whitworth - Metric






—For cutting data see page(s) 208
—Technical information, see page 197

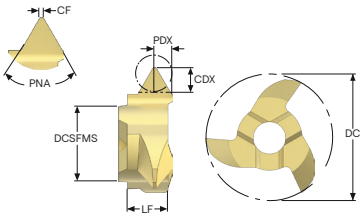
| Designation | Pitch | | DC | RE | DCSFMS | HC | LF | PDX | PNA | ZEFP | Stock standard | Grades |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Coated |
| | mm | TPIX | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | F32M |
| R335.14-117WXF11.06Z3 | – | 11 | 11,7<br>*0.461* | 0,31<br>*0.012* | 6,0<br>*0.236* | 1,48<br>*0.058* | 3,6<br>*0.142* | 1,6<br>*0.063* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-177WXF11.09Z3 | – | 11 | 17,7<br>*0.697* | 0,31<br>*0.012* | 9,0<br>*0.354* | 1,48<br>*0.058* | 5,85<br>*0.230* | 1,45<br>*0.057* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-117WXF14.06Z3 | – | 14 | 11,7<br>*0.461* | 0,24<br>*0.009* | 6,0<br>*0.236* | 1,16<br>*0.046* | 3,6<br>*0.142* | 1,3<br>*0.051* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-157WXF14.08Z3 | – | 14 | 15,7<br>*0.618* | 0,24<br>*0.009* | 8,0<br>*0.315* | 1,17<br>*0.046* | 4,6<br>*0.181* | 1,5<br>*0.059* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-177WXF14.09Z3 | – | 14 | 17,7<br>*0.697* | 0,24<br>*0.009* | 9,0<br>*0.354* | 1,16<br>*0.046* | 5,85<br>*0.230* | 1,25<br>*0.049* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-117WXF19.06Z3 | – | 19 | 11,7<br>*0.461* | 0,18<br>*0.007* | 6,0<br>*0.236* | 0,86<br>*0.034* | 3,6<br>*0.142* | 1,1<br>*0.043* | 55,0<br>*2.165* | 3 | • | ■ |
| R335.14-177WXF19.09Z3 | – | 19 | 17,7<br>*0.697* | 0,18<br>*0.007* | 9,0<br>*0.354* | 0,856<br>*0.034* | 5,85<br>*0.230* | 0,95<br>*0.037* | 55,0<br>*2.165* | 3 | • | ■ |

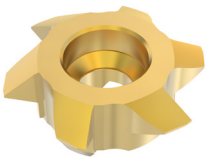
●=Stock standard O=Available on demand (within 2 weeks)

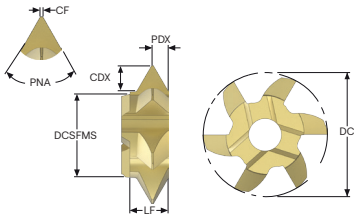
## 335.14 Inserts

Thread profile Partial Metric







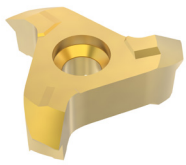

—For cutting data see page(s) 208
—Technical information, see page 197

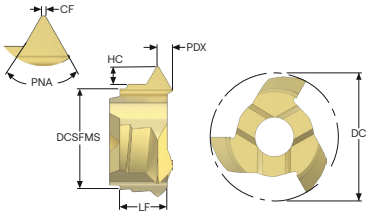
| Designation | Pitch | | DC | CF | CDX | DCSFMS | LF | PDX | PNA | ZEFP | Stock standard | Grades |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | Coated |
| | | | | | | | | | | | | F32M |
| R335.14-111MNP200300.06Z6 | 2-3 | 079-0.118 | 11,1<br>*0.437* | 0,17<br>*0.007* | 1,78<br>*0.070* | 6,0<br>*0.236* | 3,2<br>*0.126* | 1,4<br>*0.055* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-117MNP100200.06Z3 | 1-2 | 039-079 | 11,7<br>*0.461* | 0,13<br>*0.005* | 1,25<br>*0.049* | 6,0<br>*0.236* | 3,6<br>*0.142* | 0,8<br>*0.031* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-117MNP100200.06Z6 | 1-2 | 039-079 | 11,7<br>*0.461* | 0,06<br>*0.002* | 1,25<br>*0.049* | 6,0<br>*0.236* | 3,6<br>*0.142* | 1,04<br>*0.041* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-117MNP200300.06Z3 | 2-3 | 079-0.118 | 11,7<br>*0.461* | 0,25<br>*0.010* | 1,78<br>*0.070* | 6,0<br>*0.236* | 3,6<br>*0.142* | 1,2<br>*0.047* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-132MNP150275.08Z6 | 1,5-2,75 | 059-0.108 | 13,2<br>*0.520* | 0,13<br>*0.005* | 1,67<br>*0.066* | 8,0<br>*0.315* | 4,2<br>*0.165* | 1,3<br>*0.051* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-133MNP200300.08Z6 | 2-3 | 079-0.118 | 13,3<br>*0.524* | 0,17<br>*0.007* | 1,78<br>*0.070* | 8,0<br>*0.315* | 4,2<br>*0.165* | 2,5<br>*0.098* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-157MNP150275.08Z3 | 1,5-2,75 | 059-0.108 | 15,7<br>*0.618* | 0,19<br>*0.007* | 1,67<br>*0.066* | 8,0<br>*0.315* | 4,6<br>*0.181* | 1,1<br>*0.043* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-157MNP250300.08Z3 | 2,5-3 | 098-0.118 | 15,7<br>*0.618* | 0,31<br>*0.012* | 1,78<br>*0.070* | 8,0<br>*0.315* | 4,6<br>*0.181* | 1,2<br>*0.047* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-177MNP100200.09Z3 | 1-2 | 039-079 | 17,7<br>*0.697* | 0,12<br>*0.005* | 1,19<br>*0.047* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,15<br>*0.045* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-177MNP150275.09Z3 | 1,5-2,75 | 059-0.108 | 17,7<br>*0.697* | 0,19<br>*0.007* | 1,62<br>*0.064* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,25<br>*0.049* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-177MNP200375.09Z3 | 2-3,75 | 079-0.148 | 17,7<br>*0.697* | 0,25<br>*0.010* | 2,22<br>*0.087* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,65<br>*0.065* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-177MNP300550.09Z3 | 3-5,5 | 0.118-0.217 | 17,7<br>*0.697* | 0,38<br>*0.015* | 3,25<br>*0.128* | 9,0<br>*0.354* | 5,85<br>*0.230* | 2,25<br>*0.089* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-217MNP100200.12Z3 | 1-2 | 039-079 | 21,7<br>*0.854* | 0,12<br>*0.005* | 1,19<br>*0.047* | 12,0<br>*0.472* | 5,85<br>*0.230* | 1,25<br>*0.049* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-217MNP200375.12Z3 | 2-3,75 | 079-0.148 | 21,7<br>*0.854* | 0,25<br>*0.010* | 2,22<br>*0.087* | 12,0<br>*0.472* | 5,85<br>*0.230* | 1,65<br>*0.065* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-217MNP250450.12Z3 | 2,5-4,5 | 098-0.177 | 21,7<br>*0.854* | 0,25<br>*0.010* | 2,7<br>*0.106* | 12,0<br>*0.472* | 5,85<br>*0.230* | 2,15<br>*0.085* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-217MNP350600.12Z3 | 3,5-6 | 0.138-0.236 | 21,7<br>*0.854* | 0,44<br>*0.017* | 3,52<br>*0.139* | 12,0<br>*0.472* | 5,85<br>*0.230* | 2,65<br>*0.104* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-277MNP150250.14Z6 | 1,5-2,5 | 059-098 | 27,7<br>*1.091* | 0,19<br>*0.007* | 1,6<br>*0.063* | 14,0<br>*0.551* | 6,5<br>*0.256* | –<br>– | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-277MNP150250.14Z3 | 1,5-2,5 | 059-098 | 27,7<br>*1.091* | 0,18<br>*0.007* | 1,49<br>*0.059* | 14,0<br>*0.551* | 6,6<br>*0.260* | 2,4<br>*0.094* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-277MNP250500.14Z3 | 2,5-5 | 098-0.197 | 27,7<br>*1.091* | 0,37<br>*0.015* | 2,93<br>*0.115* | 14,0<br>*0.551* | 6,6<br>*0.260* | 2,6<br>*0.102* | 60,0<br>*2.362* | 3 | ● | ■ |
| R335.14-277MNP400600.14Z3 | 4-6 | 0.157-0.236 | 27,7<br>*1.091* | 0,5<br>*0.020* | 4,6<br>*0.181* | 14,0<br>*0.551* | 6,6<br>*0.260* | 3,0<br>*0.118* | 60,0<br>*2.362* | 3 | ● | ■ |

●=Stock standard O=Available on demand (within 2 weeks)

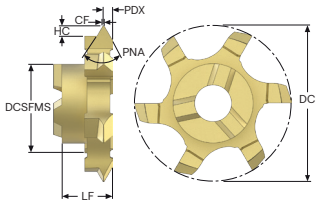
## 335.14 Inserts

Thread profile Full Metric







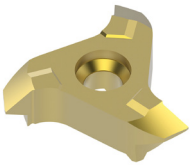

—For cutting data see page(s) 208
—Technical information, see page 197

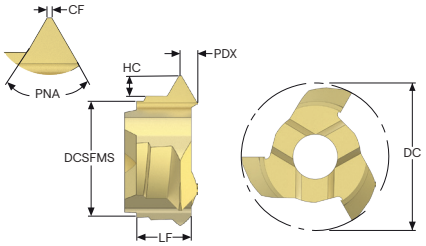
| | | | | | | | | | | | | Grades |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Designation** | **Pitch** | | **DC** | **CF** | **HC** | **DCSFMS** | **LF** | **PDX** | **PNA** | **ZEFP** | **Stock standard** | **Coated** |
| | mm | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | F32M |
| R335.14-067MNF050.05Z3 | 0,5-0,5 | 02-02 | 6,7<br>*0.264* | 0,06<br>*0.002* | 0,28<br>*0.011* | 4,8<br>*0.189* | 3,25<br>*0.128* | 0,4<br>*0.016* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-077MNF075.05Z3 | 0,75-0,75 | 03-03 | 7,7<br>*0.303* | 0,1<br>*0.004* | 0,416<br>*0.016* | 4,8<br>*0.189* | 3,25<br>*0.128* | 0,5<br>*0.020* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-077MNF100.05Z3 | 1-1 | 039-039 | 7,7<br>*0.303* | 0,12<br>*0.005* | 0,557<br>*0.022* | 4,8<br>*0.189* | 3,55<br>*0.140* | 0,9<br>*0.035* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-097MNF100.06Z3 | 1-1 | 039-039 | 9,7<br>*0.382* | 0,09<br>*0.004* | 0,58<br>*0.023* | 6,0<br>*0.236* | 3,6<br>*0.142* | 0,7<br>*0.028* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-097MNF150.06Z3 | 1,5-1,5 | 059-059 | 9,7<br>*0.382* | 0,125<br>*0.005* | 0,86<br>*0.034* | 6,0<br>*0.236* | 3,6<br>*0.142* | 0,9<br>*0.035* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-097MNF175.06Z3 | 1,75-1,75 | 069-069 | 9,7<br>*0.382* | 0,21<br>*0.008* | 0,95<br>*0.037* | 6,0<br>*0.236* | 3,6<br>*0.142* | 1,0<br>*0.039* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-097MNF200.06Z3 | 2-2 | 079-079 | 9,7<br>*0.382* | 0,165<br>*0.006* | 1,16<br>*0.046* | 6,0<br>*0.236* | 3,6<br>*0.142* | 1,1<br>*0.043* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-097MNF250.06Z3 | 2,5-2,5 | 098-098 | 9,7<br>*0.382* | 0,2<br>*0.008* | 1,44<br>*0.057* | 6,0<br>*0.236* | 3,49<br>*0.137* | 1,19<br>*0.047* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-137MNF100.08Z3 | 1-1 | 039-039 | 13,7<br>*0.539* | 0,1<br>*0.004* | 0,58<br>*0.023* | 8,0<br>*0.315* | 4,6<br>*0.181* | 0,9<br>*0.035* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-137MNF150.08Z3 | 1,5-1,5 | 059-059 | 13,7<br>*0.539* | 0,125<br>*0.005* | 0,86<br>*0.034* | 8,0<br>*0.315* | 4,6<br>*0.181* | 1,2<br>*0.047* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-137MNF200.08Z3 | 2-2 | 079-079 | 13,7<br>*0.539* | 0,165<br>*0.006* | 1,16<br>*0.046* | 8,0<br>*0.315* | 4,6<br>*0.181* | 1,4<br>*0.055* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-137MNF250.08Z3 | 2,5-2,5 | 098-098 | 13,7<br>*0.539* | 0,2<br>*0.008* | 1,44<br>*0.057* | 8,0<br>*0.315* | 4,6<br>*0.181* | 1,6<br>*0.063* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-177MNF150.09Z3 | 1,5-1,5 | 059-059 | 17,7<br>*0.697* | 0,12<br>*0.005* | 0,86<br>*0.034* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,15<br>*0.045* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-177MNF150.09Z6 | 1,5-1,5 | 059-059 | 17,7<br>*0.697* | 0,12<br>*0.005* | 0,86<br>*0.034* | 9,0<br>*0.354* | 5,85<br>*0.230* | 0,85<br>*0.033* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-177MNF200.09Z3 | 2-2 | 079-079 | 17,7<br>*0.697* | 0,16<br>*0.006* | 1,16<br>*0.046* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,35<br>*0.053* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-177MNF200.09Z6 | 2-2 | 079-079 | 17,7<br>*0.697* | 0,16<br>*0.006* | 1,16<br>*0.046* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,15<br>*0.045* | 60,0<br>*2.362* | 6 | ○ | ■ |
| R335.14-177MNF300.09Z3 | 3-3 | 0.118-0.118 | 17,7<br>*0.697* | 0,25<br>*0.010* | 1,73<br>*0.068* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,65<br>*0.065* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-177MNF350.09Z3 | 3,5-3,5 | 0.138-0.138 | 17,7<br>*0.697* | 0,28<br>*0.011* | 2,02<br>*0.080* | 9,0<br>*0.354* | 5,85<br>*0.230* | 1,95<br>*0.077* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-217MNF400.12Z3 | 4-4 | 0.157-0.157 | 21,7<br>*0.854* | 0,5<br>*0.020* | 2,16<br>*0.085* | 12,0<br>*0.472* | 5,85<br>*0.230* | 1,95<br>*0.077* | 60,0<br>*2.362* | 3 | ○ | ■ |
| R335.14-217MNF450.12Z3 | 4,5-4,5 | 0.177-0.177 | 21,7<br>*0.854* | 0,56<br>*0.022* | 2,43<br>*0.096* | 12,0<br>*0.472* | 5,85<br>*0.230* | 2,25<br>*0.089* | 60,0<br>*2.362* | 3 | ○ | ■ |

●=Stock standard O=Available on demand (within 2 weeks)

## 335.14 Inserts

Thread profile UN - Metric






—For cutting data see page(s) 208
—Technical information, see page 197

| Designation | Pitch | | DC | CF | DCSFMS | HC | LF | PDX | PNA | ZEFP | Stock standard | Grades |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Coated |
| | mm | TPIX | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | F32M |
| R335.14-177UNNF6.09Z3 | – | 6 | 17,7<br>*0.697* | 0,53<br>*0.021* | 9,0<br>*0.354* | 2,291<br>*0.090* | 5,85<br>*0.230* | 1,65<br>*0.065* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF8.09Z3 | – | 8 | 17,7<br>*0.697* | 0,4<br>*0.016* | 9,0<br>*0.354* | 1,718<br>*0.068* | 5,85<br>*0.230* | 1,45<br>*0.057* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF10.09Z3 | – | 10 | 17,7<br>*0.697* | 0,32<br>*0.013* | 9,0<br>*0.354* | 1,375<br>*0.054* | 5,85<br>*0.230* | 1,25<br>*0.049* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF11.09Z3 | – | 11 | 17,7<br>*0.697* | 0,29<br>*0.011* | 9,0<br>*0.354* | 1,249<br>*0.049* | 5,85<br>*0.230* | 1,05<br>*0.041* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF12.09Z3 | – | 12 | 17,7<br>*0.697* | 0,27<br>*0.011* | 9,0<br>*0.354* | 1,146<br>*0.045* | 5,85<br>*0.230* | 1,05<br>*0.041* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF14.09Z3 | – | 14 | 17,7<br>*0.697* | 0,23<br>*0.009* | 9,0<br>*0.354* | 0,982<br>*0.039* | 5,85<br>*0.230* | 0,85<br>*0.033* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF16.09Z3 | – | 16 | 17,7<br>*0.697* | 0,2<br>*0.008* | 9,0<br>*0.354* | 0,859<br>*0.034* | 5,85<br>*0.230* | 0,85<br>*0.033* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF18.09Z3 | – | 18 | 17,7<br>*0.697* | 0,18<br>*0.007* | 9,0<br>*0.354* | 0,763<br>*0.030* | 5,85<br>*0.230* | 0,85<br>*0.033* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF20.09Z3 | – | 20 | 17,7<br>*0.697* | 0,16<br>*0.006* | 9,0<br>*0.354* | 0,687<br>*0.027* | 5,85<br>*0.230* | 0,65<br>*0.026* | 60,0<br>*2.362* | 3 | • | ■ |
| R335.14-177UNNF24.09Z3 | – | 24 | 17,7<br>*0.697* | 0,13<br>*0.005* | 9,0<br>*0.354* | 0,572<br>*0.023* | 5,85<br>*0.230* | 0,65<br>*0.026* | 60,0<br>*2.362* | 3 | • | ■ |

●=Stock standard O=Available on demand (within 2 weeks)



# Threadmaster™ Taps

Designed to be universal in application, the high-speed steel Threadmaster Tap effectively threads holes in a wide range of workpiece types and materials. The tool features an advanced coating technology that enables it to achieve higher cutting data and output in steel up to 350 HB, stainless steels and cast irons when compared to the uncoated solutions typically found in this product area.

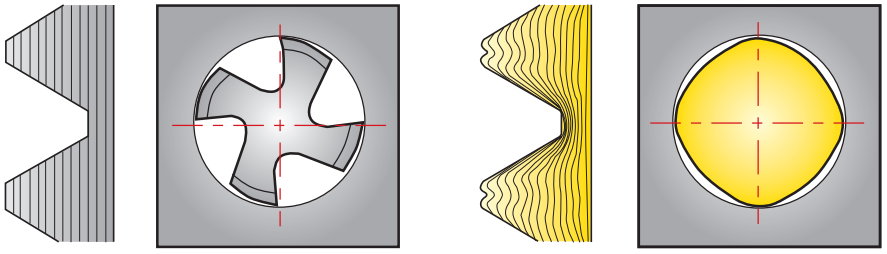
- Features spiral helixes for blind holes and spiral points for through holes.
- Straight flutes accommodate for short chipping materials.
- Advanced coatings for faster tapping.

# Introduction to taps

## What are you looking for in a thread?

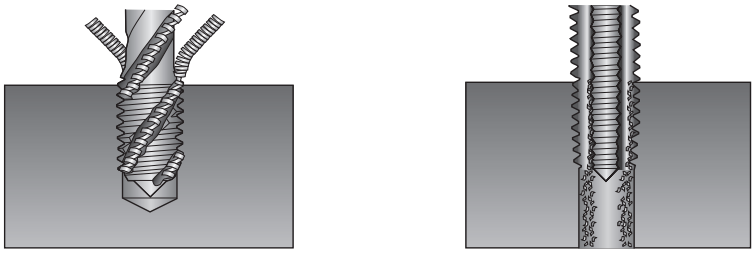
### Cutting a thread vs forming a thread

There are two way of making a thread, cutting or forming. Cutting is to be used in most materials, while forming is to be used in steel, stainless steel and aluminium.



### Through hole, blind hole

Taps have different designs. Depending on application (through or blind hole).

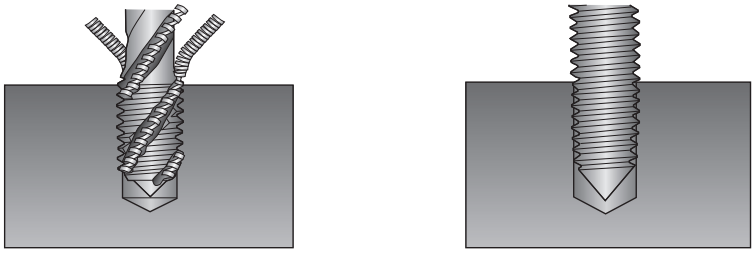


### Hole size

Dimension of the hole differs between cutting and forming the thread.

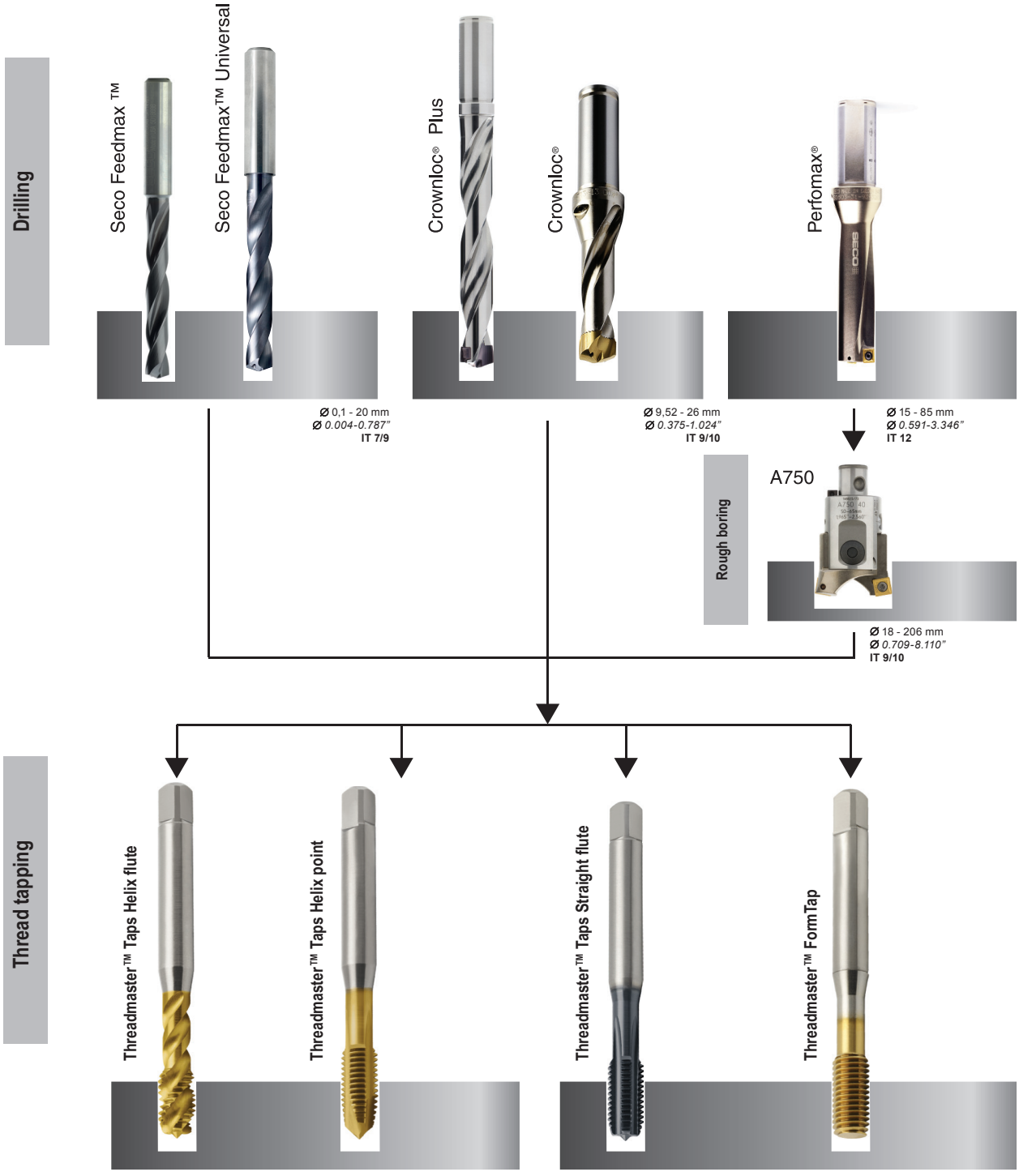
Cutting tap
D = TD-PTH

Forming tap
D = TD-PTH/2
($D = D_{nom} - 0.0068 \times PTH \times 65$)



D = Hole diameter
TD = Major thread diameter
PTH = Thread pitch

# Introduction to taps – Tool guide



## Taps – Choice of Tap tolerance

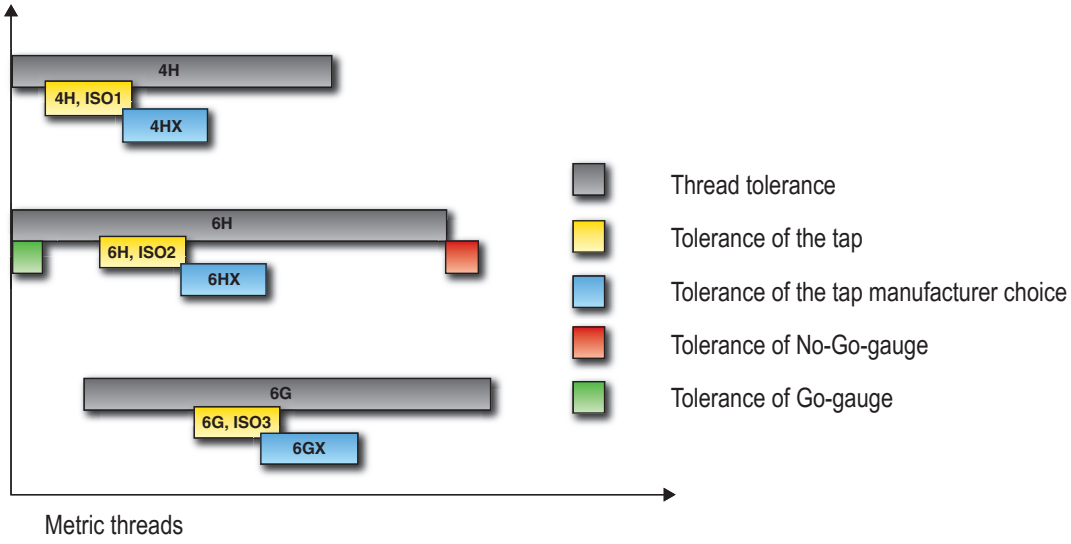
The Threadmaster™ Taps from Seco are available for threads with different tolerences 6H and 6G, as well in 6HX and 6GX.

Normal standard tolerance is H.

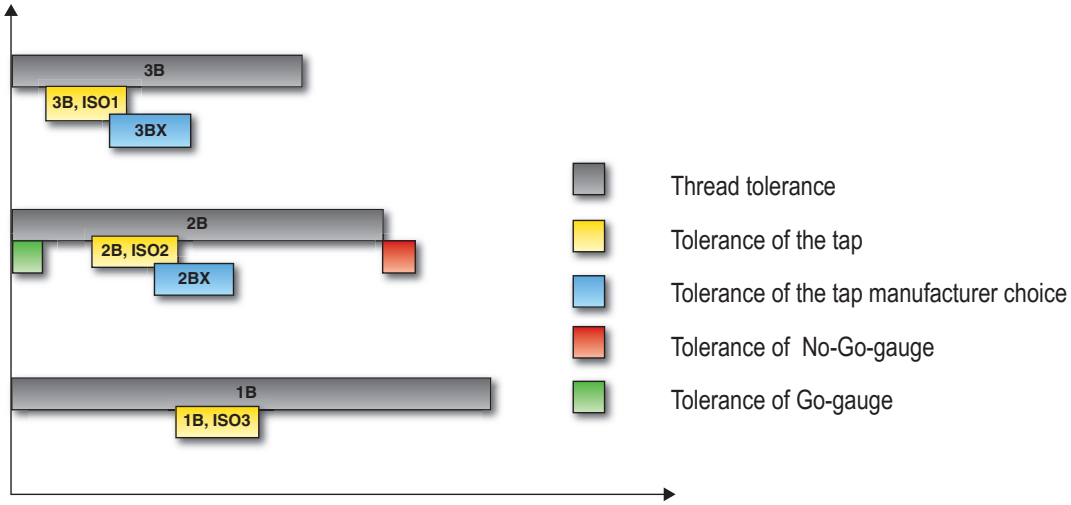
Tolerance GX/HX and BX is to be used when risk of oversize is limited, this also increases tool life of the tap.

Taps for UNC/UNF are designed for tolerance 2B.

Tolerance class for G and NPT/NPTF is normal.




Metric threads

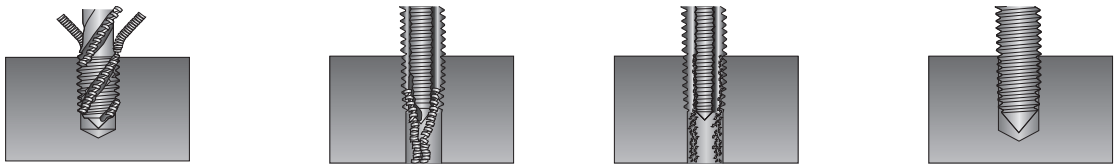



UN threads

## Code key – Taps T30, T32, T33, T34 and T35

| T35 | A | - | R | 15 | S | 01 | C | 03 | - | 6 | x | 1 | - | 65 | R | - | H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | | 10 | | 11 | 12 | | 13 |

No. 3, 4



**R40/R45**
**Blind holes**
**ULDR = 2,5**

**P**
**Through holes**
**ULDR = 3**

**S**
**Blind and through holes**
**ULDR = 1,5**

**F/FS - forming taps**
**Blind and through holes**
**ULDR = 3**

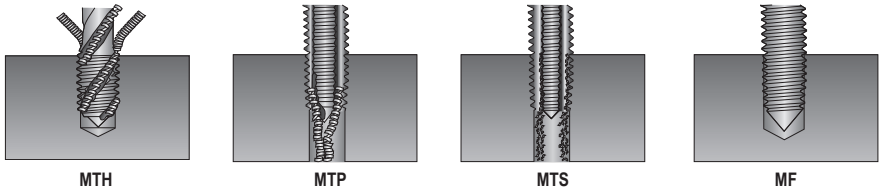
**ULDR = Usable length diameter ratio**

| Description | | | | |
|---|---|---|---|---|
| **1. Family** | T30 – General purpose HSSE taps<br>T32 – Versatile cutting taps<br>T33 – Forming taps | | T34 – High performance versatile cutting taps<br>T35 – Taps optimized for specific materials | |
| **2. Internal coolant** | [Blank] – Without coolant<br>A – Axial<br>B – Radial | | | |
| **3. Design** | P – Helix Point<br>S – Straight Flutes<br>R – Right hand spiral flutes | | L – Left hand flute<br>F – Forming tap<br>FS – Forming tap with oil grooves | |
| **4. Flute angle** | 40<br>45 | Used for Design R and L | | |
| **5. Coating** | C – TiN + TiCN<br>H – TiAlN + WC/C<br>N – TiAlN + TiN | | U – Uncoated<br>X – Vaporized<br>S – TiAlSiN | |
| **6. Thread Type** | 01 – M<br>02 – MF<br>04 – EGM - taps for Helicoil/STI threads<br>08 – UNC | | 09 – UNF<br>16 – EGUNC - taps for Helicoil/STI threads<br>17 – EGUNF - taps for Helicoil/STI threads<br>21 – G | 32 – Rp<br>33 – Rc<br>46 – NPT<br>47 – NPTF |
| **7. Type of chamfer** | B = Cutting chamfer 3,5-5 threads<br>C = Cutting chamfer 2-3 threads<br>E = Cutting chamfer 1,5-2 threads | | | |
| **8. Standard** | 03 – DIN371 - with reinforced shank<br>04 – DIN371/EL - extra-long with reinforced shank<br>05 – DIN374 - reduced shank (for fine threads)<br>06 – DIN376 - reduced shank (for coarse threads)<br>07 – DIN376/EL - extra-long with reduced shank | | 09 – DIN5156 - reduced shank (for pipe threads)<br>93 – ANSI diameters, DIN371 lengths<br>95 – ANSI diameters, DIN374 lengths<br>96 – ANSI diameters, DIN376 lengths | |
| **9. Thread size** | | | | |
| **10. Pitch** | | | | |
| **11. Tolerance** | M threads:<br>41 – 4H<br>61 – 6G<br>62 – 6GX | M threads:<br>63 – 6H<br>64 – 6H mod (for EG M)<br>65 – 6HX | For UNC and UNF threads<br>21 – 2B<br>22 – 2BX | For G threads:<br>11 – Normal<br>12 – Normal X |
| **12. Hand** | R - Right<br>L - Left | | | |
| **13. Main application area (SMG)** | | | | |

## Code key – Taps MTH, MTS, MF and MTP

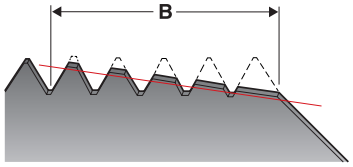
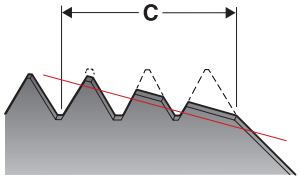
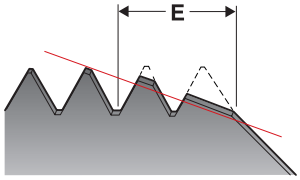
| MTS | – | M10 | x | 1.5ISO | 6H | – | B | C | – | V | 0 | 01 | – | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2 | | 3 | 4 | | 5 | 6 | | 7 | 8 | 9 | | 10 |

No. 1

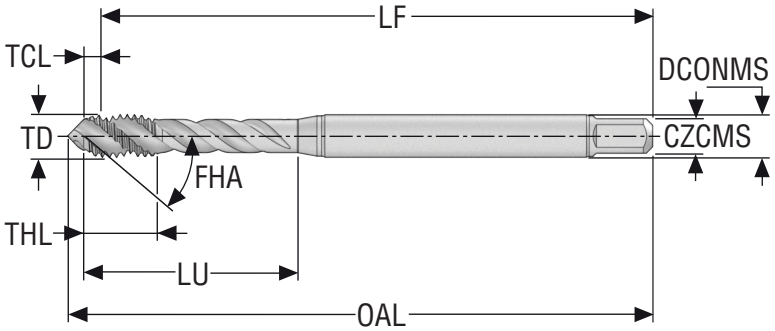



| | Description |
|---|---|
| 1 | MTH = Threadmaster™ Tap Helix flute<br>MTP = Threadmaster™ Tap Helix point<br>MTS = Threadmaster™ Tap Straight flute tap<br>MF = Threadmaster™ FormTap |
| 2 | Thread type and size |
| 3 | Pitch and thread form |
| 4 | Tolerance (tctr) 4H, 6H, 6HX, 6G, 6GX metric and 2B, 2BX, 3B, 3BX, Normal, NormalX inch |
| 5 | Operation<br>B = Blind hole<br>T = Through hole<br>X = Blind and Through hole |
| 6 | Entering Chamfer(THCHT)<br>B = Entering chamfer 3,5 - 5 threads<br>C = Entering chamfer 2 - 3 threads<br>E = Entering chamfer 1,5 - 2 threads |
| 7 | V = Versatile<br>P = Steel<br>M = Stainless Steel<br>K = Cast Iron<br>N = Non ferrous metals<br>S = Superalloys and titanium |
| 8 | Release No. = 0 ( 2014 ) |
| 9 | Tool type No. = 01, 02, 03, 04 etc |
| 10 | A = Through coolant |

# Taps – Entering chamfer THCHT

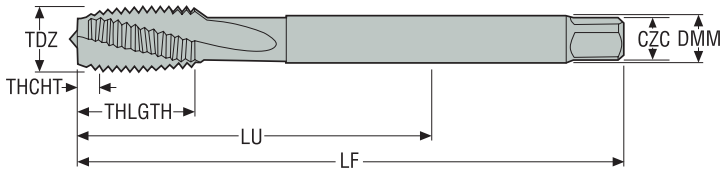
| B-type | |
|---|---|
| Length 3.5 – 5 threads<br>Low load<br>Best surface finish<br>Thin chip thickness<br>Low pressure at the chamfer<br>Long tool life<br>Most common for through holes (Helix point) |  |
| **C-type** | |
| Length 2 - 3 threads<br>Medium load<br>Good surface finish<br>Normal chip thickness<br>Normal pressure at the chamfer<br>Normal tool life<br>Most common design<br>Standard for blind holes<br>Most common for blind holes (Helix flute) |  |
| **E-type** | |
| Length 1.5 – 2 threads<br>High load<br>Good surface finish<br>Thick chip thickness<br>High pressure at the chamfer<br>Shorter tool life<br>When limited space in the bottom of a hole |  |

## Definitions for T32, T33, T34, T30 and T35




| Definitions Seco Threadmaster™ | |
|---|---|
| BSG | = Basic standard group |
| TD | = Thread diameter |
| TDZ | = Thread diameter size |
| THCHT | = Threading chamfer type |
| TCL | = Thread chamfer length |
| THL | = Thread length |
| LU | = Usable length |
| LF | = Functional length |
| OAL | = Overall length |
| FHA | = Flute Helix angle |
| DCOMS | = Connection diameter machine side |
| CZCMS | = Connection size code machine side |
| NOF | = Flute count |
| PHDR | = Recommended premachined hole diameter |
| PHDX | = Maximum premachined hole diameter |
| TCTR | = Thread tolerance class |
| TPI | = Threads per inch |
| ULDR | = Usable length diameter ratio |

# Definitions for -P, -M, -K, -N, -S, -V and MF




| Definitions Seco Threadmaster™ | |
|---|---|
| BSG | = Basic standard group |
| CZC | = Connection size code |
| DMM | = Shank diameter |
| FHA | = Flute helix angle |
| LF | = Functional length |
| LU | = Usable length |
| NOF | = Number of flutes |
| PHDR | = Recommended premachined hole diameter |
| PHDX | = Maximum premachined hole diameter |
| TCTR | = Thread tolerance class |
| TD | = Thread diameter |
| TDZ | = Thread diameter size |
| THCHT | = Thread chamfer type |
| THFT | = Thread form type ISO, Withworth, UN... |
| THLGTH | = Thread length |
| TPIX | = Threads per inch maximum |
| TTP | = Thread type internal/external/both |
| TPX | = Thread pitch maximum |
| ULDR | = Usable length diameter ratio |

## Taps - Choice of toolholder

The tool holder choice is made according to the machine spindle, with or without synchronization.

Modern CNC machine with synchronization:

The modern CNC machines can synchronize the spindle feed rate and rotation in order to make a rigid tapping operation. The TCER – tapping chucks with micro-compensation is the most suitable for synchronized tapping.

TCER Tapping chucks with micro-compensation, for synchronized tapping:

TCER for synchronized tapping has a micro-compensation system to avoid the small discrepancies and axial forces during rigid tapping machining. The taps are mounted in specific ER collets with square drive.

**Note**: These ER collets with square drive can also be mounted in ER collet chucks, but then without micro-compensation.



TCER

# Troubleshooting

## Oversized thread

**Wrong tap for application**
- Refer to application charts

**Incorrect axial feed**
- Ensure feed rate is controlled
- If possible, use tool holder for syncronized tapping

**Wrong cutting speed**
- Refer to recommendations

**Wrong tolerance**
- Choose tap with lower tolerance



## Undersized thread

**Tap worn out**
- Replace tap

**Tap drill hole too small**
- Check drilling recommendations

**Material closing after tapping**
- Increase drill diameter

**Wrong tolerance on tap**
- Choose tap with higher tolerance



## Chipping

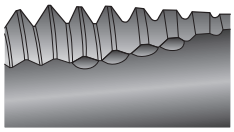
**Wrong tap for the application**
- Check for tool selection

**Incorrect or lack of lubricant**
- Use appropriate emulsion or oil

**Tap hitting bottom of hole**
- Increase drill depth or reduce thread depth

**Trapped chip**
- Check tool selection

**Surface hardening in drilled hole**
- Check drilling recommendations



## Breakage

**Too high torque**
- Use tap holder with torque settings

**Tap worn out**
- Replace tap

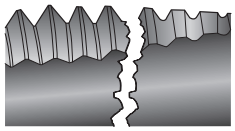
**Incorrect or lack of lubricant**
- Use appropriate emulsion or oil

**Tap hitting bottom of hole**
- Increase drill depth or reduce thread depth

**Wrong cutting speed**
- Refer to recommendations

**“Birdnest” around tool**
- Check tool selection

**Tap drill hole too small**
- Check drilling recommendations



## Rapid wear

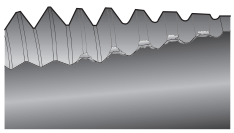
**Wrong type of tap for application**
- Refer to tap choice

**Incorrect or lack of lubricant**
- Use appropriate emulsion or oil

**Too high cutting speed**
- Refer to recommendations

**Work (surface) hardening in drilled hole**
- Check drilling recommendations
- Drill worn out

**Tap drill hole too small**
- Check drilling recommendations



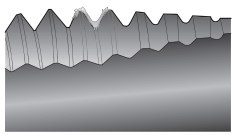
## Built-up edge

**Incorrect or lack of lubricant**
- Use appropriate emulsion or oil

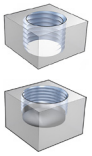
**Tap worn out**
- Replace tap

**Wrong cutting speed**
- Refer to recommendations

**Wrong type of tap for application**
- Refer to tap choice



## Taps Selection T30

| Type of tap | | T30-PUB | T30-R40UC | T30-PXB | T30-R40XC | T30-SUC |
|---|---|---|---|---|---|---|
| | |  |  |  |  |  |
| Type of hole | |  |  |  |  |  |
| Chamfer form | | B | C | B | C | C |
| Coolant | | External | External | External | External | External |
| Substrate: | | HSSE | HSSE | HSSE | HSSE | HSSE |
| ULDR | | 3 | 2,5 | 3 | 2,5 | 1,5 |
| FHA | | – | 40° | – | 40° | – |
| Page(s) | M | 276, 277 | 287, 288 | 298, 299 | 301, 302 | |
| | M 6G | 278, 278 | 289, 289 | | | |
| | MF | 279, 280, 281 | 290, 291, 292 | 300 | 303 | |
| | UNC | 282, 283 | 293, 294 | | | |
| | UNF | 284, 285 | 295, 296 | | | |
| | G | 286 | 297 | | | |
| | NPT | | | | | 304, 304 |
| | NPTF | | | | | 305 |
| | Rc | | | | | 306 |
| | Rp | | | | | 306 |

For cutting data, see next page

## Cutting data T30

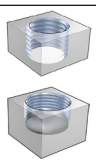
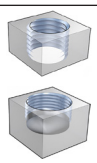
| SMG | $v_c$ | | | | |
|---|---|---|---|---|---|
| | T30-PUB | T30-R40UC | T30-PXB | T30-R40XC | T30-SUC |
| P1 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P2 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P3 | 8,6<br>*28* | 8,6<br>*28* | 8,6<br>*28* | 8,6<br>*28* | 8,6<br>*28* |
| P4 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P5 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P6 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| P7 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| P8 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| M1 | 5<br>*16* | 7<br>*23* | 5<br>*16* | 7<br>*23* | 5<br>*16* |
| M2 | 4,0<br>*13* | 5,7<br>*19* | 4,0<br>*13* | 5,7<br>*19* | 4,0<br>*13* |
| M3 | 3,1<br>*10* | 4,3<br>*14* | 3,1<br>*10* | 4,3<br>*14* | 3,1<br>*10* |
| M4 | 2,3<br>*7,5* | 3,2<br>*10* | 2,3<br>*7,5* | 3,2<br>*10* | 2,3<br>*7,5* |
| K1 | 5,0<br>*16* | —<br>— | 5,0<br>*16* | —<br>— | 5,0<br>*16* |
| K2 | 4,3<br>*14* | —<br>— | 4,3<br>*14* | —<br>— | 4,3<br>*14* |
| K3 | 3,7<br>*12* | 5,0<br>*16* | 3,7<br>*12* | 5,0<br>*16* | 3,7<br>*12* |
| K4 | 3,5<br>*11* | 4,8<br>*16* | 3,5<br>*11* | 4,8<br>*16* | 3,5<br>*11* |
| N1 | 24<br>*80* | 24<br>*80* | 24<br>*80* | 24<br>*80* | 24<br>*80* |
| N2 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| N3 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| N11 | 13<br>*43* | —<br>— | 13<br>*43* | —<br>— | 13<br>*43* |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

## Taps Selection T32 TiAlN+TiN

| Type of tap | | T32-SNC-micro | T32-SNC | T32-PNB-micro | T32-PNB | T32-PNB | T32-R40NC-micro | T32-R40NC | T32-R40NC |
|---|---|---|---|---|---|---|---|---|---|
| | | TDZ < M3 | | TDZ < M3 | | | TDZ < M3 | | |
| | |  |  |  |  |  |  |  |  |
| Type of hole | |  |  |  |  |  |  |  |  |
| Chamfer form | | C | C | B | B | B | C | C | C |
| Coolant | | External | External | External | External | External | External | External | External |
| Substrate: | | HSS-PM | HSSE | HSSE | HSSE | HSSE-PM<br>HSSE | HSS-PM | HSSE-PM<br>HSSE | HSSE |
| ULDR | | 1,5 | 1,5 | 3 | 3 | 3 | 2,5 | 2,5 | 2,5 |
| FHA | | – | – | – | – | – | 40° | 40° | 40° |
| Page(s) | M | 307, 307 | 308, 309 | 314, 314 | 315, 315 | 316, 317, 318 | 331, 331 | 332, 332 | 333, 334, 335 |
| | M 6G | | | | | 319, 319 | | | 336, 336 |
| | M LH | | 310, 310 | | | 320, 320 | | | 337, 337 |
| | MF | | 311, 312 | | | 321, 322 | | | 338, 339 |
| | UNC | | | | | 323, 324, 325 | | | 340, 341, 342 |
| | UNF | | | | | 326, 327, 328 | | | 343, 344, 345 |
| | G | | 313 | | | 329 | | | 346 |
| | EG M | | | | | | | | |
| | EG UNC | | | | | | | | |
| | EG UNF | | | | | | | | |

For cutting data, see next page

## Cutting data T32 TiAlN+TiN

| SMG | $v_c$ | | | | | |
|---|---|---|---|---|---|---|
| | T32-SNC-micro | T32-SNC | T32-PNB-micro | T32-PNB | T32-R40NC-micro | T32-R40NC |
| P1 | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* |
| P2 | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* |
| P3 | 17<br>*55* | 17<br>*55* | 17<br>*55* | 17<br>*55* | 17<br>*55* | 17<br>*55* |
| P4 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| P5 | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* |
| P6 | 16<br>*50* | 16<br>*50* | 16<br>*50* | 16<br>*50* | 16<br>*50* | 16<br>*50* |
| P7 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| P8 | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* | 14<br>*46* |
| P11 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| P12 | 8,7<br>*29* | 8,7<br>*29* | 8,7<br>*29* | 8,7<br>*29* | 8,7<br>*29* | 8,7<br>*29* |
| M1 | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* |
| M2 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| M3 | 7,6<br>*25* | 7,6<br>*25* | 7,6<br>*25* | 7,6<br>*25* | 7,6<br>*25* | 7,6<br>*25* |
| M4 | 5,7<br>*19* | 5,7<br>*19* | 5,7<br>*19* | 5,7<br>*19* | 5,7<br>*19* | 5,7<br>*19* |
| M5 | 4,8<br>*16* | 4,8<br>*16* | 4,8<br>*16* | 4,8<br>*16* | 4,8<br>*16* | 4,8<br>*16* |
| K1 | 17<br>*55* | 17<br>*55* | 17<br>*55* | 17<br>*55* | —<br>— | —<br>— |
| K2 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | —<br>— | —<br>— |
| K3 | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* |
| K4 | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* | 12<br>*39* |
| K5 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| K6 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| K7 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| N1 | 23<br>*75* | 23<br>*75* | 23<br>*75* | 23<br>*75* | 23<br>*75* | 23<br>*75* |
| N2 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| N3 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| N11 | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* |
| S1 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S2 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S3 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S11 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S12 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S13 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

# Taps Selection T32 TiAlN + WC/C

| Type of tap | | T32-PHB | T32-R40HC |
|---|---|---|---|
| | |  |  |
| Type of hole | |  |  |
| Chamfer form | | B | C |
| Coolant | | External | External |
| Substrate: | | HSSE | HSSE |
| ULDR | | 3 | 2,5 |
| FHA | | – | 40° |
| Page(s) | M | 330, 330 | 347, 347 |
| | M 6G | | |
| | M LH | | |
| | MF | | |
| | UNC | | |
| | UNF | | |
| | G | | |
| | EG M | | |
| | EG UNC | | |
| | EG UNF | | |

For cutting data, see next page

## Cutting data T32 TiAlN + WC/C

| SMG | $v_c$ | |
|---|---|---|
| | T32-PHB | T32-R40HC |
| P1 | 20<br>*65* | 20<br>*65* |
| P2 | 20<br>*65* | 20<br>*65* |
| P3 | 17<br>*55* | 17<br>*55* |
| P4 | 15<br>*49* | 15<br>*49* |
| P5 | 14<br>*46* | 14<br>*46* |
| P6 | 16<br>*50* | 16<br>*50* |
| P7 | 15<br>*49* | 15<br>*49* |
| P8 | 14<br>*46* | 14<br>*46* |
| P11 | 15<br>*49* | 15<br>*49* |
| P12 | 8,7<br>*29* | 7,5<br>*25* |
| M1 | 12<br>*39* | 12<br>*39* |
| M2 | 10<br>*33* | 10<br>*33* |
| M3 | 7,6<br>*25* | 7,6<br>*25* |
| M4 | 5,7<br>*19* | 5,7<br>*19* |
| M5 | 4,8<br>*16* | 4,8<br>*16* |
| K1 | 17<br>*55* | 17<br>*55* |
| K2 | 15<br>*49* | 15<br>*49* |
| K3 | 13<br>*43* | 13<br>*43* |
| K4 | 12<br>*39* | 12<br>*39* |
| N1 | 23<br>*75* | 23<br>*75* |
| N2 | 15<br>*49* | 15<br>*49* |
| N3 | 10<br>*33* | 10<br>*33* |
| N11 | 13<br>*43* | 13<br>*43* |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

## Taps Selection T34 TiAlN + WC/C

| Type of tap | | T34-PHB-micro | T34-PHB | T34B-PHB | T34-R45HC-micro | T34-R45HC | T34A-R45HC | T34-R45HE | T34A-R45HE |
|---|---|---|---|---|---|---|---|---|---|
| | | TDZ < M3 | | | TDZ < M3 | | | | |
| | |  |  |  |  |  |  |  |  |
| Type of hole | |  |  |  |  |  |  |  |  |
| Chamfer form | | B | B | B | C | C | C | E | E |
| Coolant | | External | External | Internal | External | External | Internal | External | Internal |
| Substrate: | | HSS-PM | HSSE-PM | HSSE-PM | HSS-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM |
| ULDR | | 3 | 3 | 3 | 2,5 | 2,5 | 2,5 | 2,5 | 2,5 |
| FHA | | – | – | – | 45° | 45° | 45° | 45° | 45° |
| Page(s) | M | 348, 348 | 349, 350, 351 | 352, 352 | 365, 365 | 366, 367, 368 | 369, 369 | 378, 378 | |
| | M 6G | | | | | | | | |
| | M LH | | | | | | | | |
| | MF | | 353, 354 | 355, 355 | | 370, 371 | 372, 372 | 379, 379 | 380 |
| | UNC | | 356, 356, 357 | | | 373, 373, 374 | | | |
| | UNF | | 358, 358, 359 | | | 375, 375, 376 | | | |
| | G | | 363 | | | 377 | | | |
| | EG M | | 360, 360 | | | | | 381, 381 | |
| | EG UNC | | 361, 361 | | | | | 382, 382 | |
| | EG UNF | | 362, 362 | | | | | 383, 383 | |

For cutting data, see next page

## Cutting data T34 TiAlN + WC/C

| SMG | $v_c$ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | T34-PHB-micro | T34-PHB | T34B-PHB | T34-R45HC-micro | T34-R45HC | T34A-R45HC | T34-R45HE | T34A-R45HE |
| P1 | 28<br>*90* | 28<br>*90* | 43<br>*140* | 28<br>*90* | 28<br>*90* | 43<br>*140* | 28<br>*90* | 43<br>*140* |
| P2 | 28<br>*90* | 28<br>*90* | 41<br>*135* | 28<br>*90* | 28<br>*90* | 41<br>*135* | 28<br>*90* | 41<br>*135* |
| P3 | 24<br>*80* | 24<br>*80* | 36<br>*120* | 24<br>*80* | 24<br>*80* | 36<br>*120* | 24<br>*80* | 36<br>*120* |
| P4 | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 31<br>*100* |
| P5 | 20<br>*65* | 20<br>*65* | 30<br>*100* | 20<br>*65* | 20<br>*65* | 30<br>*100* | 20<br>*65* | 30<br>*100* |
| P6 | 22<br>*70* | 22<br>*70* | 34<br>*110* | 22<br>*70* | 22<br>*70* | 34<br>*110* | 22<br>*70* | 34<br>*110* |
| P7 | 21<br>*70* | 21<br>*70* | 32<br>*105* | 21<br>*70* | 21<br>*70* | 32<br>*105* | 21<br>*70* | 32<br>*105* |
| P8 | 20<br>*65* | 20<br>*65* | 30<br>*100* | 20<br>*65* | 20<br>*65* | 30<br>*100* | 20<br>*65* | 30<br>*100* |
| P11 | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 31<br>*100* |
| P12 | 12<br>*39* | 12<br>*39* | 18<br>*60* | 12<br>*39* | 12<br>*39* | 18<br>*60* | 12<br>*39* | 18<br>*60* |
| M1 | 15<br>*49* | 15<br>*49* | 21<br>*70* | 15<br>*49* | 15<br>*49* | 21<br>*70* | 15<br>*49* | 21<br>*70* |
| M2 | 12<br>*39* | 12<br>*39* | 17<br>*55* | 12<br>*39* | 12<br>*39* | 17<br>*55* | 12<br>*39* | 17<br>*55* |
| M3 | 9,1<br>*30* | 9,1<br>*30* | 13<br>*43* | 9,1<br>*30* | 9,1<br>*30* | 13<br>*43* | 9,1<br>*30* | 13<br>*43* |
| M4 | 6,9<br>*23* | 6,9<br>*23* | 9,7<br>*32* | 6,9<br>*23* | 6,9<br>*23* | 9,7<br>*32* | 6,9<br>*23* | 9,7<br>*32* |
| M5 | 5,7<br>*19* | 5,7<br>*19* | 8,1<br>*27* | 5,7<br>*19* | 5,7<br>*19* | 8,1<br>*27* | 5,7<br>*19* | 8,1<br>*27* |
| K1 | 24<br>*80* | 24<br>*80* | 36<br>*120* | 24<br>*80* | 24<br>*80* | 36<br>*120* | 24<br>*80* | 36<br>*120* |
| K2 | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 21<br>*70* | 31<br>*100* | 21<br>*70* | 31<br>*100* |
| K3 | 18<br>*60* | 18<br>*60* | 26<br>*85* | 18<br>*60* | 18<br>*60* | 26<br>*85* | 18<br>*60* | 26<br>*85* |
| K4 | 17<br>*55* | 17<br>*55* | 25<br>*80* | 17<br>*55* | 17<br>*55* | 25<br>*80* | 17<br>*55* | 25<br>*80* |
| K5 | —<br>— | 10<br>*33* | 15<br>*49* | —<br>— | 10<br>*33* | 15<br>*49* | 10<br>*33* | 15<br>*49* |
| K6 | 15<br>*49* | 15<br>*49* | 22<br>*70* | 15<br>*49* | 15<br>*49* | 22<br>*70* | 15<br>*49* | 22<br>*70* |
| K7 | 13<br>*43* | 13<br>*43* | 19<br>*60* | 13<br>*43* | 13<br>*43* | 19<br>*60* | 13<br>*43* | 19<br>*60* |
| N1 | 26<br>*85* | 26<br>*85* | 39<br>*130* | 26<br>*85* | 26<br>*85* | 39<br>*130* | 26<br>*85* | 39<br>*130* |
| N2 | 17<br>*55* | 17<br>*55* | 25<br>*80* | 17<br>*55* | 17<br>*55* | 25<br>*80* | 17<br>*55* | 25<br>*80* |
| N3 | 11<br>*36* | 11<br>*36* | 17<br>*55* | 11<br>*36* | 11<br>*36* | 17<br>*55* | 11<br>*36* | 17<br>*55* |
| N11 | 15<br>*49* | 15<br>*49* | 22<br>*70* | 15<br>*49* | 15<br>*49* | 22<br>*70* | 15<br>*49* | 22<br>*70* |
| S1 | —<br>— | 4,0<br>*13* | 4,0<br>*13* | —<br>— | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* |
| S2 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S3 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S11 | —<br>— | 4,0<br>*13* | 4,0<br>*13* | —<br>— | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* |
| S12 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |
| S13 | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— | —<br>— |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

# Taps Selection T34 TiCN

| Type of tap | | T34-PCB | T34-R45CC |
|---|---|---|---|
| | |  |  |
| Type of hole | |  |  |
| Chamfer form | | B | C |
| Coolant | | External | External |
| Substrate: | | HSSE-PM | HSSE-PM |
| ULDR | | 2,5 | 3 |
| FHA | | – | 45° |
| Page(s) | M | 364, 364 | 384, 384 |
| | M 6G | | |
| | M LH | | |
| | MF | | |
| | UNC | | |
| | UNF | | |
| | G | | |
| | EG M | | |
| | EG UNC | | |
| | EG UNF | | |

For cutting data, see next page

## Cutting data T34 TiCN

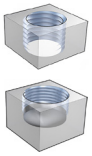
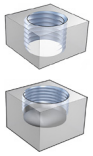
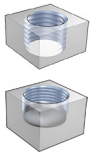
| SMG | $v_c$ | |
|---|---|---|
| | T34-PCB | T34-R45CC |
| P1 | 28<br>*90* | 28<br>*90* |
| P2 | 28<br>*90* | 28<br>*90* |
| P3 | 24<br>*80* | 24<br>*80* |
| P4 | 21<br>*70* | 21<br>*70* |
| P5 | 20<br>*65* | 20<br>*65* |
| P6 | 22<br>*70* | 22<br>*70* |
| P7 | 21<br>*70* | 21<br>*70* |
| P8 | 20<br>*65* | 20<br>*65* |
| P11 | 21<br>*70* | 21<br>*70* |
| P12 | 12<br>*39* | 12<br>*39* |
| M1 | 12<br>*39* | 12<br>*39* |
| M2 | 10<br>*33* | 10<br>*33* |
| M3 | 7,6<br>*25* | 7,6<br>*25* |
| M4 | 5,7<br>*19* | 5,7<br>*19* |
| M5 | 4,8<br>*16* | 4,8<br>*16* |
| K1 | 24<br>*80* | 24<br>*80* |
| K2 | 21<br>*70* | 21<br>*70* |
| K3 | 18<br>*60* | 18<br>*60* |
| K4 | 17<br>*55* | 17<br>*55* |
| K5 | 10<br>*33* | 10<br>*33* |
| N1 | 26<br>*85* | 26<br>*85* |
| N2 | 17<br>*55* | 17<br>*55* |
| N3 | 11<br>*36* | 11<br>*36* |
| N11 | 15<br>*49* | 15<br>*49* |
| S1 | 4,0<br>*13* | 4,0<br>*13* |
| S11 | 4<br>*13* | 4<br>*13* |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

## Taps Selection T35-P, K, N

| Type of tap | | T35-PSB-P | T35-R40SC-P | T35-SSC-K | T35-SSE-K | T35A-SSC-K | T35A-SSE-K | T35B-SSE-K | T35-R45UC-N |
|---|---|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |  |  |
| Type of hole | |  |  |  |  |  |  |  |  |
| Chamfer form | | B | C | C | E | C | E | E | C |
| Coolant | | External | External | External | External | Internal | Internal | Internal | External |
| Substrate: | | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM<br>HSSE |
| ULDR | | 3 | 2,5 | 2 | 2 | 2,5 | 2,5 | 2,5 | 2,5 |
| FHA | | – | 40° | – | – | – | – | – | 45° |
| Page(s) | M | 385, 386 | 388, 389 | 391, 391 | 395, 395 | 392, 392 | 396, 396 | 397 | 401, 401 |
| | M 6G | | | | | | | | |
| | M LH | | | | | | | | |
| | MF | 387, 387 | 390, 390 | 393, 394 | 398, 398 | | 399 | 400 | |
| | UNC | | | | | | | | |
| | UNF | | | | | | | | |
| | G | | | | | | | | |
| | EG M | | | | | | | | |
| | EG UNC | | | | | | | | |
| | EG UNF | | | | | | | | |

For cutting data, see next page

## Cutting data T35-P, K, N

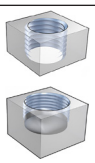
| SMG | $v_c$ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | T35-PSB-P | T35-R40SC-P | T35-SSC-K | T35-SSE-K | T35A-SSC-K | T35A-SSE-K | T35B-SSE-K | T35-R45UC-N |
| P1 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P2 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P3 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P4 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P5 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P6 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P7 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P8 | 25 | 25 | – | – | – | – | – | – |
| | *80* | *80* | – | – | – | – | – | – |
| P11 | 10 | 10 | – | – | – | – | – | – |
| | *33* | *33* | – | – | – | – | – | – |
| P12 | 10 | 10 | – | – | – | – | – | – |
| | *33* | *33* | – | – | – | – | – | – |
| M3 | 10 | 10 | – | – | – | – | – | – |
| | *33* | *33* | – | – | – | – | – | – |
| M4 | 10 | 10 | – | – | – | – | – | – |
| | *33* | *33* | – | – | – | – | – | – |
| K1 | 10 | 10 | 30 | 30 | 30 | 30 | 30 | – |
| | *33* | *33* | *100* | *100* | *100* | *100* | *100* | – |
| K2 | 10 | 10 | 20 | 20 | 20 | 20 | 20 | – |
| | *33* | *33* | *65* | *65* | *65* | *65* | *65* | – |
| K3 | 15 | 15 | 17 | 17 | 17 | 17 | 17 | – |
| | *49* | *49* | *55* | *55* | *55* | *55* | *55* | – |
| K4 | 49 | 49 | 16 | 16 | 16 | 16 | 16 | – |
| | *15* | *15* | *50* | *50* | *50* | *50* | *50* | – |
| K5 | – | – | 7 | 7 | 7 | 7 | 7 | – |
| | – | – | *23* | *23* | *23* | *23* | *23* | – |
| K6 | – | – | 14 | 14 | 14 | 14 | 14 | – |
| | – | – | *46* | *46* | *46* | *46* | *46* | – |
| K7 | – | – | 9 | 9 | 9 | 9 | 9 | – |
| | – | – | *30* | *30* | *30* | *30* | *30* | – |
| N1 | 20 | 20 | – | – | – | – | – | 15 |
| | *65* | *65* | – | – | – | – | – | *49* |
| N2 | 20 | 20 | – | – | – | – | – | – |
| | *65* | *65* | – | – | – | – | – | – |
| N3 | 20 | 20 | – | – | – | – | – | – |
| | *65* | *65* | – | – | – | – | – | – |
| N11 | 20 | 20 | – | – | – | – | – | – |
| | *65* | *65* | – | – | – | – | – | – |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

# Taps Selection T35-H

| Type of tap | | T35-SSC-H | T35-PSB-H | T35-R15SC-H | T35A-R15SC-H |
|---|---|---|---|---|---|
| | |  |  |  |  |
| Type of hole | |  |  |  |  |
| Chamfer form | | C | B | C | C |
| Coolant | | External | External | External | Internal |
| Substrate: | | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM |
| ULDR | | 1,5xD | 2,5xD | 1,5xD | 1,5xD |
| FHA | | – | – | 15° | 15° |
| Page(s) | M | 402, 402 | 403, 403 | 404, 404 | 405, 405 |
| | M 6G | | | | |
| | M LH | | | | |
| | MF | | | 406 | 407 |
| | UNC | | | | |
| | UNF | | | | |
| | G | | | | |
| | EG M | | | | |
| | EG UNC | | | | |
| | EG UNF | | | | |

For cutting data, see next page

## Cutting data T35-H

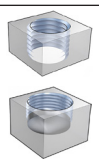
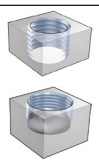
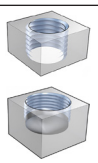
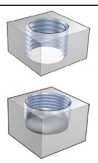
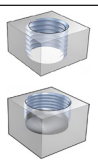
| SMG | $v_c$ | | | |
|---|---|---|---|---|
| | T35-SSC-H | T35-PSB-H | T35-R15SC-H | T35A-R15SC-H |
| P4 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P5 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| P6 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| P7 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| P8 | 10<br>*33* | 10<br>*33* | 10<br>*33* | 10<br>*33* |
| M4 | 7,0<br>*23* | 7,0<br>*23* | 7,0<br>*23* | 7,0<br>*23* |
| M5 | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* | 4,0<br>*13* |
| K1 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| K3 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| K4 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| K5 | 3,0<br>*9.8* | 5,0<br>*16* | 5,0<br>*16* | 5,0<br>*16* |
| N1 | 31<br>*100* | 31<br>*100* | 31<br>*100* | 31<br>*100* |
| N2 | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* |
| N3 | 13<br>*43* | 13<br>*43* | 13<br>*43* | 13<br>*43* |
| H5 | 7,0<br>*23* | 15<br>*49* | 7,0<br>*23* | 7,0<br>*23* |
| H8 | 7,0<br>*23* | 15<br>*49* | 7,0<br>*23* | 7,0<br>*23* |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

## Taps Selection T33

| Type of tap | | T33-FNC | T33-FSNC | T33-FSCC | T33-FSCE | T33B-FSCE/FSCC | T33A-FSCE |
|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| Type of hole | |  |  |  |  |  |  |
| Chamfer form | | C | C | C | E | E/C | E |
| Coolant | | External | External | External | External | Internal | Internal |
| Substrate: | | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM | HSSE-PM |
| ULDR | | 3 | 3 | 3 | 3 | 3 | 3 |
| Page(s) | M | 408, 408 | 409, 409 | 415 | 415 | 416, 417 | 416 |
| | M 6G | | 410, 410 | | | | |
| | M LH | | | | | | |
| | MF | | 411, 411 | 418, 419 | | 419 | |
| | UNC | | 412, 412 | | | | |
| | UNF | | 413, 413 | | | | |
| | G | | 414 | | | | |
| | EG M | | | | | | |
| | EG UNC | | | | | | |
| | EG UNF | | | | | | |

For cutting data, see next page

## Cutting data T33

| SMG | $v_c$ | | | | | |
|---|---|---|---|---|---|---|
| | T33-FNC | T33-FSNC | T33-FSCC | T33-FSCE | T33B-FSCE/FSCC | T33A-FSCE |
| P1 | 21<br>*70* | 21<br>*70* | 21<br>*70* | 21<br>*70* | 28<br>*90* | 28<br>*90* |
| P2 | 21<br>*70* | 21<br>*70* | 21<br>*70* | 21<br>*70* | 28<br>*90* | 28<br>*90* |
| P3 | 18<br>*60* | 18<br>*60* | 18<br>*60* | 18<br>*60* | 24<br>*80* | 24<br>*80* |
| P4 | 16<br>*50* | 16<br>*50* | 16<br>*50* | 16<br>*50* | 21<br>*70* | 21<br>*70* |
| P5 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 20<br>*65* | 20<br>*65* |
| P6 | 17<br>*55* | 17<br>*55* | 17<br>*55* | 17<br>*55* | 22<br>*70* | 22<br>*70* |
| P7 | 16<br>*50* | 16<br>*50* | 16<br>*50* | 16<br>*50* | 21<br>*70* | 21<br>*70* |
| P8 | — | — | — | — | — | — |
| P11 | — | — | — | — | — | — |
| P12 | — | — | — | — | — | — |
| M1 | 19<br>*60* | 19<br>*60* | 19<br>*60* | 19<br>*60* | 19<br>*60* | 19<br>*60* |
| M2 | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* | 15<br>*49* |
| M3 | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* | 11<br>*36* |
| M4 | —<br>— | —<br>— | 8,6<br>*28* | 8,6<br>*28* | 8,6<br>*28* | 8,6<br>*28* |
| M5 | — | — | — | — | — | — |
| K1 | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — |
| N1 | 31<br>*100* | 31<br>*100* | 47<br>*155* | 47<br>*155* | 47<br>*155* | 47<br>*155* |
| N2 | 20<br>*65* | 20<br>*65* | 30<br>*100* | 30<br>*100* | 30<br>*100* | 30<br>*100* |
| N3 | —<br>— | —<br>— | 20<br>*65* | 20<br>*65* | 20<br>*65* | 20<br>*65* |
| N11 | —<br>— | —<br>— | 27<br>*90* | 27<br>*90* | 27<br>*90* | 27<br>*90* |
| S1 | — | — | — | — | — | — |
| S2 | — | — | — | — | — | — |
| S3 | — | — | — | — | — | — |
| S11 | — | — | — | — | — | — |
| S12 | — | — | — | — | — | — |
| S13 | — | — | — | — | — | — |

SMG = Seco material group
$v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value.

For more detailed information on cuttingdata, please visit MyPages or Seco Suggest on secotools.com

# Taps Selection MTH-P003 – MTH-P011

| Tool type | MTH-P003 | MTH-P003-A | MTH-P004 | MTH-P004-A | MTH-P011 |
|---|---|---|---|---|---|
| Thread type | M | M | M | M | MF |
| TCTR | 6HX | 6HX | 6HX | 6HX | 6HX |
| ULDR | 3 | 3 | 3 | 3 | 3 |
| THCHT | C | C | C | C | C |
| BSG | DIN371 | DIN371 | DIN376 | DIN376 | DIN374 |
| Thread size | M1.6 - M10 | M4 - M10 | M5 - M30 | M12 - M30 | MF 4X0.5 - MF 30X2.0 |
| FHA | 48° | 48° | 48° | 48° | 48° |
| |  |  |  |  |  |
| Coolant | No | Yes | No | Yes | No |
| Page(s) | 436 | 437 | 438 | 439 | 440, 441 |

For cutting data, see next page

## Cutting data MTH-P003 – P011

| SMG | MTH- P003 | MTH- P003-A | MTH- P004 | MTH- P004-A | MTH- P011 |
|---|---|---|---|---|---|
| P1 | 55<br>*180* | 55<br>*180* | 55<br>*180* | 55<br>*180* | 55<br>*180* |
| P2 | 55<br>*180* | 55<br>*180* | 55<br>*180* | 55<br>*180* | 55<br>*180* |
| P3 | 45<br>*150* | 45<br>*150* | 45<br>*150* | 45<br>*150* | 45<br>*150* |
| P4 | 40<br>*130* | 40<br>*130* | 40<br>*130* | 40<br>*130* | 40<br>*130* |
| P5 | 38<br>*125* | 38<br>*125* | 38<br>*125* | 38<br>*125* | 38<br>*125* |
| P6 | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* |
| P7 | 40<br>*130* | 40<br>*130* | 40<br>*130* | 40<br>*130* | 40<br>*130* |
| P8 | 38<br>*125* | 38<br>*125* | 38<br>*125* | 38<br>*125* | 38<br>*125* |
| P11 | 39<br>*130* | 39<br>*130* | 39<br>*130* | 39<br>*130* | 39<br>*130* |
| P12 | 23<br>*75* | 23<br>*75* | 23<br>*75* | 23<br>*75* | 23<br>*75* |
| M1 | — | — | — | — | — |
| M2 | — | — | — | — | — |
| M3 | — | — | — | — | — |
| M4 | — | — | — | — | — |
| M5 | — | — | — | — | — |
| K1 | — | — | — | — | — |
| K2 | — | — | — | — | — |
| K3 | — | — | — | — | — |
| K4 | — | — | — | — | — |
| K5 | — | — | — | — | — |
| K6 | — | — | — | — | — |
| K7 | — | — | — | — | — |
| N1 | — | — | — | — | — |
| N2 | — | — | — | — | — |
| N3 | — | — | — | — | — |
| N11 | — | — | — | — | — |
| H5 | — | — | — | — | — |
| H8 | — | — | — | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

When running in 1,5xD increse speed by 20% and at 2,5 x D reduce speed by 20%. At 3 x D reduce by 30%. Due to machine, material and setup condition it is advisable also to optimize cutting data.

Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTP-P003 – MTP-P011

| Tool type | MTP-P003 | MTP-P003-A | MTP-P004 | MTP-P004-A | MTP-P011 |
|---|---|---|---|---|---|
| **Thread type** | M | M | M | M | MF |
| **TCTR** | 5HX/6HX | 6HX | 6HX | 6HX | 6HX |
| **ULDR** | 3 | 3 | 3 | 3 | 3 |
| **THCHT** | B | B | B | B | B |
| **BSG** | DIN371 | DIN371 | DIN376 | DIN376 | DIN374 |
| **Thread size** | M1 - M10 | M4 - M10 | M4 - M30 | M12 - M30 | MF 4X0.5 - MF 30X2.0 |
| |  |  |  |  |  |
| **Coolant** | No | Yes | No | Yes | No |
| **Page(s)** | 420 | 421 | 422 | 423 | 424, 425 |

For cutting data, see next page

## Cutting data MTP-P003 – P011

| SMG | MTP- P003 | MTP- P003-A | MTP- P004 | MTP- P004-A | MTP- P011 |
|---|---|---|---|---|---|
| P1 | 60<br>*195* | 60<br>*195* | 60<br>*195* | 60<br>*195* | 60<br>*195* |
| P2 | 60<br>*195* | 60<br>*195* | 60<br>*195* | 60<br>*195* | 60<br>*195* |
| P3 | 50<br>*165* | 50<br>*165* | 50<br>*165* | 50<br>*165* | 50<br>*165* |
| P4 | 45<br>*150* | 45<br>*150* | 45<br>*150* | 45<br>*150* | 45<br>*150* |
| P5 | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* |
| P6 | 48<br>*155* | 48<br>*155* | 48<br>*155* | 48<br>*155* | 48<br>*155* |
| P7 | 46<br>*150* | 46<br>*150* | 46<br>*150* | 46<br>*150* | 46<br>*150* |
| P8 | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* | 43<br>*140* |
| P11 | 44<br>*145* | 44<br>*145* | 44<br>*145* | 44<br>*145* | 44<br>*145* |
| P12 | 26<br>*85* | 26<br>*85* | 26<br>*85* | 26<br>*85* | 26<br>*85* |
| M1 | — | — | — | — | — |
| M2 | — | — | — | — | — |
| M3 | — | — | — | — | — |
| M4 | — | — | — | — | — |
| M5 | — | — | — | — | — |
| K1 | — | — | — | — | — |
| K2 | — | — | — | — | — |
| K3 | — | — | — | — | — |
| K4 | — | — | — | — | — |
| K5 | — | — | — | — | — |
| K6 | — | — | — | — | — |
| K7 | — | — | — | — | — |
| N1 | — | — | — | — | — |
| N2 | — | — | — | — | — |
| N3 | — | — | — | — | — |
| N11 | — | — | — | — | — |
| H5 | — | — | — | — | — |
| H8 | — | — | — | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

When running in 1,5xD increse speed by 20% and at 2,5 x D reduce speed by 20%. At 3 x D reduce by 30%. Due to machine, material and setup condition it is advisable also to optimize cutting data.

Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTH-M003 – MTP-M004

| Tool type | MTH-M003 | MTH-M003-A | MTH-M004 | MTH-M004-A | MTP-M003-A | MTP-M004 | MTP-M004-A |
|---|---|---|---|---|---|---|---|
| Thread type | M | M | M | M | M | M | M |
| TCTR | 6H | 6H | 6H | 6H | 6H | 6H | 6H |
| ULDR | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| THCHT | C | C | C | C | B | B | B |
| BSG | DIN371 | DIN371 | DIN376 | DIN376 | DIN371 | DIN376 | DIN376 |
| Thread size | M1.6 - M10 | M4 - M10 | M12 - M20 | M12 - M20 | M4 - M10 | M12 - M20 | M12 - M24 |
| FHA | 48° | 48° | 48° | 48° | – | – | – |
| |  |  |  |  |  |  |  |
| Coolant | No | Yes | No | Yes | Yes | No | Yes |
| Page(s) | 442 | 443 | 444 | 444 | 426 | 427 | 427 |

For cutting data, see next page

## Cutting data MTH-M003 – M004

| SMG | $v_c$ | | | | | | |
|---|---|---|---|---|---|---|---|
| | MTH- M003 | MTH- M003-A | MTH- M004 | MTH- M004-A | MTP- M003-A | MTP- M004 | MTP- M004-A |
| P1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P6 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P7 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P8 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P11 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P12 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| M1 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | *39* | *39* | *39* | *39* | *39* | *39* | *39* |
| M2 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | *33* | *33* | *33* | *33* | *33* | *33* | *33* |
| M3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | *26* | *26* | *26* | *26* | *26* | *26* | *26* |
| M4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | *20* | *20* | *20* | *20* | *20* | *20* | *20* |
| M5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | *16* | *16* | *16* | *16* | *16* | *16* | *16* |
| K1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N11 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| H5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |

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Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

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Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTH-N001 – MTP-N002

| Tool type | MTH-N001 | MTH-N002 | MTP-N001 | MTP-N001-A | MTP-N002 | MTP-N002-A |
|---|---|---|---|---|---|---|
| Thread type | M | M | M | M | M | M |
| TCTR | 6H | 6H | 6H | 6H | 6H | 6H |
| ULDR | 1.5 | 1.5 | 3 | 3 | 3 | 3 |
| THCHT | C | C | B | B | B | B |
| BSG | DIN371 | DIN376 | DIN371 | DIN371 | DIN376 | DIN376 |
| Thread size | M3 - M10 | M12 - M16 | M3 - M10 | M4 - M10 | M12 - M16 | M12 - M16 |
| FHA | 15° | 15° | – | – | – | – |
| |  |  |  |  |  |  |
| Coolant | No | No | No | Yes | No | Yes |
| Page(s) | 445 | 445 | 428 | 428 | 429 | 429 |

For cutting data, see next page

## Cutting data MTH-N001 – N002

| SMG | $v_c$ | | | | | |
|---|---|---|---|---|---|---|
| | MTH- N001 | MTH- N002 | MTP- N001 | MTP- N001-A | MTP- N002 | MTP- N002-A |
| P1 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P6 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P7 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P8 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P11 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| P12 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| M1 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| M2 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| M3 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| M4 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| M5 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K1 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| N1 | 55 | 55 | 55 | 55 | 55 | 55 |
| | *180* | *180* | *180* | *180* | *180* | *180* |
| N2 | 35 | 35 | 35 | 35 | 35 | 35 |
| | *115* | *115* | *115* | *115* | *115* | *115* |
| N3 | 23 | 23 | 23 | 23 | 23 | 23 |
| | *75* | *75* | *75* | *75* | *75* | *75* |
| N11 | 31 | 31 | 31 | 31 | 31 | 31 |
| | *100* | *100* | *100* | *100* | *100* | *100* |
| H5 | — | — | — | — | — | — |
| | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — |
| | — | — | — | — | — | — |

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Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

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Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTH-S001 – MTH-S032

| Tool type | MTH-S001 | MTH-S002 | MTH-S003 | MTH-S004 | MTH-S011 | MTH-S012 | MTH-S031 | MTH-S032 |
|---|---|---|---|---|---|---|---|---|
| Thread type | M | M | M | M | MF | MJ | UNC | UNJC |
| TCTR | 6HX | 6HX | 6HX | 6HX | 6HX | 4H | 2B | 3B |
| ULDR | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| THCHT | C | C | C | C | C | C | C | C |
| BSG | DIN371 | DIN371 | DIN371 | DIN371 | DIN371 | DIN371 | DIN2184-1 | DIN2184-1 |
| Thread size | M3-M10 | M12-M16 | M3-M10 | M12-M16 | MF8X1-MF12X1,5 | MJ3-MJ6 | UNC2-56-UNC3/8-16 | UNJC4-40-UNJC3/8-16 |
| FHA | 10° | 10° | 10° | 10° | 10° | 10° | 25° | 10° |
| |  |  |  |  |  |  |  |  |
| Coolant | No | No | No | No | No | No | No | No |
| Page(s) | 446 | 446 | 447 | 447 | 448 | 449 | 450 | 451 |

For cutting data, see next page

## Cutting data MTH-S001 – S032

| SMG | $v_c$ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | MTH-S001 | MTH-S002 | MTH-S003 | MTH-S004 | MTH-S011 | MTH-S012 | MTH-S031 | MTH-S032 |
| P1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P6 | 3 | 3 | 7 | 7 | 3 | 3 | 3 | 3 |
| | *10* | *10* | *23* | *23* | *10* | *10* | *10* | *10* |
| P7 | 3 | 3 | 7 | 7 | 3 | 3 | 3 | 3 |
| | *10* | *10* | *23* | *23* | *10* | *10* | *10* | *10* |
| P8 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P11 | 3 | 3 | 6 | 6 | 3 | 3 | 3 | 3 |
| | *10* | *10* | *20* | *20* | *10* | *10* | *10* | *10* |
| P12 | 2 | 2 | 4 | 4 | 2 | 2 | 2 | 2 |
| | *7* | *7* | *13* | *13* | *7* | *7* | *7* | *7* |
| M1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M4 | — | — | — | — | — | — | 2 | — |
| | — | — | — | — | — | — | *7* | — |
| M5 | — | — | — | — | — | — | 2 | — |
| | — | — | — | — | — | — | *7* | — |
| K1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N3 | 16 | 16 | 25 | 25 | 16 | 16 | — | 16 |
| | *50* | *50* | *80* | *80* | *50* | *50* | — | *50* |
| N11 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| S1 | 2 | 2 | 4 | 4 | 2 | 2 | 2 | 2 |
| | *7* | *7* | *13* | *13* | *7* | *7* | *7* | *7* |
| S2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 |
| | *7* | *7* | *10* | *10* | *7* | *7* | *7* | *7* |
| S3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 |
| | 7 | 7 | *10* | *10* | 7 | 7 | 7 | 7 |
| S11 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| S12 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| S13 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| H5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |

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# Taps Selection MTH-S041 – MTH-S142

| Tool type | MTH-S041 | MTH-S042 | MTH-S043 | MTH-S044 | MTH-S101 | MTH-S102 | MTH-S111 | MTH-S112 | MTH-S142 |
|---|---|---|---|---|---|---|---|---|---|
| **Thread type** | UNF | UNJF | EGUNF | EGUNF | M | M | MF | MJ | UNJF |
| **TCTR** | 3B | 3B | 3B | 3B | 6HX | 6HX | 6HX | 4H | 3B |
| **ULDR** | 1.5 | 1.5 | 2.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| **THCHT** | C | C | C | C | C | C | C | C | C |
| **BSG** | DIN2184-1 | DIN2184-1 | DIN2184-1 | DIN2184-1 | DIN371 | DIN376 | DIN376 | DIN371 | DIN2184-1 |
| **Thread size** | UNF6-40-UNF3/8-24 | UNJF6-40-UNJF3/8-24 | EGUNF6-40-EGUNF3/8-24 | EGUNF6-40-EGUNF3/8-24 | M2-M10 | M12-M20 | MF6X0,75-MF14X1,5 | MJ3-MJ10 | UNJF10-32-UNJF3/8-24 |
| **FHA** | 25° | 10° | 15° | 10° | 15° | 15° | 15° | 15° | 15° |
| |  |  |  |  |  |  |  |  |  |
| **Coolant** | No | No | No | No | No | No | No | No | No |
| **Page(s)** | 452 | 453 | 454 | 454 | 455 | 455 | 456 | 457 | 458 |

For cutting data, see next page

## Cutting data MTH-S041 – S142

| SMG | $v_c$ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | MTH-S041 | MTH-S042 | MTH-S043 | MTH-S044 | MTH-S101 | MTH-S102 | MTH-S111 | MTH-S112 | MTH-S142 |
| P1 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P6 | 3 | 3 | 7 | 3 | 7 | 7 | 7 | 7 | 7 |
| | *10* | *10* | *23* | *10* | *23* | *23* | *23* | *23* | *23* |
| P7 | 3 | 3 | 7 | 3 | 7 | 7 | 7 | 7 | 7 |
| | *10* | *10* | *23* | *10* | *23* | *23* | *23* | *23* | *23* |
| P8 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| P11 | 3 | 3 | 6 | 3 | 6 | 6 | 6 | 6 | 6 |
| | *10* | *10* | *20* | *10* | *20* | *20* | *20* | *20* | *20* |
| P12 | 2 | 2 | 4 | 2 | 4 | 4 | 4 | 4 | 4 |
| | *7* | *7* | *13* | *7* | *13* | *13* | *13* | *13* | *13* |
| M1 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| M2 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| M3 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| M4 | 2 | — | 6 | — | 6 | 6 | 6 | 6 | 6 |
| | *7* | — | *20* | — | *20* | *20* | *20* | *20* | *20* |
| M5 | 2 | — | 5 | — | 5 | 5 | 5 | 5 | 5 |
| | *7* | — | *16* | — | *16* | *16* | *16* | *16* | *16* |
| K1 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| N1 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| N2 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| N3 | — | 16 | 25 | 16 | 25 | 25 | 25 | 25 | 25 |
| | — | *50* | *80* | *50* | *80* | *80* | *80* | *80* | *80* |
| N11 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| S1 | 2 | 2 | — | 2 | — | — | — | — | — |
| | *7* | *7* | — | *7* | — | — | — | — | — |
| S2 | 2 | 2 | — | 2 | — | — | — | — | — |
| | *7* | *7* | — | *7* | — | — | — | — | — |
| S3 | 2 | 2 | — | 2 | — | — | — | — | — |
| | *7* | *7* | — | *7* | — | — | — | — | — |
| S11 | — | — | 5 | — | 5 | 5 | 5 | 5 | 5 |
| | — | — | *16* | — | *16* | *16* | *16* | *16* | *16* |
| S12 | — | — | 4 | — | 4 | 4 | 4 | 4 | 4 |
| | — | — | *13* | — | *13* | *13* | *13* | *13* | *13* |
| S13 | — | — | 3 | — | 3 | 3 | 3 | 3 | 3 |
| | — | — | *10* | — | *10* | *10* | *10* | *10* | *10* |
| H5 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD. When running in 1,5xD increse speed by 20% and at 2,5 x D reduce speed by 20%. At 3 x D reduce by 30%. Due to machine, material and setup condition it is advisable also to optimize cutting data.

Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTP-S001 – MTP-S043

| Tool type | MTP-S001 | MTP-S002 | MTP-S011 | MTP-S012 | MTP-S013 | MTP-S042 | MTP-S043 |
|---|---|---|---|---|---|---|---|
| **Thread type** | M | M | MF | MJ | EGM | UNFJ | EGUNF |
| **TCTR** | 6HX | 6HX | 6HX | 4H | 4H | 3B | 3B |
| **ULDR** | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| **THCHT** | B | B | B | B | B | B | B |
| **BSG** | DIN371 | DIN376 | DIN371 | DIN371 | DIN40435 | DIN2184-1 | DIN2184-1 |
| **Thread size** | M2-M10 | M12-M20 | MF6X0,75-MF14X1,5 | MJ4-MJ8 | EGM4-EGM8 | UNJF10-32-UNJF3/8-24 | EGUNF10-32-EGUNF3/8-24 |
| **FHA** | – | – | – | – | – | – | – |
| |  |  |  |  |  |  |  |
| **Coolant** | No | No | No | No | No | No | No |
| **Page(s)** | 430 | 430 | 431 | 432 | 433 | 434 | 435 |

For cutting data, see next page

## Cutting data MTP-S001 – S043

| SMG | $v_c$ | | | | | | |
|---|---|---|---|---|---|---|---|
| | MTP-S001 | MTP-S002 | MTP-S011 | MTP-S012 | MTP-S013 | MTP-S042 | MTP-S043 |
| P1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P6 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P7 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P8 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P11 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| P12 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| M1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| M2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| M3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| M4 | 6 | 6 | 6 | 6 | 2 | 6 | 2 |
| | *20* | *20* | *20* | *20* | *7* | *20* | *7* |
| M5 | 5 | 5 | 5 | 5 | 2 | 5 | 2 |
| | *16* | *16* | *16* | *16* | *7* | *16* | *7* |
| K1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K3 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K4 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K6 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| K7 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N1 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N2 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| N3 | 25 | 25 | 25 | 25 | 16 | 25 | 16 |
| | *80* | *80* | *80* | *80* | *50* | *80* | *50* |
| N11 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| S1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | *13* | *13* | *13* | *13* | *13* | *13* | *13* |
| S2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | *10* | *10* | *10* | *10* | *10* | *10* | *10* |
| S3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | *10* | *10* | *10* | *10* | *10* | *10* | *10* |
| S11 | 5 | 5 | 5 | 5 | 4 | 5 | 4 |
| | *16* | *16* | *16* | *16* | *13* | *16* | *13* |
| S12 | 4 | 4 | 4 | 4 | 3 | 4 | 3 |
| | *13* | *13* | *13* | *13* | *10* | *13* | *10* |
| S13 | 3 | 3 | 3 | 3 | 2 | 3 | 2 |
| | *10* | *10* | *10* | *10* | *7* | *10* | *7* |
| H5 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD. When running in 1,5xD increse speed by 20% and at 2,5 x D reduce speed by 20%. At 3 x D reduce by 30%. Due to machine, material and setup condition it is advisable also to optimize cutting data.

Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

# Taps Selection MTS-K101 – MTS-K141

| Tool type | MTS-K101 | MTS-K101-A | MTS-K002 | MTS-K002-A | MTS-K102 | MTS-K102-A | MTS-K111 | MTS-K121 | MTS-K131 | MTS-K141 |
|---|---|---|---|---|---|---|---|---|---|---|
| Thread type | M | M | M | M | M | M | MF | G | UNC | UNF |
| TCTR | 6HX | 6HX | 6HX | 6HX | 6HX | 6HX | 6HX | NORMAL-X | 2BX | 2BX |
| ULDR | 2.5 | 2.5 | 2 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| THCHT | C | C/E | C | C/E | C | C/E | C | C | C | C |
| BSG | DIN371 | DIN371 | DIN376 | DIN376 | DIN376 | DIN376 | DIN374 | DIN5156 | DIN2184-1 | DIN2184-1 |
| Thread size | M3 - M10 | M4 - M10 | M27 - M42 | M27 - M42 | M8 - M24 | M12 - M24 | MF 10X1 - MF 20X1.5 | G1/8-28 - G1-11 | UNC 1/4-20 - UNC 7/8-9 | UNF 1/4-28 - UNF 7/8-14 |
| FHA | – | – | – | – | – | – | – | – | – | – |
| |  | | | | | | | | | |
| Coolant | No | Yes | No | Yes | No | Yes | No | No | No | No |
| Page(s) | 461 | 461 | 462 | 462 | 463 | 464 | 465 | 466 | 467 | 468 |

For cutting data, see next page

## Cutting data MTS-K101 – MTS-K141

| SMG | $v_c$ | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | MTS- K101 | MTS- K101-A | MTS- K102 | MTS- K102-A | MTS- K111 | MTS- K121 | MTS- K131 | MTS- K141 |
| P1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P4 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P6 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P7 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P8 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P11 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| P12 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M4 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| M5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| K1 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| | *280* | *280* | *280* | *280* | *280* | *280* | *280* | *280* |
| K2 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| | *245* | *245* | *245* | *245* | *245* | *245* | *245* | *245* |
| K3 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 |
| | *215* | *215* | *215* | *215* | *215* | *215* | *215* | *215* |
| K4 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | *195* | *195* | *195* | *195* | *195* | *195* | *195* | *195* |
| K5 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | *120* | *120* | *120* | *120* | *120* | *120* | *120* | *120* |
| K6 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| | *180* | *180* | *180* | *180* | *180* | *180* | *180* | *180* |
| K7 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 |
| | *150* | *150* | *150* | *150* | *150* | *150* | *150* | *150* |
| N1 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N2 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N3 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| N11 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| H5 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |
| H8 | — | — | — | — | — | — | — | — |
| | — | — | — | — | — | — | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

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# Taps Selection MTH-V048 – MTH-V050

| Tool type | MTH-V048 | MTH-V050 |
|---|---|---|
| Thread type | NPT | NPTF |
| TCTR | NORMAL | NORMAL |
| ULDR | 1.5 | 1.5 |
| THCHT | C | C |
| BSG | DIN/ANSI | DIN/ANSI |
| Thread size | NPT 1/16-27<br>NPT 1-11.5 | NPTF 1/16-27<br>NPTF 3/4-14 |
| FHA | 15° | 15° |
| |  |  |
| Coolant | No | No |
| Page(s) | 459 | 460 |

For cutting data, see next page

## Cutting data MTH-V048 – V050

| SMG | $v_c$ | |
|---|---|---|
| | MTH- V048 | MTH- V050 |
| P1 | 11<br>*36* | 11<br>*36* |
| P2 | 11<br>*36* | 11<br>*36* |
| P3 | 10<br>*33* | 10<br>*33* |
| P4 | 8<br>*26* | 8<br>*26* |
| P5 | 8<br>*26* | 8<br>*26* |
| P6 | 9<br>*30* | 9<br>*30* |
| P7 | 8<br>*26* | 8<br>*26* |
| P8 | 8<br>*26* | 8<br>*26* |
| P11 | 8<br>*26* | 8<br>*26* |
| P12 | 5<br>*16* | 5<br>*16* |
| M1 | 9<br>*30* | 9<br>*30* |
| M2 | 7<br>*23* | 7<br>*23* |
| M3 | 5<br>*16* | 5<br>*16* |
| M4 | 4<br>*13* | 4<br>*13* |
| M5 | 3<br>*10* | 3<br>*10* |
| K1 | 14<br>*46* | 14<br>*46* |
| K2 | 12<br>*39* | 12<br>*39* |
| K3 | 10<br>*33* | 10<br>*33* |
| K4 | 10<br>*33* | 10<br>*33* |
| K5 | 6<br>*20* | 6<br>*20* |
| K6 | 9<br>*30* | 9<br>*30* |
| K7 | 8<br>*26* | 8<br>*26* |
| N1 | 23<br>*75* | 23<br>*75* |
| N2 | 15<br>*49* | 15<br>*49* |
| N3 | 10<br>*33* | 10<br>*33* |
| N11 | 13<br>*43* | 13<br>*43* |
| H5 | — | — |
| H8 | — | — |

SMG = Seco material group, $v_c$ = m/min (*sf/min*)

Cutting speeds ($v_c$) in the table are recommendations for a start value and calculated when running in 2xD, except for V048, V050 and MTH-S (001, 002, 003, 004, 011, 012, 031, 032, 041, 042 and 044) that are calculated from 1,5xD.

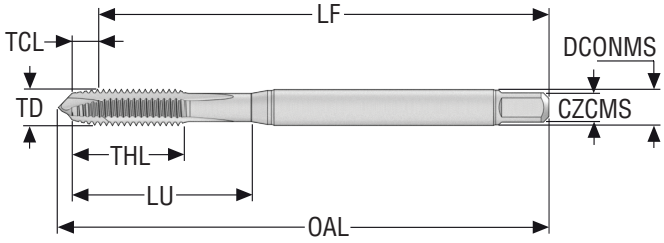
When running in 1,5xD increse speed by 20% and at 2,5 x D reduce speed by 20%. At 3 x D reduce by 30%. Due to machine, material and setup condition it is advisable also to optimize cutting data.

Recommended ranges to use for each type of tap: K001-K002: +25% / -25%, V015-V016: +15% / -15%, V001-V045: +15% / -15%, V048-V050: +35% / -35%, V053-V063: +15% / -15%

## T30-PUB

Through holes – Metric coarse threads





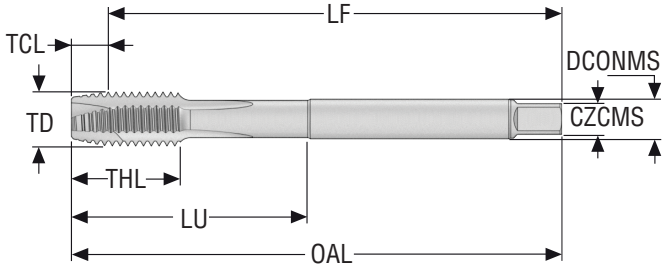

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU01B03-3X0.5-63R | 10309364 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,8<br>*2.118* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T30-PU01B03-3.5X0.6-63R | 10309365 | M3.5 | 0,6 | 2,61<br>*0.103* | 3,5<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 53,4<br>*2.102* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,9<br>*0.114* | 3 | B |
| T30-PU01B03-4X0.7-63R | 10309366 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,8<br>*2.354* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T30-PU01B03-4.5X0.75-63R | 10309641 | M4.5 | 0,75 | 3,3<br>*0.130* | 4,0<br>*0.157* | 14,0<br>*0.551* | 25<br>*0.984* | 66,7<br>*2.626* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00x4.90 | 3,8<br>*0.150* | 3 | B |
| T30-PU01B03-5X0.8-63R | 10309368 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,4<br>*2.614* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T30-PU01B03-6X1-63R | 10309370 | M6 | 1,0 | 4,37<br>*0.172* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T30-PU01B03-7X1-63R | 10309373 | M7 | 1,0 | 4,37<br>*0.172* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00x5.50 | 6,0<br>*0.236* | 3 | B |
| T30-PU01B03-8X1.25-63R | 10309374 | M8 | 1,25 | 5,4<br>*0.213* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,7<br>*3.335* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T30-PU01B03-9X1.25-63R | 10309377 | M9 | 1,25 | 5,7<br>*0.224* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 84,3<br>*3.319* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00x7.00 | 7,8<br>*0.307* | 3 | B |
| T30-PU01B03-10X1.5-63R | 10309378 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,2<br>*3.669* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T30-PUB

Through holes – Metric coarse threads





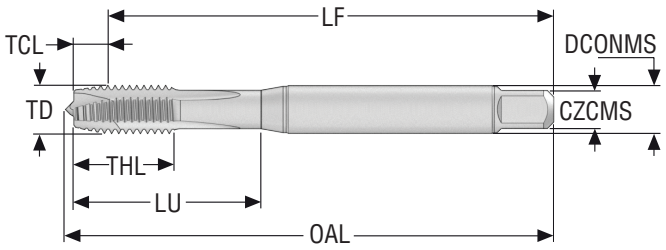

- Substrate: HSSE
- Uncoated
- Standard: DIN376
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU01B06-3X0.5-63R | 10309461 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 11,0<br>*0.433* | 37<br>*1.457* | 53,8<br>*2.118* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20x1.80 | 2,5<br>*0.098* | 3 | B |
| T30-PU01B06-4X0.7-63R | 10309462 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 44<br>*1.732* | 59,7<br>*2.350* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,3<br>*0.130* | 3 | B |
| T30-PU01B06-5X0.8-63R | 10309463 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 51<br>*2.008* | 66,4<br>*2.614* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,2<br>*0.165* | 3 | B |
| T30-PU01B06-6X1-63R | 10309464 | M6 | 1,0 | 4,39<br>*0.173* | 6,0<br>*0.236* | 18,0<br>*0.709* | 61<br>*2.402* | 75,6<br>*2.976* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50x3.40 | 5,0<br>*0.197* | 3 | B |
| T30-PU01B06-8X1.25-63R | 10309465 | M8 | 1,25 | 5,7<br>*0.224* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 84,3<br>*3.319* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | B |
| T30-PU01B06-10X1.5-63R | 10309467 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 93,2<br>*3.669* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | B |
| T30-PU01B06-11X1.5-63R | 10309667 | M11 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 76<br>*2.992* | 93,2<br>*3.669* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,5<br>*0.374* | 3 | B |
| T30-PU01B06-12X1.75-63R | 10309470 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 102,0<br>*4.016* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T30-PU01B06-14X2-63R | 10309474 | M14 | 2,0 | 9,14<br>*0.360* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 100,9<br>*3.972* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 3 | B |
| T30-PU01B06-16X2-63R | 10309478 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,8<br>*3.969* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T30-PU01B06-18X2.5-63R | 10309481 | M18 | 2,5 | 11,38<br>*0.448* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 113,6<br>*4.472* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | B |
| T30-PU01B06-20X2.5-63R | 10309484 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,4<br>*5.055* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |
| T30-PU01B06-22X2.5-63R | 10309487 | M22 | 2,5 | 11,78<br>*0.464* | 20,0<br>*0.787* | 32,0<br>*1.260* | 93<br>*3.661* | 128,2<br>*5.047* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | B |
| T30-PU01B06-24X3-63R | 10309489 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,3<br>*5.760* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | B |
| T30-PU01B06-27X3-63R | 10309494 | M27 | 3,0 | 13,88<br>*0.546* | 24,0<br>*0.945* | 38,0<br>*1.496* | 97<br>*3.819* | 146,1<br>*5.752* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 24,0<br>*0.945* | 4 | B |
| T30-PU01B06-30X3.5-63R | 10309496 | M30 | 3,5 | 15,93<br>*0.627* | 27,0<br>*1.063* | 45,0<br>*1.772* | 115<br>*4.528* | 164,1<br>*6.461* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | B |
| T30-PU01B06-33X3.5-63R | 10309679 | M33 | 3,5 | 15,93<br>*0.627* | 33,0<br>*1.299* | 45,0<br>*1.772* | 113<br>*4.449* | 164,1<br>*6.461* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00x20.00 | 29,5<br>*1.161* | 4 | B |
| T30-PU01B06-36X4-63R | 10309500 | M36 | 4,0 | 17,97<br>*0.707* | 36,0<br>*1.417* | 50,0<br>*1.969* | 131<br>*5.157* | 182,0<br>*7.165* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 32,0<br>*1.260* | 4 | B |
| T30-PU01B06-39X4-63R | 10309686 | M39 | 4,0 | 17,97<br>*0.707* | 39,0<br>*1.535* | 50,0<br>*1.969* | 102<br>*4.016* | 182,0<br>*7.165* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 35,0<br>*1.378* | 4 | B |
| T30-PU01B06-42X4.5-63R | 10309688 | M42 | 4,5 | 20,02<br>*0.788* | 42,0<br>*1.654* | 60,0<br>*2.362* | 102<br>*4.016* | 180,0<br>*7.087* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 37,5<br>*1.476* | 5 | B |
| T30-PU01B06-45X4.5-63R | 10309691 | M45 | 4,5 | 20,02<br>*0.788* | 45,0<br>*1.772* | 60,0<br>*2.362* | 117<br>*4.606* | 200,0<br>*7.874* | 220,0<br>*8.661* | 36,0<br>*1.417* | 36.00x29.00 | 40,5<br>*1.594* | 5 | B |
| T30-PU01B06-48X5-63R | 10309692 | M48 | 5,0 | 22,07<br>*0.869* | 48,0<br>*1.890* | 65,0<br>*2.559* | 147<br>*5.787* | 227,9<br>*8.972* | 250,0<br>*9.843* | 36,0<br>*1.417* | 36.00x29.00 | 43,0<br>*1.693* | 5 | B |
| T30-PU01B06-52X5-63R | 10309781 | M52 | 5,0 | 22,07<br>*0.869* | 52,0<br>*2.047* | 65,0<br>*2.559* | 146<br>*5.748* | 227,9<br>*8.972* | 250,0<br>*9.843* | 40,0<br>*1.575* | 40.00x32.00 | 47,0<br>*1.850* | 5 | B |

## T30-PUB

Through holes – Metric coarse threads, 6G





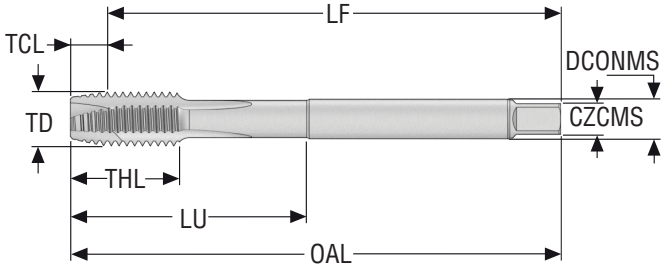

–Substrate: HSSE
–Uncoated
–Standard: DIN371
–Thread tolerance class: 6G
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU01B03-3X0.5-61R | 10309396 | M3 | 0,5 | 2,3<br>*0.091* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,7<br>*2.114* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T30-PU01B03-4X0.7-61R | 10309397 | M4 | 0,7 | 3,03<br>*0.119* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 60,0<br>*2.362* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T30-PU01B03-5X0.8-61R | 10309398 | M5 | 0,8 | 3,71<br>*0.146* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,3<br>*2.610* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T30-PU01B03-6X1-61R | 10309399 | M6 | 1,0 | 4,45<br>*0.175* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T30-PU01B03-8X1.25-61R | 10309400 | M8 | 1,25 | 5,48<br>*0.216* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,6<br>*3.331* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T30-PU01B03-10X1.5-61R | 10309401 | M10 | 1,5 | 6,94<br>*0.273* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,1<br>*3.665* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T30-PUB

Through holes – Metric coarse threads, 6G





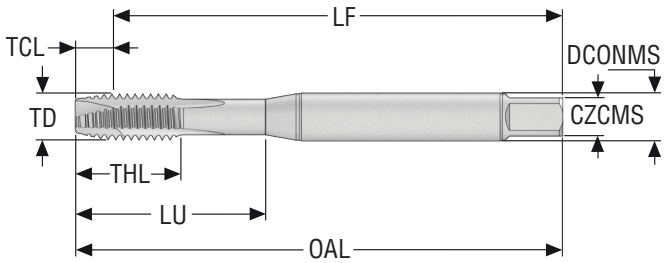

–Substrate: HSSE
–Uncoated
–Standard: DIN376
–Thread tolerance class: 6G
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU01B06-12X1.75-61R | 10309519 | M12 | 1,75 | 8,11<br>*0.319* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 101,9<br>*4.012* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T30-PU01B06-16X2-61R | 10309705 | M16 | 2,0 | 9,36<br>*0.369* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,6<br>*3.961* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T30-PU01B06-20X2.5-61R | 10309706 | M20 | 2,5 | 11,7<br>*0.461* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,3<br>*5.051* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |

## T30-PUB

Through holes – MF threads





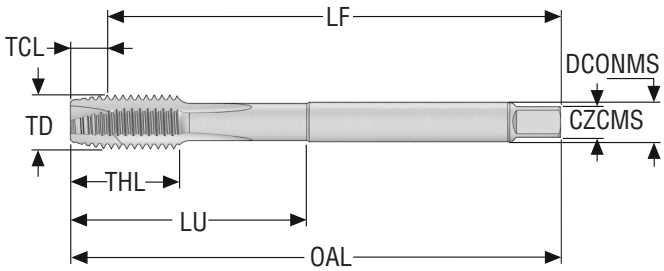

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU02B03-3X0.35-63R | 10309640 | MF3X0.35 | 0,35 | 1,55<br>*0.061* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,3<br>*2.138* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,65<br>*0.104* | 3 | B |
| T30-PU02B03-4X0.5-63R | 10309367 | MF4X0.5 | 0,5 | 2,25<br>*0.089* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 60,7<br>*2.390* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | B |
| T30-PU02B03-5X0.5-63R | 10309369 | MF5X0.5 | 0,5 | 2,25<br>*0.089* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 67,6<br>*2.661* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,5<br>*0.177* | 3 | B |
| T30-PU02B03-6X0.5-63R | 10309371 | MF6X0.5 | 0,5 | 2,28<br>*0.090* | 6,0<br>*0.236* | 14,0<br>*0.551* | 30<br>*1.181* | 77,4<br>*3.047* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,5<br>*0.217* | 3 | B |
| T30-PU02B03-6X0.75-63R | 10309372 | MF6X0.75 | 0,75 | 3,33<br>*0.131* | 6,0<br>*0.236* | 14,0<br>*0.551* | 30<br>*1.181* | 76,5<br>*3.012* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,2<br>*0.205* | 3 | B |
| T30-PU02B03-8X0.5-63R | 10309642 | MF8X0.5 | 0,5 | 2,28<br>*0.090* | 8,0<br>*0.315* | 18,0<br>*0.709* | 30<br>*1.181* | 77,6<br>*3.055* | 83,6<br>*3.291* | 8,0<br>*0.315* | 8.00x6.20 | 7,5<br>*0.295* | 3 | B |
| T30-PU02B03-8X0.75-63R | 10309375 | MF8X0.75 | 0,75 | 3,33<br>*0.131* | 8,0<br>*0.315* | 18,0<br>*0.709* | 30<br>*1.181* | 76,7<br>*3.020* | 83,6<br>*3.291* | 8,0<br>*0.315* | 8.00x6.20 | 7,2<br>*0.283* | 3 | B |
| T30-PU02B03-8X1-63R | 10309376 | MF8X1 | 1,0 | 4,37<br>*0.172* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 85,5<br>*3.366* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | B |
| T30-PU02B03-10X0.5-63R | 10309379 | MF10X0.5 | 0,5 | 2,68<br>*0.106* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 87,3<br>*3.437* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 9,5<br>*0.374* | 3 | B |
| T30-PU02B03-10X0.75-63R | 10309643 | MF10X0.75 | 0,75 | 3,73<br>*0.147* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 86,3<br>*3.398* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,2<br>*0.362* | 3 | B |
| T30-PU02B03-10X1-63R | 10309380 | MF10X1 | 1,0 | 4,77<br>*0.188* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 85,2<br>*3.354* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | B |
| T30-PU02B03-10X1.25-63R | 10309381 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 94,2<br>*3.709* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,8<br>*0.346* | 3 | B |

## T30-PUB

Through holes – MF threads






- Substrate: HSSE
- Uncoated
- Standard: DIN374
- Thread tolerance class: 6H
- For cutting data see page(s) 243

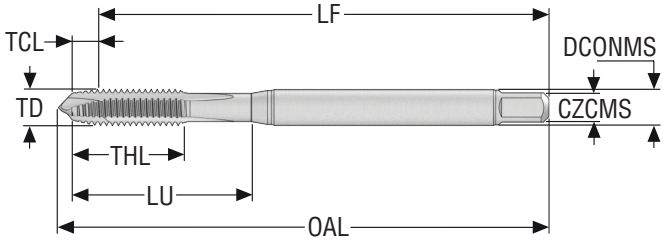
| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU02B05-4X0.5-63R | 10309662 | MF4X0.5 | 0,5 | 2,25<br>*0.089* | 4,0<br>*0.157* | 12,0<br>*0.472* | 44<br>*1.732* | 60,6<br>*2.386* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,5<br>*0.138* | 3 | B |
| T30-PU02B05-4.5X0.5-63R | 10309663 | MF4.5X0.5 | 0,5 | 2,25<br>*0.089* | 4,0<br>*0.157* | 14,0<br>*0.551* | 51<br>*2.008* | 67,8<br>*2.669* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,0<br>*0.157* | 3 | B |
| T30-PU02B05-5X0.5-63R | 10309664 | MF5X0.5 | 0,5 | 2,25<br>*0.089* | 5,0<br>*0.197* | 14,0<br>*0.551* | 51<br>*2.008* | 67,6<br>*2.661* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,5<br>*0.177* | 3 | B |
| T30-PU02B05-8X1-63R | 10309466 | MF8X1 | 1,0 | 4,67<br>*0.184* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 85,3<br>*3.358* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | B |
| T30-PU02B05-9X1-63R | 10309665 | MF9X1 | 1,0 | 4,67<br>*0.184* | 9,0<br>*0.354* | 20,0<br>*0.787* | 63<br>*2.480* | 85,3<br>*3.358* | 90,0<br>*3.543* | 7,0<br>*0.276* | 9.00x7.00 | 8,0<br>*0.315* | 3 | B |
| T30-PU02B05-10X0.75-63R | 10309666 | MF10X0.75 | 0,75 | 3,73<br>*0.147* | 10,0<br>*0.394* | 18,0<br>*0.709* | 67<br>*2.638* | 86,3<br>*3.398* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,2<br>*0.362* | 3 | B |
| T30-PU02B05-10X1-63R | 10309468 | MF10X1 | 1,0 | 4,79<br>*0.189* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 85,2<br>*3.354* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | B |
| T30-PU02B05-10X1.25-63R | 10309469 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 94,2<br>*3.709* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | B |
| T30-PU02B05-12X0.75-63R | 10309668 | MF12X0.75 | 0,75 | 3,85<br>*0.152* | 10,0<br>*0.394* | 20,0<br>*0.787* | 73<br>*2.874* | 96,2<br>*3.787* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,2<br>*0.441* | 3 | B |
| T30-PU02B05-12X1-63R | 10309471 | MF12X1 | 1,0 | 4,89<br>*0.193* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 95,1<br>*3.744* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 3 | B |
| T30-PU02B05-12X1.25-63R | 10309472 | MF12X1.25 | 1,25 | 5,94<br>*0.234* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 94,1<br>*3.705* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | B |
| T30-PU02B05-12X1.5-63R | 10309473 | MF12X1.5 | 1,5 | 6,97<br>*0.274* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 93,0<br>*3.661* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | B |
| T30-PU02B05-14X1-63R | 10309475 | MF14X1 | 1,0 | 4,99<br>*0.196* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 95,0<br>*3.740* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 3 | B |
| T30-PU02B05-14X1.25-63R | 10309476 | MF14X1.25 | 1,25 | 6,04<br>*0.238* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 94,0<br>*3.701* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,8<br>*0.504* | 3 | B |
| T30-PU02B05-14X1.5-63R | 10309477 | MF14X1.5 | 1,5 | 7,07<br>*0.278* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 92,9<br>*3.657* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 3 | B |
| T30-PU02B05-15X1-63R | 10309669 | MF15X1 | 1,0 | 4,99<br>*0.196* | 14,0<br>*0.551* | 20,0<br>*0.787* | 58<br>*2.283* | 94,9<br>*3.736* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T30-PU02B05-16X1-63R | 10309479 | MF16X1 | 1,0 | 5,09<br>*0.200* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 94,9<br>*3.736* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,0<br>*0.591* | 3 | B |
| T30-PU02B05-16X1.5-63R | 10309480 | MF16X1.5 | 1,5 | 7,17<br>*0.282* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 92,8<br>*3.654* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 3 | B |
| T30-PU02B05-18X1-63R | 10309482 | MF18X1 | 1,0 | 4,89<br>*0.193* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 105,1<br>*4.138* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 17,0<br>*0.669* | 4 | B |
| T30-PU02B05-18X1.5-63R | 10309483 | MF18X1.5 | 1,5 | 7,27<br>*0.286* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 102,7<br>*4.043* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | B |
| T30-PU02B05-18X2-63R | 10309670 | MF18X2 | 2,0 | 9,34<br>*0.368* | 18,0<br>*0.709* | 27,0<br>*1.063* | 81<br>*3.189* | 115,7<br>*4.555* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 16,0<br>*0.630* | 4 | B |
| T30-PU02B05-20X1-63R | 10309671 | MF20X1 | 1,0 | 5,39<br>*0.212* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 119,6<br>*4.709* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 19,0<br>*0.748* | 4 | B |
| T30-PU02B05-20X1.5-63R | 10309485 | MF20X1.5 | 1,5 | 7,47<br>*0.294* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 117,5<br>*4.626* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | B |
| T30-PU02B05-20X2-63R | 10309486 | MF20X2 | 2,0 | 9,54<br>*0.376* | 20,0<br>*0.787* | 27,0<br>*1.063* | 95<br>*3.740* | 130,5<br>*5.138* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 18,0<br>*0.709* | 4 | B |
| T30-PU02B05-22X1-63R | 10309672 | MF22X1 | 1,0 | 5,59<br>*0.220* | 20,0<br>*0.787* | 24,0<br>*0.945* | 78<br>*3.071* | 119,4<br>*4.701* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | B |

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU02B05-22X1.5-63R | 10309488 | MF22X1.5 | 1,5 | 7,67<br>*0.302* | 22,0<br>*0.866* | 24,0<br>*0.945* | 78<br>*3.071* | 117,3<br>*4.618* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 20,5<br>*0.807* | 4 | B |
| T30-PU02B05-22X2-63R | 10309673 | MF22X2 | 2,0 | 9,74<br>*0.383* | 22,0<br>*0.866* | 27,0<br>*1.063* | 93<br>*3.661* | 130,3<br>*5.130* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 20,0<br>*0.787* | 4 | B |
| T30-PU02B05-24X1-63R | 10309674 | MF24X1 | 1,0 | 4,91<br>*0.193* | 22,0<br>*0.866* | 27,0<br>*1.063* | 93<br>*3.661* | 135,1<br>*5.319* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,0<br>*0.906* | 4 | B |
| T30-PU02B05-24X1.5-63R | 10309490 | MF24X1.5 | 1,5 | 7,5<br>*0.295* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 132,5<br>*5.217* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 22,5<br>*0.886* | 4 | B |
| T30-PU02B05-24X2-63R | 10309491 | MF24X2 | 2,0 | 9,57<br>*0.377* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 130,4<br>*5.134* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 22,0<br>*0.866* | 4 | B |
| T30-PU02B05-25X1.5-63R | 10309492 | MF25X1.5 | 1,5 | 7,7<br>*0.303* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 132,3<br>*5.209* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,5<br>*0.925* | 4 | B |
| T30-PU02B05-26X1.5-63R | 10309493 | MF26X1.5 | 1,5 | 7,7<br>*0.303* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 132,3<br>*5.209* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 24,5<br>*0.965* | 4 | B |
| T30-PU02B05-27X1.5-63R | 10309675 | MF27X1.5 | 1,5 | 7,7<br>*0.303* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 132,3<br>*5.209* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,5<br>*1.004* | 4 | B |
| T30-PU02B05-27X2-63R | 10309495 | MF27X2 | 2,0 | 9,77<br>*0.385* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 130,2<br>*5.126* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,0<br>*0.984* | 4 | B |
| T30-PU02B05-28X1.5-63R | 10309676 | M28X1.5 | 1,5 | 7,2<br>*0.283* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 132,8<br>*5.228* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,5<br>*1.004* | 4 | B |
| T30-PU02B05-30X1.5-63R | 10309497 | MF30X1.5 | 1,5 | 7,7<br>*0.303* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 142,3<br>*5.602* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,5<br>*1.122* | 4 | B |
| T30-PU02B05-30X2-63R | 10309498 | MF30X2 | 2,0 | 9,77<br>*0.385* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 140,2<br>*5.520* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,0<br>*1.102* | 4 | B |
| T30-PU02B05-30X3-63R | 10309677 | MF30X3 | 3,0 | 13,88<br>*0.546* | 30,0<br>*1.181* | 40,0<br>*1.575* | 115<br>*4.528* | 166,1<br>*6.539* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 27,0<br>*1.063* | 4 | B |
| T30-PU02B05-32X1.5-63R | 10309499 | MF32X1.5 | 1,5 | 7,7<br>*0.303* | 32,0<br>*1.260* | 27,0<br>*1.063* | 85<br>*3.346* | 142,3<br>*5.602* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 30,5<br>*1.201* | 4 | B |
| T30-PU02B05-32X2-63R | 10309678 | MF32X2 | 2,0 | 9,77<br>*0.385* | 32,0<br>*1.260* | 27,0<br>*1.063* | 85<br>*3.346* | 140,2<br>*5.520* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 30,0<br>*1.181* | 4 | B |
| T30-PU02B05-33X1.5-63R | 10309680 | MF33X1.5 | 1,5 | 7,7<br>*0.303* | 33,0<br>*1.299* | 30,0<br>*1.181* | 93<br>*3.661* | 152,3<br>*5.996* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 31,5<br>*1.240* | 4 | B |
| T30-PU02B05-33X2-63R | 10309681 | MF33X2 | 2,0 | 9,77<br>*0.385* | 33,0<br>*1.299* | 30,0<br>*1.181* | 93<br>*3.661* | 150,2<br>*5.913* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 31,0<br>*1.220* | 4 | B |
| T30-PU02B05-35X1.5-63R | 10309682 | MF35X1.5 | 1,5 | 7,7<br>*0.303* | 35,0<br>*1.378* | 30,0<br>*1.181* | 101<br>*3.976* | 162,3<br>*6.390* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 33,5<br>*1.319* | 4 | B |
| T30-PU02B05-36X1.5-63R | 10309683 | MF36X1.5 | 1,5 | 7,7<br>*0.303* | 36,0<br>*1.417* | 30,0<br>*1.181* | 101<br>*3.976* | 162,3<br>*6.390* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 34,5<br>*1.358* | 4 | B |
| T30-PU02B05-36X2-63R | 10309684 | MF36X2 | 2,0 | 9,77<br>*0.385* | 36,0<br>*1.417* | 30,0<br>*1.181* | 101<br>*3.976* | 160,2<br>*6.307* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 34,0<br>*1.339* | 4 | B |
| T30-PU02B05-36X3-63R | 10309685 | MF36X3 | 3,0 | 13,88<br>*0.546* | 36,0<br>*1.417* | 50,0<br>*1.969* | 131<br>*5.157* | 186,1<br>*7.327* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 33,0<br>*1.299* | 4 | B |
| T30-PU02B05-40X1.5-63R | 10309687 | MF40X1.5 | 1,5 | 7,7<br>*0.303* | 40,0<br>*1.575* | 30,0<br>*1.181* | 72<br>*2.835* | 162,3<br>*6.390* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 38,5<br>*1.516* | 4 | B |
| T30-PU02B05-42X2-63R | 10309689 | MF42X2 | 2,0 | 9,77<br>*0.385* | 42,0<br>*1.654* | 30,0<br>*1.181* | 72<br>*2.835* | 160,2<br>*6.307* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 40,0<br>*1.575* | 5 | B |
| T30-PU02B05-42X3-63R | 10309690 | MF42X3 | 3,0 | 13,88<br>*0.546* | 42,0<br>*1.654* | 50,0<br>*1.969* | 102<br>*4.016* | 186,1<br>*7.327* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 39,0<br>*1.535* | 5 | B |
| T30-PU02B05-48X1.5-63R | 10309693 | MF48X1.5 | 1,5 | 7,73<br>*0.304* | 48,0<br>*1.890* | 32,0<br>*1.260* | 87<br>*3.425* | 182,3<br>*7.177* | 190,0<br>*7.480* | 36,0<br>*1.417* | 36.00x29.00 | 46,5<br>*1.831* | 5 | B |
| T30-PU02B05-48X3-63R | 10309694 | MF48X3 | 3,0 | 13,92<br>*0.548* | 48,0<br>*1.890* | 50,0<br>*1.969* | 122<br>*4.803* | 211,1<br>*8.311* | 225,0<br>*8.858* | 36,0<br>*1.417* | 36.00x29.00 | 45,0<br>*1.772* | 5 | B |

## T30-PUB

Through holes – UNC threads





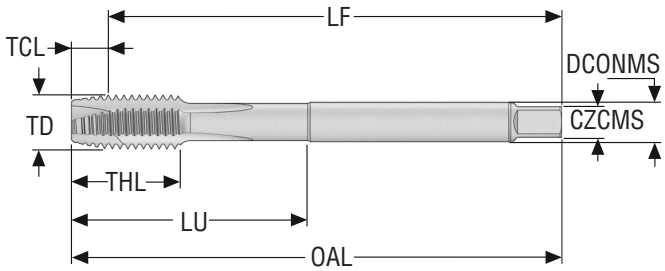

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU08B03-2-56-21R | 10309644 | UNC2-56 | 56,0 | 2,03<br>*0.080* | 2,184<br>*0.086* | 8,0<br>*0.315* | 13<br>*0.512* | 42,8<br>*1.685* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80x2.10 | 1,85<br>*0.073* | 2 | B |
| T30-PU08B03-4-40-21R | 10309382 | UNC4-40 | 40,0 | 2,77<br>*0.109* | 2,845<br>*0.112* | 10,0<br>*0.394* | 18<br>*0.709* | 53,4<br>*2.102* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,35<br>*0.093* | 3 | B |
| T30-PU08B03-5-40-21R | 10309383 | UNC5-40 | 40,0 | 2,88<br>*0.113* | 3,175<br>*0.125* | 10,0<br>*0.394* | 18<br>*0.709* | 53,1<br>*2.091* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,65<br>*0.104* | 3 | B |
| T30-PU08B03-6-32-21R | 10309384 | UNC6-32 | 32,0 | 3,68<br>*0.145* | 3,505<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 52,5<br>*2.067* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,85<br>*0.112* | 3 | B |
| T30-PU08B03-8-32-21R | 10309385 | UNC8-32 | 32,0 | 3,55<br>*0.140* | 4,166<br>*0.164* | 12,0<br>*0.472* | 21<br>*0.827* | 59,4<br>*2.339* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | B |
| T30-PU08B03-10-24-21R | 10309386 | UNC10-24 | 24,0 | 4,78<br>*0.188* | 4,826<br>*0.190* | 14,0<br>*0.551* | 25<br>*0.984* | 65,5<br>*2.579* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 3,9<br>*0.154* | 3 | B |
| T30-PU08B03-12-24-21R | 10309387 | UNC12-24 | 24,0 | 4,66<br>*0.183* | 5,486<br>*0.216* | 18,0<br>*0.709* | 30<br>*1.181* | 75,4<br>*2.969* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00x4.90 | 4,5<br>*0.177* | 3 | B |
| T30-PU08B03-1/4-20-21R | 10309388 | UNC1/4-20 | 20,0 | 5,57<br>*0.219* | 6,35<br>*0.250* | 18,0<br>*0.709* | 32<br>*1.260* | 74,4<br>*2.929* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00x5.50 | 5,1<br>*0.201* | 3 | B |
| T30-PU08B03-5/16-18-21R | 10309389 | UNC5/16-18 | 18,0 | 6,22<br>*0.245* | 7,937<br>*0.312* | 20,0<br>*0.787* | 35<br>*1.378* | 84,0<br>*3.307* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,6<br>*0.260* | 3 | B |
| T30-PU08B03-3/8-16-21R | 10309390 | UNC3/8-16 | 16,0 | 7,28<br>*0.287* | 9,525<br>*0.375* | 20,0<br>*0.787* | 39<br>*1.535* | 92,7<br>*3.650* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,0<br>*0.315* | 3 | B |

## T30-PUB

Through holes – UNC threads





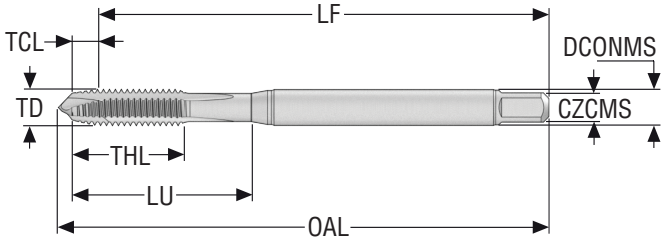

- Substrate: HSSE
- Uncoated
- Standard: DIN376
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU08B06-7/16-14-21R | 10309509 | UNC7/16-14 | 14,0 | 8,27<br>*0.326* | 11,112<br>*0.437* | 22,0<br>*0.866* | 76<br>*2.992* | 91,7<br>*3.610* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,3<br>*0.366* | 3 | B |
| T30-PU08B06-1/2-13-21R | 10309510 | UNC1/2-13 | 13,0 | 9,01<br>*0.355* | 12,7<br>*0.500* | 24,0<br>*0.945* | 83<br>*3.268* | 101,0<br>*3.976* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,7<br>*0.421* | 3 | B |
| T30-PU08B06-9/16-12-21R | 10309698 | UNC9/16-12 | 12,0 | 9,76<br>*0.384* | 14,287<br>*0.562* | 25,0<br>*0.984* | 81<br>*3.189* | 100,2<br>*3.945* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,3<br>*0.484* | 3 | B |
| T30-PU08B06-5/8-11-21R | 10309511 | UNC5/8-11 | 11,0 | 10,51<br>*0.414* | 15,875<br>*0.625* | 32,0<br>*1.260* | 68<br>*2.677* | 99,5<br>*3.917* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 13,5<br>*0.531* | 3 | B |
| T30-PU08B06-3/4-10-21R | 10309512 | UNC3/4-10 | 10,0 | 11,55<br>*0.455* | 19,05<br>*0.750* | 32,0<br>*1.260* | 81<br>*3.189* | 113,4<br>*4.465* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | B |
| T30-PU08B06-7/8-9-21R | 10309513 | UNC7/8-9 | 9,0 | 13,04<br>*0.513* | 22,225<br>*0.875* | 32,0<br>*1.260* | 93<br>*3.661* | 127,0<br>*5.000* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | B |
| T30-PU08B06-1-8-21R | 10309514 | UNC1-8 | 8,0 | 14,86<br>*0.585* | 25,4<br>*1.000* | 38,0<br>*1.496* | 97<br>*3.819* | 145,1<br>*5.713* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 22,25<br>*0.876* | 4 | B |
| T30-PU08B06-1.1/8-7-21R | 10309699 | UNC11/8-7 | 7,0 | 16,48<br>*0.649* | 28,575<br>*1.125* | 45,0<br>*1.772* | 115<br>*4.528* | 163,5<br>*6.437* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 25,0<br>*0.984* | 4 | B |
| T30-PU08B06-1.1/4-7-21R | 10309700 | UNC11/4-7 | 7,0 | 16,74<br>*0.659* | 31,75<br>*1.250* | 45,0<br>*1.772* | 115<br>*4.528* | 163,3<br>*6.429* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 28,0<br>*1.102* | 4 | B |
| T30-PU08B06-1.3/8-6-21R | 10309701 | UNC13/8-6 | 6,0 | 19,04<br>*0.750* | 34,925<br>*1.375* | 50,0<br>*1.969* | 131<br>*5.157* | 181,0<br>*7.126* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 30,75<br>*1.211* | 4 | B |
| T30-PU08B06-1.1/2-6-21R | 10309782 | UNC11/2-6 | 6,0 | 19,3<br>*0.760* | 38,1<br>*1.500* | 55,0<br>*2.165* | 131<br>*5.157* | 180,7<br>*7.114* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 34,0<br>*1.339* | 4 | B |

## T30-PUB

Through holes – UNF threads





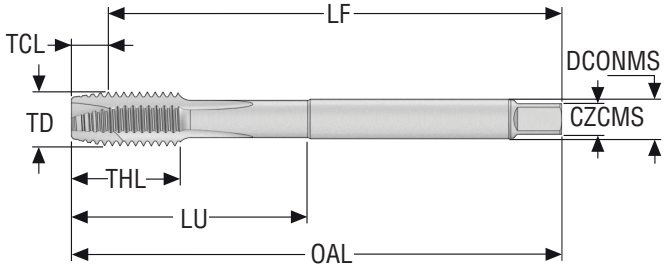

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU09B03-4-48-21R | 10309645 | UNF4-48 | 48,0 | 2,42<br>*0.095* | 2,845<br>*0.112* | 10,0<br>*0.394* | 18<br>*0.709* | 53,7<br>*2.114* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,4<br>*0.094* | 3 | B |
| T30-PU09B03-5-44-21R | 10309646 | UNF5-44 | 44,0 | 2,54<br>*0.100* | 3,175<br>*0.125* | 10,0<br>*0.394* | 18<br>*0.709* | 53,4<br>*2.102* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,7<br>*0.106* | 3 | B |
| T30-PU09B03-6-40-21R | 10309647 | UNF6-40 | 40,0 | 2,99<br>*0.118* | 3,505<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 53,1<br>*2.091* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,95<br>*0.116* | 3 | B |
| T30-PU09B03-8-36-21R | 10309648 | UNF8-36 | 36,0 | 3,21<br>*0.126* | 4,166<br>*0.164* | 12,0<br>*0.472* | 21<br>*0.827* | 59,7<br>*2.350* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | B |
| T30-PU09B03-10-32-21R | 10309391 | UNF10-32 | 32,0 | 3,76<br>*0.148* | 4,826<br>*0.190* | 14,0<br>*0.551* | 25<br>*0.984* | 66,3<br>*2.610* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,1<br>*0.161* | 3 | B |
| T30-PU09B03-12-28-21R | 10309392 | UNF12-28 | 28,0 | 3,98<br>*0.157* | 5,486<br>*0.216* | 18,0<br>*0.709* | 30<br>*1.181* | 76,2<br>*3.000* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 4,6<br>*0.181* | 3 | B |
| T30-PU09B03-1/4-28-21R | 10309393 | UNF1/4-28 | 28,0 | 4,2<br>*0.165* | 6,35<br>*0.250* | 18,0<br>*0.709* | 29<br>*1.142* | 75,6<br>*2.976* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00x5.50 | 5,5<br>*0.217* | 3 | B |
| T30-PU09B03-5/16-24-21R | 10309394 | UNF5/16-24 | 24,0 | 4,85<br>*0.191* | 7,937<br>*0.312* | 20,0<br>*0.787* | 35<br>*1.378* | 85,1<br>*3.350* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,9<br>*0.272* | 3 | B |
| T30-PU09B03-3/8-24-21R | 10309395 | UNF3/8-24 | 24,0 | 5,22<br>*0.206* | 9,525<br>*0.375* | 20,0<br>*0.787* | 35<br>*1.378* | 84,8<br>*3.339* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T30-PUB

Through holes – UNF threads





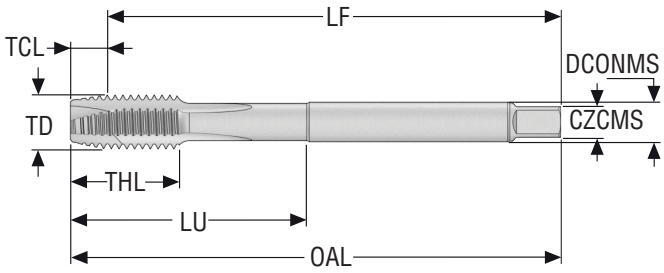

- Substrate: HSSE
- Uncoated
- Standard: DIN374
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU09B05-7/16-20-21R | 10309515 | UNF7/16-20 | 20,0 | 5,88<br>*0.231* | 11,112<br>*0.437* | 20,0<br>*0.787* | 76<br>*2.992* | 94,1<br>*3.705* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,9<br>*0.390* | 3 | B |
| T30-PU09B05-1/2-20-21R | 10309516 | UNF1/2-20 | 20,0 | 6,28<br>*0.247* | 12,7<br>*0.500* | 20,0<br>*0.787* | 73<br>*2.874* | 93,7<br>*3.689* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,5<br>*0.453* | 3 | B |
| T30-PU09B05-9/16-18-21R | 10309517 | UNF9/16-18 | 18,0 | 6,69<br>*0.263* | 14,287<br>*0.562* | 20,0<br>*0.787* | 71<br>*2.795* | 93,3<br>*3.673* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 3 | B |
| T30-PU09B05-5/8-18-21R | 10309702 | UNF5/8-18 | 18,0 | 6,76<br>*0.266* | 15,875<br>*0.625* | 20,0<br>*0.787* | 58<br>*2.283* | 93,2<br>*3.669* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 3 | B |
| T30-PU09B05-3/4-16-21R | 10309518 | UNF3/4-16 | 16,0 | 7,81<br>*0.307* | 19,05<br>*0.750* | 24,0<br>*0.945* | 66<br>*2.598* | 102,2<br>*4.024* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 17,5<br>*0.689* | 4 | B |
| T30-PU09B05-7/8-14-21R | 10309703 | UNF7/8-14 | 14,0 | 8,96<br>*0.353* | 22,225<br>*0.875* | 24,0<br>*0.945* | 78<br>*3.071* | 116,0<br>*4.567* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 20,5<br>*0.807* | 4 | B |
| T30-PU09B05-1-12-21R | 10309704 | UNF1-12 | 12,0 | 10,44<br>*0.411* | 25,4<br>*1.000* | 27,0<br>*1.063* | 93<br>*3.661* | 129,6<br>*5.102* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,3<br>*0.917* | 4 | B |
| T30-PU09B05-1.1/8-12-21R | 10309786 | UNF11/8-12 | 12,0 | 10,37<br>*0.408* | 28,575<br>*1.125* | 27,0<br>*1.063* | 85<br>*3.346* | 139,6<br>*5.496* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | B |
| T30-PU09B05-1.1/4-12-21R | 10309787 | UNF11/4-12 | 12,0 | 10,29<br>*0.405* | 31,75<br>*1.250* | 27,0<br>*1.063* | 85<br>*3.346* | 139,7<br>*5.500* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 29,5<br>*1.161* | 4 | B |
| T30-PU09B05-1.1/2-12-21R | 10309788 | UNF11/2-12 | 12,0 | 10,48<br>*0.413* | 38,1<br>*1.500* | 30,0<br>*1.181* | 101<br>*3.976* | 159,5<br>*6.280* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 36,0<br>*1.417* | 4 | B |

## T30-PUB

Through holes – G threads





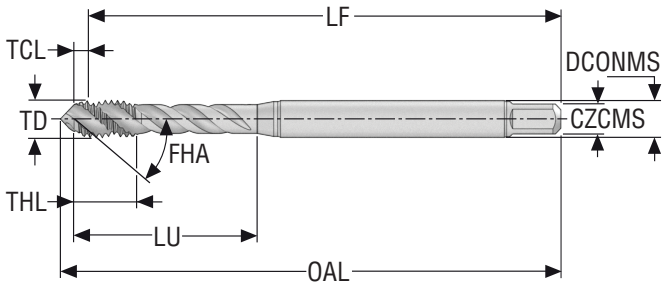

- Substrate: HSSE
- Uncoated
- Standard: DIN5156
- Thread tolerance class: NORMAL
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PU21B09-1/16-28-11R | 10309695 | G1/16 | 28,0 | 4,64<br>*0.183* | 7,723<br>*0.304* | 17,0<br>*0.669* | 67<br>*2.638* | 85,4<br>*3.362* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | B |
| T30-PU21B09-1/8-28-11R | 10309501 | G1/8 | 28,0 | 4,76<br>*0.187* | 9,728<br>*0.383* | 18,0<br>*0.709* | 67<br>*2.638* | 85,2<br>*3.354* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | B |
| T30-PU21B09-1/4-19-11R | 10309502 | G1/4 | 19,0 | 6,77<br>*0.267* | 13,157<br>*0.518* | 22,0<br>*0.866* | 71<br>*2.795* | 93,2<br>*3.669* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 11,8<br>*0.465* | 3 | B |
| T30-PU21B09-3/8-19-11R | 10309503 | G3/8 | 19,0 | 6,89<br>*0.271* | 16,662<br>*0.656* | 22,0<br>*0.866* | 58<br>*2.283* | 93,1<br>*3.665* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,25<br>*0.600* | 3 | B |
| T30-PU21B09-1/2-14-11R | 10309504 | G1/2 | 14,0 | 9,22<br>*0.363* | 20,955<br>*0.825* | 25,0<br>*0.984* | 80<br>*3.150* | 115,8<br>*4.559* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 19,0<br>*0.748* | 4 | B |
| T30-PU21B09-3/4-14-11R | 10309505 | G3/4 | 14,0 | 9,36<br>*0.369* | 26,441<br>*1.041* | 28,0<br>*1.102* | 77<br>*3.031* | 130,6<br>*5.142* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 24,5<br>*0.965* | 4 | B |
| T30-PU21B09-7/8-14-11R | 10309696 | G7/8 | 14,0 | 9,03<br>*0.356* | 30,201<br>*1.189* | 30,0<br>*1.181* | 85<br>*3.346* | 141,0<br>*5.551* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,25<br>*1.112* | 4 | B |
| T30-PU21B09-1-11-11R | 10309506 | G1 | 11,0 | 11,49<br>*0.452* | 33,249<br>*1.309* | 32,0<br>*1.260* | 93<br>*3.661* | 148,5<br>*5.846* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 30,75<br>*1.211* | 4 | B |
| T30-PU21B09-1.1/4-11-11R | 10309507 | G11/4 | 11,0 | 11,69<br>*0.460* | 41,91<br>*1.650* | 34,0<br>*1.339* | 72<br>*2.835* | 158,3<br>*6.232* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 39,5<br>*1.555* | 5 | B |
| T30-PU21B09-1.1/2-11-11R | 10309508 | G11/2 | 11,0 | 11,67<br>*0.459* | 47,803<br>*1.882* | 36,0<br>*1.417* | 87<br>*3.425* | 178,3<br>*7.020* | 190,0<br>*7.480* | 36,0<br>*1.417* | 36.00x29.00 | 45,25<br>*1.781* | 5 | B |
| T30-PU21B09-2-11-11R | 10309697 | G2 | 11,0 | 11,71<br>*0.461* | 59,614<br>*2.347* | 40,0<br>*1.575* | 111<br>*4.370* | 208,3<br>*8.201* | 220,0<br>*8.661* | 45,0<br>*1.772* | 45.00x35.00 | 57,0<br>*2.244* | 5 | B |

## T30-R40UC

Blind holes – Metric coarse threads





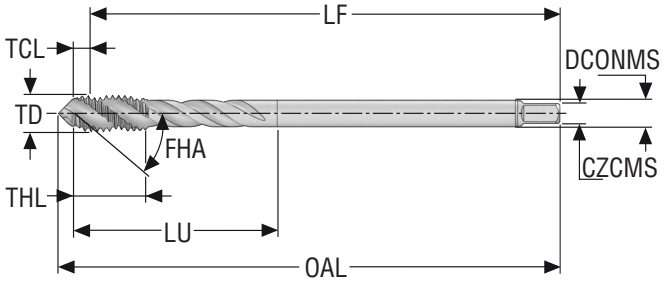

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U01C03-3X0.5-63R | 10309416 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T30-R40U01C03-3.5X0.6-63R | 10309417 | M3.5 | 0,6 | 1,36<br>*0.054* | 3,5<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,6<br>*2.150* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,9<br>*0.114* | 3 | C |
| T30-R40U01C03-4X0.7-63R | 10309418 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T30-R40U01C03-4.5X0.75-63R | 10309651 | M4.5 | 0,75 | 1,72<br>*0.068* | 4,0<br>*0.157* | 8,0<br>*0.315* | 25<br>*0.984* | 68,3<br>*2.689* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00x4.90 | 3,8<br>*0.150* | 3 | C |
| T30-R40U01C03-5X0.8-63R | 10309420 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T30-R40U01C03-6X1-63R | 10309422 | M6 | 1,0 | 2,27<br>*0.089* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T30-R40U01C03-7X1-63R | 10309425 | M7 | 1,0 | 2,28<br>*0.090* | 7,0<br>*0.276* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00x5.50 | 6,0<br>*0.236* | 3 | C |
| T30-R40U01C03-8X1.25-63R | 10309426 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T30-R40U01C03-9X1.25-63R | 10309653 | M9 | 1,25 | 3,11<br>*0.122* | 9,0<br>*0.354* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00x7.00 | 7,8<br>*0.307* | 3 | C |
| T30-R40U01C03-10X1.5-63R | 10309429 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T30-R40UC

Blind holes – Metric coarse threads





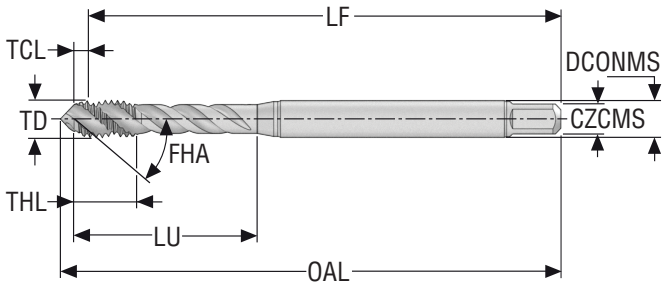

- Substrate: HSSE
- Uncoated
- Standard: DIN376
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U01C06-3X0.5-63R | 10309553 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 37<br>*1.457* | 54,8<br>*2.157* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20x1.80 | 2,5<br>*0.098* | 3 | C |
| T30-R40U01C06-4X0.7-63R | 10309554 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 8,0<br>*0.315* | 44<br>*1.732* | 61,2<br>*2.409* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,3<br>*0.130* | 3 | C |
| T30-R40U01C06-5X0.8-63R | 10309555 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 10,0<br>*0.394* | 51<br>*2.008* | 68,1<br>*2.681* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,2<br>*0.165* | 3 | C |
| T30-R40U01C06-6X1-63R | 10309556 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 12,0<br>*0.472* | 61<br>*2.402* | 77,7<br>*3.059* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50x3.40 | 5,0<br>*0.197* | 3 | C |
| T30-R40U01C06-8X1.25-63R | 10309557 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 15,0<br>*0.591* | 67<br>*2.638* | 86,9<br>*3.421* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | C |
| T30-R40U01C06-10X1.5-63R | 10309559 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 17,0<br>*0.669* | 77<br>*3.031* | 96,2<br>*3.787* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | C |
| T30-R40U01C06-11X1.5-63R | 10309731 | M11 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 76<br>*2.992* | 96,2<br>*3.787* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,5<br>*0.374* | 3 | C |
| T30-R40U01C06-12X1.75-63R | 10309562 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,6<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T30-R40U01C06-14X2-63R | 10309570 | M14 | 2,0 | 5,07<br>*0.200* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,9<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T30-R40U01C06-16X2-63R | 10309575 | M16 | 2,0 | 3,75<br>*0.148* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 106,3<br>*4.185* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T30-R40U01C06-18X2.5-63R | 10309578 | M18 | 2,5 | 6,31<br>*0.248* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 118,7<br>*4.673* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | C |
| T30-R40U01C06-20X2.5-63R | 10309581 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,5<br>*5.256* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |
| T30-R40U01C06-22X2.5-63R | 10309585 | M22 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 93<br>*3.661* | 133,5<br>*5.256* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | C |
| T30-R40U01C06-24X3-63R | 10309587 | M24 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 152,2<br>*5.992* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | C |
| T30-R40U01C06-27X3-63R | 10309591 | M27 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 97<br>*3.819* | 152,2<br>*5.992* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 24,0<br>*0.945* | 4 | C |
| T30-R40U01C06-30X3.5-63R | 10309594 | M30 | 3,5 | 8,87<br>*0.349* | 27,0<br>*1.063* | 35,0<br>*1.378* | 115<br>*4.528* | 171,1<br>*6.736* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | C |
| T30-R40U01C06-33X3.5-63R | 10309742 | M33 | 3,5 | 8,88<br>*0.350* | 33,0<br>*1.299* | 35,0<br>*1.378* | 113<br>*4.449* | 171,1<br>*6.736* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00x20.00 | 29,5<br>*1.161* | 4 | C |
| T30-R40U01C06-36X4-63R | 10309597 | M36 | 4,0 | 9,94<br>*0.391* | 36,0<br>*1.417* | 40,0<br>*1.575* | 131<br>*5.157* | 190,1<br>*7.484* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 32,0<br>*1.260* | 4 | C |
| T30-R40U01C06-39X4-63R | 10309749 | M39 | 4,0 | 9,94<br>*0.391* | 39,0<br>*1.535* | 40,0<br>*1.575* | 102<br>*4.016* | 190,1<br>*7.484* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 35,0<br>*1.378* | 5 | C |
| T30-R40U01C06-42X4.5-63R | 10309751 | M42 | 4,5 | 11,01<br>*0.433* | 42,0<br>*1.654* | 45,0<br>*1.772* | 102<br>*4.016* | 189,0<br>*7.441* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 37,5<br>*1.476* | 5 | C |
| T30-R40U01C06-45X4.5-63R | 10309754 | M45 | 4,5 | 11,01<br>*0.433* | 45,0<br>*1.772* | 45,0<br>*1.772* | 117<br>*4.606* | 209,0<br>*8.228* | 220,0<br>*8.661* | 36,0<br>*1.417* | 36.00x29.00 | 40,5<br>*1.594* | 5 | C |
| T30-R40U01C06-48X5-63R | 10309598 | M48 | 5,0 | 12,08<br>*0.476* | 48,0<br>*1.890* | 50,0<br>*1.969* | 147<br>*5.787* | 237,9<br>*9.366* | 250,0<br>*9.843* | 36,0<br>*1.417* | 36.00x29.00 | 43,0<br>*1.693* | 5 | C |
| T30-R40U01C06-52X5-63R | 10309757 | M52 | 5,0 | 12,08<br>*0.476* | 52,0<br>*2.047* | 50,0<br>*1.969* | 146<br>*5.748* | 237,9<br>*9.366* | 250,0<br>*9.843* | 40,0<br>*1.575* | 40.00x32.00 | 47,0<br>*1.850* | 5 | C |

## T30-R40UC

Blind holes – Metric coarse threads, 6G





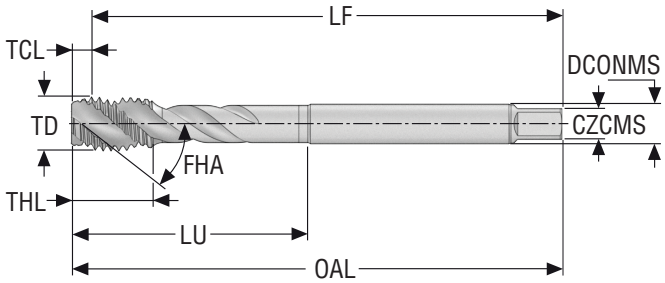

–Substrate: HSSE
–Uncoated
–Standard: DIN371
–Thread tolerance class: 6G
–FHA = 40°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U01C03-3X0.5-61R | 10309658 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T30-R40U01C03-4X0.7-61R | 10309659 | M4 | 0,7 | 1,75<br>*0.069* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T30-R40U01C03-5X0.8-61R | 10309660 | M5 | 0,8 | 1,93<br>*0.076* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T30-R40U01C03-6X1-61R | 10309446 | M6 | 1,0 | 2,32<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T30-R40U01C03-8X1.25-61R | 10309447 | M8 | 1,25 | 3,16<br>*0.124* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,8<br>*3.417* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T30-R40U01C03-10X1.5-61R | 10309448 | M10 | 1,5 | 3,81<br>*0.150* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T30-R40UC

Blind holes – Metric coarse threads, 6G





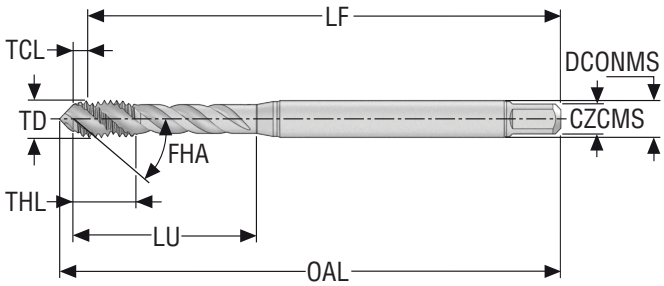

–Substrate: HSSE
–Uncoated
–Standard: DIN376
–Thread tolerance class: 6G
–FHA = 40°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U01C06-12X1.75-61R | 10309618 | M12 | 1,75 | 4,47<br>*0.176* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,5<br>*4.154* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T30-R40U01C06-16X2-61R | 10309619 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,8<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T30-R40U01C06-20X2.5-61R | 10309769 | M20 | 2,5 | 6,58<br>*0.259* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,4<br>*5.252* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |

## T30-R40UC

Blind holes – MF threads





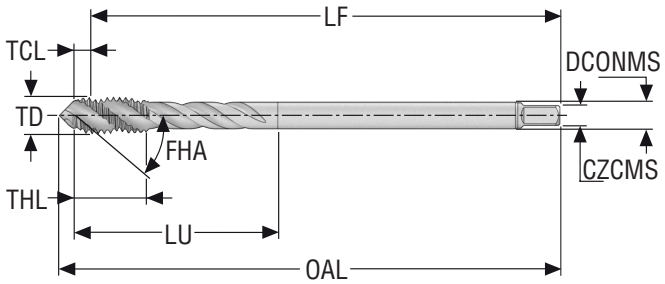

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U02C03-3X0.35-63R | 10309650 | MF3X0.35 | 0,35 | 0,81<br>*0.032* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 55,1<br>*2.169* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,65<br>*0.104* | 3 | C |
| T30-R40U02C03-4X0.5-63R | 10309419 | MF4X0.5 | 0,5 | 1,17<br>*0.046* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,7<br>*2.429* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | C |
| T30-R40U02C03-5X0.5-63R | 10309421 | MF5X0.5 | 0,5 | 1,17<br>*0.046* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,6<br>*2.701* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,5<br>*0.177* | 3 | C |
| T30-R40U02C03-6X0.5-63R | 10309423 | MF6X0.5 | 0,5 | 1,19<br>*0.047* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,5<br>*3.091* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,5<br>*0.217* | 3 | C |
| T30-R40U02C03-6X0.75-63R | 10309424 | MF6X0.75 | 0,75 | 1,73<br>*0.068* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,1<br>*3.075* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,2<br>*0.205* | 3 | C |
| T30-R40U02C03-8X0.5-63R | 10309652 | MF8X0.5 | 0,5 | 1,48<br>*0.058* | 8,0<br>*0.315* | 10,0<br>*0.394* | 30<br>*1.181* | 78,5<br>*3.091* | 80,0<br>*3.150* | 8,0<br>*0.315* | 8.00x6.20 | 7,5<br>*0.295* | 3 | C |
| T30-R40U02C03-8X0.75-63R | 10309427 | MF8X0.75 | 0,75 | 2,03<br>*0.080* | 8,0<br>*0.315* | 10,0<br>*0.394* | 30<br>*1.181* | 78,0<br>*3.071* | 81,7<br>*3.217* | 8,0<br>*0.315* | 8.00x6.20 | 7,2<br>*0.283* | 3 | C |
| T30-R40U02C03-8X1-63R | 10309428 | MF8X1 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,4<br>*3.441* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | C |
| T30-R40U02C03-10X0.5-63R | 10309654 | MF10X0.5 | 0,5 | 1,59<br>*0.063* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 88,4<br>*3.480* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 9,5<br>*0.374* | 3 | C |
| T30-R40U02C03-10X0.75-63R | 10309655 | MF10X0.75 | 0,75 | 2,13<br>*0.084* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,9<br>*3.461* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,2<br>*0.362* | 3 | C |
| T30-R40U02C03-10X1-63R | 10309430 | MF10X1 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,3<br>*3.437* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | C |
| T30-R40U02C03-10X1.25-63R | 10309431 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,8<br>*3.811* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,8<br>*0.346* | 3 | C |

## T30-R40UC

Blind holes – MF threads






- Substrate: HSSE
- Uncoated
- Standard: DIN374
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

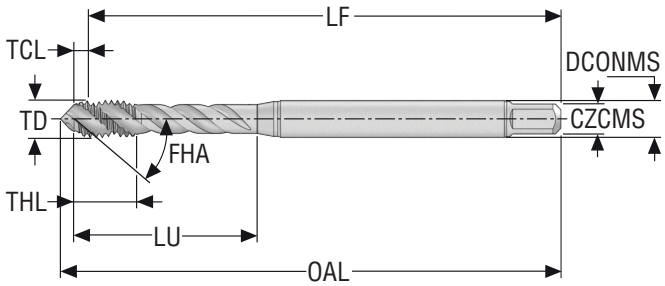
| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U02C05-4X0.5-63R | 10309727 | MF4X0.5 | 0,5 | 1,17<br>*0.046* | 4,0<br>*0.157* | 7,0<br>*0.276* | 44<br>*1.732* | 61,6<br>*2.425* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,5<br>*0.138* | 3 | C |
| T30-R40U02C05-5X0.5-63R | 10309728 | MF5X0.5 | 0,5 | 1,17<br>*0.046* | 5,0<br>*0.197* | 10,0<br>*0.394* | 51<br>*2.008* | 68,6<br>*2.701* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,5<br>*0.177* | 3 | C |
| T30-R40U02C05-8X1-63R | 10309558 | MF8X1 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 10,0<br>*0.394* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | C |
| T30-R40U02C05-9X1-63R | 10309729 | MF9X1 | 1,0 | 2,58<br>*0.102* | 9,0<br>*0.354* | 10,0<br>*0.394* | 63<br>*2.480* | 87,4<br>*3.441* | 90,0<br>*3.543* | 7,0<br>*0.276* | 9.00x7.00 | 8,0<br>*0.315* | 3 | C |
| T30-R40U02C05-10X0.75-63R | 10309730 | MF10X0.75 | 0,75 | 2,13<br>*0.084* | 10,0<br>*0.394* | 10,0<br>*0.394* | 67<br>*2.638* | 87,9<br>*3.461* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,2<br>*0.362* | 3 | C |
| T30-R40U02C05-12X0.75-63R | 10309732 | MF12X0.75 | 0,75 | 2,2<br>*0.087* | 10,0<br>*0.394* | 10,0<br>*0.394* | 73<br>*2.874* | 97,8<br>*3.850* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,2<br>*0.441* | 3 | C |
| T30-R40U02C05-10X1-63R | 10309560 | MF10X1 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 13,0<br>*0.512* | 67<br>*2.638* | 87,3<br>*3.437* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | C |
| T30-R40U02C05-10X1.25-63R | 10309561 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 77<br>*3.031* | 96,8<br>*3.811* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | C |
| T30-R40U02C05-12X1-63R | 10309567 | MF12X1 | 1,0 | 2,79<br>*0.110* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 97,2<br>*3.827* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 3 | C |
| T30-R40U02C05-12X1.25-63R | 10309568 | MF12X1.25 | 1,25 | 3,34<br>*0.131* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,7<br>*3.807* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | C |
| T30-R40U02C05-12X1.5-63R | 10309569 | MF12X1.5 | 1,5 | 3,87<br>*0.152* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,1<br>*3.783* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | C |
| T30-R40U02C05-14X1-63R | 10309571 | MF14X1 | 1,0 | 2,89<br>*0.114* | 14,0<br>*0.551* | 10,0<br>*0.394* | 71<br>*2.795* | 97,1<br>*3.823* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 4 | C |
| T30-R40U02C05-15X1-63R | 10309574 | MF15X1 | 1,0 | 2,89<br>*0.114* | 14,0<br>*0.551* | 10,0<br>*0.394* | 58<br>*2.283* | 97,1<br>*3.823* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T30-R40U02C05-14X1.25-63R | 10309572 | MF14X1.25 | 1,25 | 3,44<br>*0.135* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,6<br>*3.803* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,8<br>*0.504* | 4 | C |
| T30-R40U02C05-14X1.5-63R | 10309573 | MF14X1.5 | 1,5 | 3,97<br>*0.156* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,0<br>*3.780* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 4 | C |
| T30-R40U02C05-16X1-63R | 10309576 | MF16X1 | 1,0 | 2,79<br>*0.110* | 16,0<br>*0.630* | 10,0<br>*0.394* | 58<br>*2.283* | 97,2<br>*3.827* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,0<br>*0.591* | 4 | C |
| T30-R40U02C05-16X1.5-63R | 10309577 | MF16X1.5 | 1,5 | 4,07<br>*0.160* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,9<br>*3.776* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | C |
| T30-R40U02C05-18X1-63R | 10309579 | MF18X1 | 1,0 | 2,69<br>*0.106* | 18,0<br>*0.709* | 13,0<br>*0.512* | 66<br>*2.598* | 107,3<br>*4.224* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 17,0<br>*0.669* | 4 | C |
| T30-R40U02C05-18X1.5-63R | 10309580 | MF18X1.5 | 1,5 | 4,17<br>*0.164* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,8<br>*4.165* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | C |
| T30-R40U02C05-18X2-63R | 10309733 | MF18X2 | 2,0 | 5,25<br>*0.207* | 18,0<br>*0.709* | 20,0<br>*0.787* | 81<br>*3.189* | 119,7<br>*4.713* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 16,0<br>*0.630* | 4 | C |
| T30-R40U02C05-20X1-63R | 10309582 | MF20X1 | 1,0 | 2,79<br>*0.110* | 20,0<br>*0.787* | 13,0<br>*0.512* | 80<br>*3.150* | 122,2<br>*4.811* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 19,0<br>*0.748* | 4 | C |
| T30-R40U02C05-22X1-63R | 10309734 | MF22X1 | 1,0 | 2,59<br>*0.102* | 20,0<br>*0.787* | 13,0<br>*0.512* | 78<br>*3.071* | 122,4<br>*4.819* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | C |
| T30-R40U02C05-20X1.5-63R | 10309583 | MF20X1.5 | 1,5 | 4,37<br>*0.172* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,6<br>*4.748* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | C |
| T30-R40U02C05-20X2-63R | 10309584 | MF20X2 | 2,0 | 5,45<br>*0.215* | 20,0<br>*0.787* | 20,0<br>*0.787* | 95<br>*3.740* | 134,5<br>*5.295* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 18,0<br>*0.709* | 4 | C |
| T30-R40U02C05-24X1-63R | 10309736 | MF24X1 | 1,0 | 2,8<br>*0.110* | 22,0<br>*0.866* | 13,0<br>*0.512* | 93<br>*3.661* | 137,2<br>*5.402* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,0<br>*0.906* | 4 | C |

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U02C05-22X1.5-63R | 10309586 | MF22X1.5 | 1,5 | 4,37<br>*0.172* | 22,0<br>*0.866* | 17,0<br>*0.669* | 78<br>*3.071* | 120,6<br>*4.748* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 20,5<br>*0.807* | 4 | C |
| T30-R40U02C05-22X2-63R | 10309735 | MF22X2 | 2,0 | 5,45<br>*0.215* | 22,0<br>*0.866* | 20,0<br>*0.787* | 93<br>*3.661* | 134,5<br>*5.295* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 20,0<br>*0.787* | 4 | C |
| T30-R40U02C05-24X1.5-63R | 10309588 | MF24X1.5 | 1,5 | 4,39<br>*0.173* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 135,6<br>*5.339* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 22,5<br>*0.886* | 4 | C |
| T30-R40U02C05-25X1.5-63R | 10309590 | MF25X1.5 | 1,5 | 4,19<br>*0.165* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 135,4<br>*5.331* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,5<br>*0.925* | 4 | C |
| T30-R40U02C05-26X1.5-63R | 10309737 | MF26X1.5 | 1,5 | 4,19<br>*0.165* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 135,4<br>*5.331* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 24,5<br>*0.965* | 4 | C |
| T30-R40U02C05-24X2-63R | 10309589 | MF24X2 | 2,0 | 5,69<br>*0.224* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 134,3<br>*5.287* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 22,0<br>*0.866* | 4 | C |
| T30-R40U02C05-27X1.5-63R | 10309738 | MF27X1.5 | 1,5 | 4,19<br>*0.165* | 27,0<br>*1.063* | 20,0<br>*0.787* | 77<br>*3.031* | 135,4<br>*5.331* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,5<br>*1.004* | 4 | C |
| T30-R40U02C05-28X1.5-63R | 10309593 | M28X1.5 | 1,5 | 4,19<br>*0.165* | 27,0<br>*1.063* | 20,0<br>*0.787* | 77<br>*3.031* | 135,4<br>*5.331* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,5<br>*1.004* | 4 | C |
| T30-R40U02C05-27X2-63R | 10309592 | MF27X2 | 2,0 | 5,67<br>*0.223* | 27,0<br>*1.063* | 20,0<br>*0.787* | 77<br>*3.031* | 134,3<br>*5.287* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 25,0<br>*0.984* | 4 | C |
| T30-R40U02C05-30X1.5-63R | 10309595 | MF30X1.5 | 1,5 | 4,19<br>*0.165* | 30,0<br>*1.181* | 22,0<br>*0.866* | 85<br>*3.346* | 145,8<br>*5.740* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,5<br>*1.122* | 4 | C |
| T30-R40U02C05-30X2-63R | 10309596 | MF30X2 | 2,0 | 5,67<br>*0.223* | 30,0<br>*1.181* | 22,0<br>*0.866* | 85<br>*3.346* | 144,3<br>*5.681* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,0<br>*1.102* | 4 | C |
| T30-R40U02C05-30X3-63R | 10309739 | MF30X3 | 3,0 | 7,81<br>*0.307* | 30,0<br>*1.181* | 30,0<br>*1.181* | 115<br>*4.528* | 172,2<br>*6.780* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 27,0<br>*1.063* | 4 | C |
| T30-R40U02C05-32X1.5-63R | 10309740 | MF32X1.5 | 1,5 | 4,19<br>*0.165* | 32,0<br>*1.260* | 22,0<br>*0.866* | 85<br>*3.346* | 145,4<br>*5.724* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 30,5<br>*1.201* | 4 | C |
| T30-R40U02C05-32X2-63R | 10309741 | MF32X2 | 2,0 | 5,47<br>*0.215* | 32,0<br>*1.260* | 22,0<br>*0.866* | 85<br>*3.346* | 144,5<br>*5.689* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 30,0<br>*1.181* | 4 | C |
| T30-R40U02C05-33X1.5-63R | 10309743 | MF33X1.5 | 1,5 | 3,79<br>*0.149* | 33,0<br>*1.299* | 22,0<br>*0.866* | 93<br>*3.661* | 156,2<br>*6.150* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 31,5<br>*1.240* | 4 | C |
| T30-R40U02C05-33X2-63R | 10309744 | MF33X2 | 2,0 | 5,67<br>*0.223* | 33,0<br>*1.299* | 24,0<br>*0.945* | 93<br>*3.661* | 154,3<br>*6.075* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 31,0<br>*1.220* | 4 | C |
| T30-R40U02C05-35X1.5-63R | 10309745 | MF35X1.5 | 1,5 | 4,19<br>*0.165* | 35,0<br>*1.378* | 22,0<br>*0.866* | 101<br>*3.976* | 165,4<br>*6.512* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 33,5<br>*1.319* | 4 | C |
| T30-R40U02C05-36X1.5-63R | 10309746 | MF36X1.5 | 1,5 | 4,19<br>*0.165* | 36,0<br>*1.417* | 22,0<br>*0.866* | 101<br>*3.976* | 165,4<br>*6.512* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 34,5<br>*1.358* | 4 | C |
| T30-R40U02C05-36X2-63R | 10309747 | MF36X2 | 2,0 | 5,67<br>*0.223* | 36,0<br>*1.417* | 24,0<br>*0.945* | 101<br>*3.976* | 164,3<br>*6.469* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 34,0<br>*1.339* | 4 | C |
| T30-R40U02C05-36X3-63R | 10309748 | MF36X3 | 3,0 | 7,81<br>*0.307* | 36,0<br>*1.417* | 30,0<br>*1.181* | 131<br>*5.157* | 192,2<br>*7.567* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 33,0<br>*1.299* | 4 | C |
| T30-R40U02C05-40X1.5-63R | 10309750 | MF40X1.5 | 1,5 | 4,39<br>*0.173* | 40,0<br>*1.575* | 25,0<br>*0.984* | 72<br>*2.835* | 165,6<br>*6.520* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 38,5<br>*1.516* | 5 | C |
| T30-R40U02C05-42X2-63R | 10309752 | MF42X2 | 2,0 | 5,46<br>*0.215* | 42,0<br>*1.654* | 25,0<br>*0.984* | 72<br>*2.835* | 164,5<br>*6.476* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 40,0<br>*1.575* | 5 | C |
| T30-R40U02C05-42X3-63R | 10309753 | MF42X3 | 3,0 | 7,61<br>*0.300* | 42,0<br>*1.654* | 30,0<br>*1.181* | 102<br>*4.016* | 192,4<br>*7.575* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00x24.00 | 39,0<br>*1.535* | 5 | C |
| T30-R40U02C05-48X1.5-63R | 10309755 | MF48X1.5 | 1,5 | 4,2<br>*0.165* | 48,0<br>*1.890* | 27,0<br>*1.063* | 87<br>*3.425* | 185,4<br>*7.299* | 190,0<br>*7.480* | 36,0<br>*1.417* | 36.00x29.00 | 46,5<br>*1.831* | 5 | C |
| T30-R40U02C05-48X3-63R | 10309756 | MF48X3 | 3,0 | 7,83<br>*0.308* | 48,0<br>*1.890* | 33,0<br>*1.299* | 122<br>*4.803* | 217,2<br>*8.551* | 225,0<br>*8.858* | 36,0<br>*1.417* | 36.00x29.00 | 45,0<br>*1.772* | 5 | C |

## T30-R40UC

Blind holes – UNC threads





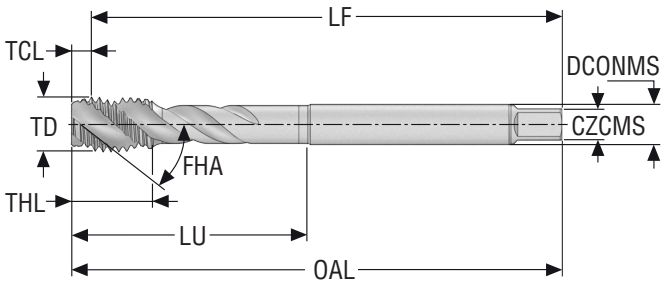

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U08C03-2-56-21R | 10309656 | UNC2-56 | 56.0 | 1,14<br>*0.045* | 2,184<br>*0.086* | 8,0<br>*0.315* | 13<br>*0.512* | 43,8<br>*1.724* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80x2.10 | 1,85<br>*0.073* | 2 | C |
| T30-R40U08C03-4-40-21R | 10309432 | UNC4-40 | 40.0 | 1,45<br>*0.057* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 54,7<br>*2.154* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,35<br>*0.093* | 3 | C |
| T30-R40U08C03-5-40-21R | 10309433 | UNC5-40 | 40.0 | 1,5<br>*0.059* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,5<br>*2.146* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,65<br>*0.104* | 3 | C |
| T30-R40U08C03-6-32-21R | 10309434 | UNC6-32 | 32.0 | 1,92<br>*0.076* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,2<br>*2.134* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,85<br>*0.112* | 3 | C |
| T30-R40U08C03-8-32-21R | 10309435 | UNC8-32 | 32.0 | 1,85<br>*0.073* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,1<br>*2.406* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | C |
| T30-R40U08C03-10-24-21R | 10309436 | UNC10-24 | 24.0 | 2,49<br>*0.098* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 67,8<br>*2.669* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 3,9<br>*0.154* | 3 | C |
| T30-R40U08C03-12-24-21R | 10309657 | UNC12-24 | 24.0 | 2,42<br>*0.095* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00x4.90 | 4,5<br>*0.177* | 3 | C |
| T30-R40U08C03-1/4-20-21R | 10309437 | UNC1/4-20 | 20.0 | 2,9<br>*0.114* | 6,35<br>*0.250* | 13,0<br>*0.512* | 32<br>*1.260* | 77,1<br>*3.035* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00x5.50 | 5,1<br>*0.201* | 3 | C |
| T30-R40U08C03-5/16-18-21R | 10309438 | UNC5/16-18 | 18.0 | 3,53<br>*0.139* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 86,5<br>*3.406* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,6<br>*0.260* | 3 | C |
| T30-R40U08C03-3/8-16-21R | 10309439 | UNC3/8-16 | 16.0 | 3,99<br>*0.157* | 9,525<br>*0.375* | 15,0<br>*0.591* | 39<br>*1.535* | 96,0<br>*3.780* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,0<br>*0.315* | 3 | C |

## T30-R40UC

Blind holes – UNC threads





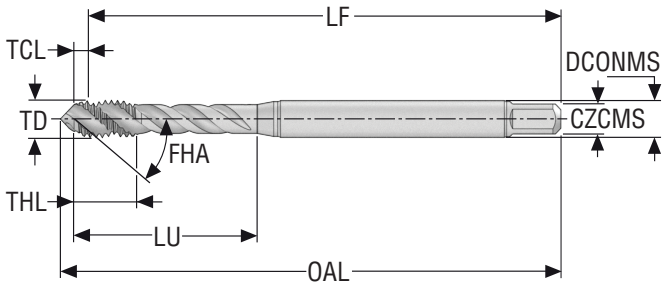

- Substrate: HSSE
- Uncoated
- Standard: DIN376
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U08C06-7/16-14-21R | 10309606 | UNC7/16-14 | 14.0 | 4,6<br>*0.181* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 95,4<br>*3.756* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,3<br>*0.366* | 3 | C |
| T30-R40U08C06-1/2-13-21R | 10309607 | UNC1/2-13 | 13.0 | 4,94<br>*0.194* | 12,7<br>*0.500* | 18,0<br>*0.709* | 83<br>*3.268* | 105,1<br>*4.138* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,7<br>*0.421* | 3 | C |
| T30-R40U08C06-9/16-12-21R | 10309608 | UNC9/16-12 | 12.0 | 5,37<br>*0.211* | 14,287<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 104,6<br>*4.118* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,3<br>*0.484* | 4 | C |
| T30-R40U08C06-5/8-11-21R | 10309609 | UNC5/8-11 | 11.0 | 5,81<br>*0.229* | 15,875<br>*0.625* | 22,0<br>*0.866* | 68<br>*2.677* | 104,2<br>*4.102* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 13,5<br>*0.531* | 4 | C |
| T30-R40U08C06-3/4-10-21R | 10309610 | UNC3/4-10 | 10.0 | 6,78<br>*0.267* | 19,05<br>*0.750* | 25,0<br>*0.984* | 81<br>*3.189* | 118,2<br>*4.654* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | C |
| T30-R40U08C06-7/8-9-21R | 10309611 | UNC7/8-9 | 9.0 | 7,27<br>*0.286* | 22,225<br>*0.875* | 30,0<br>*1.181* | 93<br>*3.661* | 132,7<br>*5.224* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | C |
| T30-R40U08C06-1-8-21R | 10309612 | UNC1-8 | 8.0 | 8,32<br>*0.328* | 25,4<br>*1.000* | 30,0<br>*1.181* | 97<br>*3.819* | 151,7<br>*5.972* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 22,25<br>*0.876* | 4 | C |
| T30-R40U08C06-1.1/8-7-21R | 10309761 | UNC11/8-7 | 7.0 | 9,16<br>*0.361* | 28,575<br>*1.125* | 37,0<br>*1.457* | 115<br>*4.528* | 170,8<br>*6.724* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 25,0<br>*0.984* | 4 | C |
| T30-R40U08C06-1.1/4-7-21R | 10309762 | UNC11/4-7 | 7.0 | 9,3<br>*0.366* | 31,75<br>*1.250* | 37,0<br>*1.457* | 115<br>*4.528* | 170,7<br>*6.720* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 28,0<br>*1.102* | 4 | C |
| T30-R40U08C06-1.3/8-6-21R | 10309763 | UNC13/8-6 | 6.0 | 10,5<br>*0.413* | 34,925<br>*1.375* | 40,0<br>*1.575* | 131<br>*5.157* | 189,5<br>*7.461* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00x22.00 | 30,75<br>*1.211* | 4 | C |

## T30-R40UC

Blind holes – UNF threads





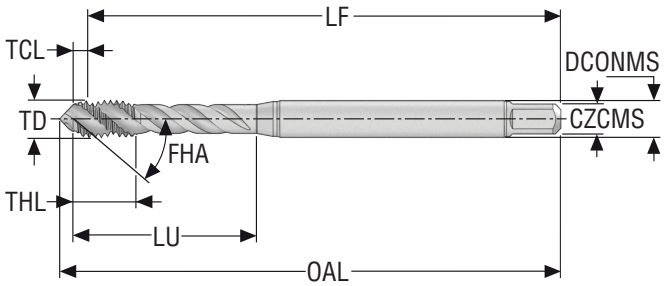

- Substrate: HSSE
- Uncoated
- Standard: DIN371
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U09C03-4-48-21R | 10309783 | UNF4-48 | 48.0 | 1,26<br>*0.050* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,4<br>*0.094* | 3 | C |
| T30-R40U09C03-5-44-21R | 10309784 | UNF5-44 | 44.0 | 1,32<br>*0.052* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,6<br>*2.150* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,7<br>*0.106* | 3 | C |
| T30-R40U09C03-6-40-21R | 10309785 | UNF6-40 | 40.0 | 1,56<br>*0.061* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,5<br>*2.146* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00x3.00 | 2,95<br>*0.116* | 3 | C |
| T30-R40U09C03-8-36-21R | 10309440 | UNF8-36 | 36.0 | 1,67<br>*0.066* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,5<br>*0.138* | 3 | C |
| T30-R40U09C03-10-32-21R | 10309441 | UNF10-32 | 32.0 | 1,96<br>*0.077* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,1<br>*0.161* | 3 | C |
| T30-R40U09C03-12-28-21R | 10309442 | UNF12-28 | 28.0 | 2,07<br>*0.081* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,9<br>*3.067* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00x4.90 | 4,6<br>*0.181* | 3 | C |
| T30-R40U09C03-1/4-28-21R | 10309443 | UNF1/4-28 | 28.0 | 2,19<br>*0.086* | 6,35<br>*0.250* | 10,0<br>*0.394* | 29<br>*1.142* | 77,6<br>*3.055* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00x5.50 | 5,5<br>*0.217* | 3 | C |
| T30-R40U09C03-5/16-24-21R | 10309444 | UNF5/16-24 | 24.0 | 2,82<br>*0.111* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 87,2<br>*3.433* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,9<br>*0.272* | 3 | C |
| T30-R40U09C03-3/8-24-21R | 10309445 | UNF3/8-24 | 24.0 | 2,91<br>*0.115* | 9,525<br>*0.375* | 15,0<br>*0.591* | 35<br>*1.378* | 87,1<br>*3.429* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T30-R40UC

Blind holes – UNF threads





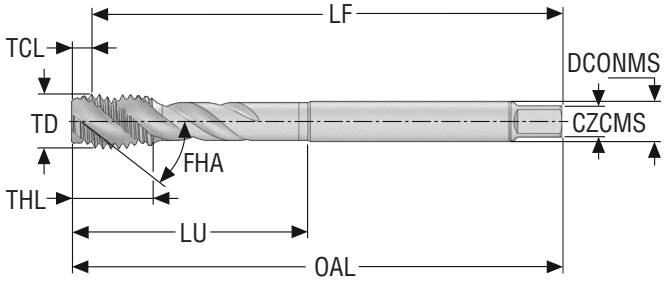

- Substrate: HSSE
- Uncoated
- Standard: DIN374
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U09C05-7/16-20-21R | 10309613 | UNF7/16-20 | 20.0 | 3,35<br>*0.132* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 96,6<br>*3.803* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00x6.20 | 9,9<br>*0.390* | 3 | C |
| T30-R40U09C05-1/2-20-21R | 10309614 | UNF1/2-20 | 20.0 | 3,51<br>*0.138* | 12,7<br>*0.500* | 15,0<br>*0.591* | 73<br>*2.874* | 96,5<br>*3.799* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,5<br>*0.453* | 3 | C |
| T30-R40U09C05-9/16-18-21R | 10309615 | UNF9/16-18 | 18.0 | 3,77<br>*0.148* | 14,287<br>*0.562* | 15,0<br>*0.591* | 71<br>*2.795* | 96,2<br>*3.787* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 4 | C |
| T30-R40U09C05-5/8-18-21R | 10309616 | UNF5/8-18 | 18.0 | 3,86<br>*0.152* | 15,875<br>*0.625* | 15,0<br>*0.591* | 58<br>*2.283* | 96,1<br>*3.783* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | C |
| T30-R40U09C05-3/4-16-21R | 10309617 | UNF3/4-16 | 16.0 | 4,45<br>*0.175* | 19,05<br>*0.750* | 17,0<br>*0.669* | 66<br>*2.598* | 105,5<br>*4.154* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 17,5<br>*0.689* | 4 | C |
| T30-R40U09C05-7/8-14-21R | 10309764 | UNF7/8-14 | 14.0 | 5,16<br>*0.203* | 22,225<br>*0.875* | 17,0<br>*0.669* | 78<br>*3.071* | 119,8<br>*4.717* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00x14.50 | 20,5<br>*0.807* | 4 | C |
| T30-R40U09C05-1-12-21R | 10309765 | UNF1-12 | 12.0 | 5,82<br>*0.229* | 25,4<br>*1.000* | 22,0<br>*0.866* | 93<br>*3.661* | 134,2<br>*5.283* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 23,3<br>*0.917* | 4 | C |
| T30-R40U09C05-1.1/8-12-21R | 10309766 | UNF11/8-12 | 12.0 | 5,98<br>*0.235* | 28,575<br>*1.125* | 22,0<br>*0.866* | 85<br>*3.346* | 144,0<br>*5.669* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | C |
| T30-R40U09C05-1.1/4-12-21R | 10309767 | UNF11/4-12 | 12.0 | 5,94<br>*0.234* | 31,75<br>*1.250* | 22,0<br>*0.866* | 85<br>*3.346* | 144,1<br>*5.673* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 29,5<br>*1.161* | 4 | C |
| T30-R40U09C05-1.1/2-12-21R | 10309768 | UNF11/2-12 | 12.0 | 6,02<br>*0.237* | 38,1<br>*1.500* | 24,0<br>*0.945* | 101<br>*3.976* | 164,0<br>*6.457* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00x22.00 | 36,0<br>*1.417* | 4 | C |

## T30-R40UC

Blind holes – G threads





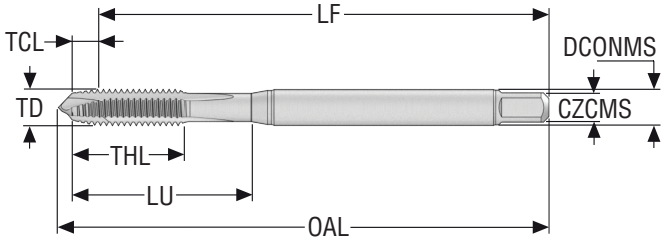

- Substrate: HSSE
- Uncoated
- Standard: DIN5156
- Thread tolerance class: NORMAL
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40U21C09-1/16-28-11R | 10309758 | G1/16 | 28.0 | 2,56<br>*0.101* | 7,723<br>*0.304* | 10,0<br>*0.394* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | C |
| T30-R40U21C09-1/8-28-11R | 10309599 | G1/8 | 28.0 | 2,67<br>*0.105* | 9,728<br>*0.383* | 10,0<br>*0.394* | 67<br>*2.638* | 87,3<br>*3.437* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | C |
| T30-R40U21C09-1/4-19-11R | 10309600 | G1/4 | 19.0 | 3,72<br>*0.146* | 13,157<br>*0.518* | 14,0<br>*0.551* | 71<br>*2.795* | 96,3<br>*3.791* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 11,8<br>*0.465* | 3 | C |
| T30-R40U21C09-3/8-19-11R | 10309601 | G3/8 | 19.0 | 3,92<br>*0.154* | 16,662<br>*0.656* | 15,0<br>*0.591* | 58<br>*2.283* | 96,1<br>*3.783* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,25<br>*0.600* | 4 | C |
| T30-R40U21C09-1/2-14-11R | 10309602 | G1/2 | 14.0 | 5,28<br>*0.208* | 20,955<br>*0.825* | 17,0<br>*0.669* | 80<br>*3.150* | 119,7<br>*4.713* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 19,0<br>*0.748* | 4 | C |
| T30-R40U21C09-3/4-14-11R | 10309603 | G3/4 | 14.0 | 5,45<br>*0.215* | 26,441<br>*1.041* | 20,0<br>*0.787* | 77<br>*3.031* | 134,5<br>*5.295* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 24,5<br>*0.965* | 4 | C |
| T30-R40U21C09-7/8-14-11R | 10309604 | G7/8 | 14.0 | 5,38<br>*0.212* | 30,201<br>*1.189* | 22,0<br>*0.866* | 85<br>*3.346* | 144,6<br>*5.693* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00x18.00 | 28,25<br>*1.112* | 4 | C |
| T30-R40U21C09-1-11-11R | 10309605 | G1 | 11.0 | 6,56<br>*0.258* | 33,249<br>*1.309* | 24,0<br>*0.945* | 93<br>*3.661* | 153,4<br>*6.039* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 30,75<br>*1.211* | 4 | C |
| T30-R40U21C09-1.1/4-11-11R | 10309759 | G11/4 | 11.0 | 6,71<br>*0.264* | 41,91<br>*1.650* | 25,0<br>*0.984* | 72<br>*2.835* | 163,3<br>*6.429* | 170,0<br>*6.693* | 32,0<br>*1.260* | 32.00x24.00 | 39,5<br>*1.555* | 5 | C |
| T30-R40U21C09-1.1/2-11-11R | 10309760 | G11/2 | 11.0 | 6,66<br>*0.262* | 47,803<br>*1.882* | 27,0<br>*1.063* | 87<br>*3.425* | 183,3<br>*7.217* | 190,0<br>*7.480* | 36,0<br>*1.417* | 36.00x29.00 | 45,25<br>*1.781* | 5 | C |
| T30-R40U21C09-2-11-11R | 10309789 | G2 | 11.0 | 6,48<br>*0.255* | 59,614<br>*2.347* | 27,0<br>*1.063* | 111<br>*4.370* | 213,5<br>*8.406* | 220,0<br>*8.661* | 45,0<br>*1.772* | 45.00x35.00 | 57,0<br>*2.244* | 6 | C |

## T30-PXB

Through holes – Metric coarse threads





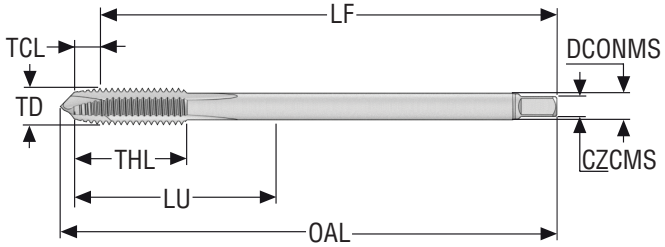

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PX01B03-3X0.5-63R | 10309402 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,8<br>*2.118* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T30-PX01B03-4X0.7-63R | 10309403 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,8<br>*2.354* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T30-PX01B03-5X0.8-63R | 10309404 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,4<br>*2.614* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T30-PX01B03-6X1-63R | 10309405 | M6 | 1,0 | 4,37<br>*0.172* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T30-PX01B03-7X1-63R | 10309649 | M7 | 1,0 | 4,37<br>*0.172* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00x5.50 | 6,0<br>*0.236* | 3 | B |
| T30-PX01B03-8X1.25-63R | 10309406 | M8 | 1,25 | 5,4<br>*0.213* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,7<br>*3.335* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T30-PX01B03-10X1.5-63R | 10309407 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,2<br>*3.669* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T30-PXB

Through holes – Metric coarse threads





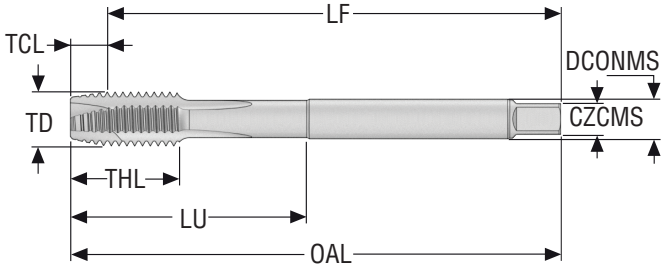

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN376
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PX01B06-3X0.5-63R | 10309707 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 11,0<br>*0.433* | 37<br>*1.457* | 53,7<br>*2.114* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20x1.80 | 2,5<br>*0.098* | 3 | B |
| T30-PX01B06-4X0.7-63R | 10309520 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 44<br>*1.732* | 59,7<br>*2.350* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,3<br>*0.130* | 3 | B |
| T30-PX01B06-5X0.8-63R | 10309521 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 51<br>*2.008* | 66,4<br>*2.614* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,2<br>*0.165* | 3 | B |
| T30-PX01B06-6X1-63R | 10309522 | M6 | 1,0 | 4,39<br>*0.173* | 6,0<br>*0.236* | 18,0<br>*0.709* | 61<br>*2.402* | 75,6<br>*2.976* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50x3.40 | 5,0<br>*0.197* | 3 | B |
| T30-PX01B06-8X1.25-63R | 10309523 | M8 | 1,25 | 5,7<br>*0.224* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 84,3<br>*3.319* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | B |
| T30-PX01B06-10X1.5-63R | 10309525 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 93,2<br>*3.669* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | B |
| T30-PX01B06-12X1.75-63R | 10309527 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 102,0<br>*4.016* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T30-PX01B06-14X2-63R | 10309530 | M14 | 2,0 | 9,14<br>*0.360* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 100,9<br>*3.972* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 3 | B |
| T30-PX01B06-16X2-63R | 10309532 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,8<br>*3.969* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T30-PX01B06-18X2.5-63R | 10309711 | M18 | 2,5 | 11,38<br>*0.448* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 113,6<br>*4.472* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | B |
| T30-PX01B06-20X2.5-63R | 10309533 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,4<br>*5.055* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |
| T30-PX01B06-22X2.5-63R | 10309713 | M22 | 2,5 | 11,78<br>*0.464* | 20,0<br>*0.787* | 32,0<br>*1.260* | 93<br>*3.661* | 128,2<br>*5.047* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | B |
| T30-PX01B06-24X3-63R | 10309535 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,3<br>*5.760* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | B |
| T30-PX01B06-27X3-63R | 10309536 | M27 | 3,0 | 13,88<br>*0.546* | 24,0<br>*0.945* | 38,0<br>*1.496* | 97<br>*3.819* | 146,1<br>*5.752* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 24,0<br>*0.945* | 4 | B |
| T30-PX01B06-30X3.5-63R | 10309714 | M30 | 3,5 | 15,93<br>*0.627* | 27,0<br>*1.063* | 45,0<br>*1.772* | 115<br>*4.528* | 164,1<br>*6.461* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | B |

## T30-PXB

Through holes – MF threads





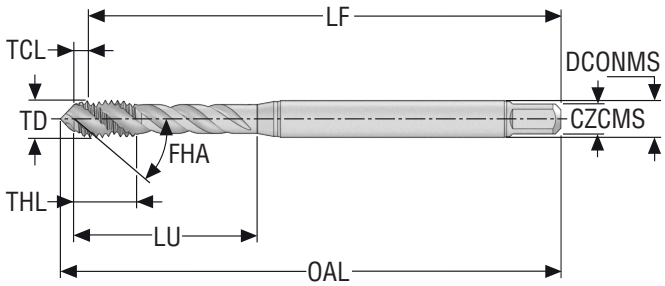

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN374
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-PX02B05-8X1-63R | 10309524 | MF8X1 | 1,0 | 4,67<br>*0.184* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 85,3<br>*3.358* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | B |
| T30-PX02B05-10X1-63R | 10309708 | MF10X1 | 1,0 | 4,79<br>*0.189* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 85,2<br>*3.354* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | B |
| T30-PX02B05-10X1.25-63R | 10309526 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 94,2<br>*3.709* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | B |
| T30-PX02B05-12X1-63R | 10309709 | MF12X1 | 1,0 | 4,89<br>*0.193* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 95,1<br>*3.744* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 3 | B |
| T30-PX02B05-12X1.25-63R | 10309528 | MF12X1.25 | 1,25 | 5,94<br>*0.234* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 94,1<br>*3.705* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | B |
| T30-PX02B05-12X1.5-63R | 10309529 | MF12X1.5 | 1,5 | 6,97<br>*0.274* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 93,0<br>*3.661* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | B |
| T30-PX02B05-14X1.5-63R | 10309531 | MF14X1.5 | 1,5 | 7,07<br>*0.278* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 92,9<br>*3.657* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 3 | B |
| T30-PX02B05-16X1.5-63R | 10309710 | MF16X1.5 | 1,5 | 7,17<br>*0.282* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 92,8<br>*3.654* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 3 | B |
| T30-PX02B05-18X1.5-63R | 10309712 | MF18X1.5 | 1,5 | 7,27<br>*0.286* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 102,7<br>*4.043* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | B |
| T30-PX02B05-20X1.5-63R | 10309534 | MF20X1.5 | 1,5 | 7,47<br>*0.294* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 117,5<br>*4.626* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | B |

## T30-R40XC

Blind holes – Metric coarse threads





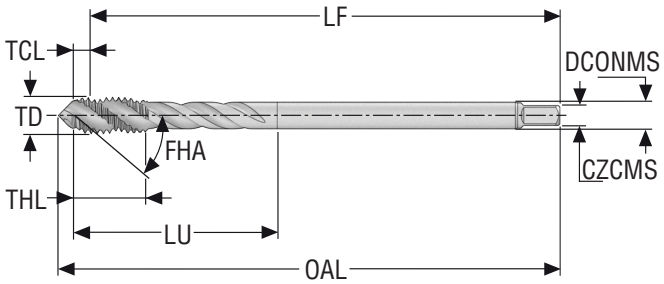

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40X01C03-3X0.5-63R | 10309449 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T30-R40X01C03-4X0.7-63R | 10309450 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T30-R40X01C03-5X0.8-63R | 10309451 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T30-R40X01C03-6X1-63R | 10309452 | M6 | 1,0 | 2,27<br>*0.089* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T30-R40X01C03-7X1-63R | 10309661 | M7 | 1,0 | 2,28<br>*0.090* | 7,0<br>*0.276* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00x5.50 | 6,0<br>*0.236* | 3 | C |
| T30-R40X01C03-8X1.25-63R | 10309453 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T30-R40X01C03-10X1.5-63R | 10309454 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T30-R40XC

Blind holes – Metric coarse threads





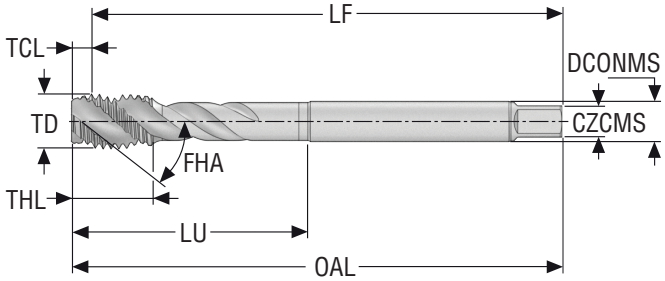

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN376
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40X01C06-3X0.5-63R | 10309770 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 37<br>*1.457* | 54,8<br>*2.157* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20x1.80 | 2,5<br>*0.098* | 3 | C |
| T30-R40X01C06-5X0.8-63R | 10309772 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 10,0<br>*0.394* | 51<br>*2.008* | 68,1<br>*2.681* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,2<br>*0.165* | 3 | C |
| T30-R40X01C06-6X1-63R | 10309620 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 12,0<br>*0.472* | 61<br>*2.402* | 77,7<br>*3.059* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50x3.40 | 5,0<br>*0.197* | 3 | C |
| T30-R40X01C06-8X1.25-63R | 10309621 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 15,0<br>*0.591* | 67<br>*2.638* | 86,9<br>*3.421* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | C |
| T30-R40X01C06-10X1.5-63R | 10309622 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 17,0<br>*0.669* | 77<br>*3.031* | 96,2<br>*3.787* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | C |
| T30-R40X01C06-12X1.75-63R | 10309624 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,6<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T30-R40X01C06-14X2-63R | 10309626 | M14 | 2,0 | 5,08<br>*0.200* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,9<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T30-R40X01C06-16X2-63R | 10309628 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,8<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T30-R40X01C06-18X2.5-63R | 10309778 | M18 | 2,5 | 6,31<br>*0.248* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 118,7<br>*4.673* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | C |
| T30-R40X01C06-20X2.5-63R | 10309630 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,5<br>*5.256* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |
| T30-R40X01C06-22X2.5-63R | 10309631 | M22 | 2,5 | 6,53<br>*0.257* | 20,0<br>*0.787* | 25,0<br>*0.984* | 93<br>*3.661* | 133,5<br>*5.256* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | C |
| T30-R40X01C06-24X3-63R | 10309632 | M24 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 152,2<br>*5.992* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | C |
| T30-R40X01C06-27X3-63R | 10309780 | M27 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 97<br>*3.819* | 152,2<br>*5.992* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00x16.00 | 24,0<br>*0.945* | 4 | C |
| T30-R40X01C06-30X3.5-63R | 10309633 | M30 | 3,5 | 8,87<br>*0.349* | 27,0<br>*1.063* | 35,0<br>*1.378* | 115<br>*4.528* | 171,1<br>*6.736* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00x18.00 | 26,5<br>*1.043* | 4 | C |

## T30-R40XC

Blind holes – MF threads





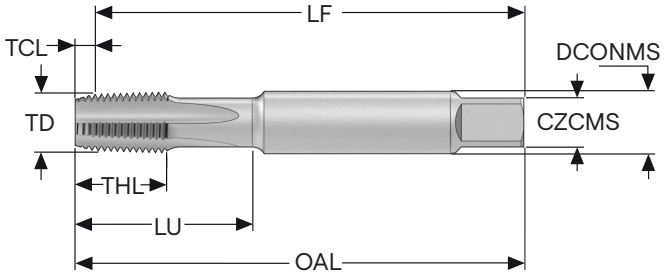

- Substrate: HSSE
- Coating: Vaporized
- Standard: DIN374
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-R40X02C05-8X1-63R | 10309773 | MF8X1 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 10,0<br>*0.394* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | C |
| T30-R40X02C05-10X1-63R | 10309623 | MF10X1 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 10,0<br>*0.394* | 67<br>*2.638* | 87,3<br>*3.437* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | C |
| T30-R40X02C05-10X1.25-63R | 10309774 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 77<br>*3.031* | 96,8<br>*3.811* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | C |
| T30-R40X02C05-12X1-63R | 10309775 | MF12X1 | 1,0 | 2,79<br>*0.110* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 97,2<br>*3.827* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 3 | C |
| T30-R40X02C05-12X1.25-63R | 10309625 | MF12X1.25 | 1,25 | 3,34<br>*0.131* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,7<br>*3.807* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | C |
| T30-R40X02C05-12X1.5-63R | 10309776 | MF12X1.5 | 1,5 | 3,87<br>*0.152* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,1<br>*3.783* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | C |
| T30-R40X02C05-14X1.5-63R | 10309627 | MF14X1.5 | 1,5 | 3,97<br>*0.156* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,0<br>*3.780* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 4 | C |
| T30-R40X02C05-16X1.5-63R | 10309777 | MF16X1.5 | 1,5 | 4,07<br>*0.160* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,9<br>*3.776* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | C |
| T30-R40X02C05-18X1.5-63R | 10309629 | MF18X1.5 | 1,5 | 4,17<br>*0.164* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,8<br>*4.165* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | C |
| T30-R40X02C05-20X1.5-63R | 10309779 | MF20X1.5 | 1,5 | 4,37<br>*0.172* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,6<br>*4.748* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | C |

## T30-SUC

Blind and through holes – NPT threads





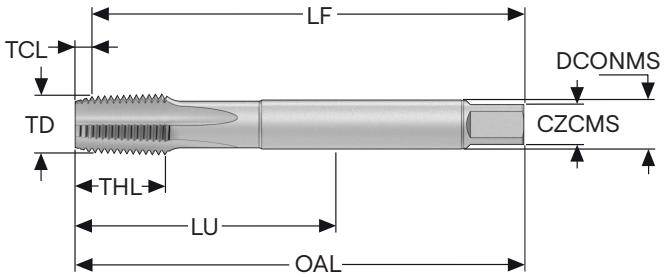

–Substrate: HSSE
–Uncoated
–Standard: DIN371
–Thread tolerance class: NORMAL
–FHA = 0°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-SU46C03-1/8-27-R | 10309414 | NPT1/8 | 27.0 | 3,14<br>*0.124* | 10,287<br>*0.405* | 15,0<br>*0.591* | 36<br>*1.417* | 86,9<br>*3.421* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |
| T30-SU46C03-1/4-18-R | 10309415 | NPT1/4 | 18.0 | 4,53<br>*0.178* | 13,716<br>*0.540* | 20,0<br>*0.787* | 39,5<br>*1.555* | 95,5<br>*3.760* | 100,0<br>*3.937* | 14,0<br>*0.551* | 14.00x11.00 | 11,0<br>*0.433* | 4 | C |

## T30-SUC

Blind and through holes – NPT threads





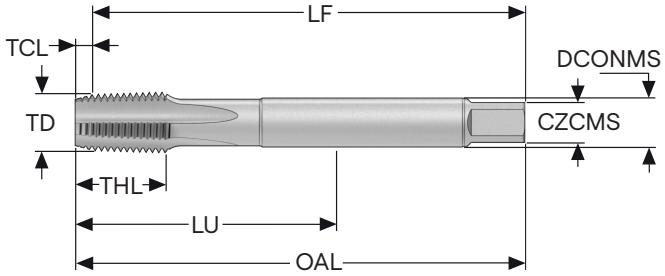

–Substrate: HSSE
–Uncoated
–Standard: DIN374
–Thread tolerance class: NORMAL
–FHA = 0°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-SU46C05-1/16-27-R | 10309723 | NPT1/16 | 27.0 | 2,72<br>*0.107* | 7,937<br>*0.312* | 15,0<br>*0.591* | 67<br>*2.638* | 87,3<br>*3.437* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,15<br>*0.242* | 3 | C |
| T30-SU46C05-1/8-27-R | 10309546 | NPT1/8 | 27.0 | 3,14<br>*0.124* | 10,287<br>*0.405* | 15,0<br>*0.591* | 67<br>*2.638* | 86,9<br>*3.421* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | C |
| T30-SU46C05-1/4-18-R | 10309547 | NPT1/4 | 18.0 | 4,53<br>*0.178* | 13,716<br>*0.540* | 20,0<br>*0.787* | 71<br>*2.795* | 95,5<br>*3.760* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 11,0<br>*0.433* | 4 | C |
| T30-SU46C05-3/8-18-R | 10309548 | NPT3/8 | 18.0 | 4,19<br>*0.165* | 17,145<br>*0.675* | 22,0<br>*0.866* | 66<br>*2.598* | 105,8<br>*4.165* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 14,4<br>*0.567* | 4 | C |
| T30-SU46C05-1/2-14-R | 10309549 | NPT1/2 | 14.0 | 5,65<br>*0.222* | 21,336<br>*0.840* | 27,0<br>*1.063* | 93<br>*3.661* | 134,4<br>*5.291* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 17,8<br>*0.701* | 5 | C |
| T30-SU46C05-3/4-14-R | 10309550 | NPT3/4 | 14.0 | 5,68<br>*0.224* | 26,67<br>*1.050* | 28,0<br>*1.102* | 77<br>*3.031* | 134,3<br>*5.287* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00x16.00 | 23,15<br>*0.911* | 5 | C |
| T30-SU46C05-1-11.1/2-R | 10309551 | NPT1 | 11.5 | 7,74<br>*0.305* | 33,401<br>*1.315* | 35,0<br>*1.378* | 93<br>*3.661* | 152,3<br>*5.996* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00x20.00 | 29,05<br>*1.144* | 6 | C |

## T30-SUC

Blind and through holes – NPTF threads





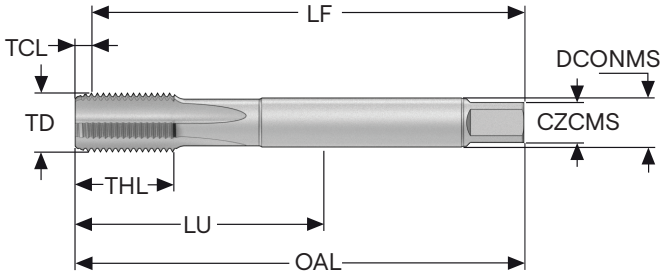

- Substrate: HSSE
- Uncoated
- Standard: DIN374
- Thread tolerance class: NORMAL
- FHA = 0°
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-SU47C05-1/8-27-R | 10309552 | NPTF1/8 | 27.0 | 3,14<br>*0.124* | 10,287<br>*0.405* | 15,0<br>*0.591* | 67<br>*2.638* | 86,9<br>*3.421* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,45<br>*0.333* | 3 | C |
| T30-SU47C05-1/4-18-R | 10309724 | NPTF1/4 | 18.0 | 4,53<br>*0.178* | 13,716<br>*0.540* | 20,0<br>*0.787* | 71<br>*2.795* | 95,5<br>*3.760* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 10,9<br>*0.429* | 4 | C |
| T30-SU47C05-3/8-18-R | 10309725 | NPTF3/8 | 18.0 | 4,19<br>*0.165* | 17,145<br>*0.675* | 22,0<br>*0.866* | 66<br>*2.598* | 105,8<br>*4.165* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 14,3<br>*0.563* | 4 | C |
| T30-SU47C05-1/2-14-R | 10309726 | NTPF1/2 | 14.0 | 5,65<br>*0.222* | 21,336<br>*0.840* | 27,0<br>*1.063* | 93<br>*3.661* | 134,4<br>*5.291* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 17,6<br>*0.693* | 5 | C |

## T30-SUC

Blind and through holes– Rc threads





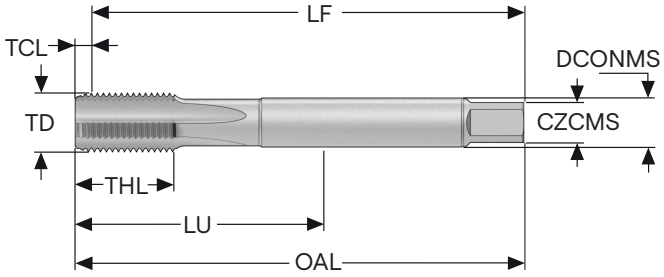

–Substrate: HSSE
–Uncoated
–Standard: DIN5156
–Thread tolerance class: NORMAL
–FHA = 0°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-SU33C09-1/16-28-R | 10309722 | Rc1/16 | 28.0 | 2,55<br>*0.100* | 7,723<br>*0.304* | 15,0<br>*0.591* | 67<br>*2.638* | 87,5<br>*3.445* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,15<br>*0.242* | 3 | C |
| T30-SU33C09-1/8-28-R | 10309542 | Rc1/8 | 28.0 | 2,56<br>*0.101* | 9,728<br>*0.383* | 15,0<br>*0.591* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,15<br>*0.321* | 3 | C |
| T30-SU33C09-1/4-19-R | 10309543 | Rc1/4 | 19.0 | 3,67<br>*0.144* | 13,157<br>*0.518* | 19,0<br>*0.748* | 71<br>*2.795* | 96,3<br>*3.791* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 10,85<br>*0.427* | 4 | C |
| T30-SU33C09-3/8-19-R | 10309544 | Rc3/8 | 19.0 | 3,61<br>*0.142* | 16,662<br>*0.656* | 21,0<br>*0.827* | 58<br>*2.283* | 96,4<br>*3.795* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,3<br>*0.563* | 4 | C |
| T30-SU33C09-1/2-14-R | 10309545 | Rc1/2 | 14.0 | 5,07<br>*0.200* | 20,955<br>*0.825* | 26,0<br>*1.024* | 80<br>*3.150* | 119,9<br>*4.720* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 17,8<br>*0.701* | 5 | C |

## T30-SUC

Blind and through holes – Rp threads





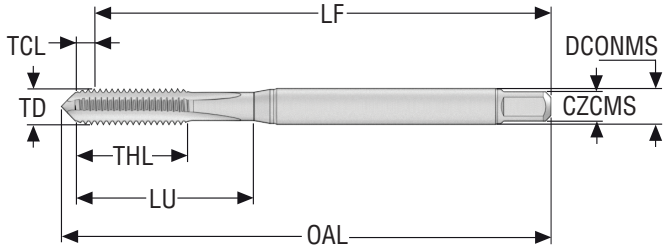

–Substrate: HSSE
–Uncoated
–Standard: DIN5156
–Thread tolerance class: NORMAL
–FHA = 0°
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T30-SU32C09-1/8-28-R | 10309540 | Rp1/8 | 28.0 | 2,24<br>*0.088* | 9,728<br>*0.383* | 18,0<br>*0.709* | 67<br>*2.638* | 87,8<br>*3.457* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 8,6<br>*0.339* | 3 | C |
| T30-SU32C09-1/4-19-R | 10309541 | Rp1/4 | 19.0 | 3,27<br>*0.129* | 13,157<br>*0.518* | 22,0<br>*0.866* | 71<br>*2.795* | 96,7<br>*3.807* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 11,5<br>*0.453* | 4 | C |
| T30-SU32C09-3/8-19-R | 10309720 | Rp3/8 | 19.0 | 3,28<br>*0.129* | 16,662<br>*0.656* | 22,0<br>*0.866* | 58<br>*2.283* | 96,7<br>*3.807* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,0<br>*0.591* | 4 | C |
| T30-SU32C09-1/2-14-R | 10309721 | Rp1.2 | 14.0 | 4,71<br>*0.185* | 20,955<br>*0.825* | 25,0<br>*0.984* | 80<br>*3.150* | 120,3<br>*4.736* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | C |

## T32-SNC-micro

Blind and through holes – Metric coarse threads





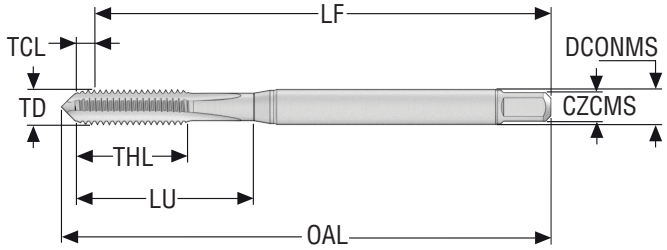

- Substrate: HSS-PM
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 4H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C03-1X0.25-41R | 10139661 | M1 | 0,25 | 0,68<br>*0.027* | 1,0<br>*0.039* | 6,0<br>*0.236* | 13<br>*0.512* | 39,32<br>*1.548* | 40,9<br>*1.610* | 2,5<br>*0.098* | 2.50X2.10 | 0,75<br>*0.030* | 2 | C |
| T32-SN01C03-1.1X0.25-41R | 10139662 | M1.1 | 0,25 | 0,68<br>*0.027* | 1,1<br>*0.043* | 6,0<br>*0.236* | 13<br>*0.512* | 39,32<br>*1.548* | 41,0<br>*1.614* | 2,5<br>*0.098* | 2.50X2.10 | 0,85<br>*0.033* | 2 | C |
| T32-SN01C03-1.2X0.25-41R | 10139663 | M1.2 | 0,25 | 0,68<br>*0.027* | 1,2<br>*0.047* | 6,0<br>*0.236* | 13<br>*0.512* | 39,32<br>*1.548* | 41,1<br>*1.618* | 2,5<br>*0.098* | 2.50X2.10 | 0,95<br>*0.037* | 2 | C |
| T32-SN01C03-1.4X0.3-41R | 10139664 | M1.4 | 0,3 | 0,79<br>*0.031* | 1,4<br>*0.055* | 7,0<br>*0.276* | 13<br>*0.512* | 39,21<br>*1.544* | 41,3<br>*1.626* | 2,5<br>*0.098* | 2.50X2.10 | 1,1<br>*0.043* | 2 | C |

## T32-SNC-micro

Blind and through holes – Metric coarse threads





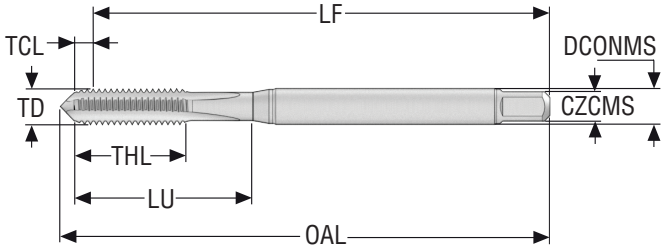

- Substrate: HSS-PM
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C03-1.6X0.35-63R | 10139665 | M1.6 | 0,35 | 0,92<br>*0.036* | 1,6<br>*0.063* | 8,0<br>*0.315* | 13<br>*0.512* | 39,08<br>*1.539* | 41,4<br>*1.630* | 2,5<br>*0.098* | 2.50X2.10 | 1,25<br>*0.049* | 2 | C |
| T32-SN01C03-1.7X0.35-63R | 10139666 | M1.7 | 0,35 | 0,92<br>*0.036* | 1,7<br>*0.067* | 8,0<br>*0.315* | 13<br>*0.512* | 39,08<br>*1.539* | 41,5<br>*1.634* | 2,5<br>*0.098* | 2.50X2.10 | 1,35<br>*0.053* | 2 | C |
| T32-SN01C03-1.8X0.35-63R | 10139667 | M1.8 | 0,35 | 0,92<br>*0.036* | 1,8<br>*0.071* | 8,0<br>*0.315* | 13<br>*0.512* | 39,08<br>*1.539* | 41,6<br>*1.638* | 2,5<br>*0.098* | 2.50X2.10 | 1,45<br>*0.057* | 2 | C |
| T32-SN01C03-2X0.4-63R | 10139668 | M2 | 0,4 | 1,13<br>*0.044* | 2,0<br>*0.079* | 10,0<br>*0.394* | 13<br>*0.512* | 43,87<br>*1.727* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,6<br>*0.063* | 2 | C |
| T32-SN01C03-2.2X0.45-63R | 10139669 | M2.2 | 0,45 | 1,24<br>*0.049* | 2,2<br>*0.087* | 10,0<br>*0.394* | 13<br>*0.512* | 43,76<br>*1.723* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,75<br>*0.069* | 2 | C |
| T32-SN01C03-2.3X0.4-63R | 10139670 | M2.3 | 0,4 | 1,13<br>*0.044* | 2,3<br>*0.091* | 10,0<br>*0.394* | 13<br>*0.512* | 43,87<br>*1.727* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,9<br>*0.075* | 2 | C |
| T32-SN01C03-2.5X0.45-63R | 10139672 | M2.5 | 0,45 | 1,24<br>*0.049* | 2,5<br>*0.098* | 9,0<br>*0.354* | 14<br>*0.551* | 48,76<br>*1.920* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,05<br>*0.081* | 2 | C |
| T32-SN01C03-2.6X0.45-63R | 10139673 | M2.6 | 0,45 | 1,24<br>*0.049* | 2,6<br>*0.102* | 9,0<br>*0.354* | 14<br>*0.551* | 48,76<br>*1.920* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,15<br>*0.085* | 2 | C |

## T32-SNC

Blind and through holes – Metric coarse threads





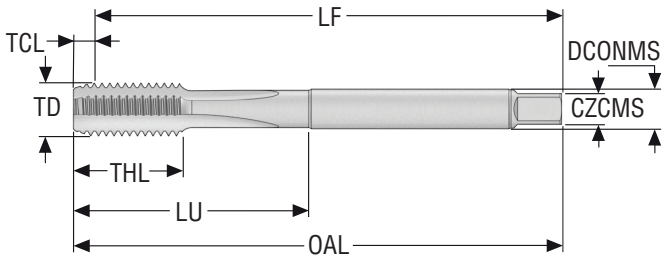

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C03-3X0.5-63R | 10139674 | M3 | 0,5 | 1,1<br>*0.043* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,9<br>*2.161* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-SN01C03-3.5X0.6-63R | 10139675 | M3.5 | 0,6 | 1,28<br>*0.050* | 3,5<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 54,72<br>*2.154* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | C |
| T32-SN01C03-4X0.7-63R | 10139676 | M4 | 0,7 | 1,61<br>*0.063* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 61,39<br>*2.417* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-SN01C03-4.5X0.75-63R | 10139677 | M4.5 | 0,75 | 1,61<br>*0.063* | 4,5<br>*0.177* | 14,0<br>*0.551* | 25<br>*0.984* | 68,39<br>*2.693* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | C |
| T32-SN01C03-5X0.8-63R | 10139678 | M5 | 0,8 | 1,78<br>*0.070* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 68,22<br>*2.686* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-SN01C03-6X1-63R | 10139679 | M6 | 1,0 | 2,14<br>*0.084* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 77,86<br>*3.065* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T32-SN01C03-7X1-63R | 10139680 | M7 | 1,0 | 2,14<br>*0.084* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 77,86<br>*3.065* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | C |
| T32-SN01C03-8X1.25-63R | 10139681 | M8 | 1,25 | 2,94<br>*0.116* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,06<br>*3.428* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T32-SN01C03-9X1.25-63R | 10139682 | M9 | 1,25 | 2,94<br>*0.116* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 87,06<br>*3.428* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | C |
| T32-SN01C03-10X1.5-63R | 10139683 | M10 | 1,5 | 3,55<br>*0.140* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 96,45<br>*3.797* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-SNC

Blind and through holes – Metric coarse threads





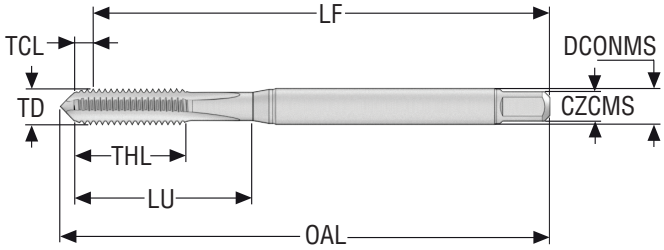

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C06-3X0.5-63R | 10139694 | M3 | 0,5 | 1,1<br>*0.043* | 3,0<br>*0.118* | 11,0<br>*0.433* | 36<br>*1.417* | 54,9<br>*2.161* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20X1.80 | 2,5<br>*0.098* | 3 | C |
| T32-SN01C06-4X0.7-63R | 10139696 | M4 | 0,7 | 1,61<br>*0.063* | 4,0<br>*0.157* | 12,0<br>*0.472* | 43<br>*1.693* | 61,39<br>*2.417* | 64,6<br>*2.543* | 2,8<br>*0.110* | 2.80X2.10 | 3,3<br>*0.130* | 3 | C |
| T32-SN01C06-5X0.8-63R | 10139697 | M5 | 0,8 | 1,78<br>*0.070* | 5,0<br>*0.197* | 14,0<br>*0.551* | 49<br>*1.929* | 68,22<br>*2.686* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50X2.70 | 4,2<br>*0.165* | 3 | C |
| T32-SN01C06-6X1-63R | 10139698 | M6 | 1,0 | 2,14<br>*0.084* | 6,0<br>*0.236* | 18,0<br>*0.709* | 59<br>*2.323* | 77,86<br>*3.065* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50X3.40 | 5,0<br>*0.197* | 3 | C |
| T32-SN01C06-8X1.25-63R | 10139700 | M8 | 1,25 | 2,94<br>*0.116* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 87,06<br>*3.428* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 6,8<br>*0.268* | 3 | C |
| T32-SN01C06-10X1.5-63R | 10139702 | M10 | 1,5 | 3,55<br>*0.140* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 96,45<br>*3.797* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00X5.50 | 8,5<br>*0.335* | 3 | C |
| T32-SN01C06-12X1.75-63R | 10139703 | M12 | 1,75 | 4,17<br>*0.164* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 105,83<br>*4.167* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T32-SN01C06-14X2-63R | 10139704 | M14 | 2,0 | 4,78<br>*0.188* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 105,22<br>*4.143* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 4 | C |
| T32-SN01C06-16X2-63R | 10139705 | M16 | 2,0 | 4,88<br>*0.192* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 105,12<br>*4.139* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |
| T32-SN01C06-18X2.5-63R | 10139706 | M18 | 2,5 | 5,97<br>*0.235* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 119,03<br>*4.686* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 15,5<br>*0.610* | 4 | C |
| T32-SN01C06-20X2.5-63R | 10139707 | M20 | 2,5 | 6,17<br>*0.243* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 133,83<br>*5.269* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | C |
| T32-SN01C06-22X2.5-63R | 10139708 | M22 | 2,5 | 6,17<br>*0.243* | 22,0<br>*0.866* | 32,0<br>*1.260* | 93<br>*3.661* | 133,83<br>*5.269* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | C |
| T32-SN01C06-24X3-63R | 10139709 | M24 | 3,0 | 7,4<br>*0.291* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 152,6<br>*6.008* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |
| T32-SN01C06-27X3-63R | 10139710 | M27 | 3,0 | 7,4<br>*0.291* | 27,0<br>*1.063* | 38,0<br>*1.496* | 97<br>*3.819* | 152,6<br>*6.008* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 24,0<br>*0.945* | 4 | C |
| T32-SN01C06-30X3.5-63R | 10139711 | M30 | 3,5 | 8,4<br>*0.331* | 30,0<br>*1.181* | 45,0<br>*1.772* | 115<br>*4.528* | 171,6<br>*6.756* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | C |
| T32-SN01C06-33X3.5-63R | 10139712 | M33 | 3,5 | 8,4<br>*0.331* | 33,0<br>*1.299* | 45,0<br>*1.772* | 113<br>*4.449* | 171,6<br>*6.756* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00X20.00 | 29,5<br>*1.161* | 4 | C |
| T32-SN01C06-36X4-63R | 10139713 | M36 | 4,0 | 9,4<br>*0.370* | 36,0<br>*1.417* | 50,0<br>*1.969* | 131<br>*5.157* | 190,6<br>*7.504* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 32,0<br>*1.260* | 4 | C |
| T32-SN01C06-39X4-63R | 10139714 | M39 | 4,0 | 9,4<br>*0.370* | 39,0<br>*1.535* | 50,0<br>*1.969* | 102<br>*4.016* | 190,6<br>*7.504* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00X24.00 | 35,0<br>*1.378* | 4 | C |
| T32-SN01C06-42X4.5-63R | 10139715 | M42 | 4,5 | 10,4<br>*0.409* | 42,0<br>*1.654* | 60,0<br>*2.362* | 102<br>*4.016* | 189,6<br>*7.465* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00X24.00 | 37,5<br>*1.476* | 5 | C |
| T32-SN01C06-45X4.5-63R | 10139716 | M45 | 4,5 | 10,42<br>*0.410* | 45,0<br>*1.772* | 60,0<br>*2.362* | 117<br>*4.606* | 209,58<br>*8.251* | 220,0<br>*8.661* | 36,0<br>*1.417* | 36.00X29.00 | 40,5<br>*1.594* | 5 | C |
| T32-SN01C06-48X5-63R | 10139717 | M48 | 5,0 | 11,4<br>*0.449* | 48,0<br>*1.890* | 65,0<br>*2.559* | 147<br>*5.787* | 238,6<br>*9.394* | 250,0<br>*9.843* | 36,0<br>*1.417* | 36.00X29.00 | 43,0<br>*1.693* | 5 | C |
| T32-SN01C06-52X5-63R | 10139718 | M52 | 5,0 | 11,4<br>*0.449* | 52,0<br>*2.047* | 65,0<br>*2.559* | 120<br>*4.724* | 238,6<br>*9.394* | 250,0<br>*9.843* | 40,0<br>*1.575* | 40.00X32.00 | 47,0<br>*1.850* | 5 | C |

## T32-SNC

Blind and through holes – Metric coarse threads, left hand thread





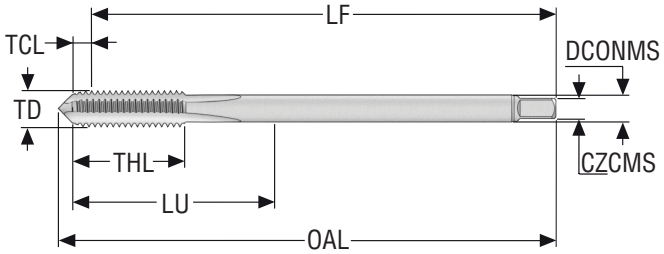

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C03-3X0.5-63L | 10139686 | M3 | 0,5 | 1,1<br>*0.043* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,9<br>*2.161* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-SN01C03-4X0.7-63L | 10139687 | M4 | 0,7 | 1,61<br>*0.063* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 61,39<br>*2.417* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-SN01C03-5X0.8-63L | 10139688 | M5 | 0,8 | 1,78<br>*0.070* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 68,22<br>*2.686* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-SN01C03-6X1-63L | 10139689 | M6 | 1,0 | 2,14<br>*0.084* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 77,86<br>*3.065* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T32-SN01C03-7X1-63L | 10139690 | M7 | 1,0 | 2,14<br>*0.084* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 77,86<br>*3.065* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | C |
| T32-SN01C03-8X1.25-63L | 10139691 | M8 | 1,25 | 2,94<br>*0.116* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,06<br>*3.428* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T32-SN01C03-9X1.25-63L | 10139692 | M9 | 1,25 | 2,94<br>*0.116* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 87,06<br>*3.428* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | C |
| T32-SN01C03-10X1.5-63L | 10139693 | M10 | 1,5 | 3,55<br>*0.140* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 96,45<br>*3.797* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-SNC

Blind and through holes – Metric coarse threads, left hand thread





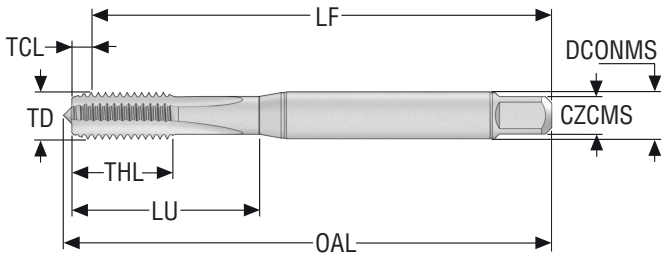

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 6H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN01C06-12X1.75-63L | 10139751 | M12 | 1,75 | 4,17<br>*0.164* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 105,83<br>*4.167* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T32-SN01C06-16X2-63L | 10139752 | M16 | 2,0 | 4,88<br>*0.192* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 105,12<br>*4.139* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |
| T32-SN01C06-20X2.5-63L | 10139753 | M20 | 2,5 | 6,17<br>*0.243* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 133,83<br>*5.269* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | C |
| T32-SN01C06-24X3-63L | 10139754 | M24 | 3,0 | 7,4<br>*0.291* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 152,6<br>*6.008* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |

## T32-SNC

Blind and through holes – MF threads





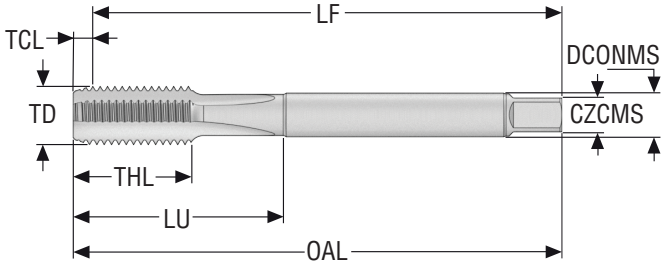

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN02C03-8X1-63R | 10139684 | MF8X1.0 | 1,0 | 2,44<br>*0.096* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,56<br>*3.447* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | C |
| T32-SN02C03-10X1-63R | 10139685 | MF10X1.0 | 1,0 | 2,54<br>*0.100* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 87,46<br>*3.443* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | C |

## T32-SNC

Blind and through holes – MF threads





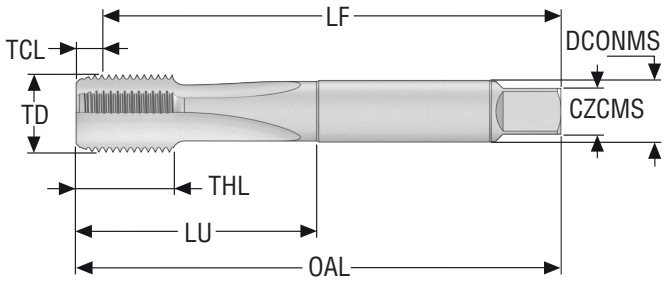

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN374
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN02C05-8X1-63R | 10139719 | MF8X1.0 | 1,0 | 2,44<br>*0.096* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 87,56<br>*3.447* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | C |
| T32-SN02C05-10X0.75-63R | 10139720 | MF10X0.75 | 0,75 | 3,43<br>*0.135* | 10,0<br>*0.394* | 18,0<br>*0.709* | 67<br>*2.638* | 86,57<br>*3.408* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,2<br>*0.362* | 3 | C |
| T32-SN02C05-10X1-63R | 10139721 | MF10X1.0 | 1,0 | 2,54<br>*0.100* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 87,46<br>*3.443* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | C |
| T32-SN02C05-10X1.25-63R | 10139722 | MF10X1.25 | 1,25 | 3,04<br>*0.120* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 96,96<br>*3.817* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | C |
| T32-SN02C05-12X1-63R | 10139723 | MF12X1.0 | 1,0 | 2,65<br>*0.104* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 97,35<br>*3.833* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,0<br>*0.433* | 3 | C |
| T32-SN02C05-12X1.25-63R | 10139724 | MF12X1.25 | 1,25 | 3,16<br>*0.124* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 96,84<br>*3.813* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,8<br>*0.425* | 3 | C |
| T32-SN02C05-12X1.5-63R | 10139725 | MF12X1.5 | 1,5 | 3,66<br>*0.144* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 96,34<br>*3.793* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | C |
| T32-SN02C05-14X1-63R | 10139726 | MF14X1.0 | 1,0 | 2,75<br>*0.108* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 97,25<br>*3.829* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 4 | C |
| T32-SN02C05-14X1.25-63R | 10139727 | MF14X1.25 | 1,25 | 3,26<br>*0.128* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 96,74<br>*3.809* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,8<br>*0.504* | 4 | C |
| T32-SN02C05-14X1.5-63R | 10139728 | MF14X1.5 | 1,5 | 3,76<br>*0.148* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 96,24<br>*3.789* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | C |
| T32-SN02C05-16X1-63R | 10139729 | MF16X1.0 | 1,0 | 2,85<br>*0.112* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 97,15<br>*3.825* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,0<br>*0.591* | 4 | C |
| T32-SN02C05-16X1.5-63R | 10139730 | MF16X1.5 | 1,5 | 3,86<br>*0.152* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 96,14<br>*3.785* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |
| T32-SN02C05-18X1.5-63R | 10139731 | MF18X1.5 | 1,5 | 3,96<br>*0.156* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 106,04<br>*4.175* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | C |
| T32-SN02C05-18X2-63R | 10139732 | MF18X2.0 | 2,0 | 4,98<br>*0.196* | 18,0<br>*0.709* | 27,0<br>*1.063* | 81<br>*3.189* | 120,02<br>*4.725* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,0<br>*0.630* | 4 | C |
| T32-SN02C05-20X1.5-63R | 10139733 | MF20X1.5 | 1,5 | 4,16<br>*0.164* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 120,84<br>*4.757* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 18,5<br>*0.728* | 4 | C |
| T32-SN02C05-20X2-63R | 10139734 | MF20X2.0 | 2,0 | 5,18<br>*0.204* | 20,0<br>*0.787* | 27,0<br>*1.063* | 95<br>*3.740* | 134,82<br>*5.308* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,0<br>*0.709* | 4 | C |
| T32-SN02C05-22X1.5-63R | 10139735 | MF22X1.5 | 1,5 | 4,16<br>*0.164* | 22,0<br>*0.866* | 24,0<br>*0.945* | 78<br>*3.071* | 120,84<br>*4.757* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | C |
| T32-SN02C05-22X2-63R | 10139736 | MF22X2.0 | 2,0 | 5,18<br>*0.204* | 22,0<br>*0.866* | 27,0<br>*1.063* | 93<br>*3.661* | 134,82<br>*5.308* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 20,0<br>*0.787* | 4 | C |
| T32-SN02C05-24X1.5-63R | 10139737 | MF24X1.5 | 1,5 | 3,88<br>*0.153* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 136,12<br>*5.359* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,5<br>*0.886* | 4 | C |
| T32-SN02C05-24X2-63R | 10139738 | MF24X2.0 | 2,0 | 4,89<br>*0.193* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 135,11<br>*5.319* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,0<br>*0.866* | 4 | C |
| T32-SN02C05-27X1.5-63R | 10139739 | MF27X1.5 | 1,5 | 4,38<br>*0.172* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 135,62<br>*5.339* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,5<br>*1.004* | 4 | C |
| T32-SN02C05-27X2-63R | 10139740 | MF27X2.0 | 2,0 | 5,39<br>*0.212* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 134,61<br>*5.300* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,0<br>*0.984* | 4 | C |
| T32-SN02C05-30X1.5-63R | 10139741 | MF30X1.5 | 1,5 | 4,38<br>*0.172* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 145,62<br>*5.733* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,5<br>*1.122* | 4 | C |
| T32-SN02C05-30X2-63R | 10139742 | MF30X1.0 | 2,0 | 5,39<br>*0.212* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 144,61<br>*5.693* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,0<br>*1.102* | 4 | C |

## T32-SNC

Blind and through holes – G threads





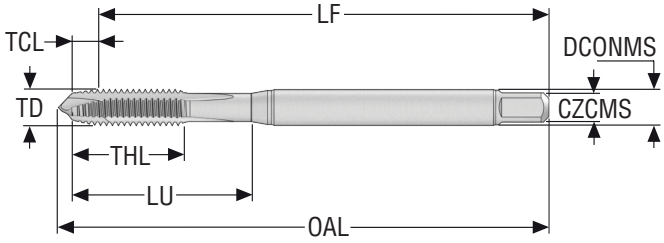

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN5156
- Thread tolerance class: NORMAL
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-SN21C09-1/8-28-11R | 10139743 | G1/8-28 | 28,0 | 2,43<br>*0.096* | 9,728<br>*0.383* | 18,0<br>*0.709* | 67<br>*2.638* | 87,57<br>*3.448* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | C |
| T32-SN21C09-1/4-19-11R | 10139744 | G1/4-19 | 19,0 | 3,52<br>*0.139* | 13,157<br>*0.518* | 22,0<br>*0.866* | 71<br>*2.795* | 96,48<br>*3.798* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 11,8<br>*0.465* | 4 | C |
| T32-SN21C09-3/8-19-11R | 10139745 | G3/8-19 | 19,0 | 3,72<br>*0.146* | 16,662<br>*0.656* | 22,0<br>*0.866* | 58<br>*2.283* | 96,28<br>*3.791* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 4 | C |
| T32-SN21C09-1/2-14-11R | 10139746 | G1/2-14 | 14,0 | 5,02<br>*0.198* | 20,955<br>*0.825* | 25,0<br>*0.984* | 80<br>*3.150* | 119,98<br>*4.724* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,0<br>*0.748* | 4 | C |
| T32-SN21C09-5/8-14-11R | 10139747 | G5/8-14 | 14,0 | 4,94<br>*0.194* | 22,911<br>*0.902* | 25,0<br>*0.984* | 78<br>*3.071* | 120,06<br>*4.727* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |
| T32-SN21C09-3/4-14-11R | 10139748 | G3/4-14 | 14,0 | 5,19<br>*0.204* | 26,441<br>*1.041* | 28,0<br>*1.102* | 77<br>*3.031* | 134,81<br>*5.307* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 24,5<br>*0.965* | 4 | C |
| T32-SN21C09-7/8-14-11R | 10139749 | G7/8-14 | 14,0 | 5,13<br>*0.202* | 30,201<br>*1.189* | 30,0<br>*1.181* | 85<br>*3.346* | 144,87<br>*5.704* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,25<br>*1.112* | 4 | C |
| T32-SN21C09-1-11-11R | 10139750 | G1-11 | 11,0 | 6,03<br>*0.237* | 33,249<br>*1.309* | 32,0<br>*1.260* | 93<br>*3.661* | 153,97<br>*6.062* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00X20.00 | 30,75<br>*1.211* | 4 | C |

## T32-PNB-micro

Through holes – Metric coarse threads





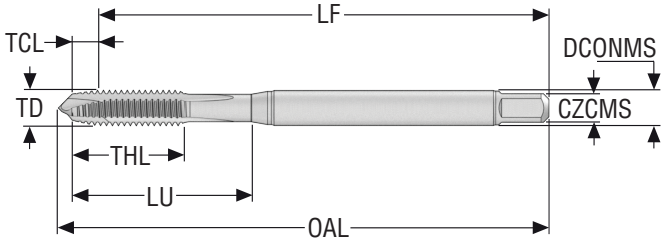

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 4H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B03-1X0.25-41R | 10139427 | M1 | 0,25 | 1,13<br>*0.044* | 1,0<br>*0.039* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 40,9<br>*1.610* | 2,5<br>*0.098* | 2.50X2.10 | 0,75<br>*0.030* | 2 | B |
| T32-PN01B03-1.1X0.25-41R | 10139428 | M1.1 | 0,25 | 1,13<br>*0.044* | 1,1<br>*0.043* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 41,0<br>*1.614* | 2,5<br>*0.098* | 2.50X2.10 | 0,85<br>*0.033* | 2 | B |
| T32-PN01B03-1.2X0.25-41R | 10139429 | M1.2 | 0,25 | 1,13<br>*0.044* | 1,2<br>*0.047* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 41,1<br>*1.618* | 2,5<br>*0.098* | 2.50X2.10 | 0,95<br>*0.037* | 2 | B |
| T32-PN01B03-1.4X0.3-41R | 10139430 | M1.4 | 0,3 | 1,32<br>*0.052* | 1,4<br>*0.055* | 7,0<br>*0.276* | 13<br>*0.512* | 38,68<br>*1.523* | 41,3<br>*1.626* | 2,5<br>*0.098* | 2.50X2.10 | 1,1<br>*0.043* | 2 | B |

## T32-PNB-micro

Through holes – Metric coarse threads





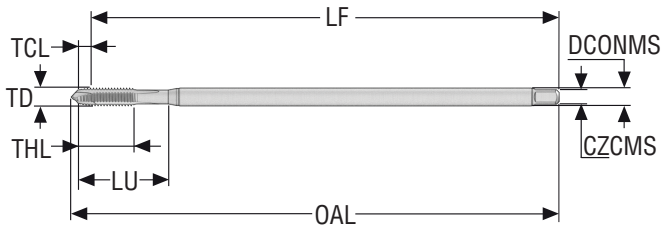

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B03-1.6X0.35-63R | 10139431 | M1.6 | 0,35 | 1,54<br>*0.061* | 1,6<br>*0.063* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,4<br>*1.630* | 2,5<br>*0.098* | 2.50X2.10 | 1,25<br>*0.049* | 2 | B |
| T32-PN01B03-1.7X0.35-63R | 10139432 | M1.7 | 0,35 | 1,54<br>*0.061* | 1,7<br>*0.067* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,5<br>*1.634* | 2,5<br>*0.098* | 2.50X2.10 | 1,35<br>*0.053* | 2 | B |
| T32-PN01B03-1.8X0.35-63R | 10139433 | M1.8 | 0,35 | 1,54<br>*0.061* | 1,8<br>*0.071* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,6<br>*1.638* | 2,5<br>*0.098* | 2.50X2.10 | 1,45<br>*0.057* | 2 | B |
| T32-PN01B03-2X0.4-63R | 10139434 | M2 | 0,4 | 1,89<br>*0.074* | 2,0<br>*0.079* | 10,0<br>*0.394* | 13<br>*0.512* | 43,11<br>*1.697* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,6<br>*0.063* | 2 | B |
| T32-PN01B03-2.2X0.45-63R | 10139435 | M2.2 | 0,45 | 2,07<br>*0.081* | 2,2<br>*0.087* | 10,0<br>*0.394* | 13<br>*0.512* | 42,93<br>*1.690* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,75<br>*0.069* | 2 | B |
| T32-PN01B03-2.3X0.4-63R | 10139436 | M2.3 | 0,4 | 1,89<br>*0.074* | 2,3<br>*0.091* | 10,0<br>*0.394* | 13<br>*0.512* | 43,11<br>*1.697* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,9<br>*0.075* | 2 | B |
| T32-PN01B03-2.5X0.45-63R | 10139437 | M2.5 | 0,45 | 2,07<br>*0.081* | 2,5<br>*0.098* | 9,0<br>*0.354* | 14<br>*0.551* | 47,93<br>*1.887* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,05<br>*0.081* | 2 | B |
| T32-PN01B03-2.6X0.45-63R | 10139438 | M2.6 | 0,45 | 2,07<br>*0.081* | 2,6<br>*0.102* | 9,0<br>*0.354* | 14<br>*0.551* | 47,93<br>*1.887* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,15<br>*0.085* | 2 | B |

## T32-PNB

Through holes – Metric coarse threads





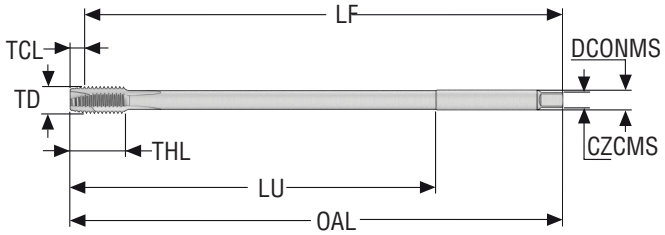

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371/EL
–Thread tolerance class: 6H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B04-3X0.5-63R | 10139652 | M3 | 0,5 | 2,28<br>*0.090* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 97,72<br>*3.847* | 101,2<br>*3.984* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B04-4X0.7-63R | 10139653 | M4 | 0,7 | 3,33<br>*0.131* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 121,67<br>*4.790* | 126,6<br>*4.984* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B04-5X0.8-63R | 10139654 | M5 | 0,8 | 3,68<br>*0.145* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 136,32<br>*5.367* | 142,0<br>*5.591* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B04-6X1-63R | 10139655 | M6 | 1,0 | 4,41<br>*0.174* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 155,59<br>*6.126* | 162,4<br>*6.394* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |

## T32-PNB

Through holes – Metric coarse threads





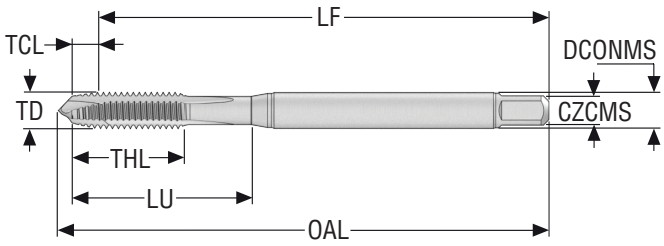

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376/EL
–Thread tolerance class: 6H
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B07-8X1.25-63R | 10139656 | M8 | 1,25 | 5,7<br>*0.224* | 8,0<br>*0.315* | 20,0<br>*0.787* | 157<br>*6.181* | 174,3<br>*6.862* | 180,0<br>*7.087* | 6,0<br>*0.236* | 6.00X4.90 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B07-10X1.5-63R | 10139657 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 177<br>*6.969* | 193,16<br>*7.605* | 200,0<br>*7.874* | 7,0<br>*0.276* | 7.00X5.50 | 8,5<br>*0.335* | 3 | B |
| T32-PN01B07-12X1.75-63R | 10139658 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 211,99<br>*8.346* | 220,0<br>*8.661* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T32-PN01B07-16X2-63R | 10139659 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 191<br>*7.520* | 210,76<br>*8.298* | 220,0<br>*8.661* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |

## T32-PNB

Through holes – Metric coarse threads





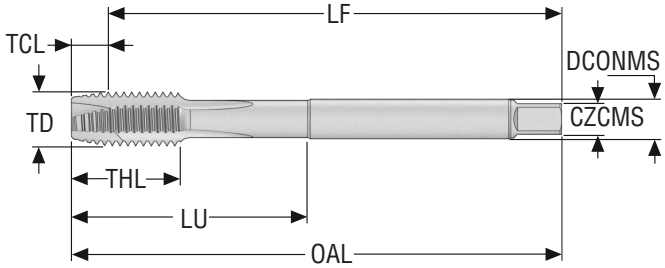

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B03-3X0.5-63R | 10139439 | M3 | 0,5 | 2,28<br>*0.090* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,72<br>*2.115* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B03-3.5X0.6-63R | 10139440 | M3.5 | 0,6 | 2,65<br>*0.104* | 3,5<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 53,35<br>*2.100* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | B |
| T32-PN01B03-4X0.7-63R | 10139441 | M4 | 0,7 | 3,33<br>*0.131* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,67<br>*2.349* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B03-4.5X0.75-63R | 10139442 | M4.5 | 0,75 | 3,33<br>*0.131* | 4,5<br>*0.177* | 14,0<br>*0.551* | 25<br>*0.984* | 66,67<br>*2.625* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | B |
| T32-PN01B03-5X0.8-63R | 10139443 | M5 | 0,8 | 3,68<br>*0.145* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,32<br>*2.611* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B03-6X1-63R | 10139444 | M6 | 1,0 | 4,41<br>*0.174* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,59<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |
| T32-PN01B03-7X1-63R | 10139445 | M7 | 1,0 | 4,41<br>*0.174* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 75,59<br>*2.976* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | B |
| T32-PN01B03-8X1.25-63R | 10139446 | M8 | 1,25 | 5,43<br>*0.214* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,57<br>*3.330* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B03-9X1.25-63R | 10139447 | M9 | 1,25 | 5,7<br>*0.224* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 84,3<br>*3.319* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | B |
| T32-PN01B03-10X1.5-63R | 10139448 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,16<br>*3.668* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T32-PNB

Through holes – Metric coarse threads



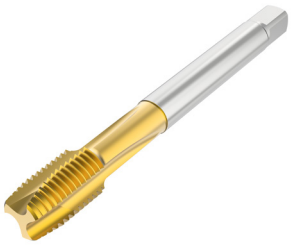


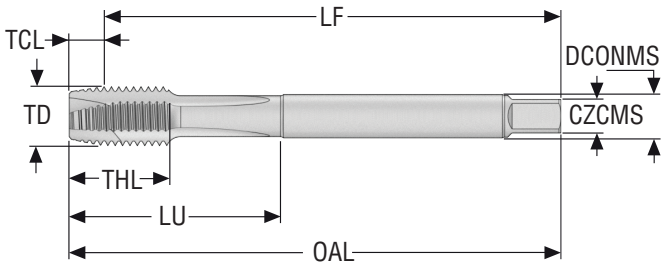

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B06-3X0.5-63R | 10139482 | M3 | 0,5 | 2,2<br>*0.087* | 3,0<br>*0.118* | 11,0<br>*0.433* | 36<br>*1.417* | 53,8<br>*2.118* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20X1.80 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B06-4X0.7-63R | 10139484 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 43<br>*1.693* | 59,7<br>*2.350* | 64,6<br>*2.543* | 2,8<br>*0.110* | 2.80X2.10 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B06-5X0.8-63R | 10139485 | M5 | 0,8 | 3,6<br>*0.142* | 5,0<br>*0.197* | 14,0<br>*0.551* | 49<br>*1.929* | 66,4<br>*2.614* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50X2.70 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B06-6X1-63R | 10139486 | M6 | 1,0 | 4,4<br>*0.173* | 6,0<br>*0.236* | 18,0<br>*0.709* | 59<br>*2.323* | 75,6<br>*2.976* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50X3.40 | 5,0<br>*0.197* | 3 | B |
| T32-PN01B06-8X1.25-63R | 10139488 | M8 | 1,25 | 5,7<br>*0.224* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 84,3<br>*3.319* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B06-9X1.25-63R | 10139489 | M9 | 1,25 | 5,7<br>*0.224* | 9,0<br>*0.354* | 20,0<br>*0.787* | 67<br>*2.638* | 84,3<br>*3.319* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 7,8<br>*0.307* | 3 | B |
| T32-PN01B06-10X1.5-63R | 10139490 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 93,16<br>*3.668* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00X5.50 | 8,5<br>*0.335* | 3 | B |
| T32-PN01B06-12X1.75-63R | 10139491 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 101,99<br>*4.015* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T32-PN01B06-14X2-63R | 10139492 | M14 | 2,0 | 9,14<br>*0.360* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 100,86<br>*3.971* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 3 | B |
| T32-PN01B06-16X2-63R | 10139493 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,76<br>*3.967* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |
| T32-PN01B06-18X2.5-63R | 10139494 | M18 | 2,5 | 11,38<br>*0.448* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 113,62<br>*4.473* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 15,5<br>*0.610* | 4 | B |
| T32-PN01B06-20X2.5-63R | 10139495 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,42<br>*5.056* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | B |
| T32-PN01B06-22X2.5-63R | 10139496 | M22 | 2,5 | 11,78<br>*0.464* | 22,0<br>*0.866* | 32,0<br>*1.260* | 93<br>*3.661* | 128,22<br>*5.048* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | B |
| T32-PN01B06-24X3-63R | 10139497 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,32<br>*5.761* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |
| T32-PN01B06-27X3-63R | 10139498 | M27 | 3,0 | 13,88<br>*0.546* | 27,0<br>*1.063* | 38,0<br>*1.496* | 97<br>*3.819* | 146,12<br>*5.753* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 24,0<br>*0.945* | 4 | B |
| T32-PN01B06-30X3.5-63R | 10139499 | M30 | 3,5 | 15,93<br>*0.627* | 30,0<br>*1.181* | 45,0<br>*1.772* | 115<br>*4.528* | 164,07<br>*6.459* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | B |
| T32-PN01B06-33X3.5-63R | 10139500 | M33 | 3,5 | 15,93<br>*0.627* | 33,0<br>*1.299* | 45,0<br>*1.772* | 113<br>*4.449* | 164,07<br>*6.459* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00X20.00 | 29,5<br>*1.161* | 4 | B |
| T32-PN01B06-36X4-63R | 10139501 | M36 | 4,0 | 17,97<br>*0.707* | 36,0<br>*1.417* | 50,0<br>*1.969* | 131<br>*5.157* | 182,03<br>*7.167* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 32,0<br>*1.260* | 4 | B |
| T32-PN01B06-39X4-63R | 10139502 | M39 | 4,0 | 17,97<br>*0.707* | 39,0<br>*1.535* | 50,0<br>*1.969* | 102<br>*4.016* | 182,03<br>*7.167* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00X24.00 | 35,0<br>*1.378* | 4 | B |
| T32-PN01B06-42X4.5-63R | 10139503 | M42 | 4,5 | 20,02<br>*0.788* | 42,0<br>*1.654* | 60,0<br>*2.362* | 102<br>*4.016* | 179,98<br>*7.086* | 200,0<br>*7.874* | 32,0<br>*1.260* | 32.00X24.00 | 37,5<br>*1.476* | 5 | B |
| T32-PN01B06-45X4.5-63R | 10139504 | M45 | 4,5 | 20,02<br>*0.788* | 45,0<br>*1.772* | 60,0<br>*2.362* | 117<br>*4.606* | 199,98<br>*7.873* | 220,0<br>*8.661* | 36,0<br>*1.417* | 36.00X29.00 | 40,5<br>*1.594* | 5 | B |
| T32-PN01B06-48X5-63R | 10139505 | M48 | 5,0 | 22,07<br>*0.869* | 48,0<br>*1.890* | 65,0<br>*2.559* | 147<br>*5.787* | 227,93<br>*8.974* | 250,0<br>*9.843* | 36,0<br>*1.417* | 36.00X29.00 | 43,0<br>*1.693* | 5 | B |
| T32-PN01B06-52X5-63R | 10139506 | M52 | 5,0 | 22,07<br>*0.869* | 52,0<br>*2.047* | 65,0<br>*2.559* | 120<br>*4.724* | 227,93<br>*8.974* | 250,0<br>*9.843* | 40,0<br>*1.575* | 40.00X32.00 | 47,0<br>*1.850* | 5 | B |

## T32-PNB

Through holes – Metric coarse threads





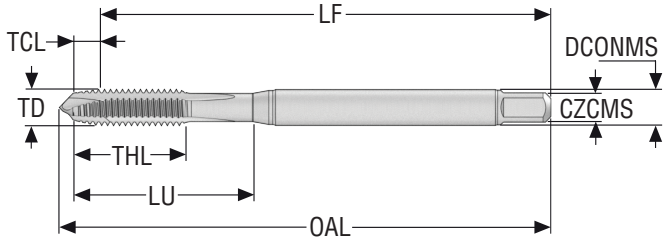

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN/ANSI
- Thread tolerance class: 6H
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B93-3X0.5-63R | 10308604 | M3 | 0,5 | 2,28<br>*0.090* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,7<br>*2.114* | 57,2<br>*2.252* | 3,581<br>*0.141* | 3.581x2.79 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B93-4X0.7-63R | 10280435 | M4 | 0,7 | 3,33<br>*0.131* | 4,0<br>*0.157* | 12,0<br>*0.472* | 31,19<br>*1.228* | 59,8<br>*2.354* | 64,6<br>*2.543* | 4,267<br>*0.168* | 4.267x3.33 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B93-5X0.8-63R | 10280436 | M5 | 0,8 | 3,68<br>*0.145* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25,14<br>*0.990* | 66,4<br>*2.614* | 72,0<br>*2.835* | 4,928<br>*0.194* | 4.928x3.86 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B93-6X1-63R | 10280437 | M6 | 1,0 | 4,41<br>*0.174* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30,14<br>*1.187* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,477<br>*0.255* | 6.477x4.85 | 5,0<br>*0.197* | 3 | B |
| T32-PN01B93-8X1.25-63R | 10280438 | M8 | 1,25 | 5,43<br>*0.214* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35,19<br>*1.385* | 84,7<br>*3.335* | 93,3<br>*3.673* | 8,077<br>*0.318* | 8.077x6.05 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B93-10X1.5-63R | 10280439 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39,14<br>*1.541* | 93,2<br>*3.669* | 100,0<br>*3.937* | 9,667<br>*0.381* | 9.667x7.26 | 8,5<br>*0.335* | 3 | B |
| T32-PN01B96-12X1.75-63R | 10280440 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 81,82<br>*3.221* | 101,99<br>*4.015* | 110,0<br>*4.331* | 9,322<br>*0.367* | 9.322x6.99 | 10,2<br>*0.402* | 3 | B |
| T32-PN01B96-16X2-63R | 10280441 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 25,0<br>*0.984* | 65,78<br>*2.590* | 100,76<br>*3.967* | 110,0<br>*4.331* | 12,192<br>*0.480* | 12.192x9.14 | 14,0<br>*0.551* | 3 | B |
| T32-PN01B96-18X2.5-63R | 10280442 | M18 | 2,5 | 11,38<br>*0.448* | 18,0<br>*0.709* | 32,0<br>*1.260* | 79<br>*3.110* | 113,62<br>*4.473* | 125,0<br>*4.921* | 13,767<br>*0.542* | 13.767x10.31 | 15,5<br>*0.610* | 4 | B |
| T32-PN01B96-20X2.5-63R | 10280443 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 92,47<br>*3.641* | 128,42<br>*5.056* | 140,0<br>*5.512* | 16,561<br>*0.652* | 16.561x12.42 | 17,5<br>*0.689* | 4 | B |
| T32-PN01B96-24X3-63R | 10280444 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 96,95<br>*3.817* | 146,32<br>*5.761* | 160,0<br>*6.299* | 19,304<br>*0.760* | 19.304x14.48 | 21,0<br>*0.827* | 4 | B |

## T32-PNB

Through holes – Metric coarse threads, 6G





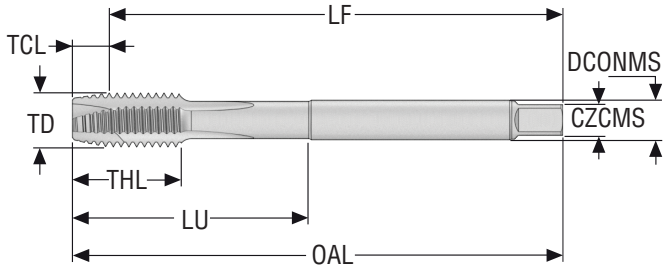

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6G
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B03-3X0.5-61R | 10139474 | M3 | 0,5 | 2,28<br>*0.090* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,72<br>*2.115* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B03-4X0.7-61R | 10139475 | M4 | 0,7 | 3,33<br>*0.131* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,67<br>*2.349* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B03-5X0.8-61R | 10139476 | M5 | 0,8 | 3,68<br>*0.145* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,32<br>*2.611* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B03-6X1-61R | 10139477 | M6 | 1,0 | 4,41<br>*0.174* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,59<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |
| T32-PN01B03-7X1-61R | 10139478 | M7 | 1,0 | 4,41<br>*0.174* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 75,59<br>*2.976* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | B |
| T32-PN01B03-8X1.25-61R | 10139479 | M8 | 1,25 | 5,43<br>*0.214* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,57<br>*3.330* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B03-9X1.25-61R | 10139480 | M9 | 1,25 | 5,7<br>*0.224* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 84,3<br>*3.319* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | B |
| T32-PN01B03-10X1.5-61R | 10139481 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,16<br>*3.668* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T32-PNB

Through holes – Metric coarse threads, 6G





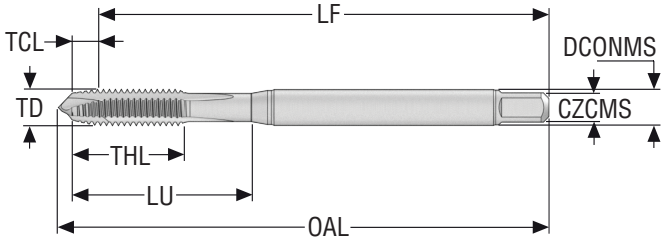

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 6G
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B06-12X1.75-61R | 10139564 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 101,99<br>*4.015* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T32-PN01B06-16X2-61R | 10139565 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,76<br>*3.967* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |
| T32-PN01B06-20X2.5-61R | 10139566 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,42<br>*5.056* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | B |
| T32-PN01B06-24X3-61R | 10139567 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,32<br>*5.761* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |

## T32-PNB

Through holes – Metric coarse threads, left hand thread





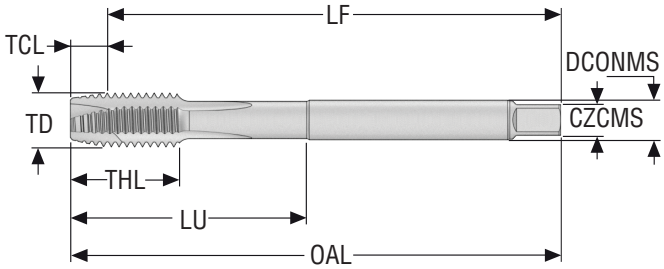

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B03-3X0.5-63L | 10139466 | M3 | 0,5 | 2,2<br>*0.087* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,8<br>*2.118* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | B |
| T32-PN01B03-4X0.7-63L | 10139467 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,7<br>*2.350* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | B |
| T32-PN01B03-5X0.8-63L | 10139468 | M5 | 0,8 | 3,6<br>*0.142* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,4<br>*2.614* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T32-PN01B03-6X1-63L | 10139469 | M6 | 1,0 | 4,4<br>*0.173* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |
| T32-PN01B03-7X1-63L | 10139470 | M7 | 1,0 | 4,4<br>*0.173* | 7,0<br>*0.276* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | B |
| T32-PN01B03-8X1.25-63L | 10139471 | M8 | 1,25 | 5,4<br>*0.213* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,6<br>*3.331* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | B |
| T32-PN01B03-9X1.25-63L | 10139472 | M9 | 1,25 | 5,7<br>*0.224* | 9,0<br>*0.354* | 20,0<br>*0.787* | 35<br>*1.378* | 84,3<br>*3.319* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | B |
| T32-PN01B03-10X1.5-63L | 10139473 | M10 | 1,5 | 6,8<br>*0.268* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,2<br>*3.669* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T32-PNB

Through holes – Metric coarse threads, left hand thread





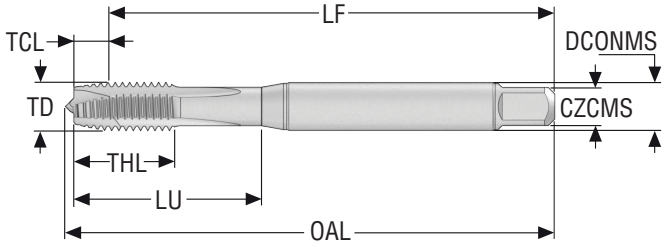

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN01B06-12X1.75-63L | 10139560 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 101,99<br>*4.015* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T32-PN01B06-16X2-63L | 10139561 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,76<br>*3.967* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |
| T32-PN01B06-20X2.5-63L | 10139562 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,42<br>*5.056* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | B |
| T32-PN01B06-24X3-63L | 10139563 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,32<br>*5.761* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |

## T32-PNB

Through holes – MF threads



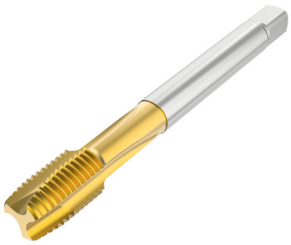


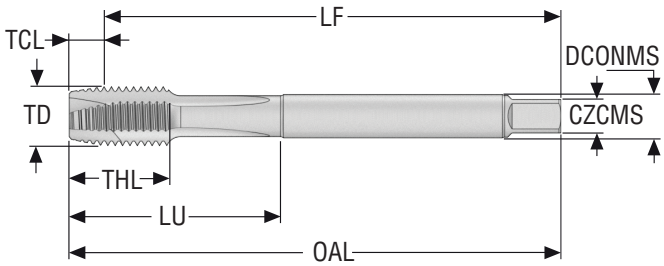

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN02B03-8X1-63R | 10139449 | MF8X1.0 | 1,0 | 4,41<br>*0.174* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 85,59<br>*3.370* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | B |
| T32-PN02B03-10X1-63R | 10139450 | MF10X1.0 | 1,0 | 4,77<br>*0.188* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 85,23<br>*3.356* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | B |
| T32-PN02B03-10X1.25-63R | 10139451 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 94,2<br>*3.709* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,8<br>*0.346* | 3 | B |

## T32-PNB

Through holes – MF threads





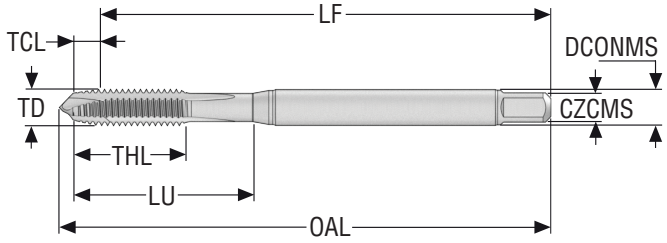

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN374
- Thread tolerance class: 6H
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN02B05-8X1-63R | 10139507 | MF8X1.0 | 1,0 | 4,67<br>*0.184* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 85,33<br>*3.359* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | B |
| T32-PN02B05-10X0.75-63R | 10139508 | MF10X0.75 | 0,75 | 3,73<br>*0.147* | 10,0<br>*0.394* | 18,0<br>*0.709* | 67<br>*2.638* | 86,27<br>*3.396* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,2<br>*0.362* | 3 | B |
| T32-PN02B05-10X1-63R | 10139509 | MF10X1.0 | 1,0 | 4,79<br>*0.189* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 85,21<br>*3.355* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | B |
| T32-PN02B05-10X1.25-63R | 10139510 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 94,2<br>*3.709* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | B |
| T32-PN02B05-12X1-63R | 10139511 | MF12X1.0 | 1,0 | 4,89<br>*0.193* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 95,11<br>*3.744* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,0<br>*0.433* | 3 | B |
| T32-PN02B05-12X1.25-63R | 10139512 | MF12X1.25 | 1,25 | 5,94<br>*0.234* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 94,06<br>*3.703* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,8<br>*0.425* | 3 | B |
| T32-PN02B05-12X1.5-63R | 10139513 | MF12X1.5 | 1,5 | 6,97<br>*0.274* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 93,03<br>*3.663* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | B |
| T32-PN02B05-14X1-63R | 10139514 | MF14X1.0 | 1,0 | 4,99<br>*0.196* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 95,01<br>*3.741* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 3 | B |
| T32-PN02B05-14X1.25-63R | 10139515 | MF14X1.25 | 1,25 | 6,04<br>*0.238* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 93,96<br>*3.699* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,8<br>*0.504* | 3 | B |
| T32-PN02B05-14X1.5-63R | 10139516 | MF14X1.5 | 1,5 | 7,07<br>*0.278* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 92,93<br>*3.659* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 3 | B |
| T32-PN02B05-16X1-63R | 10139517 | MF16X1.0 | 1,0 | 5,09<br>*0.200* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 94,91<br>*3.737* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,0<br>*0.591* | 3 | B |
| T32-PN02B05-16X1.5-63R | 10139518 | MF16X1.5 | 1,5 | 7,17<br>*0.282* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 92,83<br>*3.655* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 3 | B |
| T32-PN02B05-18X1.5-63R | 10139519 | MF18X1.5 | 1,5 | 7,27<br>*0.286* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 102,73<br>*4.044* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | B |
| T32-PN02B05-18X2-63R | 10139520 | MF18X2.0 | 2,0 | 9,34<br>*0.368* | 18,0<br>*0.709* | 27,0<br>*1.063* | 81<br>*3.189* | 115,66<br>*4.554* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,0<br>*0.630* | 4 | B |
| T32-PN02B05-20X1.5-63R | 10139521 | MF20X1.5 | 1,5 | 7,47<br>*0.294* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 117,53<br>*4.627* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 18,5<br>*0.728* | 4 | B |
| T32-PN02B05-20X2-63R | 10139522 | MF20X2.0 | 2,0 | 9,54<br>*0.376* | 20,0<br>*0.787* | 27,0<br>*1.063* | 95<br>*3.740* | 130,46<br>*5.136* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,0<br>*0.709* | 4 | B |
| T32-PN02B05-22X1.5-63R | 10139523 | MF22X1.5 | 1,5 | 7,67<br>*0.302* | 22,0<br>*0.866* | 24,0<br>*0.945* | 78<br>*3.071* | 117,33<br>*4.619* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | B |
| T32-PN02B05-22X2-63R | 10139524 | MF22X2.0 | 2,0 | 9,74<br>*0.383* | 22,0<br>*0.866* | 27,0<br>*1.063* | 93<br>*3.661* | 130,26<br>*5.128* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 20,0<br>*0.787* | 4 | B |
| T32-PN02B05-24X1.5-63R | 10139525 | MF24X1.5 | 1,5 | 7,5<br>*0.295* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 132,5<br>*5.217* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,5<br>*0.886* | 4 | B |
| T32-PN02B05-24X2-63R | 10139526 | MF24X2.0 | 2,0 | 9,57<br>*0.377* | 24,0<br>*0.945* | 27,0<br>*1.063* | 93<br>*3.661* | 130,43<br>*5.135* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,0<br>*0.866* | 4 | B |
| T32-PN02B05-27X1.5-63R | 10139527 | MF27X1.5 | 1,5 | 7,7<br>*0.303* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 132,3<br>*5.209* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,5<br>*1.004* | 4 | B |
| T32-PN02B05-27X2-63R | 10139528 | MF27X2.0 | 2,0 | 9,77<br>*0.385* | 27,0<br>*1.063* | 27,0<br>*1.063* | 77<br>*3.031* | 130,23<br>*5.127* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,0<br>*0.984* | 4 | B |
| T32-PN02B05-30X1.5-63R | 10139529 | MF30X1.5 | 1,5 | 7,7<br>*0.303* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 142,3<br>*5.602* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,5<br>*1.122* | 4 | B |
| T32-PN02B05-30X2-63R | 10139530 | MF30X1.0 | 2,0 | 9,77<br>*0.385* | 30,0<br>*1.181* | 27,0<br>*1.063* | 85<br>*3.346* | 140,23<br>*5.521* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,0<br>*1.102* | 4 | B |

## T32-PNB

Through holes – UNC threads





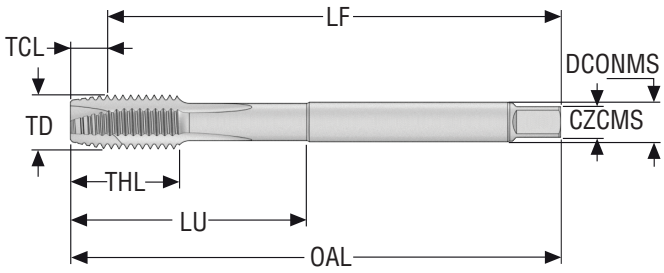

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 2B
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN08B03-4-40-21R | 10139452 | UNC4-40 | 40,0 | 2,81<br>*0.111* | 2,845<br>*0.112* | 10,0<br>*0.394* | 18<br>*0.709* | 53,19<br>*2.094* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,35<br>*0.093* | 3 | B |
| T32-PN08B03-5-40-21R | 10139453 | UNC5-40 | 40,0 | 2,92<br>*0.115* | 3,175<br>*0.125* | 10,0<br>*0.394* | 18<br>*0.709* | 53,08<br>*2.090* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | B |
| T32-PN08B03-6-32-21R | 10139454 | UNC6-32 | 32,0 | 3,71<br>*0.146* | 3,505<br>*0.138* | 12,0<br>*0.472* | 20<br>*0.787* | 52,29<br>*2.059* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,85<br>*0.112* | 3 | B |
| T32-PN08B03-8-32-21R | 10139455 | UNC8-32 | 32,0 | 3,59<br>*0.141* | 4,166<br>*0.164* | 12,0<br>*0.472* | 21<br>*0.827* | 59,41<br>*2.339* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | B |
| T32-PN08B03-10-24-21R | 10139456 | UNC10-24 | 24,0 | 4,82<br>*0.190* | 4,826<br>*0.190* | 14,0<br>*0.551* | 25<br>*0.984* | 65,18<br>*2.566* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 3,9<br>*0.154* | 3 | B |
| T32-PN08B03-12-24-21R | 10139457 | UNC12-24 | 24,0 | 4,69<br>*0.185* | 5,486<br>*0.216* | 18,0<br>*0.709* | 30<br>*1.181* | 75,31<br>*2.965* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | B |
| T32-PN08B03-1/4-20-21R | 10139458 | UNC1/4-20 | 20,0 | 5,6<br>*0.220* | 6,35<br>*0.250* | 18,0<br>*0.709* | 32<br>*1.260* | 74,4<br>*2.929* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,1<br>*0.201* | 3 | B |
| T32-PN08B03-5/16-18-21R | 10139459 | UNC5/16-18 | 18,0 | 6,26<br>*0.246* | 7,937<br>*0.312* | 20,0<br>*0.787* | 35<br>*1.378* | 83,74<br>*3.297* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | B |
| T32-PN08B03-3/8-16-21R | 10139460 | UNC3/8-16 | 16,0 | 7,28<br>*0.287* | 9,525<br>*0.375* | 20,0<br>*0.787* | 39<br>*1.535* | 92,72<br>*3.650* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,0<br>*0.315* | 3 | B |

## T32-PNB

Through holes – UNC threads





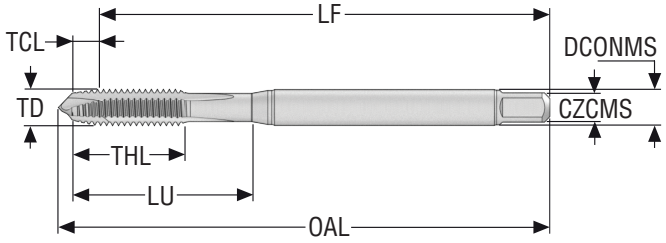

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 2B
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN08B06-7/16-14-21R | 10139531 | UNC7/16-14 | 14,0 | 8,27<br>*0.326* | 11,112<br>*0.437* | 22,0<br>*0.866* | 76<br>*2.992* | 91,73<br>*3.611* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,3<br>*0.366* | 3 | B |
| T32-PN08B06-1/2-13-21R | 10139540 | UNC1/2-13 | 13,0 | 9,01<br>*0.355* | 12,7<br>*0.500* | 24,0<br>*0.945* | 83<br>*3.268* | 100,99<br>*3.976* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,7<br>*0.421* | 3 | B |
| T32-PN08B06-9/16-12-21R | 10139533 | UNC9/16-12 | 12,0 | 9,76<br>*0.384* | 14,287<br>*0.562* | 25,0<br>*0.984* | 81<br>*3.189* | 100,24<br>*3.946* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,3<br>*0.484* | 3 | B |
| T32-PN08B06-5/8-11-21R | 10139534 | UNC5/8-11 | 11,0 | 10,51<br>*0.414* | 15,875<br>*0.625* | 32,0<br>*1.260* | 68<br>*2.677* | 99,49<br>*3.917* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,5<br>*0.531* | 3 | B |
| T32-PN08B06-3/4-10-21R | 10139535 | UNC3/4-10 | 10,0 | 11,55<br>*0.455* | 19,05<br>*0.750* | 32,0<br>*1.260* | 81<br>*3.189* | 113,45<br>*4.467* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | B |
| T32-PN08B06-7/8-9-21R | 10139536 | UNC7/8-9 | 9,0 | 13,04<br>*0.513* | 22,225<br>*0.875* | 32,0<br>*1.260* | 93<br>*3.661* | 126,96<br>*4.998* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | B |
| T32-PN08B06-1-8-21R | 10139537 | UNC1-8 | 8,0 | 14,86<br>*0.585* | 25,4<br>*1.000* | 38,0<br>*1.496* | 97<br>*3.819* | 145,14<br>*5.714* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 22,25<br>*0.876* | 4 | B |
| T32-PN08B06-1_1/8-7-21R | 10139756 | UNC11/8-7 | 7,0 | 16,48<br>*0.649* | 28,575<br>*1.125* | 45,0<br>*1.772* | 115<br>*4.528* | 163,52<br>*6.438* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 25,0<br>*0.984* | 4 | B |
| T32-PN08B06-1_1/4-7-21R | 10139538 | UNC11/4-7 | 7,0 | 16,74<br>*0.659* | 31,75<br>*1.250* | 45,0<br>*1.772* | 115<br>*4.528* | 163,26<br>*6.428* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 28,0<br>*1.102* | 4 | B |
| T32-PN08B06-1_3/8-6-21R | 10139532 | UNC13/8-6 | 6,0 | 19,04<br>*0.750* | 34,925<br>*1.375* | 50,0<br>*1.969* | 131<br>*5.157* | 180,96<br>*7.124* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 30,75<br>*1.211* | 4 | B |
| T32-PN08B06-1_1/2-6-21R | 10139539 | UNC11/2-6 | 6,0 | 19,3<br>*0.760* | 38,1<br>*1.500* | 55,0<br>*2.165* | 131<br>*5.157* | 180,7<br>*7.114* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 34,0<br>*1.339* | 4 | B |

## T32-PNB

Through holes – UNC threads





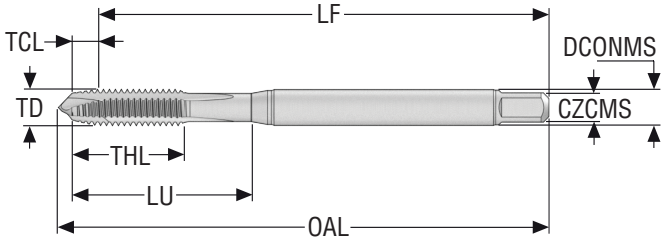

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN/ANSI
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T32-PN08B93-4-40-21R | 10280403 | UNC4-40 | 40.0 | 0.111 | 0.112 | 0.394 | 0.718 | 2.102 | 2.252 | 0.141 | 3.581x2.79 | 0.093 | 3 | B |
| T32-PN08B93-5-40-21R | 10280404 | UNC5-40 | 40.0 | 0.115 | 0.125 | 0.394 | 0.712 | 2.091 | 2.252 | 0.141 | 3.581x2.79 | 0.104 | 3 | B |
| T32-PN08B93-6-32-21R | 10280405 | UNC6-32 | 32.0 | 0.146 | 0.138 | 0.472 | 0.799 | 2.067 | 2.260 | 0.141 | 3.581x2.79 | 0.112 | 3 | B |
| T32-PN08B93-8-32-21R | 10280406 | UNC8-32 | 32.0 | 0.141 | 0.164 | 0.472 | 0.832 | 2.339 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | B |
| T32-PN08B93-10-24-21R | 10280407 | UNC10-24 | 24.0 | 0.190 | 0.190 | 0.551 | 1.000 | 2.579 | 2.835 | 0.194 | 4.928x3.86 | 0.154 | 3 | B |
| T32-PN08B93-12-24-21R | 10280408 | UNC12-24 | 24.0 | 0.185 | 0.216 | 0.709 | 1.191 | 2.969 | 3.236 | 0.220 | 5.588x4.19 | 0.177 | 3 | B |
| T32-PN08B93-1/4-20-21R | 10280409 | UNC1/4-20 | 20.0 | 0.220 | 0.250 | 0.709 | 1.187 | 2.929 | 3.244 | 0.255 | 6.477x4.85 | 0.201 | 3 | B |
| T32-PN08B93-5/16-18-21R | 10280410 | UNC5/16-18 | 18.0 | 0.246 | 0.312 | 0.787 | 1.391 | 3.307 | 3.673 | 0.318 | 8.077x6.05 | 0.260 | 3 | B |
| T32-PN08B93-3/8-16-21R | 10280411 | UNC3/8-16 | 16.0 | 0.287 | 0.375 | 0.787 | 1.541 | 3.646 | 3.937 | 0.381 | 9.667x7.26 | 0.315 | 3 | B |
| T32-PN08B96-7/16-14-21R | 10280412 | UNC7/16-14 | 14.0 | 0.326 | 0.437 | 0.591 | 2.858 | 3.619 | 3.937 | 0.323 | 8.204x6.15 | 0.366 | 3 | B |
| T32-PN08B96-1/2-13-21R | 10280413 | UNC1/2-13 | 13.0 | 0.355 | 0.500 | 0.709 | 3.221 | 3.972 | 4.331 | 0.367 | 9.322x6.99 | 0.421 | 3 | B |
| T32-PN08B96-9/16-12-21R | 10280414 | UNC9/16-12 | 12.0 | 0.384 | 0.562 | 0.787 | 3.161 | 3.943 | 4.331 | 0.429 | 10.987x8.18 | 0.484 | 3 | B |
| T32-PN08B96-5/8-11-21R | 10280415 | UNC5/8-11 | 11.0 | 0.414 | 0.625 | 0.866 | 2.590 | 3.917 | 4.331 | 0.480 | 12.192x9.14 | 0.531 | 3 | B |
| T32-PN08B96-3/4-10-21R | 10280416 | UNC3/4-10 | 10.0 | 0.455 | 0.750 | 1.260 | 3.050 | 4.467 | 4.921 | 0.590 | 14.986x11.23 | 0.650 | 4 | B |
| T32-PN08B96-7/8-9-21R | 10280417 | UNC7/8-9 | 9.0 | 0.513 | 0.875 | 1.260 | 3.581 | 4.998 | 5.512 | 0.697 | 17.704x13.28 | 0.768 | 4 | B |
| T32-PN08B96-1-8-21R | 10280418 | UNC1-8 | 8.0 | 0.585 | 1.000 | 1.496 | 3.757 | 5.710 | 6.299 | 0.800 | 20.320x15.24 | 0.876 | 4 | B |

## T32-PNB

Through holes – UNF threads



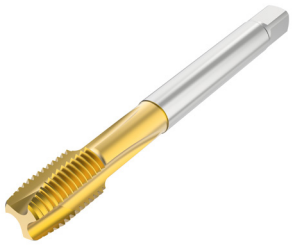


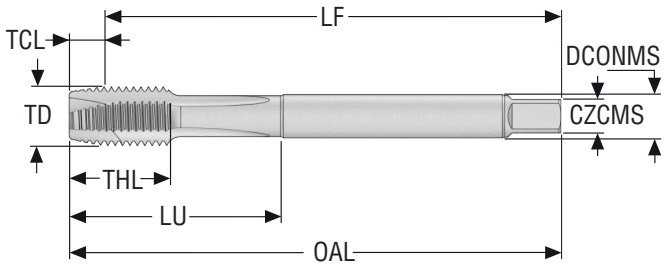

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 2B
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN09B03-10-32-21R | 10139461 | UNF10-32 | 32,0 | 3,8<br>*0.150* | 4,826<br>*0.190* | 14,0<br>*0.551* | 25<br>*0.984* | 66,2<br>*2.606* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,1<br>*0.161* | 3 | B |
| T32-PN09B03-12-28-21R | 10139462 | UNF12-28 | 28,0 | 4,01<br>*0.158* | 5,486<br>*0.216* | 18,0<br>*0.709* | 30<br>*1.181* | 75,99<br>*2.992* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 4,6<br>*0.181* | 3 | B |
| T32-PN09B03-1/4-28-21R | 10139463 | UNF1/4-28 | 28,0 | 4,24<br>*0.167* | 6,35<br>*0.250* | 18,0<br>*0.709* | 30<br>*1.181* | 75,76<br>*2.983* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,5<br>*0.217* | 3 | B |
| T32-PN09B03-5/16-24-21R | 10139464 | UNF5/16-24 | 24,0 | 4,89<br>*0.193* | 7,937<br>*0.312* | 20,0<br>*0.787* | 35<br>*1.378* | 85,11<br>*3.351* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,9<br>*0.272* | 3 | B |
| T32-PN09B03-3/8-24-21R | 10139465 | UNF3/8-24 | 24,0 | 5,22<br>*0.206* | 9,525<br>*0.375* | 20,0<br>*0.787* | 35<br>*1.378* | 84,78<br>*3.338* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T32-PNB

Through holes – UNF threads





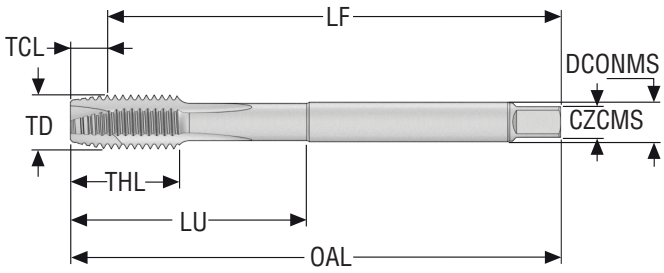

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN374
- Thread tolerance class: 2B
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN09B05-7/16-20-21R | 10139542 | UNF7/16-20 | 20,0 | 5,88<br>*0.231* | 11,112<br>*0.437* | 20,0<br>*0.787* | 76<br>*2.992* | 94,12<br>*3.706* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,9<br>*0.390* | 3 | B |
| T32-PN09B05-1/2-20-21R | 10139551 | UNF1/2-20 | 20,0 | 6,28<br>*0.247* | 12,7<br>*0.500* | 20,0<br>*0.787* | 73<br>*2.874* | 93,72<br>*3.690* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | B |
| T32-PN09B05-9/16-18-21R | 10139544 | UNF9/16-18 | 18,0 | 6,69<br>*0.263* | 14,287<br>*0.562* | 20,0<br>*0.787* | 71<br>*2.795* | 93,31<br>*3.674* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 3 | B |
| T32-PN09B05-5/8-18-21R | 10139545 | UNF5/8-18 | 18,0 | 6,76<br>*0.266* | 15,875<br>*0.625* | 20,0<br>*0.787* | 58<br>*2.283* | 93,24<br>*3.671* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 3 | B |
| T32-PN09B05-3/4-16-21R | 10139546 | UNF3/4-16 | 16,0 | 7,81<br>*0.307* | 19,05<br>*0.750* | 24,0<br>*0.945* | 66<br>*2.598* | 102,19<br>*4.023* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 17,5<br>*0.689* | 4 | B |
| T32-PN09B05-7/8-14-21R | 10139547 | UNF7/8-14 | 14,0 | 8,96<br>*0.353* | 22,225<br>*0.875* | 24,0<br>*0.945* | 78<br>*3.071* | 116,04<br>*4.569* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | B |
| T32-PN09B05-1-12-21R | 10139548 | UNF1-12 | 12,0 | 10,44<br>*0.411* | 25,4<br>*1.000* | 27,0<br>*1.063* | 93<br>*3.661* | 129,56<br>*5.101* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 23,3<br>*0.917* | 4 | B |
| T32-PN09B05-1_1/8-12-21R | 10139757 | UNF11/8-12 | 12,0 | 10,37<br>*0.408* | 28,575<br>*1.125* | 27,0<br>*1.063* | 85<br>*3.346* | 139,63<br>*5.497* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | B |
| T32-PN09B05-1_1/4-12-21R | 10139549 | UNF11/4-12 | 12,0 | 10,29<br>*0.405* | 31,75<br>*1.250* | 27,0<br>*1.063* | 85<br>*3.346* | 139,71<br>*5.500* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 29,5<br>*1.161* | 4 | B |
| T32-PN09B05-1_3/8-12-21R | 10139543 | UNF13/8-12 | 12,0 | 10,55<br>*0.415* | 34,925<br>*1.375* | 30,0<br>*1.181* | 101<br>*3.976* | 159,45<br>*6.278* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00X22.00 | 32,8<br>*1.291* | 4 | B |
| T32-PN09B05-1_1/2-12-21R | 10139550 | UNF11/2-12 | 12,0 | 10,48<br>*0.413* | 38,1<br>*1.500* | 30,0<br>*1.181* | 101<br>*3.976* | 159,52<br>*6.280* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00X22.00 | 36,0<br>*1.417* | 4 | B |

## T32-PNB

Through holes – UNF threads





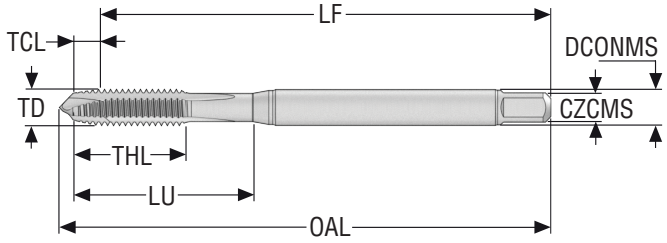

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN/ANSI
- Thread tolerance class: 2B
- For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T32-PN09B93-4-48-21R | 10280419 | UNF4-48 | 48.0 | 0.094 | 0.112 | 0.394 | 0.718 | 2.114 | 2.252 | 0.141 | 3.581x2.79 | 0.094 | 3 | B |
| T32-PN09B93-5-44-21R | 10280420 | UNF5-44 | 44.0 | 0.118 | 0.125 | 0.394 | 0.712 | 2.102 | 2.252 | 0.141 | 3.581x2.79 | 0.106 | 3 | B |
| T32-PN09B93-6-40-21R | 10280421 | UNF6-40 | 40.0 | 0.126 | 0.138 | 0.472 | 0.795 | 2.091 | 2.260 | 0.141 | 3.581x2.79 | 0.116 | 3 | B |
| T32-PN09B93-8-36-21R | 10280422 | UNF8-36 | 36.0 | 0.126 | 0.164 | 0.472 | 0.830 | 2.350 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | B |
| T32-PN09B93-10-32-21R | 10280423 | UNF10-32 | 32.0 | 0.150 | 0.190 | 0.551 | 0.994 | 2.610 | 2.835 | 0.194 | 4.928x3.86 | 0.161 | 3 | B |
| T32-PN09B93-12-28-21R | 10280424 | UNF12-28 | 28.0 | 0.158 | 0.216 | 0.709 | 1.194 | 3.000 | 3.236 | 0.220 | 5.588x4.19 | 0.181 | 3 | B |
| T32-PN09B93-1/4-28-21R | 10280425 | UNF1/4-28 | 28.0 | 0.167 | 0.250 | 0.709 | 1.179 | 2.976 | 3.244 | 0.255 | 6.477x4.85 | 0.217 | 3 | B |
| T32-PN09B93-5/16-24-21R | 10280426 | UNF5/16-24 | 24.0 | 0.193 | 0.312 | 0.787 | 1.383 | 3.350 | 3.673 | 0.318 | 8.077x6.05 | 0.272 | 3 | B |
| T32-PN09B93-3/8-24-21R | 10280427 | UNF3/8-24 | 24.0 | 0.206 | 0.375 | 0.787 | 1.383 | 3.339 | 3.543 | 0.381 | 9.667x7.26 | 0.335 | 3 | B |
| T32-PN09B95-7/16-20-21R | 10280428 | UNF7/16-20 | 20.0 | 0.231 | 0.437 | 0.591 | 2.858 | 3.706 | 3.937 | 0.323 | 8.204x6.15 | 0.390 | 3 | B |
| T32-PN09B95-1/2-20-21R | 10280429 | UNF1/2-20 | 20.0 | 0.247 | 0.500 | 0.591 | 2.828 | 3.690 | 3.937 | 0.367 | 9.322x6.99 | 0.453 | 3 | B |
| T32-PN09B95-9/16-18-21R | 10280430 | UNF9/16-18 | 18.0 | 0.263 | 0.562 | 0.591 | 2.768 | 3.674 | 3.937 | 0.429 | 10.987x8.18 | 0.512 | 3 | B |
| T32-PN09B95-5/8-18-21R | 10280431 | UNF5/8-18 | 18.0 | 0.266 | 0.625 | 0.591 | 2.196 | 3.671 | 3.937 | 0.480 | 12.192x9.14 | 0.571 | 3 | B |
| T32-PN09B95-3/4-16-21R | 10280432 | UNF3/4-16 | 16.0 | 0.307 | 0.750 | 0.945 | 2.459 | 4.023 | 4.331 | 0.590 | 14.986x11.23 | 0.689 | 4 | B |
| T32-PN09B95-7/8-14-21R | 10280433 | UNF7/8-14 | 14.0 | 0.353 | 0.875 | 0.945 | 2.990 | 4.569 | 4.921 | 0.697 | 17.704x13.28 | 0.807 | 4 | B |
| T32-PN09B95-1-12-21R | 10280434 | UNF1-12 | 12.0 | 0.411 | 1.000 | 1.063 | 2.970 | 5.101 | 5.512 | 0.800 | 20.320x15.24 | 0.917 | 4 | B |

## T32-PNB

Through holes – G threads





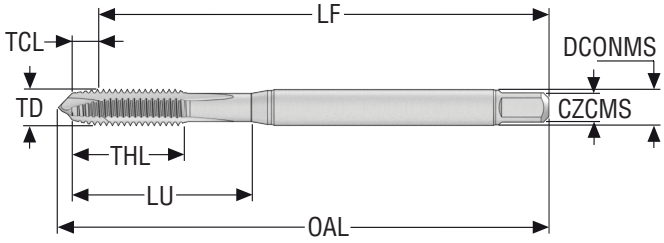

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN5156
- Thread tolerance class: NORMAL
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PN21B09-1/8-28-11R | 10139552 | G1/8-28 | 28,0 | 4,76<br>*0.187* | 9,728<br>*0.383* | 18,0<br>*0.709* | 67<br>*2.638* | 85,24<br>*3.356* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | B |
| T32-PN21B09-1/4-19-11R | 10139553 | G1/4-19 | 19,0 | 6,77<br>*0.267* | 13,157<br>*0.518* | 22,0<br>*0.866* | 71<br>*2.795* | 93,23<br>*3.670* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 11,8<br>*0.465* | 3 | B |
| T32-PN21B09-3/8-19-11R | 10139554 | G3/8-19 | 19,0 | 6,89<br>*0.271* | 16,662<br>*0.656* | 22,0<br>*0.866* | 58<br>*2.283* | 93,11<br>*3.666* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 4 | B |
| T32-PN21B09-1/2-14-11R | 10139555 | G1/2-14 | 14,0 | 9,22<br>*0.363* | 20,955<br>*0.825* | 25,0<br>*0.984* | 80<br>*3.150* | 115,78<br>*4.558* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,0<br>*0.748* | 4 | B |
| T32-PN21B09-5/8-14-11R | 10139556 | G5/8-14 | 14,0 | 9,4<br>*0.370* | 22,911<br>*0.902* | 25,0<br>*0.984* | 78<br>*3.071* | 115,6<br>*4.551* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |
| T32-PN21B09-3/4-14-11R | 10139557 | G3/4-14 | 14,0 | 9,36<br>*0.369* | 26,441<br>*1.041* | 28,0<br>*1.102* | 77<br>*3.031* | 130,64<br>*5.143* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 24,5<br>*0.965* | 4 | B |
| T32-PN21B09-7/8-14-11R | 10139558 | G7/8-14 | 14,0 | 9,03<br>*0.356* | 30,201<br>*1.189* | 30,0<br>*1.181* | 85<br>*3.346* | 140,97<br>*5.550* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,25<br>*1.112* | 4 | B |
| T32-PN21B09-1-11-11R | 10139559 | G1-11 | 11,0 | 11,49<br>*0.452* | 33,249<br>*1.309* | 32,0<br>*1.260* | 93<br>*3.661* | 148,51<br>*5.847* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00X20.00 | 30,75<br>*1.211* | 4 | B |

## T32-PHB

Through holes – Metric coarse threads





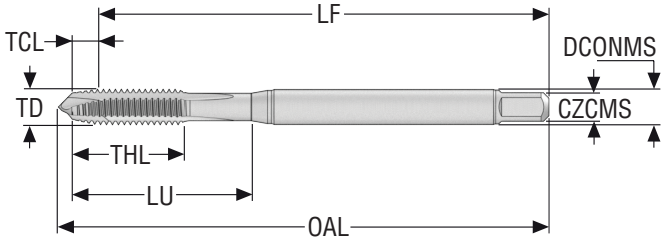

–Substrate: HSSE
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6H
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PH01B03-3X0.5-63R | 10309408 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,8<br>*2.118* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T32-PH01B03-4X0.7-63R | 10309409 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,8<br>*2.354* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T32-PH01B03-5X0.8-63R | 10309410 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,4<br>*2.614* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T32-PH01B03-6X1-63R | 10309411 | M6 | 1,0 | 4,37<br>*0.172* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T32-PH01B03-8X1.25-63R | 10309412 | M8 | 1,25 | 5,4<br>*0.213* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,7<br>*3.335* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T32-PH01B03-10X1.5-63R | 10309413 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,2<br>*3.669* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T32-PHB

Through holes – Metric coarse threads





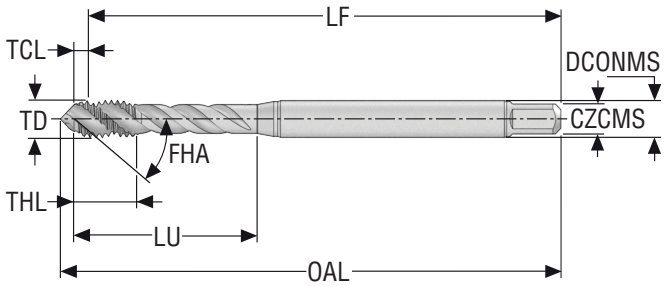

–Substrate: HSSE
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 6H
–For cutting data see page(s) 243

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-PH01B06-12X1.75-63R | 10309537 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 102,0<br>*4.016* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T32-PH01B06-14X2-63R | 10309715 | M14 | 2,0 | 9,14<br>*0.360* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 100,9<br>*3.972* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 3 | B |
| T32-PH01B06-16X2-63R | 10309538 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,8<br>*3.969* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T32-PH01B06-20X2.5-63R | 10309539 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,4<br>*5.055* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |
| T32-PH01B06-24X3-63R | 10309716 | M24 | 3,0 | 13,68<br>*0.539* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,3<br>*5.760* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | B |

## T32-R40NC-micro

Blind holes – Metric coarse threads





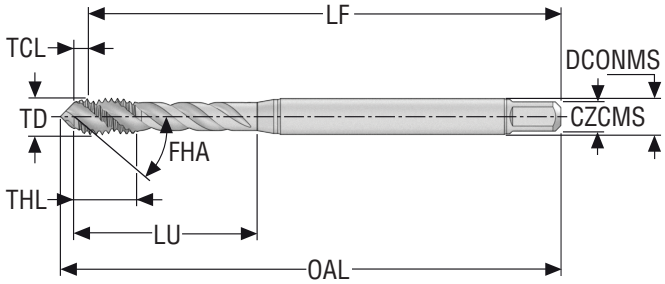

- Substrate: HSS-PM
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 4H
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C03-1X0.25-41R | 10139129 | M1 | 0,25 | 0,59<br>*0.023* | 1,0<br>*0.039* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 40,9<br>*1.610* | 2,5<br>*0.098* | 2.50X2.10 | 0,75<br>*0.030* | 2 | C |
| T32-R40N01C03-1.1X0.25-41R | 10139130 | M1.1 | 0,25 | 0,59<br>*0.023* | 1,1<br>*0.043* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 41,0<br>*1.614* | 2,5<br>*0.098* | 2.50X2.10 | 0,85<br>*0.033* | 2 | C |
| T32-R40N01C03-1.2X0.25-41R | 10139131 | M1.2 | 0,25 | 0,59<br>*0.023* | 1,2<br>*0.047* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 41,1<br>*1.618* | 2,5<br>*0.098* | 2.50X2.10 | 0,95<br>*0.037* | 2 | C |
| T32-R40N01C03-1.4X0.3-41R | 10139132 | M1.4 | 0,3 | 0,69<br>*0.027* | 1,4<br>*0.055* | 8,0<br>*0.315* | 13<br>*0.512* | 39,31<br>*1.548* | 41,3<br>*1.626* | 2,5<br>*0.098* | 2.50X2.10 | 1,1<br>*0.043* | 2 | C |

## T32-R40NC-micro

Blind holes – Metric coarse threads





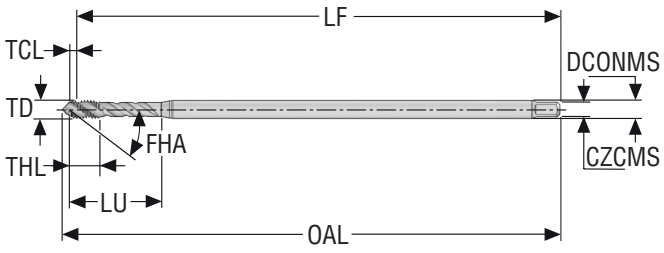

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C03-1.6X0.35-63R | 10139133 | M1.6 | 0,35 | 0,8<br>*0.031* | 1,6<br>*0.063* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,4<br>*1.630* | 2,5<br>*0.098* | 2.50X2.10 | 1,25<br>*0.049* | 2 | C |
| T32-R40N01C03-1.7X0.35-63R | 10139134 | M1.7 | 0,35 | 0,8<br>*0.031* | 1,7<br>*0.067* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,5<br>*1.634* | 2,5<br>*0.098* | 2.50X2.10 | 1,35<br>*0.053* | 2 | C |
| T32-R40N01C03-1.8X0.35-63R | 10139135 | M1.8 | 0,35 | 0,8<br>*0.031* | 1,8<br>*0.071* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,6<br>*1.638* | 2,5<br>*0.098* | 2.50X2.10 | 1,45<br>*0.057* | 2 | C |
| T32-R40N01C03-2X0.4-63R | 10139136 | M2 | 0,4 | 1,03<br>*0.041* | 2,0<br>*0.079* | 10,0<br>*0.394* | 13<br>*0.512* | 43,974<br>*1.731* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,6<br>*0.063* | 2 | C |
| T32-R40N01C03-2.2X0.45-63R | 10139137 | M2.2 | 0,45 | 1,15<br>*0.045* | 2,2<br>*0.087* | 10,0<br>*0.394* | 13<br>*0.512* | 43,847<br>*1.726* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,75<br>*0.069* | 2 | C |
| T32-R40N01C03-2.3X0.4-63R | 10139138 | M2.3 | 0,4 | 1,05<br>*0.041* | 2,3<br>*0.091* | 10,0<br>*0.394* | 13<br>*0.512* | 43,948<br>*1.730* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,9<br>*0.075* | 2 | C |
| T32-R40N01C03-2.5X0.45-63R | 10139139 | M2.5 | 0,45 | 1,06<br>*0.042* | 2,5<br>*0.098* | 5,0<br>*0.197* | 14<br>*0.551* | 48,94<br>*1.927* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,05<br>*0.081* | 2 | C |
| T32-R40N01C03-2.6X0.45-63R | 10139140 | M2.6 | 0,45 | 1,15<br>*0.045* | 2,6<br>*0.102* | 5,0<br>*0.197* | 14<br>*0.551* | 48,847<br>*1.923* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,15<br>*0.085* | 2 | C |

## T32-R40NC

Blind holes – Metric coarse threads





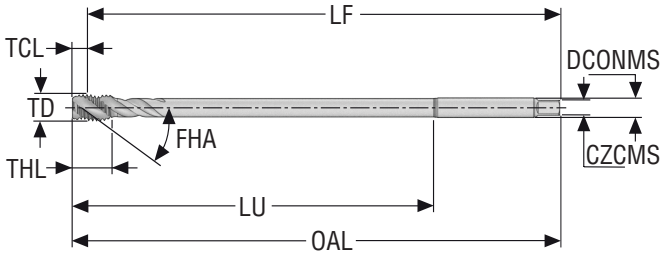

—Substrate: HSSE
—Coating: TiAlN + TiN
—Standard: DIN371/EL
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C04-3X0.5-63R | 10139179 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 98,83<br>*3.891* | 101,2<br>*3.984* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-R40N01C04-4X0.7-63R | 10139180 | M4 | 0,7 | 1,45<br>*0.057* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 123,55<br>*4.864* | 126,6<br>*4.984* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-R40N01C04-5X0.8-63R | 10139181 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 138,1<br>*5.437* | 142,0<br>*5.591* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-R40N01C04-6X1-63R | 10139182 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 157,72<br>*6.209* | 162,4<br>*6.394* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |

## T32-R40NC

Blind holes – Metric coarse threads





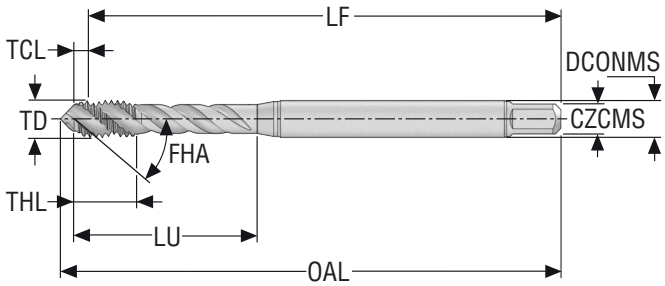

—Substrate: HSSE
—Coating: TiAlN + TiN
—Standard: DIN376/EL
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C07-8X1.25-63R | 10139183 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 15,0<br>*0.591* | 157<br>*6.181* | 176,89<br>*6.964* | 180,0<br>*7.087* | 6,0<br>*0.236* | 6.00X4.90 | 6,8<br>*0.268* | 3 | C |
| T32-R40N01C07-10X1.5-63R | 10139185 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 17,0<br>*0.669* | 177<br>*6.969* | 196,24<br>*7.726* | 200,0<br>*7.874* | 7,0<br>*0.276* | 7.00X5.50 | 8,5<br>*0.335* | 3 | C |
| T32-R40N01C07-12X1.75-63R | 10139186 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 193<br>*7.598* | 215,59<br>*8.488* | 220,0<br>*8.661* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T32-R40N01C07-16X2-63R | 10139187 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 178<br>*7.008* | 214,79<br>*8.456* | 220,0<br>*8.661* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |

## T32-R40NC

Blind holes – Metric coarse threads





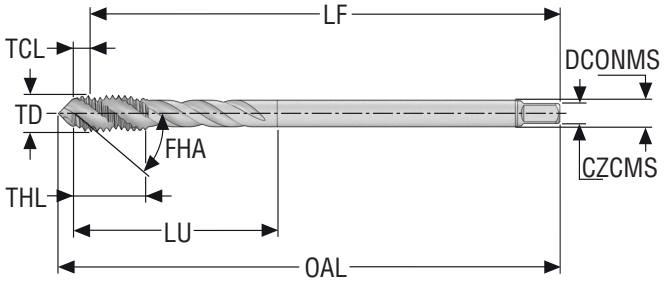

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C03-3X0.5-63R | 10139141 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-R40N01C03-3.5X0.6-63R | 10139142 | M3.5 | 0,6 | 1,36<br>*0.054* | 3,5<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,64<br>*2.151* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | C |
| T32-R40N01C03-4X0.7-63R | 10139143 | M4 | 0,7 | 1,54<br>*0.061* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,46<br>*2.420* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-R40N01C03-5X0.8-63R | 10139144 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-R40N01C03-6X1-63R | 10139145 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,72<br>*3.060* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T32-R40N01C03-7X1-63R | 10139146 | M7 | 1,0 | 2,28<br>*0.090* | 7,0<br>*0.276* | 10,0<br>*0.394* | 30<br>*1.181* | 77,72<br>*3.060* | 82,9<br>*3.264* | 7,0<br>*0.276* | 7.00X5.50 | 6,0<br>*0.236* | 3 | C |
| T32-R40N01C03-8X1.25-63R | 10139147 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,89<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T32-R40N01C03-9X1.25-63R | 10139148 | M9 | 1,25 | 3,11<br>*0.122* | 9,0<br>*0.354* | 13,0<br>*0.512* | 35<br>*1.378* | 86,89<br>*3.421* | 91,7<br>*3.610* | 9,0<br>*0.354* | 9.00X7.00 | 7,8<br>*0.307* | 3 | C |
| T32-R40N01C03-10X1.5-63R | 10139149 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,24<br>*3.789* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-R40NC

Blind holes – Metric coarse threads





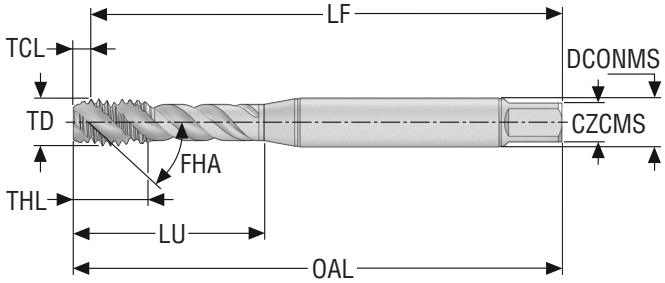

—Substrate: HSSE
—Coating: TiAlN + TiN
—Standard: DIN376
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | | mm<br>Inch | | |
| T32-R40N01C06-3X0.5-63R | 10139568 | M3 | 0,5 | 1,17<br>0.046 | 3,0<br>0.118 | 5,0<br>0.197 | 36<br>1.417 | 54,83<br>2.159 | 57,2<br>2.252 | 2,2<br>0.087 | 2.20X1.80 | 2,5<br>0.098 | 3 | C |
| T32-R40N01C06-4X0.7-63R | 10139570 | M4 | 0,7 | 1,72<br>0.068 | 4,0<br>0.157 | 8,0<br>0.315 | 43<br>1.693 | 61,28<br>2.413 | 64,6<br>2.543 | 2,8<br>0.110 | 2.80X2.10 | 3,3<br>0.130 | 3 | C |
| T32-R40N01C06-5X0.8-63R | 10139571 | M5 | 0,8 | 1,9<br>0.075 | 5,0<br>0.197 | 10,0<br>0.394 | 49<br>1.929 | 68,1<br>2.681 | 72,0<br>2.835 | 3,5<br>0.138 | 3.50X2.70 | 4,2<br>0.165 | 3 | C |
| T32-R40N01C06-6X1-63R | 10139572 | M6 | 1,0 | 2,28<br>0.090 | 6,0<br>0.236 | 12,0<br>0.472 | 59<br>2.323 | 77,72<br>3.060 | 82,4<br>3.244 | 4,5<br>0.177 | 4.50X3.40 | 5,0<br>0.197 | 3 | C |
| T32-R40N01C06-8X1.25-63R | 10139574 | M8 | 1,25 | 3,11<br>0.122 | 8,0<br>0.315 | 15,0<br>0.591 | 67<br>2.638 | 86,89<br>3.421 | 90,0<br>3.543 | 6,0<br>0.236 | 6.00X4.90 | 6,8<br>0.268 | 3 | C |
| T32-R40N01C06-9X1.25-63R | 10139575 | M9 | 1,25 | 3,21<br>0.126 | 9,0<br>0.354 | 15,0<br>0.591 | 67<br>2.638 | 86,79<br>3.417 | 90,0<br>3.543 | 7,0<br>0.276 | 7.00X5.50 | 7,8<br>0.307 | 3 | C |
| T32-R40N01C06-10X1.5-63R | 10139576 | M10 | 1,5 | 3,76<br>0.148 | 10,0<br>0.394 | 17,0<br>0.669 | 77<br>3.031 | 96,24<br>3.789 | 100,0<br>3.937 | 7,0<br>0.276 | 7.00X5.50 | 8,5<br>0.335 | 3 | C |
| T32-R40N01C06-12X1.75-63R | 10139577 | M12 | 1,75 | 4,41<br>0.174 | 12,0<br>0.472 | 18,0<br>0.709 | 83<br>3.268 | 105,59<br>4.157 | 110,0<br>4.331 | 9,0<br>0.354 | 9.00X7.00 | 10,2<br>0.402 | 3 | C |
| T32-R40N01C06-14X2-63R | 10139578 | M14 | 2,0 | 5,07<br>0.200 | 14,0<br>0.551 | 20,0<br>0.787 | 81<br>3.189 | 104,93<br>4.131 | 110,0<br>4.331 | 11,0<br>0.433 | 11.00X9.00 | 12,0<br>0.472 | 4 | C |
| T32-R40N01C06-16X2-63R | 10139579 | M16 | 2,0 | 5,15<br>0.203 | 16,0<br>0.630 | 20,0<br>0.787 | 68<br>2.677 | 104,85<br>4.128 | 110,0<br>4.331 | 12,0<br>0.472 | 12.00X9.00 | 14,0<br>0.551 | 4 | C |
| T32-R40N01C06-18X2.5-63R | 10139580 | M18 | 2,5 | 6,31<br>0.248 | 18,0<br>0.709 | 25,0<br>0.984 | 81<br>3.189 | 118,69<br>4.673 | 125,0<br>4.921 | 14,0<br>0.551 | 14.00X11.00 | 15,5<br>0.610 | 4 | C |
| T32-R40N01C06-20X2.5-63R | 10139581 | M20 | 2,5 | 6,51<br>0.256 | 20,0<br>0.787 | 25,0<br>0.984 | 95<br>3.740 | 133,49<br>5.256 | 140,0<br>5.512 | 16,0<br>0.630 | 16.00X12.00 | 17,5<br>0.689 | 4 | C |
| T32-R40N01C06-22X2.5-63R | 10139582 | M22 | 2,5 | 6,51<br>0.256 | 22,0<br>0.866 | 25,0<br>0.984 | 93<br>3.661 | 133,49<br>5.256 | 140,0<br>5.512 | 18,0<br>0.709 | 18.00X14.50 | 19,5<br>0.768 | 4 | C |
| T32-R40N01C06-24X3-63R | 10139583 | M24 | 3,0 | 7,81<br>0.307 | 24,0<br>0.945 | 30,0<br>1.181 | 113<br>4.449 | 152,19<br>5.992 | 160,0<br>6.299 | 18,0<br>0.709 | 18.00X14.50 | 21,0<br>0.827 | 4 | C |
| T32-R40N01C06-27X3-63R | 10139584 | M27 | 3,0 | 7,81<br>0.307 | 27,0<br>1.063 | 30,0<br>1.181 | 97<br>3.819 | 152,19<br>5.992 | 160,0<br>6.299 | 20,0<br>0.787 | 20.00X16.00 | 24,0<br>0.945 | 4 | C |
| T32-R40N01C06-30X3.5-63R | 10139585 | M30 | 3,5 | 8,88<br>0.350 | 30,0<br>1.181 | 35,0<br>1.378 | 115<br>4.528 | 171,12<br>6.737 | 180,0<br>7.087 | 22,0<br>0.866 | 22.00X18.00 | 26,5<br>1.043 | 4 | C |
| T32-R40N01C06-33X3.5-63R | 10139586 | M33 | 3,5 | 8,88<br>0.350 | 33,0<br>1.299 | 35,0<br>1.378 | 113<br>4.449 | 171,12<br>6.737 | 180,0<br>7.087 | 25,0<br>0.984 | 25.00X20.00 | 29,5<br>1.161 | 4 | C |
| T32-R40N01C06-36X4-63R | 10139587 | M36 | 4,0 | 9,94<br>0.391 | 36,0<br>1.417 | 40,0<br>1.575 | 131<br>5.157 | 190,06<br>7.483 | 200,0<br>7.874 | 28,0<br>1.102 | 28.00X22.00 | 32,0<br>1.260 | 4 | C |
| T32-R40N01C06-39X4-63R | 10139588 | M39 | 4,0 | 9,94<br>0.391 | 39,0<br>1.535 | 40,0<br>1.575 | 102<br>4.016 | 190,06<br>7.483 | 200,0<br>7.874 | 32,0<br>1.260 | 32.00X24.00 | 35,0<br>1.378 | 4 | C |
| T32-R40N01C06-42X4.5-63R | 10139589 | M42 | 4,5 | 11,01<br>0.433 | 42,0<br>1.654 | 45,0<br>1.772 | 102<br>4.016 | 188,99<br>7.441 | 200,0<br>7.874 | 32,0<br>1.260 | 32.00X24.00 | 37,5<br>1.476 | 5 | C |
| T32-R40N01C06-45X4.5-63R | 10139590 | M45 | 4,5 | 11,01<br>0.433 | 45,0<br>1.772 | 45,0<br>1.772 | 117<br>4.606 | 208,99<br>8.228 | 220,0<br>8.661 | 36,0<br>1.417 | 36.00X29.00 | 40,5<br>1.594 | 5 | C |
| T32-R40N01C06-48X5-63R | 10139591 | M48 | 5,0 | 12,08<br>0.476 | 48,0<br>1.890 | 50,0<br>1.969 | 147<br>5.787 | 237,92<br>9.367 | 250,0<br>9.843 | 36,0<br>1.417 | 36.00X29.00 | 43,0<br>1.693 | 5 | C |
| T32-R40N01C06-52X5-63R | 10139592 | M52 | 5,0 | 12,08<br>0.476 | 52,0<br>2.047 | 50,0<br>1.969 | 120<br>4.724 | 237,92<br>9.367 | 250,0<br>9.843 | 40,0<br>1.575 | 40.00X32.00 | 47,0<br>1.850 | 5 | C |

## T32-R40NC

Blind holes – Metric coarse threads





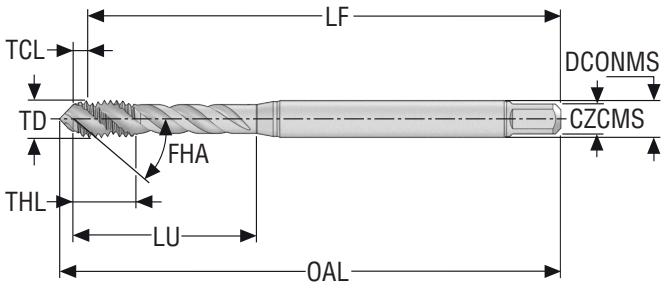

—Substrate: HSSE
—Coating: TiAlN + TiN
—Standard: DIN/ANSI
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C93-3X0.5-63R | 10308605 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 27,5<br>*1.083* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,581<br>*0.141* | 3.581x2.79 | 2,5<br>*0.098* | 3 | C |
| T32-R40N01C93-4X0.7-63R | 10280348 | M4 | 0,7 | 1,54<br>*0.061* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21,14<br>*0.832* | 61,46<br>*2.420* | 64,6<br>*2.543* | 4,267<br>*0.168* | 4.267x3.33 | 3,3<br>*0.130* | 3 | C |
| T32-R40N01C93-5X0.8-63R | 10280349 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25,14<br>*0.990* | 68,1<br>*2.681* | 72,0<br>*2.835* | 4,928<br>*0.194* | 4.928x3.86 | 4,2<br>*0.165* | 3 | C |
| T32-R40N01C93-6X1-63R | 10280350 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30,14<br>*1.187* | 77,72<br>*3.060* | 82,4<br>*3.244* | 6,477<br>*0.255* | 6.477x4.85 | 5,0<br>*0.197* | 3 | C |
| T32-R40N01C93-8X1.25-63R | 10280351 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35,14<br>*1.383* | 86,89<br>*3.421* | 90,0<br>*3.543* | 8,077<br>*0.318* | 8.077x6.05 | 6,8<br>*0.268* | 3 | C |
| T32-R40N01C93-10X1.5-63R | 10280352 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39,14<br>*1.541* | 96,24<br>*3.789* | 100,0<br>*3.937* | 9,667<br>*0.381* | 9.667x7.26 | 8,5<br>*0.335* | 3 | C |
| T32-R40N01C96-12X1.75-63R | 10280353 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 81,82<br>*3.221* | 105,59<br>*4.157* | 110,0<br>*4.331* | 9,322<br>*0.367* | 9.322x6.99 | 10,2<br>*0.402* | 3 | C |
| T32-R40N01C96-16X2-63R | 10280354 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 65,78<br>*2.590* | 104,79<br>*4.126* | 110,0<br>*4.331* | 12,192<br>*0.480* | 12.192x9.14 | 14,0<br>*0.551* | 4 | C |
| T32-R40N01C96-18X2.5-63R | 10280355 | M18 | 2,5 | 6,31<br>*0.248* | 18,0<br>*0.709* | 25,0<br>*0.984* | 79<br>*3.110* | 118,69<br>*4.673* | 125,0<br>*4.921* | 13,767<br>*0.542* | 13.767x10.31 | 15,5<br>*0.610* | 4 | C |
| T32-R40N01C96-20X2.5-63R | 10280356 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 92,47<br>*3.641* | 133,49<br>*5.256* | 140,0<br>*5.512* | 16,561<br>*0.652* | 16.561x12.42 | 17,5<br>*0.689* | 4 | C |
| T32-R40N01C96-24X3-63R | 10280357 | M24 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 96,95<br>*3.817* | 152,19<br>*5.992* | 160,0<br>*6.299* | 19,304<br>*0.760* | 19.304x14.48 | 21,0<br>*0.827* | 4 | C |

## T32-R40NC

Blind holes – Metric coarse threads, 6G





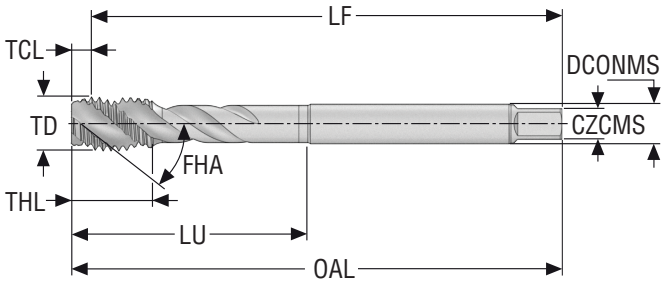

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6G
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C03-3X0.5-61R | 10139173 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-R40N01C03-4X0.7-61R | 10139174 | M4 | 0,7 | 1,54<br>*0.061* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,46<br>*2.420* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-R40N01C03-5X0.8-61R | 10139175 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-R40N01C03-6X1-61R | 10139176 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,72<br>*3.060* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T32-R40N01C03-8X1.25-61R | 10139177 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,89<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T32-R40N01C03-10X1.5-61R | 10139178 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,24<br>*3.789* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-R40NC

Blind holes – Metric coarse threads, 6G





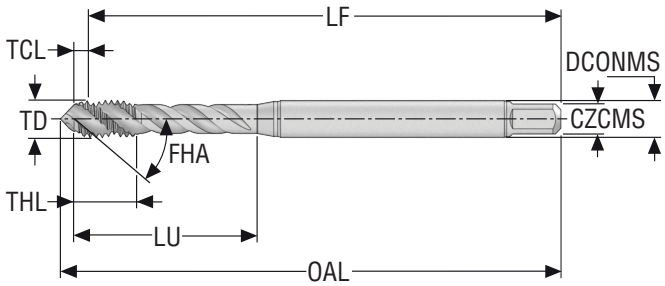

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 6G
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N01C06-12X1.75-61R | 10139649 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,59<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T32-R40N01C06-16X2-61R | 10139650 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 81<br>*3.189* | 104,85<br>*4.128* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |
| T32-R40N01C06-20X2.5-61R | 10139651 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,49<br>*5.256* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | C |

## T32-R40NC

Blind holes – Metric coarse threads, left hand thread





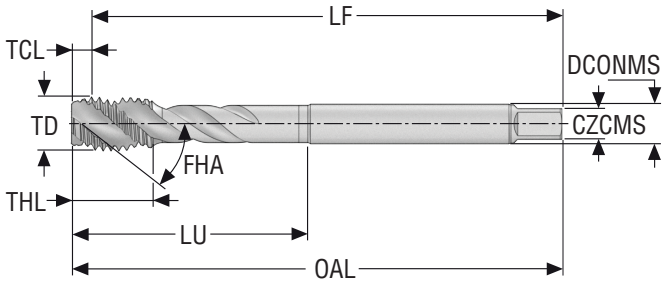

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6H
–FHA = 40°
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-L40N01C03-3X0.5-63L | 10139167 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T32-L40N01C03-4X0.7-63L | 10139168 | M4 | 0,7 | 1,54<br>*0.061* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,46<br>*2.420* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T32-L40N01C03-5X0.8-63L | 10139169 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T32-L40N01C03-6X1-63L | 10139170 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,72<br>*3.060* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T32-L40N01C03-8X1.25-63L | 10139171 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,89<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T32-L40N01C03-10X1.5-63L | 10139172 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,24<br>*3.789* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-R40NC

Blind holes – Metric coarse threads, left hand thread





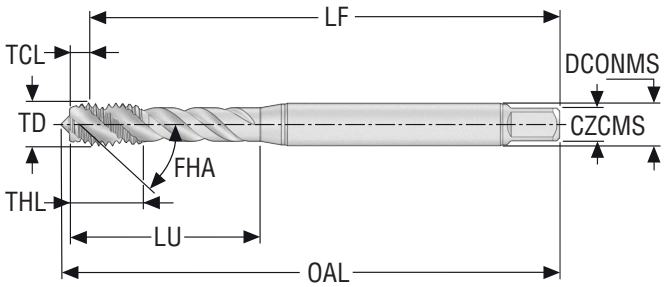

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 6H
–FHA = 40°
–For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-L40N01C06-12X1.75-63L | 10139645 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,59<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T32-L40N01C06-16X2-63L | 10139646 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,85<br>*4.128* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |
| T32-L40N01C06-20X2.5-63L | 10139647 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,49<br>*5.256* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | C |
| T32-L40N01C06-24X3-63L | 10139648 | M24 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 152,19<br>*5.992* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |

## T32-R40NC

Blind holes – MF threads





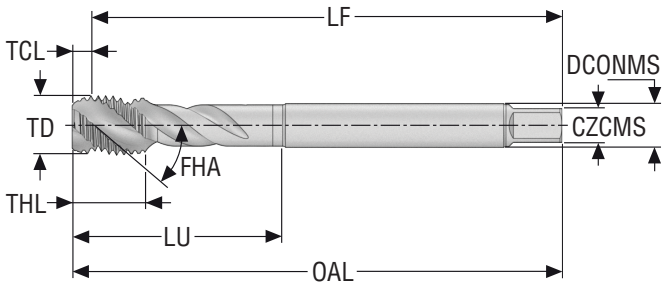

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N02C03-8X1-63R | 10139150 | MF8X1.0 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,42<br>*3.442* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | C |
| T32-R40N02C03-10X1-63R | 10139151 | MF10X1.0 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,32<br>*3.438* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | C |
| T32-R40N02C03-10X1.25-63R | 10139152 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,79<br>*3.811* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,8<br>*0.346* | 3 | C |

## T32-R40NC

Blind holes – MF threads





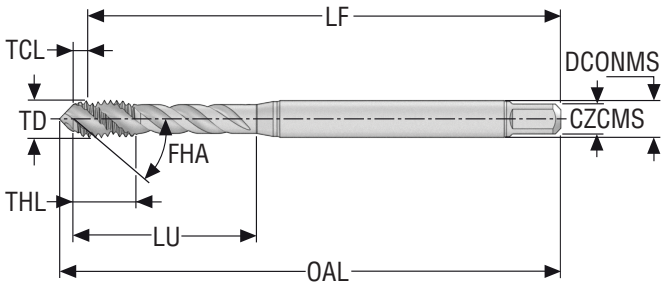

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN374
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N02C05-8X1-63R | 10139593 | MF8X1.0 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 10,0<br>*0.394* | 67<br>*2.638* | 87,42<br>*3.442* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | C |
| T32-R40N02C05-10X0.75-63R | 10139594 | MF10X0.75 | 0,75 | 2,13<br>*0.084* | 10,0<br>*0.394* | 10,0<br>*0.394* | 67<br>*2.638* | 87,87<br>*3.459* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,2<br>*0.362* | 3 | C |
| T32-R40N02C05-10X1-63R | 10139595 | MF10X1.0 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 13,0<br>*0.512* | 67<br>*2.638* | 87,32<br>*3.438* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | C |
| T32-R40N02C05-10X1.25-63R | 10139596 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 77<br>*3.031* | 96,79<br>*3.811* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | C |
| T32-R40N02C05-12X1-63R | 10139597 | MF12X1.0 | 1,0 | 2,79<br>*0.110* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 97,21<br>*3.827* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,0<br>*0.433* | 3 | C |
| T32-R40N02C05-12X1.25-63R | 10139598 | MF12X1.25 | 1,25 | 3,34<br>*0.131* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,66<br>*3.806* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,8<br>*0.425* | 3 | C |
| T32-R40N02C05-12X1.5-63R | 10139599 | MF12X1.5 | 1,5 | 3,87<br>*0.152* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,13<br>*3.785* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | C |
| T32-R40N02C05-14X1-63R | 10139600 | MF14X1.0 | 1,0 | 2,89<br>*0.114* | 14,0<br>*0.551* | 10,0<br>*0.394* | 71<br>*2.795* | 97,11<br>*3.823* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 4 | C |
| T32-R40N02C05-14X1.25-63R | 10139601 | MF14X1.25 | 1,25 | 3,44<br>*0.135* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,56<br>*3.802* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,8<br>*0.504* | 4 | C |
| T32-R40N02C05-14X1.5-63R | 10139602 | MF14X1.5 | 1,5 | 3,97<br>*0.156* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,03<br>*3.781* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | C |
| T32-R40N02C05-16X1-63R | 10139603 | MF16X1.0 | 1,0 | 2,79<br>*0.110* | 16,0<br>*0.630* | 10,0<br>*0.394* | 58<br>*2.283* | 97,21<br>*3.827* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,0<br>*0.591* | 4 | C |
| T32-R40N02C05-16X1.5-63R | 10139604 | MF16X1.5 | 1,5 | 4,07<br>*0.160* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,93<br>*3.777* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |
| T32-R40N02C05-18X1.5-63R | 10139605 | MF18X1.5 | 1,5 | 4,17<br>*0.164* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,83<br>*4.167* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | C |
| T32-R40N02C05-18X2-63R | 10139606 | MF18X2.0 | 2,0 | 5,25<br>*0.207* | 18,0<br>*0.709* | 20,0<br>*0.787* | 81<br>*3.189* | 119,75<br>*4.715* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,0<br>*0.630* | 4 | C |
| T32-R40N02C05-20X1.5-63R | 10139607 | MF20X1.5 | 1,5 | 4,37<br>*0.172* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,63<br>*4.749* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 18,5<br>*0.728* | 4 | C |
| T32-R40N02C05-20X2-63R | 10139608 | MF20X2.0 | 2,0 | 5,45<br>*0.215* | 20,0<br>*0.787* | 20,0<br>*0.787* | 95<br>*3.740* | 134,55<br>*5.297* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,0<br>*0.709* | 4 | C |
| T32-R40N02C05-22X1.5-63R | 10139609 | MF22X1.5 | 1,5 | 4,37<br>*0.172* | 22,0<br>*0.866* | 17,0<br>*0.669* | 78<br>*3.071* | 120,63<br>*4.749* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | C |
| T32-R40N02C05-22X2-63R | 10139610 | MF22X2.0 | 2,0 | 5,45<br>*0.215* | 22,0<br>*0.866* | 20,0<br>*0.787* | 93<br>*3.661* | 134,55<br>*5.297* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 20,0<br>*0.787* | 4 | C |
| T32-R40N02C05-24X1.5-63R | 10139611 | MF24X1.5 | 1,5 | 4,39<br>*0.173* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 135,61<br>*5.339* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,5<br>*0.886* | 4 | C |
| T32-R40N02C05-24X2-63R | 10139612 | MF24X2.0 | 2,0 | 5,67<br>*0.223* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 134,33<br>*5.289* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,0<br>*0.866* | 4 | C |
| T32-R40N02C05-27X1.5-63R | 10139613 | MF27X1.5 | 1,5 | 4,59<br>*0.181* | 27,0<br>*1.063* | 20,0<br>*0.787* | 77<br>*3.031* | 135,41<br>*5.331* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,5<br>*1.004* | 4 | C |
| T32-R40N02C05-27X2-63R | 10139614 | MF27X2.0 | 2,0 | 5,67<br>*0.223* | 27,0<br>*1.063* | 20,0<br>*0.787* | 77<br>*3.031* | 134,33<br>*5.289* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,0<br>*0.984* | 4 | C |
| T32-R40N02C05-30X1.5-63R | 10139615 | MF30X1.5 | 1,5 | 4,19<br>*0.165* | 30,0<br>*1.181* | 22,0<br>*0.866* | 85<br>*3.346* | 145,81<br>*5.741* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,5<br>*1.122* | 4 | C |
| T32-R40N02C05-30X2-63R | 10139616 | MF30X1.0 | 2,0 | 5,67<br>*0.223* | 30,0<br>*1.181* | 22,0<br>*0.866* | 85<br>*3.346* | 144,33<br>*5.682* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,0<br>*1.102* | 4 | C |

## T32-R40NC

Blind holes – UNC threads





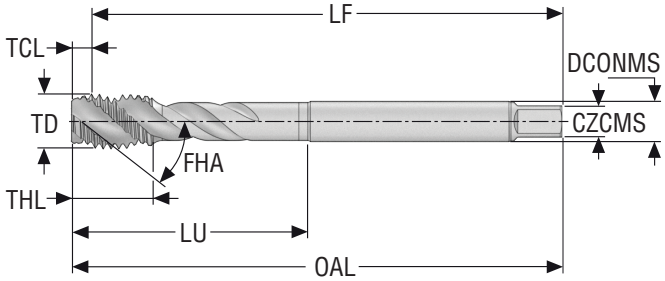

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N08C03-4-40-21R | 10139153 | UNC4-40 | 40,0 | 1,45<br>*0.057* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 54,55<br>*2.148* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,35<br>*0.093* | 3 | C |
| T32-R40N08C03-5-40-21R | 10139154 | UNC5-40 | 40,0 | 1,5<br>*0.059* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,5<br>*2.146* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | C |
| T32-R40N08C03-6-32-21R | 10139155 | UNC6-32 | 32,0 | 1,92<br>*0.076* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,08<br>*2.129* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,85<br>*0.112* | 3 | C |
| T32-R40N08C03-8-32-21R | 10139156 | UNC8-32 | 32,0 | 1,85<br>*0.073* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,15<br>*2.407* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | C |
| T32-R40N08C03-10-24-21R | 10139157 | UNC10-24 | 24,0 | 2,49<br>*0.098* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 67,51<br>*2.658* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 3,9<br>*0.154* | 3 | C |
| T32-R40N08C03-12-24-21R | 10139158 | UNC12-24 | 24,0 | 2,43<br>*0.096* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,57<br>*3.054* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | C |
| T32-R40N08C03-1/4-20-21R | 10139159 | UNC1/4-20 | 20,0 | 2,9<br>*0.114* | 6,35<br>*0.250* | 13,0<br>*0.512* | 32<br>*1.260* | 77,1<br>*3.035* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,1<br>*0.201* | 3 | C |
| T32-R40N08C03-5/16-18-21R | 10139160 | UNC5/16-18 | 18,0 | 3,54<br>*0.139* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 86,46<br>*3.404* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | C |
| T32-R40N08C03-3/8-16-21R | 10139161 | UNC3/8-16 | 16,0 | 3,99<br>*0.157* | 9,525<br>*0.375* | 15,0<br>*0.591* | 39<br>*1.535* | 96,01<br>*3.780* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,0<br>*0.315* | 3 | C |

## T32-R40NC

Blind holes – UNC threads





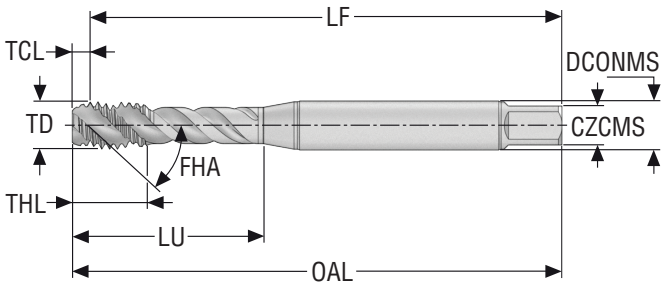

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN376
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N08C06-7/16-14-21R | 10139617 | UNC7/16-14 | 14,0 | 4,6<br>*0.181* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 95,4<br>*3.756* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,3<br>*0.366* | 3 | C |
| T32-R40N08C06-1/2-13-21R | 10139626 | UNC1/2-13 | 13,0 | 4,94<br>*0.194* | 12,7<br>*0.500* | 18,0<br>*0.709* | 83<br>*3.268* | 105,06<br>*4.136* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,7<br>*0.421* | 3 | C |
| T32-R40N08C06-9/16-12-21R | 10139619 | UNC9/16-12 | 12,0 | 5,37<br>*0.211* | 14,287<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 104,63<br>*4.119* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,3<br>*0.484* | 4 | C |
| T32-R40N08C06-5/8-11-21R | 10139620 | UNC5/8-11 | 11,0 | 5,81<br>*0.229* | 15,875<br>*0.625* | 22,0<br>*0.866* | 68<br>*2.677* | 104,19<br>*4.102* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,5<br>*0.531* | 4 | C |
| T32-R40N08C06-3/4-10-21R | 10139621 | UNC3/4-10 | 10,0 | 6,78<br>*0.267* | 19,05<br>*0.750* | 25,0<br>*0.984* | 81<br>*3.189* | 118,22<br>*4.654* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | C |
| T32-R40N08C06-7/8-9-21R | 10139622 | UNC7/8-9 | 9,0 | 7,27<br>*0.286* | 22,225<br>*0.875* | 30,0<br>*1.181* | 93<br>*3.661* | 132,73<br>*5.226* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | C |
| T32-R40N08C06-1-8-21R | 10139623 | UNC1-8 | 8,0 | 8,32<br>*0.328* | 25,4<br>*1.000* | 30,0<br>*1.181* | 97<br>*3.819* | 151,68<br>*5.972* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 22,25<br>*0.876* | 4 | C |
| T32-R40N08C06-1_1/8-7-21R | 10139758 | UNC11/8-7 | 7,0 | 9,17<br>*0.361* | 28,575<br>*1.125* | 37,0<br>*1.457* | 115<br>*4.528* | 170,83<br>*6.726* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 25,0<br>*0.984* | 4 | C |
| T32-R40N08C06-1_1/4-7-21R | 10139624 | UNC11/4-7 | 7,0 | 9,3<br>*0.366* | 31,75<br>*1.250* | 37,0<br>*1.457* | 115<br>*4.528* | 170,7<br>*6.720* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 28,0<br>*1.102* | 4 | C |
| T32-R40N08C06-1_3/8-6-21R | 10139618 | UNC13/8-6 | 6,0 | 10,5<br>*0.413* | 34,925<br>*1.375* | 40,0<br>*1.575* | 131<br>*5.157* | 189,5<br>*7.461* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 30,75<br>*1.211* | 4 | C |
| T32-R40N08C06-1_1/2-6-21R | 10139625 | UNC11/2-6 | 6,0 | 10,63<br>*0.419* | 38,1<br>*1.500* | 40,0<br>*1.575* | 131<br>*5.157* | 189,37<br>*7.456* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 34,0<br>*1.339* | 4 | C |

## T32-R40NC

Blind holes – UNC threads





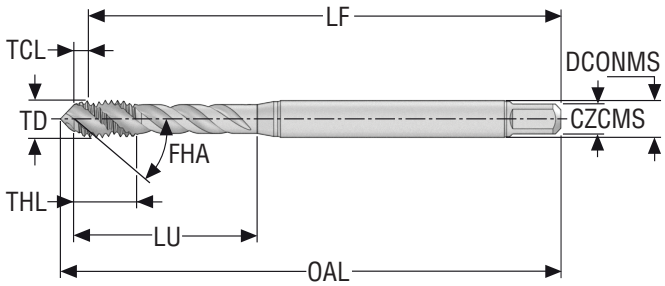

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN/ANSI
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T32-R40N08C93-4-40-21R | 10280314 | UNC4-40 | 40.0 | 0.057 | 0.112 | 0.197 | 0.720 | 2.154 | 2.252 | 0.141 | 3.581x2.79 | 0.093 | 3 | C |
| T32-R40N08C93-5-40-21R | 10280315 | UNC5-40 | 40.0 | 0.059 | 0.125 | 0.276 | 0.714 | 2.146 | 2.252 | 0.141 | 3.581x2.79 | 0.104 | 3 | C |
| T32-R40N08C93-6-32-21R | 10280316 | UNC6-32 | 32.0 | 0.076 | 0.138 | 0.236 | 0.799 | 2.135 | 2.260 | 0.141 | 3.581x2.79 | 0.112 | 3 | C |
| T32-R40N08C93-8-32-21R | 10280317 | UNC8-32 | 32.0 | 0.073 | 0.164 | 0.276 | 0.832 | 2.407 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | C |
| T32-R40N08C93-10-24-21R | 10280318 | UNC10-24 | 24.0 | 0.098 | 0.190 | 0.315 | 1.000 | 2.668 | 2.835 | 0.194 | 4.928x3.86 | 0.154 | 3 | C |
| T32-R40N08C93-12-24-21R | 10280319 | UNC12-24 | 24.0 | 0.096 | 0.216 | 0.394 | 1.191 | 3.058 | 3.236 | 0.220 | 5.588x4.19 | 0.177 | 3 | C |
| T32-R40N08C93-1/4-20-21R | 10280320 | UNC1/4-20 | 20.0 | 0.114 | 0.250 | 0.512 | 1.265 | 3.035 | 3.244 | 0.255 | 6.477x4.85 | 0.201 | 3 | C |
| T32-R40N08C93-5/16-18-21R | 10280321 | UNC5/16-18 | 18.0 | 0.139 | 0.312 | 0.512 | 1.383 | 3.404 | 3.543 | 0.318 | 8.077x6.05 | 0.260 | 3 | C |
| T32-R40N08C93-3/8-16-21R | 10280322 | UNC3/8-16 | 16.0 | 0.157 | 0.375 | 0.591 | 1.541 | 3.780 | 3.937 | 0.381 | 9.667x7.26 | 0.315 | 3 | C |
| T32-R40N08C96-7/16-14-21R | 10280323 | UNC7/16-14 | 14.0 | 0.181 | 0.437 | 0.591 | 2.858 | 3.756 | 3.937 | 0.323 | 8.204x6.15 | 0.366 | 3 | C |
| T32-R40N08C96-1/2-13-21R | 10280324 | UNC1/2-13 | 13.0 | 0.194 | 0.500 | 0.709 | 3.221 | 4.136 | 4.331 | 0.367 | 9.322x6.99 | 0.421 | 3 | C |
| T32-R40N08C96-9/16-12-21R | 10280326 | UNC9/16-12 | 12.0 | 0.211 | 0.562 | 0.787 | 3.161 | 4.119 | 4.331 | 0.429 | 10.987x8.18 | 0.484 | 4 | C |
| T32-R40N08C96-5/8-11-21R | 10280327 | UNC5/8-11 | 11.0 | 0.229 | 0.625 | 0.866 | 2.590 | 4.102 | 4.331 | 0.480 | 12.192x9.14 | 0.531 | 4 | C |
| T32-R40N08C96-3/4-10-21R | 10280328 | UNC3/4-10 | 10.0 | 0.267 | 0.750 | 1.260 | 3.050 | 4.654 | 4.921 | 0.590 | 14.986x11.23 | 0.650 | 4 | C |
| T32-R40N08C96-7/8-9-21R | 10280329 | UNC7/8-9 | 9.0 | 0.286 | 0.875 | 1.260 | 3.581 | 5.226 | 5.512 | 0.697 | 17.704x13.28 | 0.768 | 4 | C |
| T32-R40N08C96-1-8-21R | 10280330 | UNC1-8 | 8.0 | 0.328 | 1.000 | 1.496 | 3.757 | 5.972 | 6.299 | 0.800 | 20.320x15.24 | 0.876 | 4 | C |

## T32-R40NC

Blind holes – UNF threads





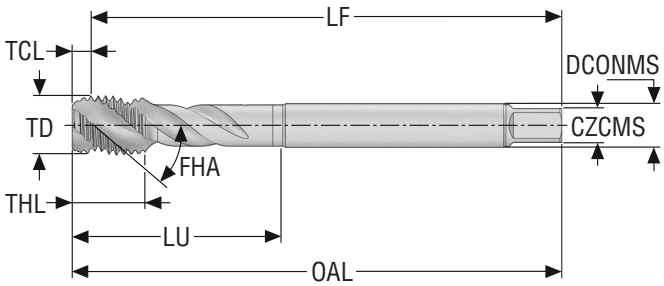

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN371
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N09C03-10-32-21R | 10139162 | UNF10-32 | 32,0 | 1,96<br>*0.077* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 68,04<br>*2.679* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,1<br>*0.161* | 3 | C |
| T32-R40N09C03-12-28-21R | 10139163 | UNF12-28 | 28,0 | 2,07<br>*0.081* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,93<br>*3.068* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 4,6<br>*0.181* | 3 | C |
| T32-R40N09C03-1/4-28-21R | 10139164 | UNF1/4-28 | 28,0 | 2,19<br>*0.086* | 6,35<br>*0.250* | 10,0<br>*0.394* | 30<br>*1.181* | 77,81<br>*3.063* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,5<br>*0.217* | 3 | C |
| T32-R40N09C03-5/16-24-21R | 10139165 | UNF5/16-24 | 24,0 | 2,83<br>*0.111* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 87,17<br>*3.432* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,9<br>*0.272* | 3 | C |
| T32-R40N09C03-3/8-24-21R | 10139166 | UNF3/8-24 | 24,0 | 2,91<br>*0.115* | 9,525<br>*0.375* | 15,0<br>*0.591* | 35<br>*1.378* | 87,09<br>*3.429* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T32-R40NC

Blind holes – UNF threads





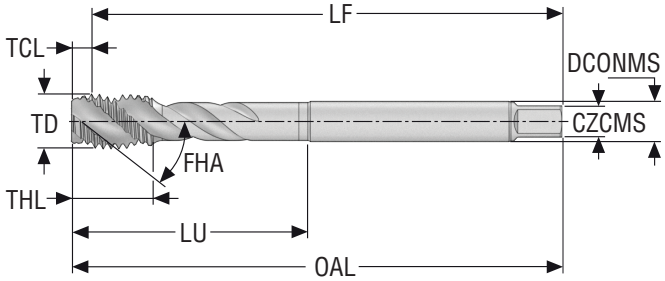

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN374
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N09C05-7/16-20-21R | 10139627 | UNF7/16-20 | 20,0 | 3,35<br>*0.132* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 96,65<br>*3.805* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,9<br>*0.390* | 3 | C |
| T32-R40N09C05-1/2-20-21R | 10139636 | UNF1/2-20 | 20,0 | 3,51<br>*0.138* | 12,7<br>*0.500* | 15,0<br>*0.591* | 73<br>*2.874* | 96,49<br>*3.799* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | C |
| T32-R40N09C05-9/16-18-21R | 10139629 | UNF9/16-18 | 18,0 | 3,77<br>*0.148* | 14,287<br>*0.562* | 15,0<br>*0.591* | 71<br>*2.795* | 96,23<br>*3.789* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 4 | C |
| T32-R40N09C05-5/8-18-21R | 10139630 | UNF5/8-18 | 18,0 | 3,86<br>*0.152* | 15,875<br>*0.625* | 15,0<br>*0.591* | 58<br>*2.283* | 96,14<br>*3.785* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |
| T32-R40N09C05-3/4-16-21R | 10139631 | UNF3/4-16 | 16,0 | 4,45<br>*0.175* | 19,05<br>*0.750* | 17,0<br>*0.669* | 66<br>*2.598* | 105,55<br>*4.156* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 17,5<br>*0.689* | 4 | C |
| T32-R40N09C05-7/8-14-21R | 10139632 | UNF7/8-14 | 14,0 | 5,15<br>*0.203* | 22,225<br>*0.875* | 17,0<br>*0.669* | 78<br>*3.071* | 119,85<br>*4.719* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | C |
| T32-R40N09C05-1-12-21R | 10139633 | UNF1-12 | 12,0 | 5,82<br>*0.229* | 25,4<br>*1.000* | 22,0<br>*0.866* | 93<br>*3.661* | 134,18<br>*5.283* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 23,3<br>*0.917* | 4 | C |
| T32-R40N09C05-1_1/8-12-21R | 10139759 | UNF11/8-12 | 12,0 | 5,98<br>*0.235* | 28,575<br>*1.125* | 22,0<br>*0.866* | 85<br>*3.346* | 144,02<br>*5.670* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | C |
| T32-R40N09C05-1_1/4-12-21R | 10139634 | UNF11/4-12 | 12,0 | 5,94<br>*0.234* | 31,75<br>*1.250* | 22,0<br>*0.866* | 85<br>*3.346* | 144,06<br>*5.672* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 29,5<br>*1.161* | 4 | C |
| T32-R40N09C05-1_3/8-12-21R | 10139628 | UNF13/8-12 | 12,0 | 6,07<br>*0.239* | 34,925<br>*1.375* | 22,0<br>*0.866* | 101<br>*3.976* | 163,93<br>*6.454* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00X22.00 | 32,8<br>*1.291* | 4 | C |
| T32-R40N09C05-1_1/2-12-21R | 10139635 | UNF11/2-12 | 12,0 | 6,04<br>*0.238* | 38,1<br>*1.500* | 24,0<br>*0.945* | 101<br>*3.976* | 163,96<br>*6.455* | 170,0<br>*6.693* | 28,0<br>*1.102* | 28.00X22.00 | 36,0<br>*1.417* | 4 | C |

## T32-R40NC

Blind holes – UNF threads





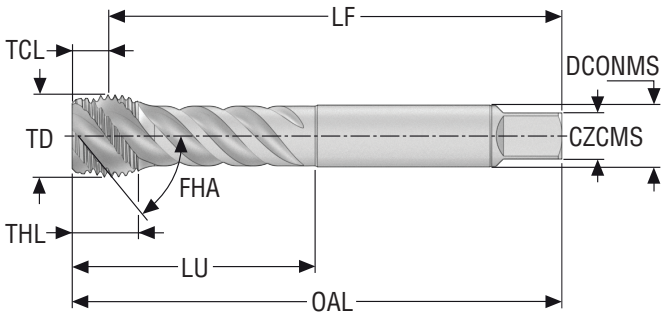

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN/ANSI
- Thread tolerance class: 2B
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T32-R40N09C93-4-48-21R | 10280332 | UNF4-48 | 48.0 | 0.050 | 0.112 | 0.197 | 0.718 | 2.159 | 2.252 | 0.141 | 3.581x2.79 | 0.094 | 3 | C |
| T32-R40N09C93-5-44-21R | 10280333 | UNF5-44 | 44.0 | 0.052 | 0.125 | 0.276 | 0.712 | 2.230 | 2.252 | 0.141 | 3.581x2.79 | 0.106 | 3 | C |
| T32-R40N09C93-6-40-21R | 10280334 | UNF6-40 | 40.0 | 0.061 | 0.138 | 0.236 | 0.795 | 2.145 | 2.260 | 0.141 | 3.581x2.79 | 0.116 | 3 | C |
| T32-R40N09C93-8-36-21R | 10280335 | UNF8-36 | 36.0 | 0.066 | 0.164 | 0.276 | 0.830 | 2.413 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | C |
| T32-R40N09C93-10-32-21R | 10280336 | UNF10-32 | 32.0 | 0.077 | 0.190 | 0.315 | 0.994 | 2.683 | 2.835 | 0.194 | 4.928x3.86 | 0.161 | 3 | C |
| T32-R40N09C93-12-28-21R | 10280337 | UNF12-28 | 28.0 | 0.081 | 0.216 | 0.394 | 1.187 | 3.068 | 3.236 | 0.220 | 5.588x4.19 | 0.181 | 3 | C |
| T32-R40N09C93-1/4-28-21R | 10280338 | UNF1/4-28 | 28.0 | 0.086 | 0.250 | 0.394 | 1.179 | 3.056 | 3.244 | 0.255 | 6.477x4.85 | 0.217 | 3 | C |
| T32-R40N09C93-5/16-24-21R | 10280339 | UNF5/16-24 | 24.0 | 0.111 | 0.312 | 0.512 | 1.383 | 3.432 | 3.543 | 0.318 | 8.077x6.05 | 0.272 | 3 | C |
| T32-R40N09C93-3/8-24-21R | 10280340 | UNF3/8-24 | 24.0 | 0.115 | 0.375 | 0.591 | 1.383 | 3.429 | 3.543 | 0.381 | 9.667x7.26 | 0.335 | 3 | C |
| T32-R40N09C95-7/16-20-21R | 10280341 | UNF7/16-20 | 20.0 | 0.132 | 0.437 | 0.591 | 2.858 | 3.805 | 3.937 | 0.323 | 8.204x6.15 | 0.390 | 3 | C |
| T32-R40N09C95-1/2-20-21R | 10280342 | UNF1/2-20 | 20.0 | 0.138 | 0.500 | 0.591 | 2.828 | 3.799 | 3.937 | 0.367 | 9.322x6.99 | 0.453 | 3 | C |
| T32-R40N09C95-9/16-18-21R | 10280343 | UNF9/16-18 | 18.0 | 0.148 | 0.562 | 0.591 | 2.768 | 3.789 | 3.937 | 0.429 | 10.987x8.18 | 0.512 | 4 | C |
| T32-R40N09C95-5/8-18-21R | 10280344 | UNF5/8-18 | 18.0 | 0.152 | 0.625 | 0.591 | 2.196 | 3.785 | 3.937 | 0.480 | 12.192x9.14 | 0.571 | 4 | C |
| T32-R40N09C95-3/4-16-21R | 10280345 | UNF3/4-16 | 16.0 | 0.175 | 0.750 | 0.945 | 2.459 | 4.156 | 4.331 | 0.590 | 14.986x11.23 | 0.689 | 4 | C |
| T32-R40N09C95-7/8-14-21R | 10280346 | UNF7/8-14 | 14.0 | 0.203 | 0.875 | 0.945 | 2.990 | 4.719 | 4.921 | 0.697 | 17.704x13.28 | 0.807 | 4 | C |
| T32-R40N09C95-1-12-21R | 10280347 | UNF1-12 | 12.0 | 0.229 | 1.000 | 1.063 | 2.970 | 5.283 | 5.512 | 0.800 | 20.320x15.24 | 0.917 | 4 | C |

## T32-R40NC

Blind holes – G threads





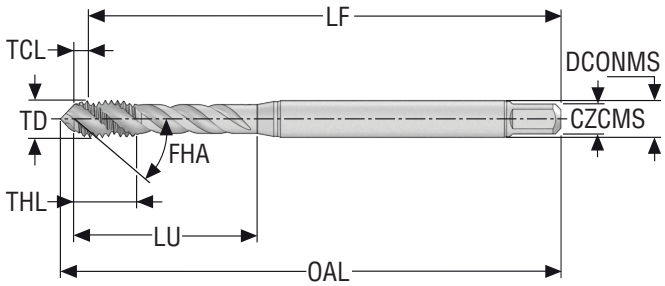

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN5156
- Thread tolerance class: NORMAL
- FHA = 40°
- For cutting data see page(s) 245

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40N21C09-1/8-28-11R | 10139637 | G1/8-28 | 28,0 | 2,67<br>*0.105* | 9,728<br>*0.383* | 10,0<br>*0.394* | 67<br>*2.638* | 87,33<br>*3.438* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | C |
| T32-R40N21C09-1/4-19-11R | 10139638 | G1/4-19 | 19,0 | 3,72<br>*0.146* | 13,157<br>*0.518* | 14,0<br>*0.551* | 71<br>*2.795* | 96,28<br>*3.791* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 11,8<br>*0.465* | 3 | C |
| T32-R40N21C09-3/8-19-11R | 10139639 | G3/8-19 | 19,0 | 3,92<br>*0.154* | 16,662<br>*0.656* | 15,0<br>*0.591* | 58<br>*2.283* | 96,08<br>*3.783* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 4 | C |
| T32-R40N21C09-1/2-14-11R | 10139640 | G1/2-14 | 14,0 | 5,28<br>*0.208* | 20,955<br>*0.825* | 17,0<br>*0.669* | 80<br>*3.150* | 119,72<br>*4.713* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,0<br>*0.748* | 4 | C |
| T32-R40N21C09-5/8-14-11R | 10139641 | G5/8-14 | 14,0 | 5,21<br>*0.205* | 22,911<br>*0.902* | 20,0<br>*0.787* | 78<br>*3.071* | 119,79<br>*4.716* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |
| T32-R40N21C09-3/4-14-11R | 10139642 | G3/4-14 | 14,0 | 5,45<br>*0.215* | 26,441<br>*1.041* | 20,0<br>*0.787* | 77<br>*3.031* | 134,55<br>*5.297* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 24,5<br>*0.965* | 4 | C |
| T32-R40N21C09-7/8-14-11R | 10139643 | G7/8-14 | 14,0 | 5,38<br>*0.212* | 30,201<br>*1.189* | 22,0<br>*0.866* | 85<br>*3.346* | 144,62<br>*5.694* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,25<br>*1.112* | 4 | C |
| T32-R40N21C09-1-11-11R | 10139644 | G1-11 | 11,0 | 6,56<br>*0.258* | 33,249<br>*1.309* | 24,0<br>*0.945* | 93<br>*3.661* | 153,44<br>*6.041* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00X20.00 | 30,75<br>*1.211* | 4 | C |

## T32-R40HC

Blind holes – Metric coarse threads





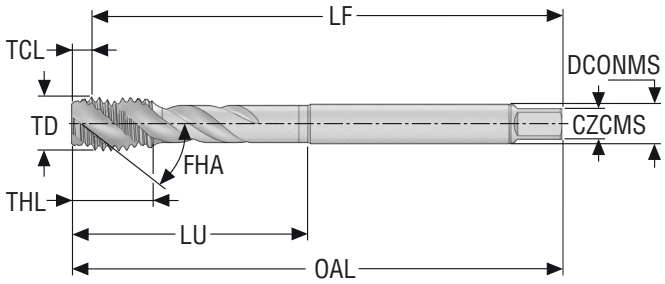

–Substrate: HSSE
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6H
–FHA = 40°
–For cutting data see page(s) 247

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40H01C03-3X0.5-63R | 10309455 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T32-R40H01C03-4X0.7-63R | 10309456 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T32-R40H01C03-5X0.8-63R | 10309457 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T32-R40H01C03-6X1-63R | 10309458 | M6 | 1,0 | 2,27<br>*0.089* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T32-R40H01C03-8X1.25-63R | 10309459 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T32-R40H01C03-10X1.5-63R | 10309460 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T32-R40HC

Blind holes – Metric coarse threads





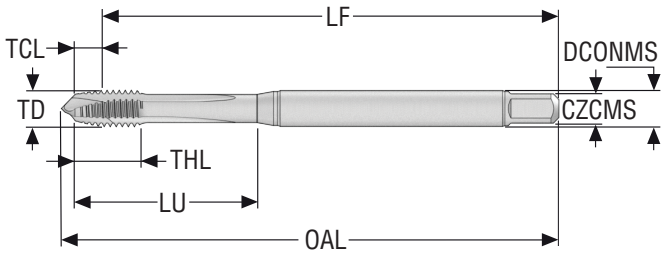

–Substrate: HSSE
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 6H
–FHA = 40°
–For cutting data see page(s) 247

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T32-R40H01C06-12X1.75-63R | 10309634 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,6<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T32-R40H01C06-14X2-63R | 10309635 | M14 | 2,0 | 5,07<br>*0.200* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,9<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T32-R40H01C06-16X2-63R | 10309636 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,8<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T32-R40H01C06-20X2.5-63R | 10309637 | M20 | 2,5 | 6,51<br>*0.256* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,5<br>*5.256* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |
| T32-R40H01C06-24X3-63R | 10309639 | M24 | 3,0 | 7,81<br>*0.307* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 152,2<br>*5.992* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | C |

## T34-PHB-micro

Through holes – Metric coarse threads





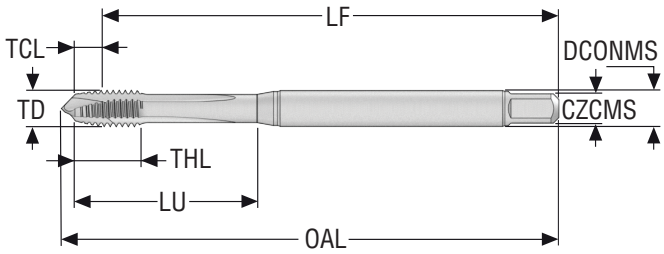

—Substrate: HSS-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 4H
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH01B03-1X0.25-41R | 10139302 | M1 | 0,25 | 1,13<br>*0.044* | 1,0<br>*0.039* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 40,9<br>*1.610* | 2,5<br>*0.098* | 2.50X2.10 | 0,75<br>*0.030* | 2 | B |
| T34-PH01B03-1.1X0.25-41R | 10139303 | M1.1 | 0,25 | 1,13<br>*0.044* | 1,1<br>*0.043* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 41,0<br>*1.614* | 2,5<br>*0.098* | 2.50X2.10 | 0,85<br>*0.033* | 2 | B |
| T34-PH01B03-1.2X0.25-41R | 10139304 | M1.2 | 0,25 | 1,13<br>*0.044* | 1,2<br>*0.047* | 6,0<br>*0.236* | 13<br>*0.512* | 38,87<br>*1.530* | 41,1<br>*1.618* | 2,5<br>*0.098* | 2.50X2.10 | 0,95<br>*0.037* | 2 | B |
| T34-PH01B03-1.4X0.3-41R | 10139305 | M1.4 | 0,3 | 1,32<br>*0.052* | 1,4<br>*0.055* | 8,0<br>*0.315* | 13<br>*0.512* | 38,68<br>*1.523* | 41,3<br>*1.626* | 2,5<br>*0.098* | 2.50X2.10 | 1,1<br>*0.043* | 2 | B |

## T34-PHB-micro

Through holes – Metric coarse threads





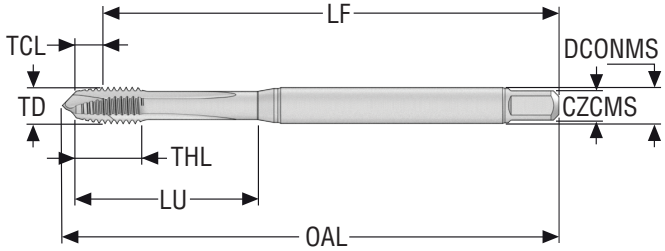

—Substrate: HSS-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6H
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH01B03-1.6X0.35-63R | 10139306 | M1.6 | 0,35 | 1,54<br>*0.061* | 1,6<br>*0.063* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,4<br>*1.630* | 2,5<br>*0.098* | 2.50X2.10 | 1,25<br>*0.049* | 2 | B |
| T34-PH01B03-1.7X0.35-63R | 10139307 | M1.7 | 0,35 | 1,54<br>*0.061* | 1,7<br>*0.067* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,5<br>*1.634* | 2,5<br>*0.098* | 2.50X2.10 | 1,35<br>*0.053* | 2 | B |
| T34-PH01B03-1.8X0.35-63R | 10139308 | M1.8 | 0,35 | 1,54<br>*0.061* | 1,8<br>*0.071* | 8,0<br>*0.315* | 13<br>*0.512* | 38,46<br>*1.514* | 41,6<br>*1.638* | 2,5<br>*0.098* | 2.50X2.10 | 1,45<br>*0.057* | 2 | B |
| T34-PH01B03-2X0.4-63R | 10139309 | M2 | 0,4 | 1,89<br>*0.074* | 2,0<br>*0.079* | 10,0<br>*0.394* | 13<br>*0.512* | 43,11<br>*1.697* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,6<br>*0.063* | 2 | B |
| T34-PH01B03-2.2X0.45-63R | 10139310 | M2.2 | 0,45 | 2,07<br>*0.081* | 2,2<br>*0.087* | 10,0<br>*0.394* | 13<br>*0.512* | 42,93<br>*1.690* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,75<br>*0.069* | 2 | B |
| T34-PH01B03-2.3X0.4-63R | 10139311 | M2.3 | 0,4 | 1,89<br>*0.074* | 2,3<br>*0.091* | 10,0<br>*0.394* | 13<br>*0.512* | 43,11<br>*1.697* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,9<br>*0.075* | 2 | B |
| T34-PH01B03-2.5X0.45-63R | 10139312 | M2.5 | 0,45 | 2,07<br>*0.081* | 2,5<br>*0.098* | 9,0<br>*0.354* | 14<br>*0.551* | 47,93<br>*1.887* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,05<br>*0.081* | 2 | B |
| T34-PH01B03-2.6X0.45-63R | 10139313 | M2.6 | 0,45 | 2,07<br>*0.081* | 2,6<br>*0.102* | 9,0<br>*0.354* | 14<br>*0.551* | 47,93<br>*1.887* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,15<br>*0.085* | 2 | B |

## T34-PHB

Through holes – Metric coarse threads





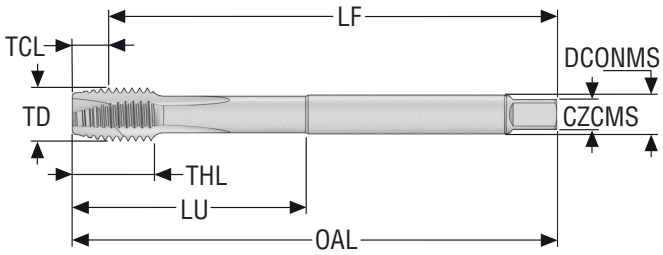

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH01B03-3X0.5-65R | 10139314 | M3 | 0,5 | 2,3<br>*0.091* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 53,7<br>*2.114* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | B |
| T34-PH01B03-3.5X0.6-65R | 10139315 | M3.5 | 0,6 | 2,67<br>*0.105* | 3,5<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 53,33<br>*2.100* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | B |
| T34-PH01B03-4X0.7-65R | 10139316 | M4 | 0,7 | 3,03<br>*0.119* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 59,97<br>*2.361* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | B |
| T34-PH01B03-4.5X0.75-65R | 10139317 | M4.5 | 0,75 | 3,36<br>*0.132* | 4,5<br>*0.177* | 7,5<br>*0.295* | 25<br>*0.984* | 66,64<br>*2.624* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | B |
| T34-PH01B03-5X0.8-65R | 10139318 | M5 | 0,8 | 3,71<br>*0.146* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 66,29<br>*2.610* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T34-PH01B03-6X1-65R | 10139319 | M6 | 1,0 | 4,5<br>*0.177* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 75,5<br>*2.972* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |
| T34-PH01B03-8X1.25-65R | 10139320 | M8 | 1,25 | 5,48<br>*0.216* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 84,52<br>*3.328* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | B |
| T34-PH01B03-10X1.5-65R | 10139321 | M10 | 1,5 | 6,9<br>*0.272* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 93,1<br>*3.665* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T34-PHB

Through holes – Metric coarse threads





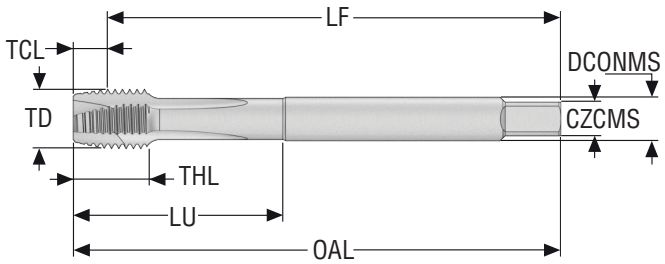

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN376
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH01B06-12X1.75-65R | 10139322 | M12 | 1,75 | 8,11<br>*0.319* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 101,89<br>*4.011* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T34-PH01B06-14X2-65R | 10139323 | M14 | 2,0 | 9,26<br>*0.365* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 100,74<br>*3.966* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 3 | B |
| T34-PH01B06-16X2-65R | 10139324 | M16 | 2,0 | 9,36<br>*0.369* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 100,64<br>*3.962* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |
| T34-PH01B06-18X2.5-65R | 10139325 | M18 | 2,5 | 11,3<br>*0.445* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 113,7<br>*4.476* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 15,5<br>*0.610* | 4 | B |
| T34-PH01B06-20X2.5-65R | 10139326 | M20 | 2,5 | 11,4<br>*0.449* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 128,6<br>*5.063* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | B |
| T34-PH01B06-22X2.5-65R | 10139327 | M22 | 2,5 | 11,4<br>*0.449* | 22,0<br>*0.866* | 25,0<br>*0.984* | 93<br>*3.661* | 128,6<br>*5.063* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | B |
| T34-PH01B06-24X3-65R | 10139328 | M24 | 3,0 | 13,62<br>*0.536* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 146,38<br>*5.763* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |
| T34-PH01B06-27X3-65R | 10139329 | M27 | 3,0 | 13,82<br>*0.544* | 27,0<br>*1.063* | 30,0<br>*1.181* | 97<br>*3.819* | 146,18<br>*5.755* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 24,0<br>*0.945* | 4 | B |
| T34-PH01B06-30X3.5-65R | 10139330 | M30 | 3,5 | 15,87<br>*0.625* | 30,0<br>*1.181* | 35,0<br>*1.378* | 115<br>*4.528* | 164,13<br>*6.462* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | B |
| T34-PH01B06-33X3.5-65R | 10139331 | M33 | 3,5 | 15,87<br>*0.625* | 33,0<br>*1.299* | 35,0<br>*1.378* | 113<br>*4.449* | 164,13<br>*6.462* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00X20.00 | 29,5<br>*1.161* | 4 | B |
| T34-PH01B06-36X4-65R | 10139332 | M36 | 4,0 | 18,13<br>*0.714* | 36,0<br>*1.417* | 40,0<br>*1.575* | 131<br>*5.157* | 181,87<br>*7.160* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 32,0<br>*1.260* | 4 | B |

## T34-PHB

Through holes – Metric coarse threads





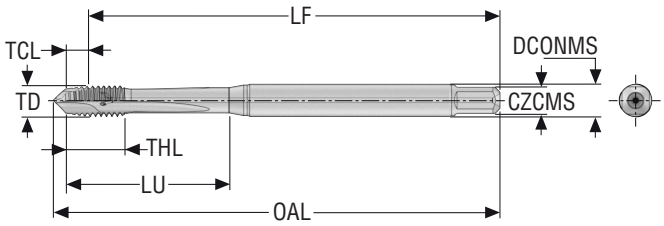

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN/ANSI
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH01B93-4X0.7-65R | 10280477 | M4 | 0,7 | 3,03<br>*0.119* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21,14<br>*0.832* | 60,0<br>*2.362* | 64,6<br>*2.543* | 4,267<br>*0.168* | 4.267x3.33 | 3,3<br>*0.130* | 3 | B |
| T34-PH01B93-5X0.8-65R | 10280478 | M5 | 0,8 | 3,71<br>*0.146* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25,14<br>*0.990* | 66,3<br>*2.610* | 72,0<br>*2.835* | 4,928<br>*0.194* | 4.928x3.86 | 4,2<br>*0.165* | 3 | B |
| T34-PH01B93-6X1-65R | 10280480 | M6 | 1,0 | 4,5<br>*0.177* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30,14<br>*1.187* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,477<br>*0.255* | 6.477x4.85 | 5,0<br>*0.197* | 3 | B |
| T34-PH01B93-8X1.25-65R | 10280481 | M8 | 1,25 | 5,48<br>*0.216* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35,19<br>*1.385* | 84,6<br>*3.331* | 93,3<br>*3.673* | 8,077<br>*0.318* | 8.077x6.05 | 6,8<br>*0.268* | 3 | B |
| T34-PH01B93-10X1.5-65R | 10280482 | M10 | 1,5 | 6,9<br>*0.272* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39,14<br>*1.541* | 93,1<br>*3.665* | 100,0<br>*3.937* | 9,667<br>*0.381* | 9.667x7.26 | 8,5<br>*0.335* | 3 | B |
| T34-PH01B96-12X1.75-65R | 10280483 | M12 | 1,75 | 8,11<br>*0.319* | 12,0<br>*0.472* | 18,0<br>*0.709* | 81,82<br>*3.221* | 101,89<br>*4.011* | 110,0<br>*4.331* | 9,322<br>*0.367* | 9.322x6.99 | 10,2<br>*0.402* | 3 | B |
| T34-PH01B96-16X2-65R | 10280484 | M16 | 2,0 | 9,36<br>*0.369* | 16,0<br>*0.630* | 20,0<br>*0.787* | 65,78<br>*2.590* | 100,64<br>*3.962* | 110,0<br>*4.331* | 12,192<br>*0.480* | 12.192x9.14 | 14,0<br>*0.551* | 3 | B |
| T34-PH01B96-18X2.5-65R | 10280485 | M18 | 2,5 | 11,3<br>*0.445* | 18,0<br>*0.709* | 25,0<br>*0.984* | 79<br>*3.110* | 113,5<br>*4.469* | 125,0<br>*4.921* | 13,767<br>*0.542* | 13.767x10.31 | 15,5<br>*0.610* | 4 | B |
| T34-PH01B96-20X2.5-65R | 10280486 | M20 | 2,5 | 11,4<br>*0.449* | 20,0<br>*0.787* | 25,0<br>*0.984* | 92,47<br>*3.641* | 128,5<br>*5.059* | 140,0<br>*5.512* | 16,561<br>*0.652* | 16.561x12.42 | 17,5<br>*0.689* | 4 | B |
| T34-PH01B96-24X3-65R | 10280487 | M24 | 3,0 | 13,62<br>*0.536* | 24,0<br>*0.945* | 30,0<br>*1.181* | 96,95<br>*3.817* | 146,18<br>*5.755* | 160,0<br>*6.299* | 19,304<br>*0.760* | 19.304x14.48 | 21,0<br>*0.827* | 4 | B |

## T34B-PHB

Through holes – Metric coarse threads





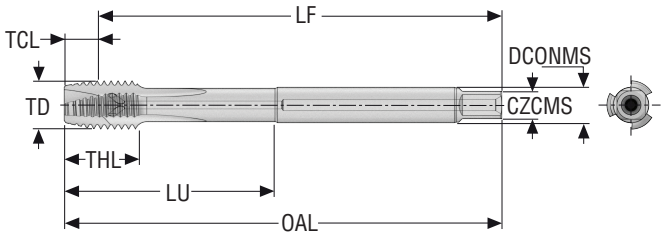

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34B-PH01B03-5X0.8-65R | 10139333 | M5 | 0,8 | 3,71<br>*0.146* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 66,29<br>*2.610* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T34B-PH01B03-6X1-65R | 10139334 | M6 | 1,0 | 4,5<br>*0.177* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 75,5<br>*2.972* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | B |
| T34B-PH01B03-8X1.25-65R | 10139335 | M8 | 1,25 | 5,48<br>*0.216* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 84,52<br>*3.328* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | B |
| T34B-PH01B03-10X1.5-65R | 10139336 | M10 | 1,5 | 6,9<br>*0.272* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 93,1<br>*3.665* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T34B-PHB

Through holes – Metric coarse threads





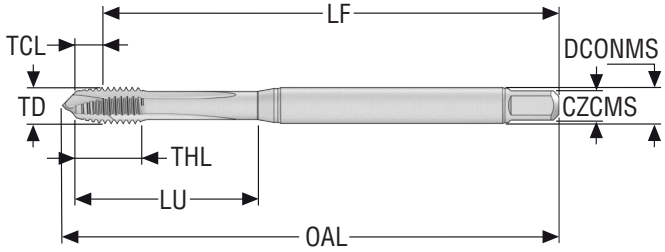

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 6HX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34B-PH01B06-12X1.75-65R | 10139337 | M12 | 1,75 | 8,11<br>*0.319* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 101,89<br>*4.011* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | B |
| T34B-PH01B06-14X2-65R | 10139338 | M14 | 2,0 | 9,26<br>*0.365* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 100,74<br>*3.966* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 3 | B |
| T34B-PH01B06-16X2-65R | 10139339 | M16 | 2,0 | 9,36<br>*0.369* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 100,64<br>*3.962* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 3 | B |

## T34-PHB

Through holes – MF threads





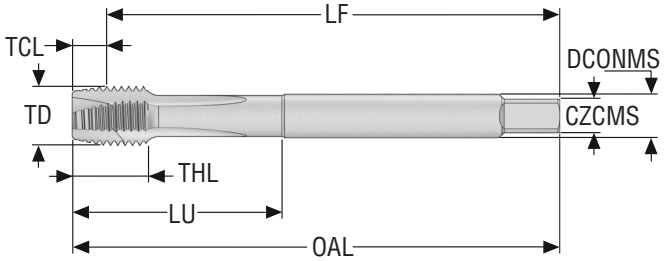

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH02B03-3X0.35-65R | 10139340 | MF3X0.35 | 0,35 | 1,6<br>*0.063* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,4<br>*2.142* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | B |
| T34-PH02B03-3.5X0.35-65R | 10139341 | MF3.5X0.35 | 0,35 | 1,6<br>*0.063* | 3,5<br>*0.138* | 5,0<br>*0.197* | 20<br>*0.787* | 54,4<br>*2.142* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 3,15<br>*0.124* | 3 | B |
| T34-PH02B03-4X0.5-65R | 10139342 | MF4X0.5 | 0,5 | 2,3<br>*0.091* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 60,7<br>*2.390* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | B |
| T34-PH02B03-5X0.5-65R | 10139343 | MF5X0.5 | 0,5 | 2,3<br>*0.091* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,7<br>*2.665* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | B |
| T34-PH02B03-6X0.5-65R | 10139344 | MF6X0.5 | 0,5 | 2,34<br>*0.092* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,66<br>*3.057* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,5<br>*0.217* | 3 | B |
| T34-PH02B03-6X0.75-65R | 10139345 | MF6X0.75 | 0,75 | 3,4<br>*0.134* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 76,6<br>*3.016* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,2<br>*0.205* | 3 | B |
| T34-PH02B03-8X0.75-65R | 10139346 | MF8X0.75 | 0,75 | 3,4<br>*0.134* | 8,0<br>*0.315* | 10,0<br>*0.394* | 30<br>*1.181* | 76,6<br>*3.016* | 83,6<br>*3.291* | 8,0<br>*0.315* | 8.00X6.20 | 7,2<br>*0.283* | 3 | B |
| T34-PH02B03-8X1-65R | 10139347 | MF8X1.0 | 1,0 | 4,45<br>*0.175* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 85,55<br>*3.368* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | B |
| T34-PH02B03-10X0.75-65R | 10139348 | MF10X0.75 | 0,75 | 3,8<br>*0.150* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 86,2<br>*3.394* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,2<br>*0.362* | 3 | B |
| T34-PH02B03-10X1-65R | 10139349 | MF10X1.0 | 1,0 | 5,25<br>*0.207* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 84,75<br>*3.337* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | B |
| T34-PH02B03-10X1.25-65R | 10139350 | MF10X1.25 | 1,25 | 6,28<br>*0.247* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 93,72<br>*3.690* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,8<br>*0.346* | 3 | B |

## T34-PHB

Through holes – MF threads





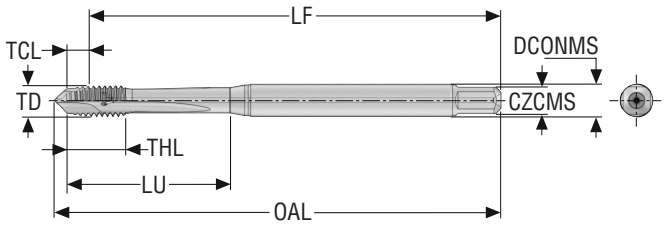

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN374
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH02B05-8X1-65R | 10139351 | MF8X1.0 | 1,0 | 4,75<br>*0.187* | 8,0<br>*0.315* | 10,0<br>*0.394* | 35<br>*1.378* | 85,25<br>*3.356* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | B |
| T34-PH02B05-10X1-65R | 10139352 | MF10X1.0 | 1,0 | 4,85<br>*0.191* | 10,0<br>*0.394* | 10,0<br>*0.394* | 35<br>*1.378* | 85,15<br>*3.352* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | B |
| T34-PH02B05-12X1-65R | 10139353 | MF12X1.0 | 1,0 | 4,98<br>*0.196* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 95,02<br>*3.741* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,0<br>*0.433* | 3 | B |
| T34-PH02B05-12X1.25-65R | 10139354 | MF12X1.25 | 1,25 | 7,07<br>*0.278* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 92,93<br>*3.659* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,8<br>*0.425* | 3 | B |
| T34-PH02B05-12X1.5-65R | 10139355 | MF12X1.5 | 1,5 | 6,03<br>*0.237* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 93,97<br>*3.700* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | B |
| T34-PH02B05-14X1.5-65R | 10139356 | MF14X1.5 | 1,5 | 7,17<br>*0.282* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 92,83<br>*3.655* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 3 | B |
| T34-PH02B05-16X1.5-65R | 10139357 | MF16X1.5 | 1,5 | 7,27<br>*0.286* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 92,73<br>*3.651* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 3 | B |
| T34-PH02B05-18X1.5-65R | 10139358 | MF18X1.5 | 1,5 | 7,17<br>*0.282* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 102,83<br>*4.048* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | B |
| T34-PH02B05-20X1.5-65R | 10139359 | MF20X1.5 | 1,5 | 7,27<br>*0.286* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 117,73<br>*4.635* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 18,5<br>*0.728* | 4 | B |
| T34-PH02B05-22X1.5-65R | 10139360 | MF22X1.5 | 1,5 | 7,27<br>*0.286* | 22,0<br>*0.866* | 17,0<br>*0.669* | 78<br>*3.071* | 117,73<br>*4.635* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | B |
| T34-PH02B05-24X1.5-65R | 10139361 | MF24X1.5 | 1,5 | 7,41<br>*0.292* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 132,59<br>*5.220* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,5<br>*0.886* | 4 | B |

## T34B-PHB

Through holes – MF threads





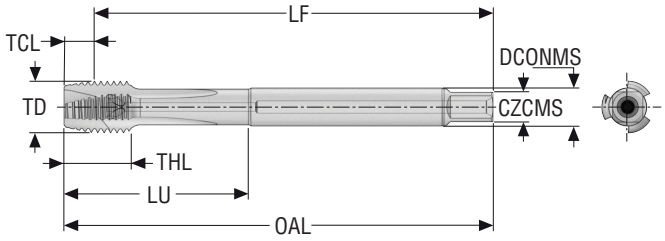

–Internal coolant
–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34B-PH02B03-8X1-65R | 10139362 | MF8X1.0 | 1,0 | 4,45<br>*0.175* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 85,55<br>*3.368* | 93,4<br>*3.677* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | B |
| T34B-PH02B03-10X1-65R | 10139363 | MF10X1.0 | 1,0 | 5,25<br>*0.207* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 84,75<br>*3.337* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | B |

## T34B-PHB

Through holes – MF threads





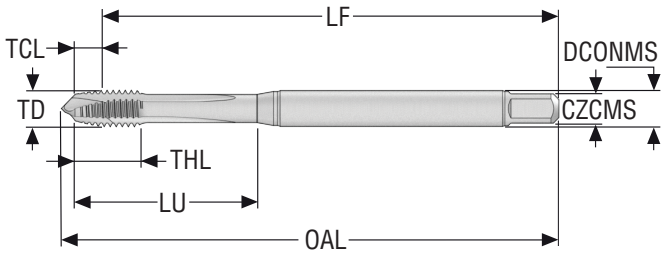

–Internal coolant
–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN374
–Thread tolerance class: 6HX
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34B-PH02B05-8X1-65R | 10139364 | MF8X1.0 | 1,0 | 4,75<br>*0.187* | 8,0<br>*0.315* | 10,0<br>*0.394* | 35<br>*1.378* | 85,25<br>*3.356* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | B |
| T34B-PH02B05-10X1-65R | 10139365 | MF10X1.0 | 1,0 | 4,85<br>*0.191* | 10,0<br>*0.394* | 10,0<br>*0.394* | 35<br>*1.378* | 85,15<br>*3.352* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | B |
| T34B-PH02B05-12X1.5-65R | 10139366 | MF12X1.5 | 1,5 | 7,07<br>*0.278* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 92,93<br>*3.659* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | B |
| T34B-PH02B05-14X1.5-65R | 10139367 | MF14X1.5 | 1,5 | 7,17<br>*0.282* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 92,83<br>*3.655* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 3 | B |
| T34B-PH02B05-16X1.5-65R | 10139368 | MF16X1.5 | 1,5 | 7,27<br>*0.286* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 92,73<br>*3.651* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 3 | B |

## T34-PHB

Through holes – UNC threads





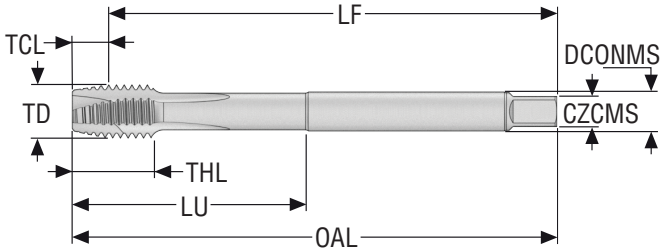

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH08B03-4-40-22R | 10139041 | UNC4-40 | 40,0 | 2,83<br>*0.111* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 53,17<br>*2.093* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,35<br>*0.093* | 3 | B |
| T34-PH08B03-5-40-22R | 10139042 | UNC5-40 | 40,0 | 2,94<br>*0.116* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 53,06<br>*2.089* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | B |
| T34-PH08B03-6-32-22R | 10139043 | UNC6-32 | 32,0 | 3,74<br>*0.147* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 52,26<br>*2.057* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,85<br>*0.112* | 3 | B |
| T34-PH08B03-8-32-22R | 10139044 | UNC8-32 | 32,0 | 3,62<br>*0.143* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 59,38<br>*2.338* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | B |
| T34-PH08B03-10-24-22R | 10139045 | UNC10-24 | 24,0 | 4,86<br>*0.191* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 65,14<br>*2.565* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 3,9<br>*0.154* | 3 | B |
| T34-PH08B03-12-24-22R | 10139046 | UNC12-24 | 24,0 | 4,74<br>*0.187* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 75,26<br>*2.963* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | B |
| T34-PH08B03-1/4-20-22R | 10139047 | UNC1/4-20 | 20,0 | 5,65<br>*0.222* | 6,35<br>*0.250* | 13,0<br>*0.512* | 32<br>*1.260* | 74,35<br>*2.927* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,1<br>*0.201* | 3 | B |
| T34-PH08B03-5/16-18-22R | 10139048 | UNC5/16-18 | 18,0 | 6,31<br>*0.248* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 83,69<br>*3.295* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | B |
| T34-PH08B03-3/8-16-22R | 10139049 | UNC3/8-16 | 16,0 | 7,37<br>*0.290* | 9,525<br>*0.375* | 15,0<br>*0.591* | 39<br>*1.535* | 92,63<br>*3.647* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,0<br>*0.315* | 3 | B |

## T34-PHB

Through holes – UNC threads





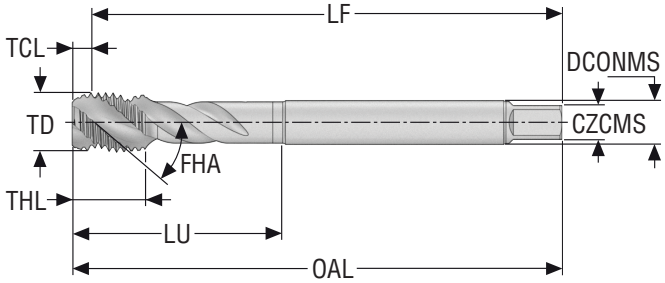

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH08B06-7/16-14-22R | 10139050 | UNC7/16-14 | 14,0 | 8,36<br>*0.329* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 91,64<br>*3.608* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,3<br>*0.366* | 3 | B |
| T34-PH08B06-1/2-13-22R | 10139051 | UNC1/2-13 | 13,0 | 9,01<br>*0.355* | 12,7<br>*0.500* | 18,0<br>*0.709* | 83<br>*3.268* | 100,99<br>*3.976* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,7<br>*0.421* | 3 | B |
| T34-PH08B06-9/16-12-22R | 10139052 | UNC9/16-12 | 12,0 | 9,87<br>*0.389* | 14,287<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 100,13<br>*3.942* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,3<br>*0.484* | 3 | B |
| T34-PH08B06-5/8-11-22R | 10139053 | UNC5/8-11 | 11,0 | 10,62<br>*0.418* | 15,875<br>*0.625* | 22,0<br>*0.866* | 68<br>*2.677* | 99,38<br>*3.913* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,5<br>*0.531* | 3 | B |

## T34-PHB

Through holes – UNC threads





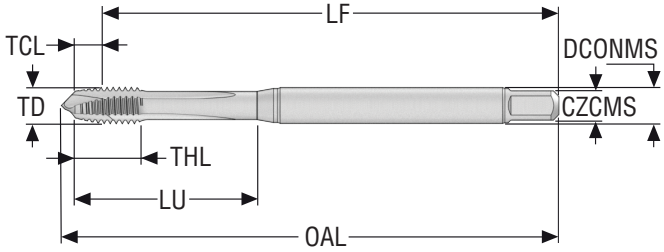

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN/ANSI
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T34-PH08B93-4-40-22R | 10280445 | UNC4-40 | 40.0 | 0.111 | 0.112 | 0.197 | 0.720 | 2.098 | 2.252 | 0.141 | 3.581x2.79 | 0.093 | 3 | B |
| T34-PH08B93-5-40-22R | 10280446 | UNC5-40 | 40.0 | 0.116 | 0.125 | 0.276 | 0.714 | 2.091 | 2.252 | 0.141 | 3.581x2.79 | 0.104 | 3 | B |
| T34-PH08B93-6-32-22R | 10280447 | UNC6-32 | 32.0 | 0.147 | 0.138 | 0.236 | 0.799 | 2.063 | 2.260 | 0.141 | 3.581x2.79 | 0.112 | 3 | B |
| T34-PH08B93-8-32-22R | 10280448 | UNC8-32 | 32.0 | 0.143 | 0.164 | 0.276 | 0.832 | 2.339 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | B |
| T34-PH08B93-10-24-22R | 10280449 | UNC10-24 | 24.0 | 0.191 | 0.190 | 0.315 | 1.000 | 2.575 | 2.835 | 0.194 | 4.928x3.86 | 0.154 | 3 | B |
| T34-PH08B93-12-24-22R | 10280450 | UNC12-24 | 24.0 | 0.187 | 0.216 | 0.394 | 1.191 | 2.969 | 3.236 | 0.220 | 5.588x4.19 | 0.177 | 3 | B |
| T34-PH08B93-1/4-20-22R | 10280451 | UNC1/4-20 | 20.0 | 0.222 | 0.250 | 0.512 | 1.187 | 2.925 | 3.244 | 0.255 | 6.477x4.85 | 0.201 | 3 | B |
| T34-PH08B93-5/16-18-22R | 10280452 | UNC5/16-18 | 18.0 | 0.248 | 0.312 | 0.512 | 1.391 | 3.303 | 3.673 | 0.318 | 8.077x6.05 | 0.260 | 3 | B |
| T34-PH08B93-3/8-16-22R | 10280453 | UNC3/8-16 | 16.0 | 0.290 | 0.375 | 0.591 | 1.541 | 3.646 | 3.937 | 0.381 | 9.667x7.26 | 0.315 | 3 | B |
| T34-PH08B96-7/16-14-22R | 10280454 | UNC7/16-14 | 14.0 | 0.329 | 0.437 | 0.591 | 2.858 | 3.608 | 3.937 | 0.323 | 8.204x6.15 | 0.366 | 3 | B |
| T34-PH08B96-1/2-13-22R | 10280455 | UNC1/2-13 | 13.0 | 0.355 | 0.500 | 0.709 | 3.221 | 3.972 | 4.331 | 0.367 | 9.322x6.99 | 0.421 | 3 | B |
| T34-PH08B96-9/16-12-22R | 10280456 | UNC9/16-12 | 12.0 | 0.389 | 0.562 | 0.787 | 3.161 | 3.942 | 4.331 | 0.429 | 10.987x8.18 | 0.484 | 3 | B |
| T34-PH08B96-5/8-11-22R | 10280457 | UNC5/8-11 | 11.0 | 0.418 | 0.625 | 0.866 | 2.590 | 3.913 | 4.331 | 0.480 | 12.192x9.14 | 0.531 | 3 | B |
| T34-PH08B96-3/4-10-22R | 10280458 | UNC3/4-10 | 10.0 | 0.475 | 0.750 | 1.260 | 3.050 | 4.446 | 4.921 | 0.590 | 14.986x11.23 | 0.650 | 4 | B |
| T34-PH08B96-7/8-9-22R | 10280459 | UNC7/8-9 | 9.0 | 0.513 | 0.875 | 1.260 | 3.581 | 4.998 | 5.512 | 0.697 | 17.704x13.28 | 0.768 | 4 | B |
| T34-PH08B96-1-8-22R | 10280460 | UNC1-8 | 8.0 | 0.577 | 1.000 | 1.496 | 3.757 | 5.722 | 6.299 | 0.800 | 20.320x15.24 | 0.876 | 4 | B |

## T34-PHB

Through holes – UNF threads





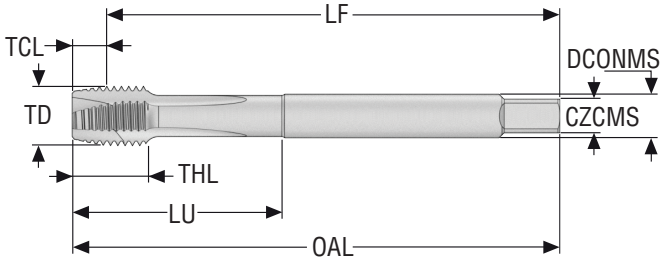

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH09B03-4-48-22R | 10139369 | UNF4-48 | 48,0 | 2,48<br>*0.098* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 53,52<br>*2.107* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,4<br>*0.094* | 3 | B |
| T34-PH09B03-5-44-22R | 10139370 | UNF5-44 | 44,0 | 2,6<br>*0.102* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 53,4<br>*2.102* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,7<br>*0.106* | 3 | B |
| T34-PH09B03-6-40-22R | 10139371 | UNF6-40 | 40,0 | 3,05<br>*0.120* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 52,95<br>*2.085* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,95<br>*0.116* | 3 | B |
| T34-PH09B03-8-36-22R | 10139372 | UNF8-36 | 36,0 | 3,28<br>*0.129* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 59,72<br>*2.351* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | B |
| T34-PH09B03-10-32-22R | 10139373 | UNF10-32 | 32,0 | 3,5<br>*0.138* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 66,5<br>*2.618* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,1<br>*0.161* | 3 | B |
| T34-PH09B03-12-28-22R | 10139374 | UNF12-28 | 28,0 | 4,05<br>*0.159* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 75,95<br>*2.990* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,6<br>*0.181* | 3 | B |
| T34-PH09B03-1/4-28-22R | 10139375 | UNF1/4-28 | 28,0 | 3,94<br>*0.155* | 6,35<br>*0.250* | 10,0<br>*0.394* | 30<br>*1.181* | 76,06<br>*2.994* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,5<br>*0.217* | 3 | B |
| T34-PH09B03-5/16-24-22R | 10139376 | UNF5/16-24 | 24,0 | 4,6<br>*0.181* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 85,4<br>*3.362* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,9<br>*0.272* | 3 | B |
| T34-PH09B03-3/8-24-22R | 10139377 | UNF3/8-24 | 24,0 | 4,98<br>*0.196* | 9,525<br>*0.375* | 15,0<br>*0.591* | 35<br>*1.378* | 85,02<br>*3.347* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | B |

## T34-PHB

Through holes – UNF threads





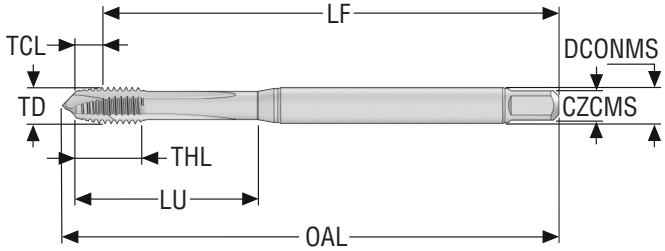

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH09B05-7/16-20-22R | 10139378 | UNF7/16-20 | 20,0 | 5,95<br>*0.234* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 94,05<br>*3.703* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,9<br>*0.390* | 3 | B |
| T34-PH09B05-1/2-20-22R | 10139379 | UNF1/2-20 | 20,0 | 6,14<br>*0.242* | 12,7<br>*0.500* | 15,0<br>*0.591* | 73<br>*2.874* | 93,86<br>*3.695* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | B |
| T34-PH09B05-9/16-18-22R | 10139380 | UNF9/16-18 | 18,0 | 6,8<br>*0.268* | 14,287<br>*0.562* | 15,0<br>*0.591* | 71<br>*2.795* | 93,2<br>*3.669* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 3 | B |
| T34-PH09B05-5/8-18-22R | 10139381 | UNF5/8-18 | 18,0 | 6,87<br>*0.270* | 15,875<br>*0.625* | 15,0<br>*0.591* | 58<br>*2.283* | 93,13<br>*3.667* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 3 | B |

## T34-PHB

Through holes – UNF threads





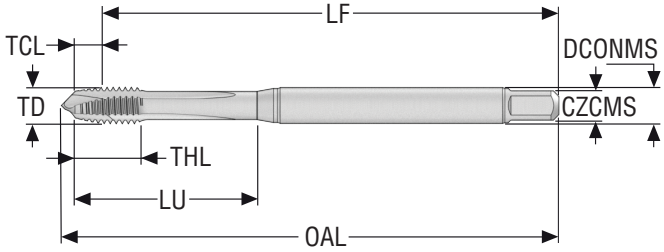

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN/ANSI
—Thread tolerance class: 2BX
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T34-PH09B93-4-48-22R | 10280461 | UNF4-48 | 48.0 | 0.098 | 0.112 | 0.197 | 0.718 | 2.110 | 2.252 | 0.141 | 3.581x2.79 | 0.094 | 3 | B |
| T34-PH09B93-5-44-22R | 10280462 | UNF5-44 | 44.0 | 0.102 | 0.125 | 0.276 | 0.712 | 2.102 | 2.252 | 0.141 | 3.581x2.79 | 0.106 | 3 | B |
| T34-PH09B93-6-40-22R | 10280463 | UNF6-40 | 40.0 | 0.120 | 0.138 | 0.236 | 0.795 | 2.087 | 2.260 | 0.141 | 3.581x2.79 | 0.116 | 3 | B |
| T34-PH09B93-8-36-22R | 10280464 | UNF8-36 | 36.0 | 0.129 | 0.164 | 0.276 | 0.830 | 2.350 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | B |
| T34-PH09B93-10-32-22R | 10280465 | UNF10-32 | 32.0 | 0.138 | 0.190 | 0.315 | 0.992 | 2.622 | 2.835 | 0.194 | 4.928x3.86 | 0.161 | 3 | B |
| T34-PH09B93-12-28-22R | 10280466 | UNF12-28 | 28.0 | 0.159 | 0.216 | 0.394 | 1.187 | 2.988 | 3.236 | 0.220 | 5.588x4.19 | 0.181 | 3 | B |
| T34-PH09B93-1/4-28-22R | 10280467 | UNF1/4-28 | 28.0 | 0.155 | 0.250 | 0.394 | 1.177 | 2.984 | 3.244 | 0.255 | 6.477x4.85 | 0.217 | 3 | B |
| T34-PH09B93-5/16-24-22R | 10280468 | UNF5/16-24 | 24.0 | 0.181 | 0.312 | 0.512 | 1.381 | 3.358 | 3.673 | 0.318 | 8.077x6.05 | 0.272 | 3 | B |
| T34-PH09B93-3/8-24-22R | 10280469 | UNF3/8-24 | 24.0 | 0.196 | 0.375 | 0.591 | 1.383 | 3.346 | 3.543 | 0.381 | 9.667x7.26 | 0.335 | 3 | B |
| T34-PH09B95-7/16-20-22R | 10280470 | UNF7/16-20 | 20.0 | 0.234 | 0.437 | 0.591 | 2.858 | 3.703 | 3.937 | 0.323 | 8.204x6.15 | 0.390 | 3 | B |
| T34-PH09B95-1/2-20-22R | 10280471 | UNF1/2-20 | 20.0 | 0.242 | 0.500 | 0.591 | 2.828 | 3.699 | 3.937 | 0.367 | 9.322x6.99 | 0.453 | 3 | B |
| T34-PH09B95-9/16-18-22R | 10280472 | UNF9/16-18 | 18.0 | 0.268 | 0.562 | 0.591 | 2.768 | 3.669 | 3.937 | 0.429 | 10.987x8.18 | 0.512 | 3 | B |
| T34-PH09B95-5/8-18-22R | 10280473 | UNF5/8-18 | 18.0 | 0.270 | 0.625 | 0.591 | 2.196 | 3.667 | 3.937 | 0.480 | 12.192x9.14 | 0.571 | 3 | B |
| T34-PH09B95-3/4-16-22R | 10280474 | UNF3/4-16 | 16.0 | 0.304 | 0.750 | 0.945 | 2.459 | 4.026 | 4.331 | 0.590 | 14.986x11.23 | 0.689 | 4 | B |
| T34-PH09B95-7/8-14-22R | 10280475 | UNF7/8-14 | 14.0 | 0.333 | 0.875 | 0.945 | 2.990 | 4.720 | 4.921 | 0.697 | 17.704x13.28 | 0.807 | 4 | B |
| T34-PH09B95-1-12-22R | 10280476 | UNF1-12 | 12.0 | 0.387 | 1.000 | 1.063 | 2.970 | 5.125 | 5.512 | 0.800 | 20.320x15.24 | 0.917 | 4 | B |

## T34-PHB

Through holes – EGM threads





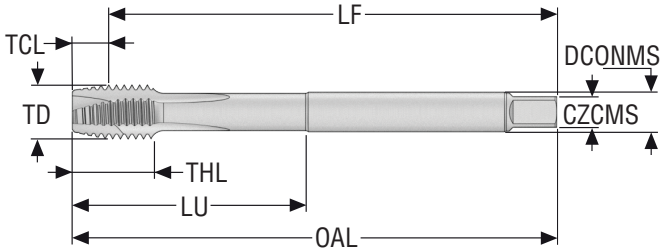

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6H mod.
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH04B03-2X0.4-64R | 10139382 | EGM2 | 0,4 | 2,07<br>*0.081* | 2,52<br>*0.099* | 9,0<br>*0.354* | 14<br>*0.551* | 47,93<br>*1.887* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,1<br>*0.083* | 2 | B |
| T34-PH04B03-2.5X0.45-64R | 10139383 | EGM2.5 | 0,45 | 2,13<br>*0.084* | 3,084<br>*0.121* | 10,0<br>*0.394* | 18<br>*0.709* | 53,87<br>*2.121* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | B |
| T34-PH04B03-3X0.5-64R | 10139384 | EGM3 | 0,5 | 2,03<br>*0.080* | 3,65<br>*0.144* | 12,0<br>*0.472* | 21<br>*0.827* | 60,97<br>*2.400* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,15<br>*0.124* | 3 | B |
| T34-PH04B03-4X0.7-64R | 10139385 | EGM4 | 0,7 | 3,27<br>*0.129* | 4,91<br>*0.193* | 14,0<br>*0.551* | 25<br>*0.984* | 66,73<br>*2.627* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | B |
| T34-PH04B03-5X0.8-64R | 10139386 | EGM5 | 0,8 | 3,72<br>*0.146* | 6,04<br>*0.238* | 18,0<br>*0.709* | 30<br>*1.181* | 76,28<br>*3.003* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,25<br>*0.207* | 3 | B |
| T34-PH04B03-6X1-64R | 10139387 | EGM6 | 1,0 | 4,7<br>*0.185* | 7,3<br>*0.287* | 18,0<br>*0.709* | 35<br>*1.378* | 85,3<br>*3.358* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,3<br>*0.248* | 3 | B |
| T34-PH04B03-8X1.25-64R | 10139388 | EGM8 | 1,25 | 5,8<br>*0.228* | 9,624<br>*0.379* | 20,0<br>*0.787* | 39<br>*1.535* | 94,2<br>*3.709* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,4<br>*0.331* | 3 | B |

## T34-PHB

Through holes – EGM threads





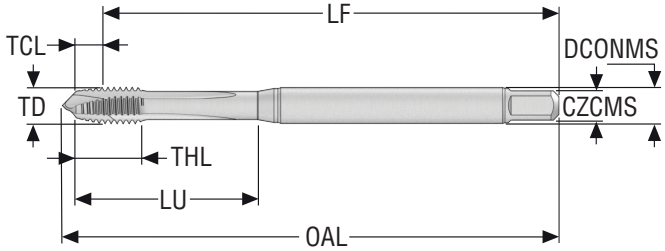

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 6H mod.
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH04B06-10X1.5-64R | 10139409 | EGM10 | 1,5 | 7,41<br>*0.292* | 11,948<br>*0.470* | 15,0<br>*0.591* | 73<br>*2.874* | 92,59<br>*3.645* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | B |
| T34-PH04B06-12X1.75-64R | 10139410 | EGM12 | 1,75 | 8,29<br>*0.326* | 14,274<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 101,71<br>*4.004* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | B |
| T34-PH04B06-14X2-64R | 10139411 | EGM14 | 2,0 | 9,14<br>*0.360* | 16,598<br>*0.653* | 20,0<br>*0.787* | 68<br>*2.677* | 100,86<br>*3.971* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | B |
| T34-PH04B06-16X2-64R | 10139412 | EGM16 | 2,0 | 9,14<br>*0.360* | 18,598<br>*0.732* | 20,0<br>*0.787* | 81<br>*3.189* | 115,86<br>*4.561* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | B |
| T34-PH04B06-18X2.5-64R | 10139413 | EGM18 | 2,5 | 11,45<br>*0.451* | 21,248<br>*0.837* | 27,0<br>*1.063* | 93<br>*3.661* | 128,55<br>*5.061* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 18,75<br>*0.738* | 4 | B |
| T34-PH04B06-20X2.5-64R | 10139414 | EGM20 | 2,5 | 11,45<br>*0.451* | 23,248<br>*0.915* | 30,0<br>*1.181* | 113<br>*4.449* | 148,55<br>*5.848* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 20,75<br>*0.817* | 4 | B |

## T34-PHB

Through holes – EGUNC threads





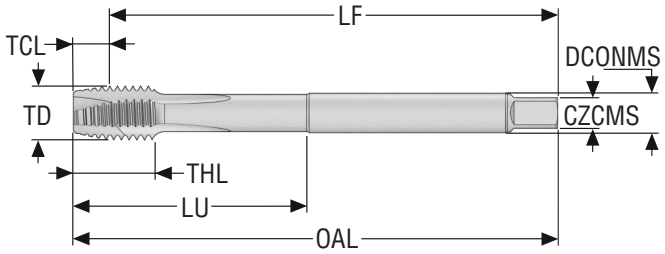

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 2B
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH16B03-4-40-21R | 10139389 | EGUNC4-40 | 40,0 | 2,83<br>*0.111* | 3,67<br>*0.144* | 13,0<br>*0.512* | 21<br>*0.827* | 60,17<br>*2.369* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,1<br>*0.122* | 3 | B |
| T34-PH16B03-6-32-21R | 10139390 | EGUNC6-32 | 32,0 | 3,75<br>*0.148* | 4,536<br>*0.179* | 14,0<br>*0.551* | 25<br>*0.984* | 66,25<br>*2.608* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | B |
| T34-PH16B03-8-32-21R | 10139391 | EGUNC8-32 | 32,0 | 3,73<br>*0.147* | 5,197<br>*0.205* | 16,0<br>*0.630* | 30<br>*1.181* | 76,27<br>*3.003* | 82,1<br>*3.232* | 6,0<br>*0.236* | 6.00X4.90 | 4,4<br>*0.173* | 3 | B |
| T34-PH16B03-10-24-21R | 10139392 | EGUNC10-24 | 24,0 | 3,5<br>*0.138* | 6,2<br>*0.244* | 17,0<br>*0.669* | 30<br>*1.181* | 76,5<br>*3.012* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,2<br>*0.205* | 3 | B |
| T34-PH16B03-1/4-20-21R | 10139393 | EGUNC1/4-20 | 20,0 | 5,71<br>*0.225* | 8,001<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,29<br>*3.319* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 6,7<br>*0.264* | 3 | B |
| T34-PH16B03-5/16-18-21R | 10139394 | EGUNC5/16-18 | 18,0 | 6,61<br>*0.260* | 9,771<br>*0.385* | 22,0<br>*0.866* | 39<br>*1.535* | 93,39<br>*3.677* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,4<br>*0.331* | 3 | B |

## T34-PHB

Through holes – EGUNC threads





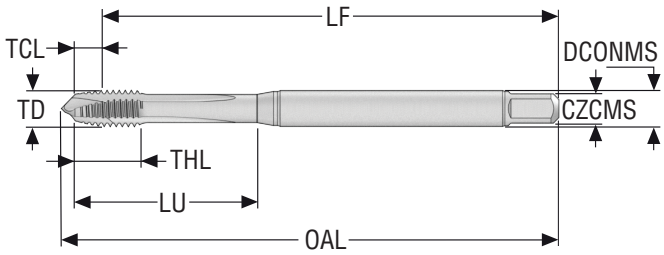

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 2B
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH16B06-3/8-16-21R | 10139415 | EGUNC3/8-16 | 16,0 | 7,6<br>*0.299* | 11,587<br>*0.456* | 15,0<br>*0.591* | 73<br>*2.874* | 92,4<br>*3.638* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,0<br>*0.394* | 3 | B |
| T34-PH16B06-7/16-14-21R | 10139416 | EGUNC7/16-14 | 14,0 | 8,6<br>*0.339* | 13,47<br>*0.530* | 18,0<br>*0.709* | 81<br>*3.189* | 101,4<br>*3.992* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 11,6<br>*0.457* | 3 | B |
| T34-PH16B06-1/2-13-21R | 10139417 | EGUNC1/2-13 | 13,0 | 9,3<br>*0.366* | 15,237<br>*0.600* | 18,0<br>*0.709* | 68<br>*2.677* | 100,7<br>*3.965* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,3<br>*0.524* | 3 | B |
| T34-PH16B06-9/16-12-21R | 10139418 | EGUNC9/16-12 | 12,0 | 9,7<br>*0.382* | 17,038<br>*0.671* | 20,0<br>*0.787* | 68<br>*2.677* | 100,3<br>*3.949* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,9<br>*0.587* | 4 | B |
| T34-PH16B06-5/8-11-21R | 10139419 | EGUNC5/8-11 | 11,0 | 10,6<br>*0.417* | 18,875<br>*0.743* | 20,0<br>*0.787* | 81<br>*3.189* | 114,4<br>*4.504* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | B |
| T34-PH16B06-3/4-10-21R | 10139420 | EGUNC3/4-10 | 10,0 | 11,8<br>*0.465* | 22,349<br>*0.880* | 25,0<br>*0.984* | 93<br>*3.661* | 128,2<br>*5.047* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,75<br>*0.778* | 4 | B |

## T34-PHB

Through holes – EGUNF threads





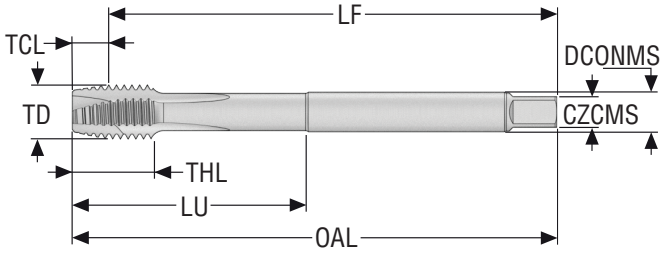

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 2B
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH17B03-4-48-21R | 10139395 | EGUNF4-48 | 48,0 | 2,36<br>*0.093* | 3,533<br>*0.139* | 9,0<br>*0.354* | 20<br>*0.787* | 53,64<br>*2.112* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 3,0<br>*0.118* | 3 | B |
| T34-PH17B03-6-40-21R | 10139396 | EGUNF6-40 | 40,0 | 2,75<br>*0.108* | 4,331<br>*0.171* | 10,0<br>*0.394* | 25<br>*0.984* | 67,25<br>*2.648* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,7<br>*0.146* | 3 | B |
| T34-PH17B03-8-36-21R | 10139397 | EGUNF8-36 | 36,0 | 2,93<br>*0.115* | 5,083<br>*0.200* | 13,0<br>*0.512* | 30<br>*1.181* | 77,07<br>*3.034* | 82,1<br>*3.232* | 6,0<br>*0.236* | 6.00X4.90 | 4,4<br>*0.173* | 3 | B |
| T34-PH17B03-10-32-21R | 10139398 | EGUNF10-32 | 32,0 | 3,5<br>*0.138* | 5,857<br>*0.231* | 13,0<br>*0.512* | 30<br>*1.181* | 76,5<br>*3.012* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,1<br>*0.201* | 3 | B |
| T34-PH17B03-1/4-28-21R | 10139399 | EGUNF1/4-28 | 28,0 | 4,09<br>*0.161* | 7,529<br>*0.296* | 17,0<br>*0.669* | 35<br>*1.378* | 85,91<br>*3.382* | 93,2<br>*3.669* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | B |
| T34-PH17B03-5/16-24-21R | 10139400 | EGUNF5/16-24 | 24,0 | 5,1<br>*0.201* | 9,312<br>*0.367* | 18,0<br>*0.709* | 35<br>*1.378* | 84,97<br>*3.345* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,25<br>*0.325* | 3 | B |

## T34-PHB

Through holes – EGUNF threads





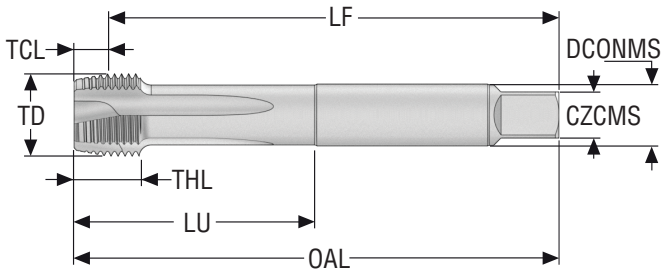

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 2B
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH17B06-3/8-24-21R | 10139421 | EGUNF3/8-24 | 24,0 | 4,43<br>*0.174* | 10,899<br>*0.429* | 12,0<br>*0.472* | 66<br>*2.598* | 85,57<br>*3.369* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.00 | 9,8<br>*0.386* | 3 | B |
| T34-PH17B06-7/16-20-21R | 10139422 | EGUNF7/16-20 | 20,0 | 6,2<br>*0.244* | 12,763<br>*0.502* | 15,0<br>*0.591* | 73<br>*2.874* | 93,8<br>*3.693* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | B |
| T34-PH17B06-1/2-20-21R | 10139423 | EGUNF1/2-20 | 20,0 | 6,2<br>*0.244* | 14,351<br>*0.565* | 15,0<br>*0.591* | 71<br>*2.795* | 93,8<br>*3.693* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,1<br>*0.516* | 3 | B |
| T34-PH17B06-9/16-18-21R | 10139424 | EGUNF9/16-18 | 18,0 | 6,9<br>*0.272* | 16,121<br>*0.635* | 15,0<br>*0.591* | 58<br>*2.283* | 93,1<br>*3.665* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,7<br>*0.579* | 4 | B |
| T34-PH17B06-5/8-18-21R | 10139425 | EGUNF5/8-18 | 18,0 | 6,9<br>*0.272* | 17,709<br>*0.697* | 15,0<br>*0.591* | 66<br>*2.598* | 103,1<br>*4.059* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,25<br>*0.640* | 4 | B |
| T34-PH17B06-3/4-16-21R | 10139426 | EGUNF3/4-16 | 16,0 | 7,9<br>*0.311* | 21,112<br>*0.831* | 17,0<br>*0.669* | 80<br>*3.150* | 117,1<br>*4.610* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,5<br>*0.768* | 4 | B |

## T34-PHB

Through holes – G threads





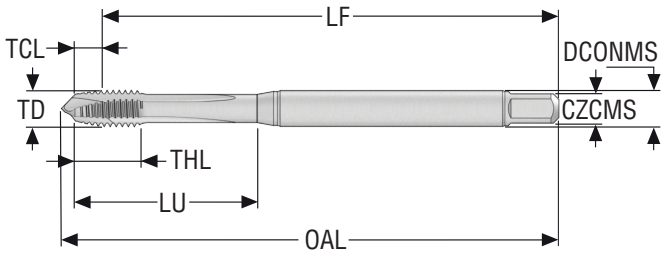

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN5156
- Thread tolerance class: NORMAL-X
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PH21B09-1/8-28-12R | 10139401 | G1/8-28 | 28,0 | 4,49<br>*0.177* | 9,728<br>*0.383* | 10,0<br>*0.394* | 36<br>*1.417* | 85,51<br>*3.367* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | B |
| T34-PH21B09-1/4-19-12R | 10139402 | G1/4-19 | 19,0 | 6,85<br>*0.270* | 13,157<br>*0.518* | 14,0<br>*0.551* | 71<br>*2.795* | 93,15<br>*3.667* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 11,8<br>*0.465* | 3 | B |
| T34-PH21B09-3/8-19-12R | 10139403 | G3/8-19 | 19,0 | 6,97<br>*0.274* | 16,662<br>*0.656* | 15,0<br>*0.591* | 58<br>*2.283* | 93,03<br>*3.663* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 4 | B |
| T34-PH21B09-1/2-14-12R | 10139404 | G1/2-14 | 14,0 | 9,0<br>*0.354* | 20,955<br>*0.825* | 17,0<br>*0.669* | 80<br>*3.150* | 116,0<br>*4.567* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,0<br>*0.748* | 4 | B |
| T34-PH21B09-5/8-14-12R | 10139405 | G5/8-14 | 14,0 | 9,4<br>*0.370* | 22,911<br>*0.902* | 20,0<br>*0.787* | 78<br>*3.071* | 115,6<br>*4.551* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | B |
| T34-PH21B09-3/4-14-12R | 10139406 | G3/4-14 | 14,0 | 9,16<br>*0.361* | 26,441<br>*1.041* | 20,0<br>*0.787* | 77<br>*3.031* | 130,84<br>*5.151* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 24,5<br>*0.965* | 4 | B |
| T34-PH21B09-7/8-14-12R | 10139407 | G7/8-14 | 14,0 | 9,03<br>*0.356* | 30,201<br>*1.189* | 22,0<br>*0.866* | 85<br>*3.346* | 140,97<br>*5.550* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,25<br>*1.112* | 4 | B |
| T34-PH21B09-1-11-12R | 10139408 | G1-11 | 11,0 | 11,49<br>*0.452* | 33,249<br>*1.309* | 24,0<br>*0.945* | 93<br>*3.661* | 148,51<br>*5.847* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00X20.00 | 30,75<br>*1.211* | 4 | B |

## T34-PCB

Through holes – Metric coarse threads





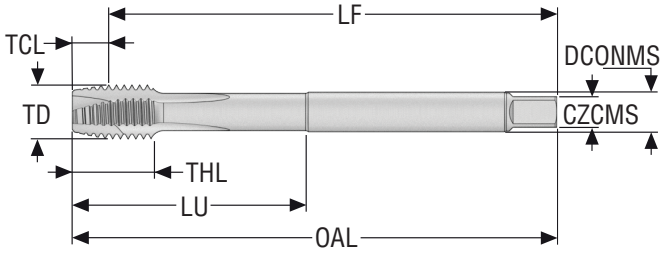

–Substrate: HSSE-PM
–Coating: TiN + TiCN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 251

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PC01B03-3X0.5-65R | 10309940 | M3 | 0,5 | 2,3<br>*0.091* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 53,7<br>*2.114* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T34-PC01B03-4X0.7-65R | 10309941 | M4 | 0,7 | 3,03<br>*0.119* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 60,0<br>*2.362* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T34-PC01B03-5X0.8-65R | 10309942 | M5 | 0,8 | 3,71<br>*0.146* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 66,3<br>*2.610* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T34-PC01B03-6X1-65R | 10309943 | M6 | 1,0 | 4,45<br>*0.175* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T34-PC01B03-8X1.25-65R | 10309944 | M8 | 1,25 | 5,48<br>*0.216* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,6<br>*3.331* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T34-PC01B03-10X1.5-65R | 10309945 | M10 | 1,5 | 6,94<br>*0.273* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 93,1<br>*3.665* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T34-PCB

Through holes – Metric coarse threads





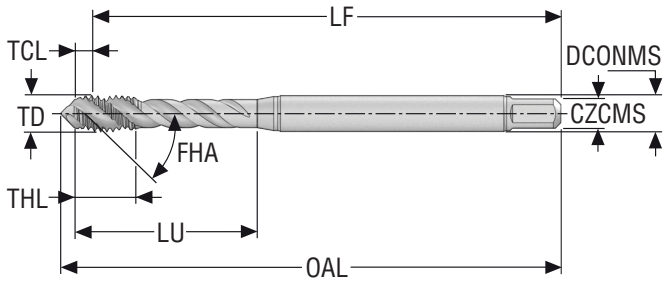

–Substrate: HSSE-PM
–Coating: TiN + TiCN
–Standard: DIN376
–Thread tolerance class: 6HX
–For cutting data see page(s) 251

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-PC01B06-12X1.75-65R | 10309961 | M12 | 1,75 | 8,11<br>*0.319* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 101,9<br>*4.012* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T34-PC01B06-14X2-65R | 10309962 | M14 | 2,0 | 9,26<br>*0.365* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 100,7<br>*3.965* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 3 | B |
| T34-PC01B06-16X2-65R | 10309963 | M16 | 2,0 | 9,36<br>*0.369* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 100,6<br>*3.961* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T34-PC01B06-18X2.5-65R | 10309972 | M18 | 2,5 | 11,3<br>*0.445* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 113,7<br>*4.476* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | B |
| T34-PC01B06-20X2.5-65R | 10309973 | M20 | 2,5 | 11,4<br>*0.449* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 128,6<br>*5.063* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |

## T34-R45HC-micro

Blind holes – Metric coarse threads





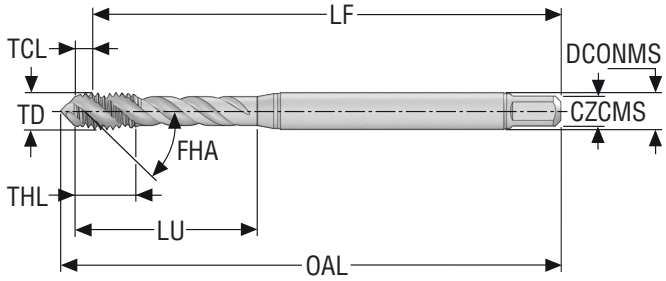

–Substrate: HSS-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 4H
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01C03-1X0.25-41R | 10138952 | M1 | 0,25 | 0,59<br>*0.023* | 1,0<br>*0.039* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 40,9<br>*1.610* | 2,5<br>*0.098* | 2.50X2.10 | 0,75<br>*0.030* | 2 | C |
| T34-R45H01C03-1.1X0.25-41R | 10138953 | M1.1 | 0,25 | 0,59<br>*0.023* | 1,1<br>*0.043* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 41,0<br>*1.614* | 2,5<br>*0.098* | 2.50X2.10 | 0,85<br>*0.033* | 2 | C |
| T34-R45H01C03-1.2X0.25-41R | 10138954 | M1.2 | 0,25 | 0,59<br>*0.023* | 1,2<br>*0.047* | 6,0<br>*0.236* | 13<br>*0.512* | 39,41<br>*1.552* | 41,1<br>*1.618* | 2,5<br>*0.098* | 2.50X2.10 | 0,95<br>*0.037* | 2 | C |
| T34-R45H01C03-1.4X0.3-41R | 10138955 | M1.4 | 0,3 | 0,69<br>*0.027* | 1,4<br>*0.055* | 8,0<br>*0.315* | 13<br>*0.512* | 39,31<br>*1.548* | 41,3<br>*1.626* | 2,5<br>*0.098* | 2.50X2.10 | 1,1<br>*0.043* | 2 | C |

## T34-R45HC-micro

Blind holes – Metric coarse threads





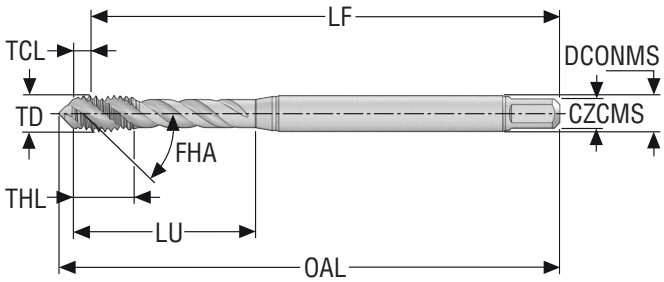

–Substrate: HSS-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6H
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01C03-1.6X0.35-63R | 10138956 | M1.6 | 0,35 | 0,8<br>*0.031* | 1,6<br>*0.063* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,4<br>*1.630* | 2,5<br>*0.098* | 2.50X2.10 | 1,25<br>*0.049* | 2 | C |
| T34-R45H01C03-1.7X0.35-63R | 10138957 | M1.7 | 0,35 | 0,8<br>*0.031* | 1,7<br>*0.067* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,5<br>*1.634* | 2,5<br>*0.098* | 2.50X2.10 | 1,35<br>*0.053* | 2 | C |
| T34-R45H01C03-1.8X0.35-63R | 10138958 | M1.8 | 0,35 | 0,8<br>*0.031* | 1,8<br>*0.071* | 8,0<br>*0.315* | 13<br>*0.512* | 39,2<br>*1.543* | 41,6<br>*1.638* | 2,5<br>*0.098* | 2.50X2.10 | 1,45<br>*0.057* | 2 | C |
| T34-R45H01C03-2X0.4-63R | 10138959 | M2 | 0,4 | 1,05<br>*0.041* | 2,0<br>*0.079* | 10,0<br>*0.394* | 13<br>*0.512* | 43,95<br>*1.730* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,6<br>*0.063* | 2 | C |
| T34-R45H01C03-2.2X0.45-63R | 10138960 | M2.2 | 0,45 | 1,15<br>*0.045* | 2,2<br>*0.087* | 10,0<br>*0.394* | 13<br>*0.512* | 43,85<br>*1.726* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,75<br>*0.069* | 2 | C |
| T34-R45H01C03-2.3X0.4-63R | 10138961 | M2.3 | 0,4 | 1,05<br>*0.041* | 2,3<br>*0.091* | 10,0<br>*0.394* | 13<br>*0.512* | 43,95<br>*1.730* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,9<br>*0.075* | 2 | C |
| T34-R45H01C03-2.5X0.45-63R | 10138962 | M2.5 | 0,45 | 1,06<br>*0.042* | 2,5<br>*0.098* | 5,0<br>*0.197* | 14<br>*0.551* | 48,94<br>*1.927* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,05<br>*0.081* | 2 | C |
| T34-R45H01C03-2.6X0.45-63R | 10138963 | M2.6 | 0,45 | 1,15<br>*0.045* | 2,6<br>*0.102* | 5,0<br>*0.197* | 14<br>*0.551* | 48,85<br>*1.923* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,15<br>*0.085* | 2 | C |

## T34-R45HC

Blind holes – Metric coarse threads





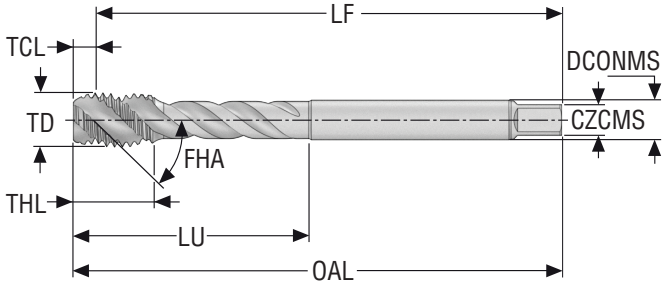

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01C03-3X0.5-65R | 10138964 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | C |
| T34-R45H01C03-3.5X0.6-65R | 10138966 | M3.5 | 0,6 | 1,31<br>*0.052* | 3,5<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,69<br>*2.153* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | C |
| T34-R45H01C03-4X0.7-65R | 10138967 | M4 | 0,7 | 1,82<br>*0.072* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,18<br>*2.409* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | C |
| T34-R45H01C03-4.5X0.75-65R | 10138968 | M4.5 | 0,75 | 1,82<br>*0.072* | 4,5<br>*0.177* | 7,5<br>*0.295* | 25<br>*0.984* | 68,18<br>*2.684* | 71,8<br>*2.827* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | C |
| T34-R45H01C03-5X0.8-65R | 10138969 | M5 | 0,8 | 2,01<br>*0.079* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,99<br>*2.677* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T34-R45H01C03-6X1-65R | 10138970 | M6 | 1,0 | 2,32<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,68<br>*3.058* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T34-R45H01C03-8X1.25-65R | 10138971 | M8 | 1,25 | 3,16<br>*0.124* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,84<br>*3.419* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T34-R45H01C03-10X1.5-65R | 10138972 | M10 | 1,5 | 3,81<br>*0.150* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,19<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T34-R45HC

Blind holes – Metric coarse threads





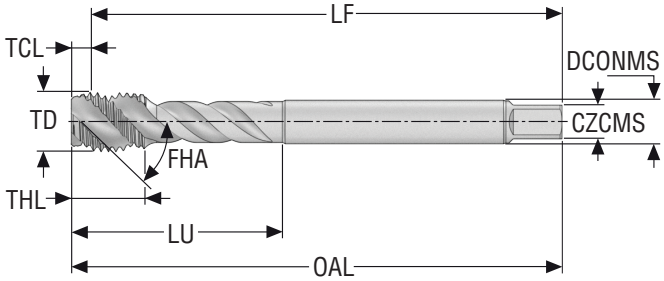

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN376
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01C06-12X1.75-65R | 10138973 | M12 | 1,75 | 4,47<br>*0.176* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,53<br>*4.155* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T34-R45H01C06-14X2-65R | 10138974 | M14 | 2,0 | 5,11<br>*0.201* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,89<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 4 | C |
| T34-R45H01C06-16X2-65R | 10138975 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,79<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |
| T34-R45H01C06-18X2.5-65R | 10138976 | M18 | 2,5 | 6,28<br>*0.247* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 118,72<br>*4.674* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 15,5<br>*0.610* | 4 | C |
| T34-R45H01C06-20X2.5-65R | 10138977 | M20 | 2,5 | 6,28<br>*0.247* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,72<br>*5.265* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 17,5<br>*0.689* | 4 | C |
| T34-R45H01C06-22X2.5-65R | 10138978 | M22 | 2,5 | 6,28<br>*0.247* | 22,0<br>*0.866* | 25,0<br>*0.984* | 93<br>*3.661* | 133,72<br>*5.265* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,5<br>*0.768* | 4 | C |
| T34-R45H01C06-24X3-65R | 10138979 | M24 | 3,0 | 7,48<br>*0.294* | 24,0<br>*0.945* | 30,0<br>*1.181* | 113<br>*4.449* | 152,52<br>*6.005* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |
| T34-R45H01C06-27X3-65R | 10138980 | M27 | 3,0 | 7,68<br>*0.302* | 27,0<br>*1.063* | 30,0<br>*1.181* | 97<br>*3.819* | 152,32<br>*5.997* | 160,0<br>*6.299* | 20,0<br>*0.787* | 20.00X16.00 | 24,0<br>*0.945* | 4 | C |
| T34-R45H01C06-30X3.5-65R | 10138981 | M30 | 3,5 | 8,75<br>*0.344* | 30,0<br>*1.181* | 35,0<br>*1.378* | 115<br>*4.528* | 171,25<br>*6.742* | 180,0<br>*7.087* | 22,0<br>*0.866* | 22.00X18.00 | 26,5<br>*1.043* | 4 | C |
| T34-R45H01C06-33X3.5-65R | 10138982 | M33 | 3,5 | 8,75<br>*0.344* | 33,0<br>*1.299* | 35,0<br>*1.378* | 113<br>*4.449* | 171,25<br>*6.742* | 180,0<br>*7.087* | 25,0<br>*0.984* | 25.00X20.00 | 29,5<br>*1.161* | 4 | C |
| T34-R45H01C06-36X4-65R | 10138983 | M36 | 4,0 | 10,02<br>*0.394* | 36,0<br>*1.417* | 40,0<br>*1.575* | 131<br>*5.157* | 189,98<br>*7.480* | 200,0<br>*7.874* | 28,0<br>*1.102* | 28.00X22.00 | 32,0<br>*1.260* | 4 | C |

## T34-R45HC

Blind holes – Metric coarse threads





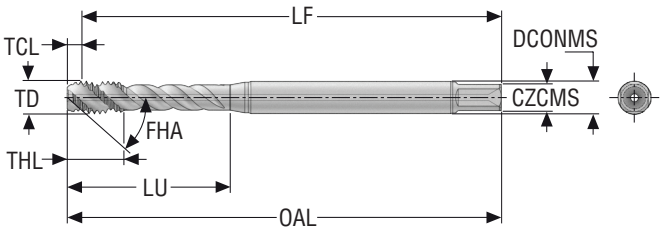

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN/ANSI
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01C93-4X0.7-65R | 10280390 | M4 | 0,7 | 1,82<br>*0.072* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21,19<br>*0.834* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,267<br>*0.168* | 4.267x3.33 | 3,3<br>*0.130* | 3 | C |
| T34-R45H01C93-5X0.8-65R | 10280391 | M5 | 0,8 | 2,01<br>*0.079* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25,14<br>*0.990* | 68,06<br>*2.680* | 72,0<br>*2.835* | 4,928<br>*0.194* | 4.928x3.86 | 4,2<br>*0.165* | 3 | C |
| T34-R45H01C93-6X1-65R | 10280392 | M6 | 1,0 | 2,32<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30,14<br>*1.187* | 77,68<br>*3.058* | 82,4<br>*3.244* | 6,477<br>*0.255* | 6.477x4.85 | 5,0<br>*0.197* | 3 | C |
| T34-R45H01C93-8X1.25-65R | 10280393 | M8 | 1,25 | 3,16<br>*0.124* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35,14<br>*1.383* | 86,84<br>*3.419* | 90,0<br>*3.543* | 8,077<br>*0.318* | 8.077x6.05 | 6,8<br>*0.268* | 3 | C |
| T34-R45H01C93-10X1.5-65R | 10280394 | M10 | 1,5 | 3,81<br>*0.150* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39,14<br>*1.541* | 96,19<br>*3.787* | 100,0<br>*3.937* | 9,667<br>*0.381* | 9.667x7.26 | 8,5<br>*0.335* | 3 | C |
| T34-R45H01C96-12X1.75-65R | 10280395 | M12 | 1,75 | 4,47<br>*0.176* | 12,0<br>*0.472* | 18,0<br>*0.709* | 81,82<br>*3.221* | 105,53<br>*4.155* | 110,0<br>*4.331* | 9,322<br>*0.367* | 9.322x6.99 | 10,2<br>*0.402* | 3 | C |
| T34-R45H01C96-16X2-65R | 10280397 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 65,78<br>*2.590* | 104,79<br>*4.126* | 110,0<br>*4.331* | 12,192<br>*0.480* | 12.192x9.14 | 14,0<br>*0.551* | 4 | C |
| T34-R45H01C96-18X2.5-65R | 10280398 | M18 | 2,5 | 6,28<br>*0.247* | 18,0<br>*0.709* | 25,0<br>*0.984* | 79<br>*3.110* | 118,72<br>*4.674* | 125,0<br>*4.921* | 13,767<br>*0.542* | 13.767x10.31 | 15,5<br>*0.610* | 4 | C |
| T34-R45H01C96-20X2.5-65R | 10280399 | M20 | 2,5 | 6,28<br>*0.247* | 20,0<br>*0.787* | 25,0<br>*0.984* | 92,47<br>*3.641* | 133,72<br>*5.265* | 140,0<br>*5.512* | 16,561<br>*0.652* | 16.561x12.42 | 17,5<br>*0.689* | 4 | C |
| T34-R45H01C96-24X3-65R | 10280400 | M24 | 3,0 | 7,48<br>*0.294* | 24,0<br>*0.945* | 30,0<br>*1.181* | 96,95<br>*3.817* | 152,52<br>*6.005* | 160,0<br>*6.299* | 19,304<br>*0.760* | 19.304x14.48 | 21,0<br>*0.827* | 4 | C |

## T34A-R45HC

Blind holes – Metric coarse threads





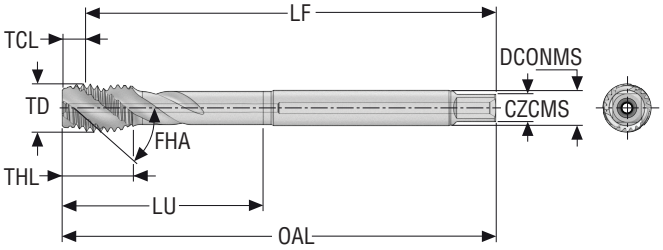

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN371
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34A-R45H01C03-5X0.8-65R | 10138984 | M5 | 0,8 | 1,94<br>*0.076* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,06<br>*2.680* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | C |
| T34A-R45H01C03-6X1-65R | 10138985 | M6 | 1,0 | 2,32<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,68<br>*3.058* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | C |
| T34A-R45H01C03-8X1.25-65R | 10138986 | M8 | 1,25 | 3,16<br>*0.124* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,84<br>*3.419* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | C |
| T34A-R45H01C05-10X1.5-65R | 10138987 | M10 | 1,5 | 3,81<br>*0.150* | 10,0<br>*0.394* | 17,0<br>*0.669* | 39<br>*1.535* | 96,19<br>*3.787* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T34A-R45HC

Blind holes – Metric coarse threads





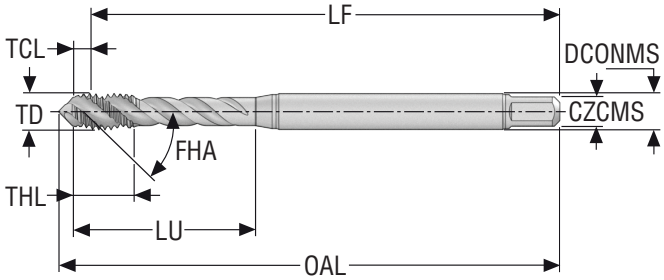

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN376
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34A-R45H01C06-12X1.75-65R | 10138988 | M12 | 1,75 | 4,47<br>*0.176* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,53<br>*4.155* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | C |
| T34A-R45H01C06-14X2-65R | 10138989 | M14 | 2,0 | 5,11<br>*0.201* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,89<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 4 | C |
| T34A-R45H01C06-16X2-65R | 10138990 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,79<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | C |

## T34-R45HC

Blind holes – MF threads





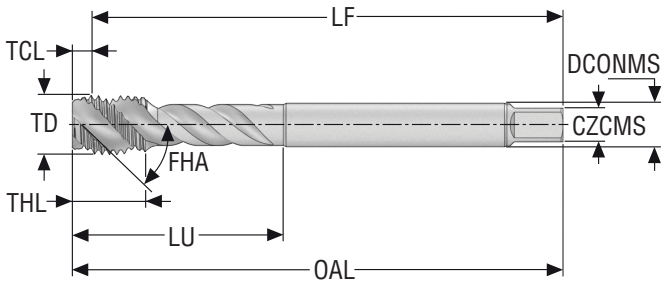

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN371
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H02C03-3X0.35-65R | 10139002 | MF3X0.35 | 0,35 | 0,7<br>*0.028* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 55,3<br>*2.177* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | C |
| T34-R45H02C03-3.5X0.35-65R | 10139003 | MF3.5X0.35 | 0,35 | 0,69<br>*0.027* | 3,5<br>*0.138* | 5,0<br>*0.197* | 20<br>*0.787* | 55,31<br>*2.178* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 3,15<br>*0.124* | 3 | C |
| T34-R45H02C03-4X0.5-65R | 10139004 | MF4X0.5 | 0,5 | 1,31<br>*0.052* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,69<br>*2.429* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | C |
| T34-R45H02C03-5X0.5-65R | 10139005 | MF5X0.5 | 0,5 | 1,2<br>*0.047* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,8<br>*2.709* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | C |
| T34-R45H02C03-6X0.5-65R | 10139006 | MF6X0.5 | 0,5 | 1,22<br>*0.048* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,78<br>*3.102* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,5<br>*0.217* | 3 | C |
| T34-R45H02C03-6X0.75-65R | 10139007 | MF6X0.75 | 0,75 | 1,77<br>*0.070* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,23<br>*3.080* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,2<br>*0.205* | 3 | C |
| T34-R45H02C03-8X0.75-65R | 10139008 | MF8X0.75 | 0,75 | 2,07<br>*0.081* | 8,0<br>*0.315* | 10,0<br>*0.394* | 30<br>*1.181* | 77,93<br>*3.068* | 81,7<br>*3.217* | 8,0<br>*0.315* | 8.00X6.20 | 7,2<br>*0.283* | 3 | C |
| T34-R45H02C03-8X1-65R | 10139009 | MF8X1.0 | 1,0 | 2,62<br>*0.103* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,38<br>*3.440* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | C |
| T34-R45H02C03-10X0.75-65R | 10139011 | MF10X0.75 | 0,75 | 2,17<br>*0.085* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,83<br>*3.458* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,2<br>*0.362* | 3 | C |
| T34-R45H02C03-10X1-65R | 10139012 | MF10X1.0 | 1,0 | 2,72<br>*0.107* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,28<br>*3.436* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | C |
| T34-R45H02C03-10X1.25-65R | 10139013 | MF10X1.25 | 1,25 | 3,26<br>*0.128* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,74<br>*3.809* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 8,8<br>*0.346* | 3 | C |

## T34-R45HC

Blind holes – MF threads





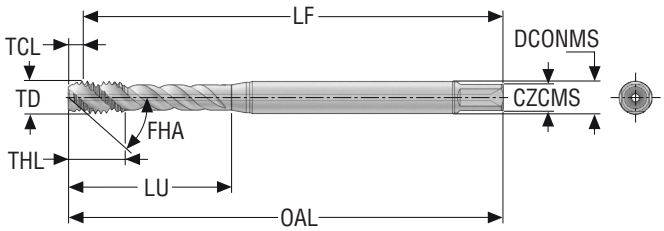

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN374
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H02C05-8X1-65R | 10139014 | MF8X1.0 | 1,0 | 2,62<br>*0.103* | 8,0<br>*0.315* | 10,0<br>*0.394* | 35<br>*1.378* | 87,38<br>*3.440* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | C |
| T34-R45H02C05-10X1-65R | 10139015 | MF10X1.0 | 1,0 | 2,62<br>*0.103* | 10,0<br>*0.394* | 10,0<br>*0.394* | 35<br>*1.378* | 87,38<br>*3.440* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | C |
| T34-R45H02C05-12X1-65R | 10139016 | MF12X1.0 | 1,0 | 2,83<br>*0.111* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 97,17<br>*3.826* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,0<br>*0.433* | 3 | C |
| T34-R45H02C05-12X1.25-65R | 10139017 | MF12X1.25 | 1,25 | 3,38<br>*0.133* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,62<br>*3.804* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,8<br>*0.425* | 3 | C |
| T34-R45H02C05-12X1.5-65R | 10139018 | MF12X1.5 | 1,5 | 3,93<br>*0.155* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,07<br>*3.782* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | C |
| T34-R45H02C05-14X1.5-65R | 10139019 | MF14X1.5 | 1,5 | 4,03<br>*0.159* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 95,97<br>*3.778* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | C |
| T34-R45H02C05-16X1.5-65R | 10139020 | MF16X1.5 | 1,5 | 4,13<br>*0.163* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,87<br>*3.774* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |
| T34-R45H02C05-18X1.5-65R | 10139021 | MF18X1.5 | 1,5 | 4,13<br>*0.163* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,87<br>*4.168* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | C |
| T34-R45H02C05-20X1.5-65R | 10139022 | MF20X1.5 | 1,5 | 4,13<br>*0.163* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,87<br>*4.759* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 18,5<br>*0.728* | 4 | C |
| T34-R45H02C05-22X1.5-65R | 10139023 | MF22X1.5 | 1,5 | 4,13<br>*0.163* | 22,0<br>*0.866* | 17,0<br>*0.669* | 78<br>*3.071* | 120,87<br>*4.759* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 20,5<br>*0.807* | 4 | C |
| T34-R45H02C05-24X1.5-65R | 10139024 | MF24X1.5 | 1,5 | 4,25<br>*0.167* | 24,0<br>*0.945* | 20,0<br>*0.787* | 93<br>*3.661* | 135,75<br>*5.344* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 22,5<br>*0.886* | 4 | C |

## T34A-R45HC

Blind holes – MF threads





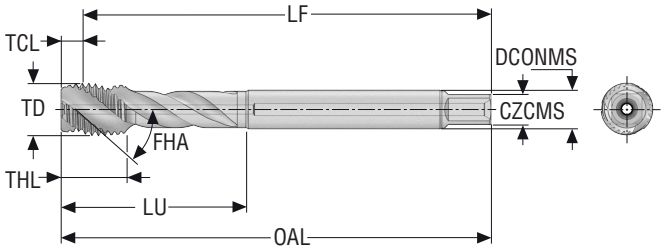

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34A-R45H02C03-8X1-65R | 10139025 | MF8X1.0 | 1,0 | 2,62<br>*0.103* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,38<br>*3.440* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | C |
| T34A-R45H02C03-10X1-65R | 10139026 | MF10X1.0 | 1,0 | 2,72<br>*0.107* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,28<br>*3.436* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | C |

## T34A-R45HC

Blind holes – MF threads





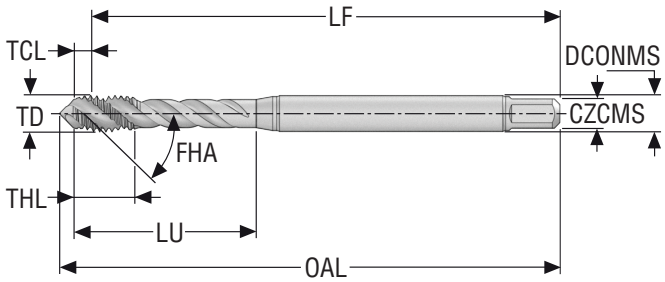

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN374
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34A-R45H02C05-8X1-65R | 10139027 | MF8X1.0 | 1,0 | 2,62<br>*0.103* | 8,0<br>*0.315* | 10,0<br>*0.394* | 35<br>*1.378* | 87,38<br>*3.440* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | C |
| T34A-R45H02C05-10X1-65R | 10139028 | MF10X1.0 | 1,0 | 2,62<br>*0.103* | 10,0<br>*0.394* | 10,0<br>*0.394* | 35<br>*1.378* | 87,38<br>*3.440* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | C |
| T34A-R45H02C05-12X1.5-65R | 10139029 | MF12X1.5 | 1,5 | 3,93<br>*0.155* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,07<br>*3.782* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | C |
| T34A-R45H02C05-14X1.5-65R | 10139030 | MF14X1.5 | 1,5 | 4,03<br>*0.159* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 95,97<br>*3.778* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | C |
| T34A-R45H02C05-16X1.5-65R | 10139031 | MF16X1.5 | 1,5 | 4,13<br>*0.163* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,87<br>*3.774* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |

## T34-R45HC

Blind holes – UNC threads





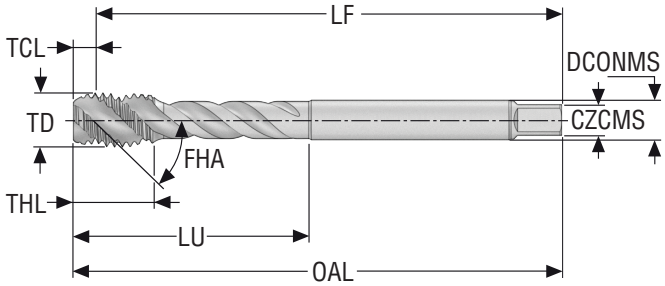

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 2BX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H08C03-4-40-22R | 10139054 | UNC4-40 | 40,0 | 1,48<br>*0.058* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 54,52<br>*2.146* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,35<br>*0.093* | 3 | C |
| T34-R45H08C03-5-40-22R | 10139055 | UNC5-40 | 40,0 | 1,53<br>*0.060* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,47<br>*2.144* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | C |
| T34-R45H08C03-6-32-22R | 10139056 | UNC6-32 | 32,0 | 1,95<br>*0.077* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,05<br>*2.128* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,85<br>*0.112* | 3 | C |
| T34-R45H08C03-8-32-22R | 10139057 | UNC8-32 | 32,0 | 1,89<br>*0.074* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,11<br>*2.406* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | C |
| T34-R45H08C03-10-24-22R | 10139058 | UNC10-24 | 24,0 | 2,53<br>*0.100* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 67,47<br>*2.656* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 3,9<br>*0.154* | 3 | C |
| T34-R45H08C03-12-24-22R | 10139059 | UNC12-24 | 24,0 | 2,47<br>*0.097* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,53<br>*3.052* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,5<br>*0.177* | 3 | C |
| T34-R45H08C03-1/4-20-22R | 10139060 | UNC1/4-20 | 20,0 | 2,94<br>*0.116* | 6,35<br>*0.250* | 13,0<br>*0.512* | 32<br>*1.260* | 77,06<br>*3.034* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,1<br>*0.201* | 3 | C |
| T34-R45H08C03-5/16-18-22R | 10139061 | UNC5/16-18 | 18,0 | 3,59<br>*0.141* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 86,41<br>*3.402* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | C |
| T34-R45H08C03-3/8-16-22R | 10139062 | UNC3/8-16 | 16,0 | 4,03<br>*0.159* | 9,525<br>*0.375* | 15,0<br>*0.591* | 39<br>*1.535* | 95,97<br>*3.778* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,0<br>*0.315* | 3 | C |

## T34-R45HC

Blind holes – UNC threads





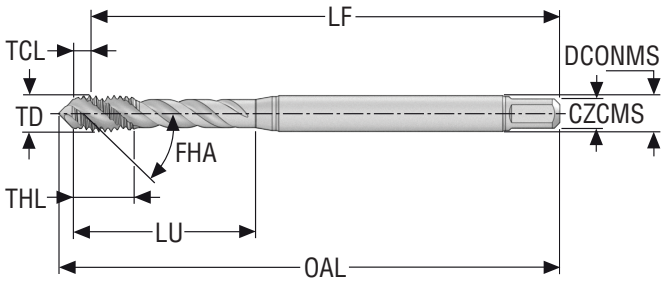

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 2BX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H08C06-7/16-14-22R | 10139063 | UNC7/16-14 | 14,0 | 4,65<br>*0.183* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 95,35<br>*3.754* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,3<br>*0.366* | 3 | C |
| T34-R45H08C06-1/2-13-22R | 10139064 | UNC1/2-13 | 13,0 | 4,99<br>*0.196* | 12,7<br>*0.500* | 18,0<br>*0.709* | 83<br>*3.268* | 105,01<br>*4.134* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,7<br>*0.421* | 3 | C |
| T34-R45H08C06-9/16-12-22R | 10139065 | UNC9/16-12 | 12,0 | 5,43<br>*0.214* | 14,287<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 104,57<br>*4.117* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,3<br>*0.484* | 4 | C |
| T34-R45H08C06-5/8-11-22R | 10139066 | UNC5/8-11 | 11,0 | 5,87<br>*0.231* | 15,875<br>*0.625* | 22,0<br>*0.866* | 68<br>*2.677* | 104,13<br>*4.100* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,5<br>*0.531* | 4 | C |

## T34-R45HC

Blind holes – UNC threads





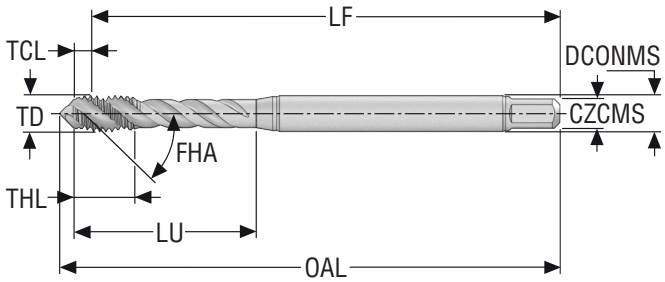

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN/ANSI
—Thread tolerance class: 2BX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T34-R45H08C93-4-40-22R | 10280358 | UNC4-40 | 40.0 | 0.058 | 0.112 | 0.197 | 0.720 | 2.152 | 2.252 | 0.141 | 3.581x2.79 | 0.093 | 3 | C |
| T34-R45H08C93-5-40-22R | 10280359 | UNC5-40 | 40.0 | 0.060 | 0.125 | 0.276 | 0.714 | 2.144 | 2.252 | 0.141 | 3.581x2.79 | 0.104 | 3 | C |
| T34-R45H08C93-6-32-22R | 10280360 | UNC6-32 | 32.0 | 0.077 | 0.138 | 0.236 | 0.799 | 2.134 | 2.260 | 0.141 | 3.581x2.79 | 0.112 | 3 | C |
| T34-R45H08C93-8-32-22R | 10280361 | UNC8-32 | 32.0 | 0.074 | 0.164 | 0.276 | 0.832 | 2.406 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | C |
| T34-R45H08C93-10-24-22R | 10280362 | UNC10-24 | 24.0 | 0.100 | 0.190 | 0.315 | 1.000 | 2.666 | 2.835 | 0.194 | 4.928x3.86 | 0.154 | 3 | C |
| T34-R45H08C93-12-24-22R | 10280363 | UNC12-24 | 24.0 | 0.097 | 0.216 | 0.394 | 1.191 | 3.056 | 3.236 | 0.220 | 5.588x4.19 | 0.177 | 3 | C |
| T34-R45H08C93-1/4-20-22R | 10280364 | UNC1/4-20 | 20.0 | 0.116 | 0.250 | 0.512 | 1.269 | 3.034 | 3.244 | 0.255 | 6.477x4.85 | 0.201 | 3 | C |
| T34-R45H08C93-5/16-18-22R | 10280365 | UNC5/16-18 | 18.0 | 0.141 | 0.312 | 0.512 | 1.383 | 3.402 | 3.543 | 0.318 | 8.077x6.05 | 0.260 | 3 | C |
| T34-R45H08C93-3/8-16-22R | 10280366 | UNC3/8-16 | 16.0 | 0.159 | 0.375 | 0.591 | 1.541 | 3.778 | 3.937 | 0.381 | 9.667x7.26 | 0.315 | 3 | C |
| T34-R45H08C96-7/16-14-22R | 10280367 | UNC7/16-14 | 14.0 | 0.183 | 0.437 | 0.591 | 2.858 | 3.754 | 3.937 | 0.323 | 8.204x6.15 | 0.366 | 3 | C |
| T34-R45H08C96-1/2-13-22R | 10280368 | UNC1/2-13 | 13.0 | 0.196 | 0.500 | 0.709 | 3.221 | 4.134 | 4.331 | 0.367 | 9.322x6.99 | 0.421 | 3 | C |
| T34-R45H08C96-9/16-12-22R | 10280369 | UNC9/16-12 | 12.0 | 0.214 | 0.562 | 0.787 | 3.161 | 4.117 | 4.331 | 0.429 | 10.987x8.18 | 0.484 | 4 | C |
| T34-R45H08C96-5/8-11-22R | 10280370 | UNC5/8-11 | 11.0 | 0.231 | 0.625 | 0.866 | 2.590 | 4.100 | 4.331 | 0.480 | 12.192x9.14 | 0.531 | 4 | C |
| T34-R45H08C96-3/4-10-22R | 10280371 | UNC3/4-10 | 10.0 | 0.250 | 0.750 | 1.260 | 3.050 | 4.671 | 4.921 | 0.590 | 14.986x11.23 | 0.650 | 4 | C |
| T34-R45H08C96-7/8-9-22R | 10280372 | UNC7/8-9 | 9.0 | 0.277 | 0.875 | 1.260 | 3.581 | 5.235 | 5.512 | 0.697 | 17.704x13.28 | 0.768 | 4 | C |
| T34-R45H08C96-1-8-22R | 10280373 | UNC1-8 | 8.0 | 0.323 | 1.000 | 1.496 | 3.757 | 5.976 | 6.299 | 0.800 | 20.320x15.24 | 0.876 | 4 | C |

## T34-R45HC

Blind holes – UNF threads





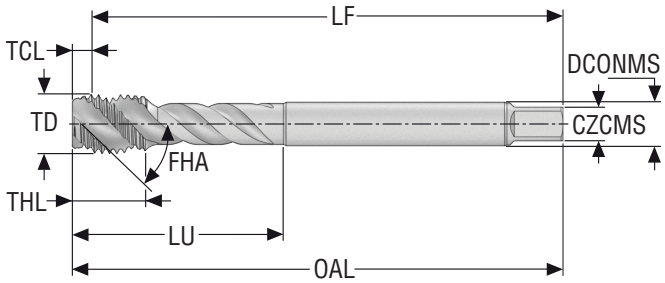

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 2BX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H09C03-4-48-22R | 10139067 | UNF4-48 | 48,0 | 1,29<br>*0.051* | 2,845<br>*0.112* | 5,0<br>*0.197* | 18<br>*0.709* | 54,71<br>*2.154* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,4<br>*0.094* | 3 | C |
| T34-R45H09C03-5-44-22R | 10139068 | UNF5-44 | 44,0 | 1,35<br>*0.053* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,65<br>*2.152* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,7<br>*0.106* | 3 | C |
| T34-R45H09C03-6-40-22R | 10139073 | UNF6-40 | 40,0 | 1,59<br>*0.063* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,41<br>*2.142* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 2,95<br>*0.116* | 3 | C |
| T34-R45H09C03-8-36-22R | 10139074 | UNF8-36 | 36,0 | 1,71<br>*0.067* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,29<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,5<br>*0.138* | 3 | C |
| T34-R45H09C03-10-32-22R | 10139075 | UNF10-32 | 32,0 | 2,0<br>*0.079* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 68,0<br>*2.677* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,1<br>*0.161* | 3 | C |
| T34-R45H09C03-12-28-22R | 10139076 | UNF12-28 | 28,0 | 2,11<br>*0.083* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,89<br>*3.067* | 82,2<br>*3.236* | 6,0<br>*0.236* | 6.00X4.90 | 4,6<br>*0.181* | 3 | C |
| T34-R45H09C03-1/4-28-22R | 10139077 | UNF1/4-28 | 28,0 | 2,23<br>*0.088* | 6,35<br>*0.250* | 10,0<br>*0.394* | 30<br>*1.181* | 77,77<br>*3.062* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,5<br>*0.217* | 3 | C |
| T34-R45H09C03-5/16-24-22R | 10139078 | UNF5/16-24 | 24,0 | 2,87<br>*0.113* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 87,13<br>*3.430* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,9<br>*0.272* | 3 | C |
| T34-R45H09C03-3/8-24-22R | 10139079 | UNF3/8-24 | 24,0 | 2,96<br>*0.117* | 9,525<br>*0.375* | 15,0<br>*0.591* | 35<br>*1.378* | 87,04<br>*3.427* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | C |

## T34-R45HC

Blind holes – UNF threads





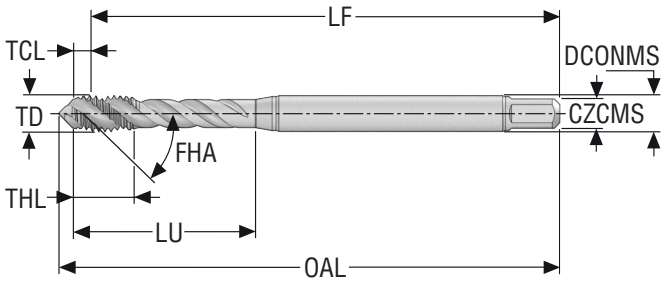

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN374
–Thread tolerance class: 2BX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H09C05-7/16-20-22R | 10139080 | UNF7/16-20 | 20,0 | 3,39<br>*0.133* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 96,61<br>*3.804* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 9,9<br>*0.390* | 3 | C |
| T34-R45H09C05-1/2-20-22R | 10139081 | UNF1/2-20 | 20,0 | 3,56<br>*0.140* | 12,7<br>*0.500* | 15,0<br>*0.591* | 73<br>*2.874* | 96,44<br>*3.797* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | C |
| T34-R45H09C05-9/16-18-22R | 10139082 | UNF9/16-18 | 18,0 | 3,86<br>*0.152* | 14,287<br>*0.562* | 15,0<br>*0.591* | 71<br>*2.795* | 96,14<br>*3.785* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,0<br>*0.512* | 4 | C |
| T34-R45H09C05-5/8-18-22R | 10139083 | UNF5/8-18 | 18,0 | 3,91<br>*0.154* | 15,875<br>*0.625* | 15,0<br>*0.591* | 58<br>*2.283* | 96,09<br>*3.783* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | C |

## T34-R45HC

Blind holes – UNF threads





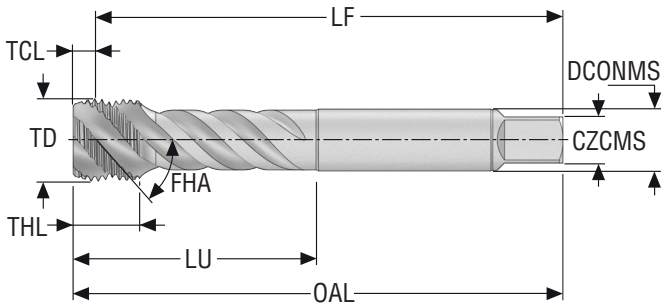

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN/ANSI
- Thread tolerance class: 2BX
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | Inch | Inch | Inch | Inch | Inch | Inch | Inch | | Inch | | |
| T34-R45H09C93-4-48-22R | 10280374 | UNF4-48 | 48.0 | 0.051 | 0.112 | 0.197 | 0.718 | 2.158 | 2.252 | 0.141 | 3.581x2.79 | 0.094 | 3 | C |
| T34-R45H09C93-5-44-22R | 10280375 | UNF5-44 | 44.0 | 0.053 | 0.125 | 0.276 | 0.712 | 2.150 | 2.252 | 0.141 | 3.581x2.79 | 0.106 | 3 | C |
| T34-R45H09C93-6-40-22R | 10280376 | UNF6-40 | 40.0 | 0.063 | 0.138 | 0.236 | 0.795 | 2.144 | 2.260 | 0.141 | 3.581x2.79 | 0.116 | 3 | C |
| T34-R45H09C93-8-36-22R | 10280377 | UNF8-36 | 36.0 | 0.067 | 0.164 | 0.276 | 0.830 | 2.411 | 2.543 | 0.168 | 4.267x3.33 | 0.138 | 3 | C |
| T34-R45H09C93-10-32-22R | 10280378 | UNF10-32 | 32.0 | 0.079 | 0.190 | 0.315 | 0.994 | 2.681 | 2.835 | 0.194 | 4.928x3.86 | 0.161 | 3 | C |
| T34-R45H09C93-12-28-22R | 10280379 | UNF12-28 | 28.0 | 0.083 | 0.216 | 0.394 | 1.187 | 3.067 | 3.236 | 0.220 | 5.588x4.19 | 0.181 | 3 | C |
| T34-R45H09C93-1/4-28-22R | 10280380 | UNF1/4-28 | 28.0 | 0.088 | 0.250 | 0.394 | 1.179 | 3.054 | 3.244 | 0.255 | 6.477x4.85 | 0.217 | 3 | C |
| T34-R45H09C93-5/16-24-22R | 10280381 | UNF5/16-24 | 24.0 | 0.113 | 0.312 | 0.512 | 1.383 | 3.430 | 3.543 | 0.318 | 8.077x6.05 | 0.272 | 3 | C |
| T34-R45H09C93-3/8-24-22R | 10280382 | UNF3/8-24 | 24.0 | 0.117 | 0.375 | 0.591 | 1.383 | 3.427 | 3.543 | 0.381 | 9.667x7.26 | 0.335 | 3 | C |
| T34-R45H09C95-7/16-20-22R | 10280383 | UNF7/16-20 | 20.0 | 0.133 | 0.437 | 0.591 | 2.858 | 3.804 | 3.937 | 0.323 | 8.204x6.15 | 0.390 | 3 | C |
| T34-R45H09C95-1/2-20-22R | 10280384 | UNF1/2-20 | 20.0 | 0.140 | 0.500 | 0.591 | 2.828 | 3.797 | 3.937 | 0.367 | 9.322x6.99 | 0.453 | 3 | C |
| T34-R45H09C95-9/16-18-22R | 10280385 | UNF9/16-18 | 18.0 | 0.152 | 0.562 | 0.591 | 2.768 | 3.785 | 3.937 | 0.429 | 10.987x8.18 | 0.512 | 4 | C |
| T34-R45H09C95-5/8-18-22R | 10280386 | UNF5/8-18 | 18.0 | 0.154 | 0.625 | 0.591 | 2.196 | 3.783 | 3.937 | 0.480 | 12.192x9.14 | 0.571 | 4 | C |
| T34-R45H09C95-3/4-16-22R | 10280387 | UNF3/4-16 | 16.0 | 0.166 | 0.750 | 0.945 | 2.459 | 4.165 | 4.331 | 0.590 | 14.986x11.23 | 0.689 | 4 | C |
| T34-R45H09C95-7/8-14-22R | 10280388 | UNF7/8-14 | 14.0 | 0.187 | 0.875 | 0.945 | 2.990 | 4.803 | 4.921 | 0.697 | 17.704x13.28 | 0.807 | 4 | C |
| T34-R45H09C95-1-12-22R | 10280389 | UNF1-12 | 12.0 | 0.231 | 1.000 | 1.063 | 2.970 | 5.280 | 5.512 | 0.800 | 20.320x15.24 | 0.917 | 4 | C |

## T34-R45HC

Blind holes – G threads





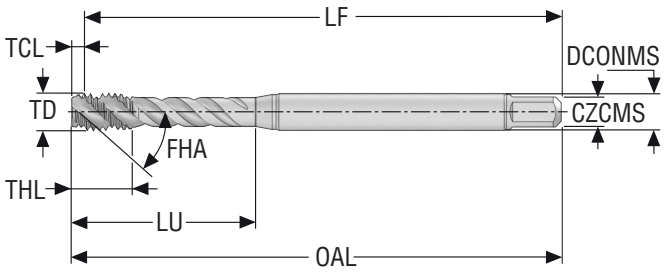

- Substrate: HSSE-PM
- Coating: TiAlN + WC/C
- Standard: DIN5156
- Thread tolerance class: NORMAL-X
- FHA = 45°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H21C09-1/8-28-12R | 10139084 | G1/8-28 | 28,0 | 2,43<br>*0.096* | 9,728<br>*0.383* | 10,0<br>*0.394* | 36<br>*1.417* | 87,57<br>*3.448* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 8,8<br>*0.346* | 3 | C |
| T34-R45H21C09-1/4-19-12R | 10139085 | G1/4-19 | 19,0 | 3,66<br>*0.144* | 13,157<br>*0.518* | 14,0<br>*0.551* | 71<br>*2.795* | 96,34<br>*3.793* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 11,8<br>*0.465* | 3 | C |
| T34-R45H21C09-3/8-19-12R | 10139086 | G3/8-19 | 19,0 | 3,67<br>*0.144* | 16,662<br>*0.656* | 15,0<br>*0.591* | 58<br>*2.283* | 96,33<br>*3.793* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 4 | C |
| T34-R45H21C09-1/2-14-12R | 10139087 | G1/2-14 | 14,0 | 4,93<br>*0.194* | 20,955<br>*0.825* | 17,0<br>*0.669* | 80<br>*3.150* | 120,07<br>*4.727* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,0<br>*0.748* | 4 | C |
| T34-R45H21C09-5/8-14-12R | 10139088 | G5/8-14 | 14,0 | 5,06<br>*0.199* | 22,911<br>*0.902* | 20,0<br>*0.787* | 78<br>*3.071* | 119,94<br>*4.722* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 21,0<br>*0.827* | 4 | C |
| T34-R45H21C09-3/4-14-12R | 10139089 | G3/4-14 | 14,0 | 5,05<br>*0.199* | 26,441<br>*1.041* | 20,0<br>*0.787* | 73<br>*2.874* | 134,95<br>*5.313* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 24,5<br>*0.965* | 4 | C |
| T34-R45H21C09-7/8-14-12R | 10139090 | G7/8-14 | 14,0 | 4,98<br>*0.196* | 30,201<br>*1.189* | 22,0<br>*0.866* | 85<br>*3.346* | 145,02<br>*5.709* | 150,0<br>*5.906* | 22,0<br>*0.866* | 22.00X18.00 | 28,25<br>*1.112* | 4 | C |
| T34-R45H21C09-1-11-12R | 10139091 | G1-11 | 11,0 | 6,56<br>*0.258* | 33,249<br>*1.309* | 24,0<br>*0.945* | 93<br>*3.661* | 153,44<br>*6.041* | 160,0<br>*6.299* | 25,0<br>*0.984* | 25.00X20.00 | 30,75<br>*1.211* | 4 | C |

## T34-R45HE

Blind holes – Metric coarse threads





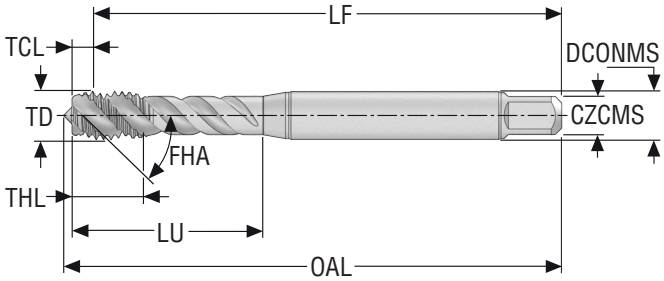

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01E03-3X0.5-65R | 10138991 | M3 | 0,5 | 0,81<br>*0.032* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 55,19<br>*2.173* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,5<br>*0.098* | 3 | E |
| T34-R45H01E03-3.5X0.6-65R | 10138992 | M3.5 | 0,6 | 0,94<br>*0.037* | 3,5<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 55,06<br>*2.168* | 56,0<br>*2.205* | 4,0<br>*0.157* | 4.00X3.00 | 2,9<br>*0.114* | 3 | E |
| T34-R45H01E03-4X0.7-65R | 10138993 | M4 | 0,7 | 1,18<br>*0.046* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,82<br>*2.434* | 63,0<br>*2.480* | 4,5<br>*0.177* | 4.50X3.40 | 3,3<br>*0.130* | 3 | E |
| T34-R45H01E03-4.5X0.75-65R | 10138994 | M4.5 | 0,75 | 1,18<br>*0.046* | 4,5<br>*0.177* | 7,5<br>*0.295* | 25<br>*0.984* | 68,82<br>*2.709* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | E |
| T34-R45H01E03-5X0.8-65R | 10138995 | M5 | 0,8 | 1,31<br>*0.052* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,69<br>*2.704* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | E |
| T34-R45H01E03-6X1-65R | 10138996 | M6 | 1,0 | 1,57<br>*0.062* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,43<br>*3.088* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 3 | E |
| T34-R45H01E03-8X1.25-65R | 10138997 | M8 | 1,25 | 2,23<br>*0.088* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,77<br>*3.456* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,8<br>*0.268* | 3 | E |
| T34-R45H01E03-10X1.5-65R | 10138998 | M10 | 1,5 | 2,6<br>*0.102* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 97,4<br>*3.835* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,5<br>*0.335* | 3 | E |

## T34-R45HE

Blind holes – Metric coarse threads





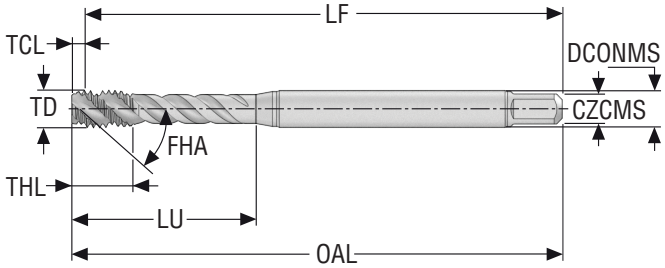

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H01E06-12X1.75-65R | 10138999 | M12 | 1,75 | 3,18<br>*0.125* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 106,82<br>*4.206* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 10,2<br>*0.402* | 3 | E |
| T34-R45H01E06-14X2-65R | 10139000 | M14 | 2,0 | 3,65<br>*0.144* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 106,35<br>*4.187* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,0<br>*0.472* | 4 | E |
| T34-R45H01E06-16X2-65R | 10139001 | M16 | 2,0 | 3,75<br>*0.148* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 106,25<br>*4.183* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,0<br>*0.551* | 4 | E |

## T34-R45HE

Blind holes – MF threads





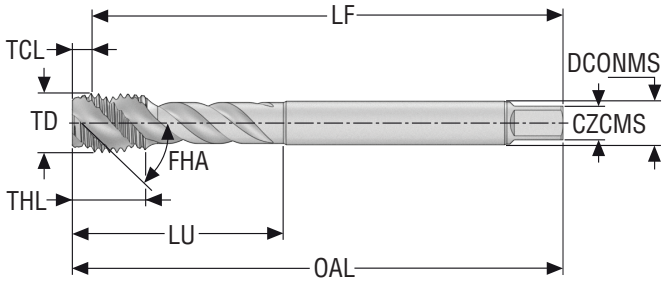

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6HX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H02E03-8X1-65R | 10139032 | MF8X1.0 | 1,0 | 1,87<br>*0.074* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 88,13<br>*3.470* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | E |
| T34-R45H02E03-10X1-65R | 10139033 | MF10X1.0 | 1,0 | 1,97<br>*0.078* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 88,03<br>*3.466* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | E |

## T34-R45HE

Blind holes – MF threads





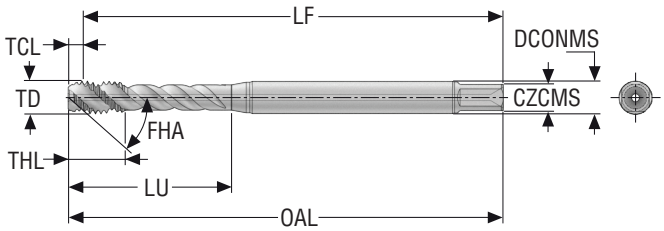

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN374
–Thread tolerance class: 6HX
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H02E05-8X1-65R | 10139034 | MF8X1.0 | 1,0 | 1,87<br>*0.074* | 8,0<br>*0.315* | 10,0<br>*0.394* | 35<br>*1.378* | 88,13<br>*3.470* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00X4.90 | 7,0<br>*0.276* | 3 | E |
| T34-R45H02E05-10X1-65R | 10139035 | MF10X1.0 | 1,0 | 1,87<br>*0.074* | 10,0<br>*0.394* | 10,0<br>*0.394* | 35<br>*1.378* | 88,13<br>*3.470* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,0<br>*0.354* | 3 | E |
| T34-R45H02E05-12X1.5-65R | 10139036 | MF12X1.5 | 1,5 | 2,81<br>*0.111* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 97,19<br>*3.826* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | E |
| T34-R45H02E05-14X1.5-65R | 10139037 | MF14X1.5 | 1,5 | 3,01<br>*0.119* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,99<br>*3.819* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | E |
| T34-R45H02E05-16X1.5-65R | 10139038 | MF16X1.5 | 1,5 | 3,01<br>*0.119* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 96,99<br>*3.819* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | E |

## T34A-R45HE

Blind holes – MF threads





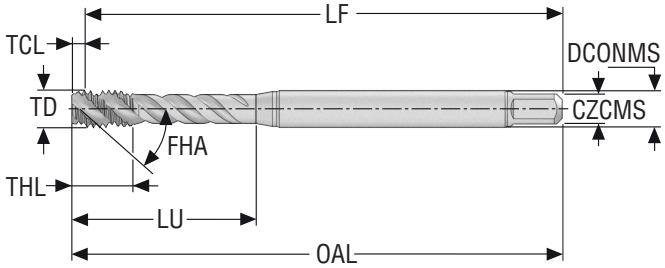

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34A-R45H02E03-8X1-65R | 10139039 | MF8X1.0 | 1,0 | 1,87<br>*0.074* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 88,13<br>*3.470* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 7,0<br>*0.276* | 3 | E |
| T34A-R45H02E03-10X1-65R | 10139040 | MF10X1.0 | 1,0 | 1,97<br>*0.078* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 88,03<br>*3.466* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,0<br>*0.354* | 3 | E |

## T34-R45HE

Blind holes – EGM threads





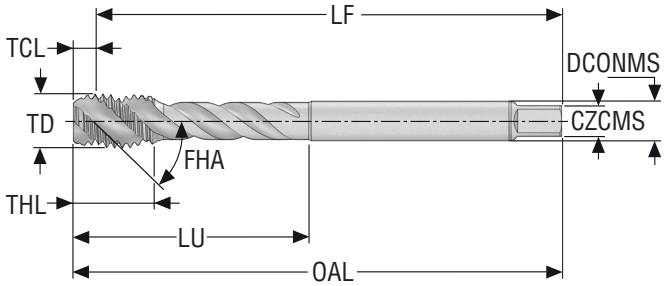

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 6H mod.
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H04E03-2X0.4-64R | 10139092 | EGM2 | 0,4 | 0,73<br>*0.029* | 2,52<br>*0.099* | 5,0<br>*0.197* | 14<br>*0.551* | 49,27<br>*1.940* | 50,0<br>*1.969* | 2,8<br>*0.110* | 2.80X2.10 | 2,1<br>*0.083* | 2 | E |
| T34-R45H04E03-2.5X0.45-64R | 10139093 | EGM2.5 | 0,45 | 0,75<br>*0.030* | 3,084<br>*0.121* | 5,0<br>*0.197* | 18<br>*0.709* | 55,25<br>*2.175* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,65<br>*0.104* | 3 | E |
| T34-R45H04E03-3X0.5-64R | 10139094 | EGM3 | 0,5 | 0,83<br>*0.033* | 3,65<br>*0.144* | 5,0<br>*0.197* | 21<br>*0.827* | 62,17<br>*2.448* | 63,0<br>*2.480* | 4,5<br>*0.177* | 4.50X3.40 | 3,15<br>*0.124* | 3 | E |
| T34-R45H04E03-4X0.7-64R | 10139095 | EGM4 | 0,7 | 1,15<br>*0.045* | 4,91<br>*0.193* | 8,0<br>*0.315* | 25<br>*0.984* | 68,85<br>*2.711* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,2<br>*0.165* | 3 | E |
| T34-R45H04E03-5X0.8-64R | 10139096 | EGM5 | 0,8 | 1,19<br>*0.047* | 6,04<br>*0.238* | 10,0<br>*0.394* | 30<br>*1.181* | 78,81<br>*3.103* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,25<br>*0.207* | 3 | E |
| T34-R45H04E03-6X1-64R | 10139097 | EGM6 | 1,0 | 1,81<br>*0.071* | 7,3<br>*0.287* | 10,0<br>*0.394* | 35<br>*1.378* | 88,19<br>*3.472* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,3<br>*0.248* | 3 | E |
| T34-R45H04E03-8X1.25-64R | 10139098 | EGM8 | 1,25 | 2,2<br>*0.087* | 9,624<br>*0.379* | 13,0<br>*0.512* | 39<br>*1.535* | 97,8<br>*3.850* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,4<br>*0.331* | 3 | E |

## T34-R45HE

Blind holes – EGM threads





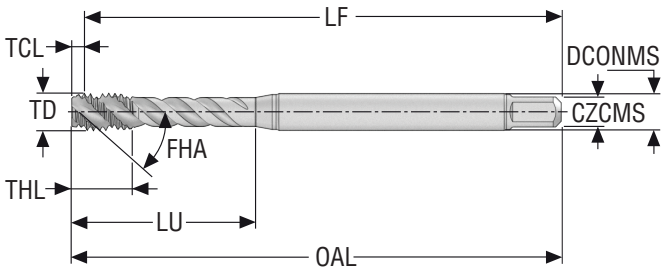

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 6H mod.
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H04E06-10X1.5-64R | 10139111 | EGM10 | 1,5 | 2,83<br>*0.111* | 11,948<br>*0.470* | 15,0<br>*0.591* | 73<br>*2.874* | 97,17<br>*3.826* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,5<br>*0.413* | 3 | E |
| T34-R45H04E06-12X1.75-64R | 10139112 | EGM12 | 1,75 | 3,21<br>*0.126* | 14,274<br>*0.562* | 20,0<br>*0.787* | 81<br>*3.189* | 106,79<br>*4.204* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 12,5<br>*0.492* | 4 | E |
| T34-R45H04E06-14X2-64R | 10139113 | EGM14 | 2,0 | 3,67<br>*0.144* | 16,598<br>*0.653* | 20,0<br>*0.787* | 68<br>*2.677* | 106,33<br>*4.186* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,5<br>*0.571* | 4 | E |
| T34-R45H04E06-16X2-64R | 10139114 | EGM16 | 2,0 | 3,67<br>*0.144* | 18,598<br>*0.732* | 20,0<br>*0.787* | 81<br>*3.189* | 121,33<br>*4.777* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | E |
| T34-R45H04E06-18X2.5-64R | 10139115 | EGM18 | 2,5 | 4,45<br>*0.175* | 21,248<br>*0.837* | 27,0<br>*1.063* | 93<br>*3.661* | 135,55<br>*5.337* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 18,75<br>*0.738* | 4 | E |
| T34-R45H04E06-20X2.5-64R | 10139116 | EGM20 | 2,5 | 4,55<br>*0.179* | 23,248<br>*0.915* | 30,0<br>*1.181* | 113<br>*4.449* | 155,45<br>*6.120* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00X14.50 | 20,75<br>*0.817* | 4 | E |

## T34-R45HE

Blind holes – EGUNC threads





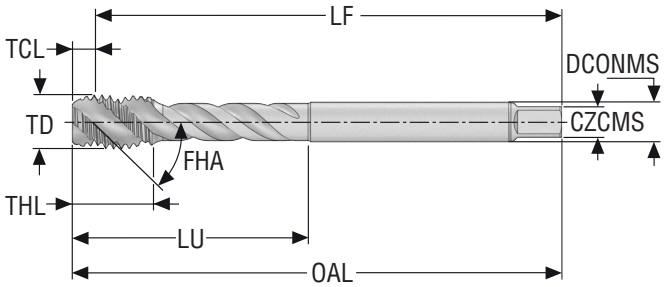

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN371
—Thread tolerance class: 2B
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H16E03-4-40-21R | 10139099 | EGUNC4-40 | 40,0 | 1,0<br>*0.039* | 3,67<br>*0.144* | 7,0<br>*0.276* | 21<br>*0.827* | 62,0<br>*2.441* | 63,0<br>*2.480* | 4,5<br>*0.177* | 4.50X3.40 | 3,1<br>*0.122* | 3 | E |
| T34-R45H16E03-6-32-21R | 10139100 | EGUNC6-32 | 32,0 | 1,32<br>*0.052* | 4,536<br>*0.179* | 8,0<br>*0.315* | 25<br>*0.984* | 68,68<br>*2.704* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 3,8<br>*0.150* | 3 | E |
| T34-R45H16E03-8-32-21R | 10139101 | EGUNC8-32 | 32,0 | 1,32<br>*0.052* | 5,197<br>*0.205* | 10,0<br>*0.394* | 30<br>*1.181* | 78,68<br>*3.098* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 4,4<br>*0.173* | 3 | E |
| T34-R45H16E03-10-24-21R | 10139102 | EGUNC10-24 | 24,0 | 1,64<br>*0.065* | 6,2<br>*0.244* | 12,0<br>*0.472* | 30<br>*1.181* | 78,36<br>*3.085* | 80,0<br>*3.150* | 7,0<br>*0.276* | 7.00X5.50 | 5,2<br>*0.205* | 3 | E |
| T34-R45H16E03-1/4-20-21R | 10139103 | EGUNC1/4-20 | 20,0 | 2,29<br>*0.090* | 8,001<br>*0.315* | 15,0<br>*0.591* | 35<br>*1.378* | 87,71<br>*3.453* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,7<br>*0.264* | 3 | E |
| T34-R45H16E03-5/16-18-21R | 10139104 | EGUNC5/16-18 | 18,0 | 2,5<br>*0.098* | 9,771<br>*0.385* | 18,0<br>*0.709* | 39<br>*1.535* | 97,5<br>*3.839* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8 | 8,4<br>*0.331* | 3 | E |

## T34-R45HE

Blind holes – EGUNC threads





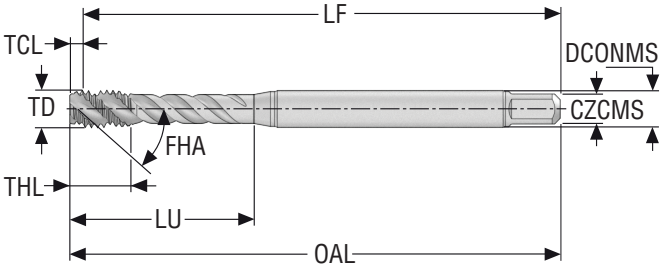

—Substrate: HSSE-PM
—Coating: TiAlN + WC/C
—Standard: DIN376
—Thread tolerance class: 2B
—FHA = 45°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H16E06-3/8-16-21R | 10139117 | EGUNC3/8-16 | 16,0 | 2,99<br>*0.118* | 11,587<br>*0.456* | 15,0<br>*0.591* | 73<br>*2.874* | 97,01<br>*3.819* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 10,0<br>*0.394* | 3 | E |
| T34-R45H16E06-7/16-14-21R | 10139118 | EGUNC7/16-14 | 14,0 | 3,3<br>*0.130* | 13,47<br>*0.530* | 18,0<br>*0.709* | 81<br>*3.189* | 106,7<br>*4.201* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 11,6<br>*0.457* | 3 | E |
| T34-R45H16E06-1/2-13-21R | 10139119 | EGUNC1/2-13 | 13,0 | 3,74<br>*0.147* | 15,237<br>*0.600* | 18,0<br>*0.709* | 68<br>*2.677* | 106,26<br>*4.183* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 13,3<br>*0.524* | 3 | E |
| T34-R45H16E06-9/16-12-21R | 10139120 | EGUNC9/16-12 | 12,0 | 3,6<br>*0.142* | 17,038<br>*0.671* | 20,0<br>*0.787* | 68<br>*2.677* | 106,4<br>*4.189* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 14,9<br>*0.587* | 4 | E |
| T34-R45H16E06-5/8-11-21R | 10139121 | EGUNC5/8-11 | 11,0 | 4,3<br>*0.169* | 18,875<br>*0.743* | 20,0<br>*0.787* | 81<br>*3.189* | 120,7<br>*4.752* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,5<br>*0.650* | 4 | E |
| T34-R45H16E06-3/4-10-21R | 10139122 | EGUNC3/4-10 | 10,0 | 4,8<br>*0.189* | 22,349<br>*0.880* | 25,0<br>*0.984* | 93<br>*3.661* | 135,2<br>*5.323* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00X14.50 | 19,75<br>*0.778* | 4 | E |

## T34-R45HE

Blind holes – EGUNF threads





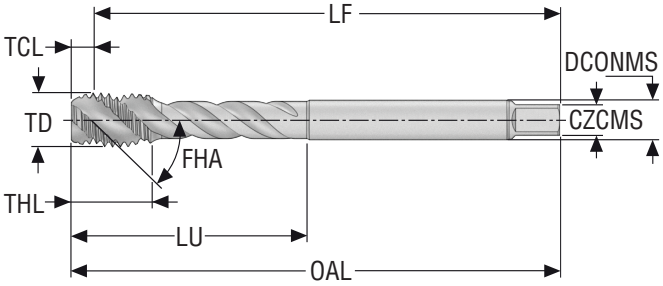

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN371
–Thread tolerance class: 2B
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H17E03-4-48-21R | 10139105 | EGUNF4-48 | 48,0 | 0,83<br>*0.033* | 3,533<br>*0.139* | 6,0<br>*0.236* | 20<br>*0.787* | 55,17<br>*2.172* | 56,0<br>*2.205* | 4,0<br>*0.157* | 4.00X3.00 | 3,0<br>*0.118* | 3 | E |
| T34-R45H17E03-6-40-21R | 10139106 | EGUNF6-40 | 40,0 | 1,12<br>*0.044* | 4,331<br>*0.171* | 7,0<br>*0.276* | 25<br>*0.984* | 68,88<br>*2.712* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 3,7<br>*0.146* | 3 | E |
| T34-R45H17E03-8-36-21R | 10139107 | EGUNF8-36 | 36,0 | 1,32<br>*0.052* | 5,083<br>*0.200* | 9,0<br>*0.354* | 30<br>*1.181* | 78,68<br>*3.098* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 4,4<br>*0.173* | 3 | E |
| T34-R45H17E03-10-32-21R | 10139108 | EGUNF10-32 | 32,0 | 1,23<br>*0.048* | 5,857<br>*0.231* | 9,0<br>*0.354* | 30<br>*1.181* | 78,77<br>*3.101* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,1<br>*0.201* | 3 | E |
| T34-R45H17E03-1/4-28-21R | 10139109 | EGUNF1/4-28 | 28,0 | 1,74<br>*0.069* | 7,529<br>*0.296* | 10,0<br>*0.394* | 35<br>*1.378* | 88,26<br>*3.475* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 6,6<br>*0.260* | 3 | E |
| T34-R45H17E03-5/16-24-21R | 10139110 | EGUNF5/16-24 | 24,0 | 2,52<br>*0.099* | 9,312<br>*0.367* | 12,0<br>*0.472* | 35<br>*1.378* | 87,48<br>*3.444* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 8,25<br>*0.325* | 3 | E |

## T34-R45HE

Blind holes – EGUNF threads





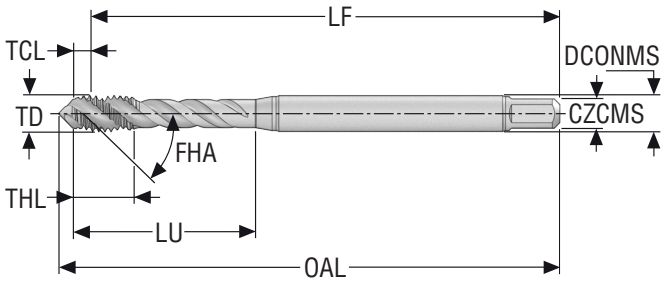

–Substrate: HSSE-PM
–Coating: TiAlN + WC/C
–Standard: DIN376
–Thread tolerance class: 2B
–FHA = 45°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45H17E06-3/8-24-21R | 10139123 | EGUNF3/8-24 | 24,0 | 2,0<br>*0.079* | 10,899<br>*0.429* | 12,0<br>*0.472* | 66<br>*2.598* | 88,0<br>*3.465* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.00 | 9,8<br>*0.386* | 3 | E |
| T34-R45H17E06-7/16-20-21R | 10139124 | EGUNF7/16-20 | 20,0 | 2,5<br>*0.098* | 12,763<br>*0.502* | 15,0<br>*0.591* | 73<br>*2.874* | 97,5<br>*3.839* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,5<br>*0.453* | 3 | E |
| T34-R45H17E06-1/2-20-21R | 10139125 | EGUNF1/2-20 | 20,0 | 2,5<br>*0.098* | 14,351<br>*0.565* | 15,0<br>*0.591* | 71<br>*2.795* | 97,5<br>*3.839* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 13,1<br>*0.516* | 3 | E |
| T34-R45H17E06-9/16-18-21R | 10139126 | EGUNF9/16-18 | 18,0 | 2,58<br>*0.102* | 16,121<br>*0.635* | 15,0<br>*0.591* | 58<br>*2.283* | 97,42<br>*3.835* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 14,7<br>*0.579* | 4 | E |
| T34-R45H17E06-5/8-18-21R | 10139127 | EGUNF5/8-18 | 18,0 | 2,7<br>*0.106* | 17,709<br>*0.697* | 15,0<br>*0.591* | 66<br>*2.598* | 107,3<br>*4.224* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 16,25<br>*0.640* | 4 | E |
| T34-R45H17E06-3/4-16-21R | 10139128 | EGUNF3/4-16 | 16,0 | 3,0<br>*0.118* | 21,112<br>*0.831* | 17,0<br>*0.669* | 80<br>*3.150* | 122,0<br>*4.803* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,5<br>*0.768* | 4 | E |

## T34-R45CC

Blind holes – Metric coarse threads





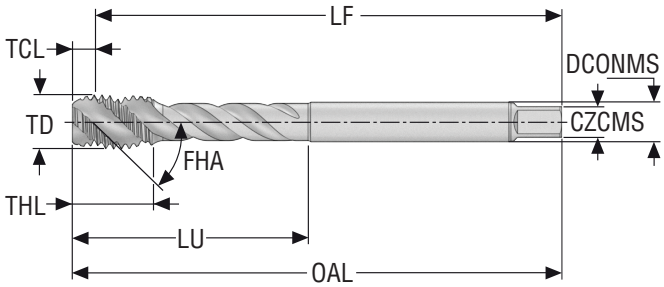

- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN371
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 251

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45C01C03-3X0.5-65R | 10309853 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T34-R45C01C03-4X0.7-65R | 10309854 | M4 | 0,7 | 1,75<br>*0.069* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T34-R45C01C03-5X0.8-65R | 10309855 | M5 | 0,8 | 1,94<br>*0.076* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T34-R45C01C03-6X1-65R | 10309856 | M6 | 1,0 | 2,31<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T34-R45C01C03-8X1.25-65R | 10309857 | M8 | 1,25 | 3,16<br>*0.124* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,8<br>*3.417* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T34-R45C01C03-10X1.5-65R | 10309858 | M10 | 1,5 | 3,81<br>*0.150* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T34-R45CC

Blind holes – Metric coarse threads





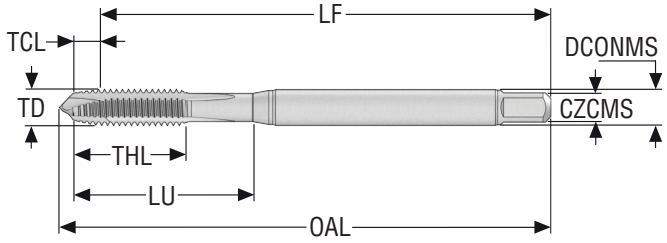

- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN376
- Thread tolerance class: 6HX
- FHA = 45°
- For cutting data see page(s) 251

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T34-R45C01C06-12X1.75-65R | 10309870 | M12 | 1,75 | 4,47<br>*0.176* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,5<br>*4.154* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T34-R45C01C06-14X2-65R | 10309871 | M14 | 2,0 | 5,11<br>*0.201* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 104,9<br>*4.130* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T34-R45C01C06-16X2-65R | 10309872 | M16 | 2,0 | 5,21<br>*0.205* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,8<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T34-R45C01C06-18X2.5-65R | 10309902 | M18 | 2,5 | 6,28<br>*0.247* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 118,7<br>*4.673* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | C |
| T34-R45C01C06-20X2.5-65R | 10309873 | M20 | 2,5 | 6,28<br>*0.247* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,7<br>*5.264* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |

## T35-PSB-P

Through holes – Metric coarse threads





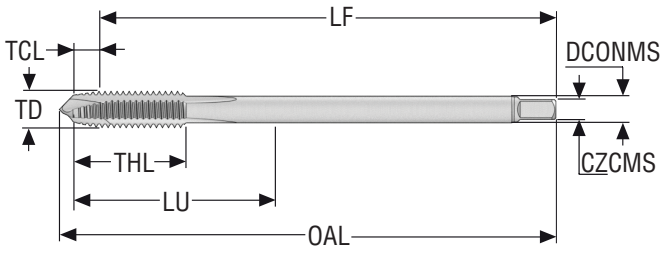

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6H
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-PS01B03-3X0.5-63R-P | 10309932 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 53,8<br>*2.118* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | B |
| T35-PS01B03-4X0.7-63R-P | 10309933 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 59,8<br>*2.354* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | B |
| T35-PS01B03-5X0.8-63R-P | 10309934 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 66,4<br>*2.614* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | B |
| T35-PS01B03-6X1-63R-P | 10309935 | M6 | 1,0 | 4,37<br>*0.172* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 75,6<br>*2.976* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | B |
| T35-PS01B03-8X1.25-63R-P | 10309936 | M8 | 1,25 | 5,4<br>*0.213* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 84,7<br>*3.335* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | B |
| T35-PS01B03-10X1.5-63R-P | 10309938 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 93,2<br>*3.669* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | B |

## T35-PSB-P

Through holes – Metric coarse threads





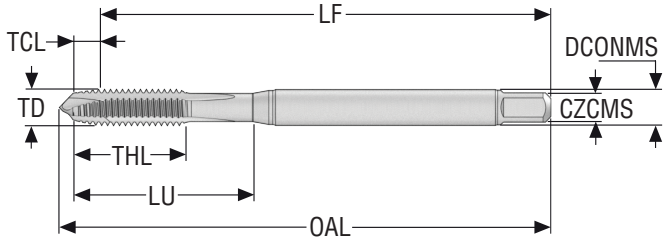

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN376
—Thread tolerance class: 6H
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-PS01B06-3X0.5-63R-P | 10309965 | M3 | 0,5 | 2,25<br>*0.089* | 3,0<br>*0.118* | 11,0<br>*0.433* | 37<br>*1.457* | 53,8<br>*2.118* | 57,2<br>*2.252* | 2,2<br>*0.087* | 2.20x1.80 | 2,5<br>*0.098* | 3 | B |
| T35-PS01B06-4X0.7-63R-P | 10309948 | M4 | 0,7 | 3,3<br>*0.130* | 4,0<br>*0.157* | 12,0<br>*0.472* | 44<br>*1.732* | 59,7<br>*2.350* | 64,5<br>*2.539* | 2,8<br>*0.110* | 2.80x2.10 | 3,3<br>*0.130* | 3 | B |
| T35-PS01B06-5X0.8-63R-P | 10309949 | M5 | 0,8 | 3,65<br>*0.144* | 5,0<br>*0.197* | 14,0<br>*0.551* | 51<br>*2.008* | 66,4<br>*2.614* | 72,0<br>*2.835* | 3,5<br>*0.138* | 3.50x2.70 | 4,2<br>*0.165* | 3 | B |
| T35-PS01B06-6X1-63R-P | 10309950 | M6 | 1,0 | 4,37<br>*0.172* | 6,0<br>*0.236* | 18,0<br>*0.709* | 61<br>*2.402* | 75,6<br>*2.976* | 82,4<br>*3.244* | 4,5<br>*0.177* | 4.50x3.40 | 5,0<br>*0.197* | 3 | B |
| T35-PS01B06-8X1.25-63R-P | 10309951 | M8 | 1,25 | 5,7<br>*0.224* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 84,3<br>*3.319* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 3 | B |
| T35-PS01B06-10X1.5-63R-P | 10309952 | M10 | 1,5 | 6,84<br>*0.269* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 93,2<br>*3.669* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 3 | B |
| T35-PS01B06-12X1.75-63R-P | 10309953 | M12 | 1,75 | 8,01<br>*0.315* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 102,0<br>*4.016* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | B |
| T35-PS01B06-14X2-63R-P | 10309955 | M14 | 2,0 | 9,14<br>*0.360* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 100,9<br>*3.972* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 3 | B |
| T35-PS01B06-16X2-63R-P | 10309957 | M16 | 2,0 | 9,24<br>*0.364* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 100,8<br>*3.969* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | B |
| T35-PS01B06-18X2.5-63R-P | 10309970 | M18 | 2,5 | 11,38<br>*0.448* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 113,6<br>*4.472* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | B |
| T35-PS01B06-20X2.5-63R-P | 10309959 | M20 | 2,5 | 11,58<br>*0.456* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 128,4<br>*5.055* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | B |
| T35-PS01B06-22X2.5-63R-P | 10309971 | M22 | 2,5 | 11,78<br>*0.464* | 20,0<br>*0.787* | 32,0<br>*1.260* | 93<br>*3.661* | 128,2<br>*5.047* | 140,0<br>*5.512* | 18,0<br>*0.709* | 18.00x14.50 | 19,5<br>*0.768* | 4 | B |
| T35-PS01B06-24X3-63R-P | 10309960 | M24 | 3,0 | 13,88<br>*0.546* | 24,0<br>*0.945* | 38,0<br>*1.496* | 113<br>*4.449* | 146,1<br>*5.752* | 160,0<br>*6.299* | 18,0<br>*0.709* | 18.00x14.50 | 21,0<br>*0.827* | 4 | B |

## T35-PSB-P

Through holes – MF threads





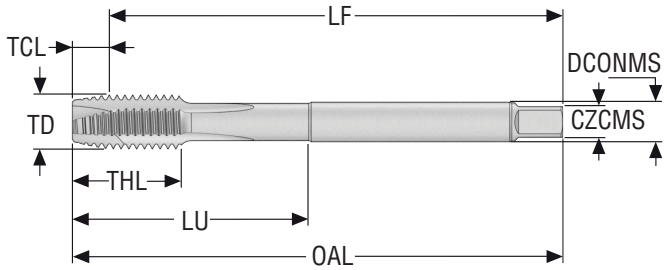

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN371
–Thread tolerance class: 6H
–For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-PS02B03-8X1-63R-P | 10309937 | MF8X1 | 1,0 | 4,37<br>*0.172* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 85,5<br>*3.366* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | B |
| T35-PS02B03-10X1-63R-P | 10309939 | MF10X1 | 1,0 | 4,77<br>*0.188* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 85,2<br>*3.354* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | B |

## T35-PSB-P

Through holes – MF threads





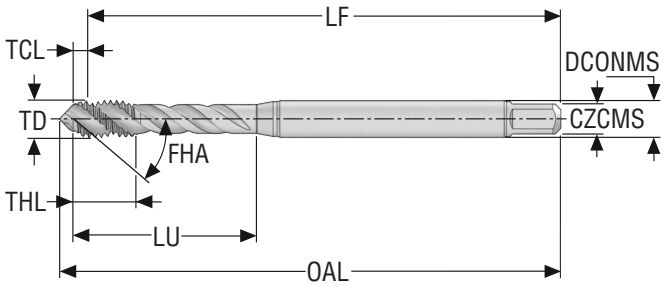

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN374
–Thread tolerance class: 6H
–For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-PS02B05-8X1-63R-P | 10309966 | MF8X1 | 1,0 | 4,67<br>*0.184* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 85,3<br>*3.358* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | B |
| T35-PS02B05-10X1-63R-P | 10309967 | MF10X1 | 1,0 | 4,77<br>*0.188* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 85,2<br>*3.354* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | B |
| T35-PS02B05-10X1.25-63R-P | 10309968 | MF10X1.25 | 1,25 | 5,8<br>*0.228* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 94,2<br>*3.709* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | B |
| T35-PS02B05-12X1.25-63R-P | 10309969 | MF12X1.25 | 1,25 | 5,94<br>*0.234* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 94,1<br>*3.705* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | B |
| T35-PS02B05-12X1.5-63R-P | 10309954 | MF12X1.5 | 1,5 | 6,97<br>*0.274* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 93,0<br>*3.661* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | B |
| T35-PS02B05-14X1.5-63R-P | 10309956 | MF14X1.5 | 1,5 | 7,07<br>*0.278* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 92,9<br>*3.657* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 3 | B |
| T35-PS02B05-16X1.5-63R-P | 10309958 | MF16X1.5 | 1,5 | 7,17<br>*0.282* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 92,8<br>*3.654* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 3 | B |

## T35-R40SC-P

Blind holes – Metric coarse threads





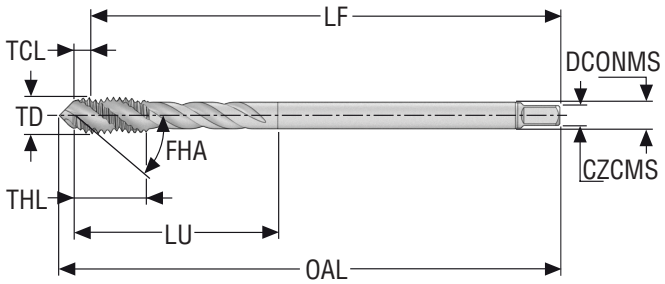

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-R40S01C03-3X0.5-63R-P | 10309859 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T35-R40S01C03-4X0.7-63R-P | 10309860 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T35-R40S01C03-5X0.8-63R-P | 10309861 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T35-R40S01C03-6X1-63R-P | 10309862 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T35-R40S01C03-8X1.25-63R-P | 10309863 | M8 | 1,25 | 3,11<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T35-R40S01C03-10X1.5-63R-P | 10309865 | M10 | 1,5 | 3,76<br>*0.148* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T35-R40SC-P

Blind holes – Metric coarse threads





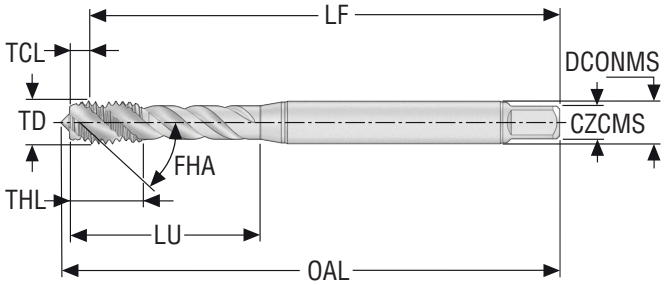

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN376
- Thread tolerance class: 6H
- FHA = 40°
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | | mm<br>Inch | | |
| T35-R40S01C06-3X0.5-63R-P | 10309903 | M3 | 0,5 | 1,17<br>0.046 | 3,0<br>0.118 | 5,0<br>0.197 | 37<br>1.457 | 54,8<br>2.157 | 57,2<br>2.252 | 2,2<br>0.087 | 2.20x1.80 | 2,5<br>0.098 | 3 | C |
| T35-R40S01C06-4X0.7-63R-P | 10309904 | M4 | 0,7 | 1,72<br>0.068 | 4,0<br>0.157 | 8,0<br>0.315 | 44<br>1.732 | 61,2<br>2.409 | 64,5<br>2.539 | 2,8<br>0.110 | 2.80x2.10 | 3,3<br>0.130 | 3 | C |
| T35-R40S01C06-5X0.8-63R-P | 10309905 | M5 | 0,8 | 1,9<br>0.075 | 5,0<br>0.197 | 10,0<br>0.394 | 51<br>2.008 | 68,1<br>2.681 | 72,0<br>2.835 | 3,5<br>0.138 | 3.50x2.70 | 4,2<br>0.165 | 3 | C |
| T35-R40S01C06-6X1-63R-P | 10309906 | M6 | 1,0 | 2,28<br>0.090 | 6,0<br>0.236 | 12,0<br>0.472 | 61<br>2.402 | 77,7<br>3.059 | 82,4<br>3.244 | 4,5<br>0.177 | 4.50x3.40 | 5,0<br>0.197 | 3 | C |
| T35-R40S01C06-8X1.25-63R-P | 10309874 | M8 | 1,25 | 3,11<br>0.122 | 8,0<br>0.315 | 15,0<br>0.591 | 67<br>2.638 | 86,9<br>3.421 | 90,0<br>3.543 | 6,0<br>0.236 | 6.00x4.90 | 6,8<br>0.268 | 3 | C |
| T35-R40S01C06-10X1.5-63R-P | 10309876 | M10 | 1,5 | 3,76<br>0.148 | 10,0<br>0.394 | 17,0<br>0.669 | 77<br>3.031 | 96,2<br>3.787 | 100,0<br>3.937 | 7,0<br>0.276 | 7.00x5.50 | 8,5<br>0.335 | 3 | C |
| T35-R40S01C06-12X1.75-63R-P | 10309877 | M12 | 1,75 | 4,41<br>0.174 | 12,0<br>0.472 | 18,0<br>0.709 | 83<br>3.268 | 105,6<br>4.157 | 110,0<br>4.331 | 9,0<br>0.354 | 9.00x7.00 | 10,2<br>0.402 | 3 | C |
| T35-R40S01C06-14X2-63R-P | 10309879 | M14 | 2,0 | 5,07<br>0.200 | 14,0<br>0.551 | 20,0<br>0.787 | 81<br>3.189 | 104,9<br>4.130 | 110,0<br>4.331 | 11,0<br>0.433 | 11.00x9.00 | 12,0<br>0.472 | 4 | C |
| T35-R40S01C06-16X2-63R-P | 10309880 | M16 | 2,0 | 5,15<br>0.203 | 16,0<br>0.630 | 20,0<br>0.787 | 68<br>2.677 | 104,8<br>4.126 | 110,0<br>4.331 | 12,0<br>0.472 | 12.00x9.00 | 14,0<br>0.551 | 4 | C |
| T35-R40S01C06-18X2.5-63R-P | 10309882 | M18 | 2,5 | 6,31<br>0.248 | 18,0<br>0.709 | 25,0<br>0.984 | 81<br>3.189 | 118,7<br>4.673 | 125,0<br>4.921 | 14,0<br>0.551 | 14.00x11.00 | 15,5<br>0.610 | 4 | C |
| T35-R40S01C06-20X2.5-63R-P | 10309884 | M20 | 2,5 | 6,51<br>0.256 | 20,0<br>0.787 | 25,0<br>0.984 | 95<br>3.740 | 133,5<br>5.256 | 140,0<br>5.512 | 16,0<br>0.630 | 16.00x12.00 | 17,5<br>0.689 | 4 | C |
| T35-R40S01C06-22X2.5-63R-P | 10309885 | M22 | 2,5 | 6,51<br>0.256 | 20,0<br>0.787 | 25,0<br>0.984 | 93<br>3.661 | 133,5<br>5.256 | 140,0<br>5.512 | 18,0<br>0.709 | 18.00x14.50 | 19,5<br>0.768 | 4 | C |
| T35-R40S01C06-24X3-63R-P | 10309886 | M24 | 3,0 | 7,81<br>0.307 | 24,0<br>0.945 | 30,0<br>1.181 | 113<br>4.449 | 152,2<br>5.992 | 160,0<br>6.299 | 18,0<br>0.709 | 18.00x14.50 | 21,0<br>0.827 | 4 | C |
| T35-R40S01C06-27X3-63R-P | 10309887 | M27 | 3,0 | 7,81<br>0.307 | 24,0<br>0.945 | 30,0<br>1.181 | 97<br>3.819 | 152,2<br>5.992 | 160,0<br>6.299 | 20,0<br>0.787 | 20.00x16.00 | 24,0<br>0.945 | 4 | C |
| T35-R40S01C06-30X3.5-63R-P | 10309888 | M30 | 3,5 | 8,87<br>0.349 | 27,0<br>1.063 | 35,0<br>1.378 | 115<br>4.528 | 171,1<br>6.736 | 180,0<br>7.087 | 22,0<br>0.866 | 22.00x18.00 | 26,5<br>1.043 | 4 | C |

## T35-R40SC-P

Blind holes – MF threads





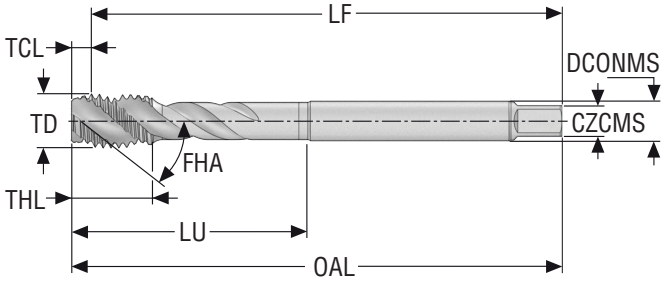

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-R40S02C03-8X1-63R-P | 10309864 | MF8X1 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,4<br>*3.441* | 91,7<br>*3.610* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | C |
| T35-R40S02C03-10X1-63R-P | 10309866 | MF10X1 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,3<br>*3.437* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | C |
| T35-R40S02C03-10X1.25-63R-P | 10309896 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,8<br>*3.811* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,8<br>*0.346* | 3 | C |

## T35-R40SC-P

Blind holes – MF threads





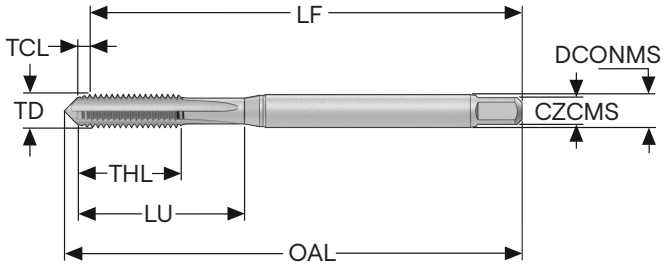

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN374
—Thread tolerance class: 6H
—FHA = 40°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-R40S02C05-8X1-63R-P | 10309875 | MF8X1 | 1,0 | 2,58<br>*0.102* | 8,0<br>*0.315* | 10,0<br>*0.394* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 3 | C |
| T35-R40S02C05-10X1-63R-P | 10309907 | MF10X1 | 1,0 | 2,68<br>*0.106* | 10,0<br>*0.394* | 10,0<br>*0.394* | 67<br>*2.638* | 87,3<br>*3.437* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 3 | C |
| T35-R40S02C05-10X1.25-63R-P | 10309908 | MF10X1.25 | 1,25 | 3,21<br>*0.126* | 10,0<br>*0.394* | 15,0<br>*0.591* | 77<br>*3.031* | 96,8<br>*3.811* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,8<br>*0.346* | 3 | C |
| T35-R40S02C05-12X1-63R-P | 10309878 | MF12X1 | 1,0 | 2,79<br>*0.110* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 97,2<br>*3.827* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 3 | C |
| T35-R40S02C05-12X1.25-63R-P | 10309909 | MF12X1.25 | 1,25 | 3,34<br>*0.131* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,7<br>*3.807* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 3 | C |
| T35-R40S02C05-12X1.5-63R-P | 10309910 | MF12X1.5 | 1,5 | 3,87<br>*0.152* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,1<br>*3.783* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 3 | C |
| T35-R40S02C05-14X1.5-63R-P | 10309911 | MF14X1.5 | 1,5 | 3,97<br>*0.156* | 14,0<br>*0.551* | 15,0<br>*0.591* | 71<br>*2.795* | 96,0<br>*3.780* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 4 | C |
| T35-R40S02C05-16X1.5-63R-P | 10309881 | MF16X1.5 | 1,5 | 4,07<br>*0.160* | 16,0<br>*0.630* | 15,0<br>*0.591* | 58<br>*2.283* | 95,9<br>*3.776* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | C |
| T35-R40S02C05-18X1.5-63R-P | 10309883 | MF18X1.5 | 1,5 | 4,17<br>*0.164* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,8<br>*4.165* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | C |

## T35-SSC-K

Blind and through holes – Metric coarse threads





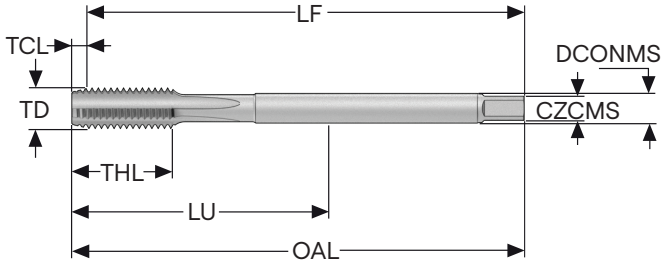

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS01C03-3X0.5-65R-K | 10309980 | M3 | 0,5 | 1,49<br>*0.059* | 3,0<br>*0.118* | 10,0<br>*0.394* | 20<br>*0.787* | 54,5<br>*2.146* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | C |
| T35-SS01C03-4X0.7-65R-K | 10309981 | M4 | 0,7 | 1,96<br>*0.077* | 4,0<br>*0.157* | 12,0<br>*0.472* | 20,5<br>*0.807* | 61,0<br>*2.402* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | C |
| T35-SS01C03-5X0.8-65R-K | 10309982 | M5 | 0,8 | 2,19<br>*0.086* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 67,8<br>*2.669* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | C |
| T35-SS01C03-6X1-65R-K | 10309983 | M6 | 1,0 | 2,66<br>*0.105* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 77,3<br>*3.043* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | C |
| T35-SS01C03-8X1.25-65R-K | 10309984 | M8 | 1,25 | 3,63<br>*0.143* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 86,4<br>*3.402* | 91,8<br>*3.614* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | C |
| T35-SS01C03-10X1.5-65R-K | 10309985 | M10 | 1,5 | 4,42<br>*0.174* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 95,6<br>*3.764* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | C |

## T35-SSC-K

Blind and through holes– Metric coarse threads





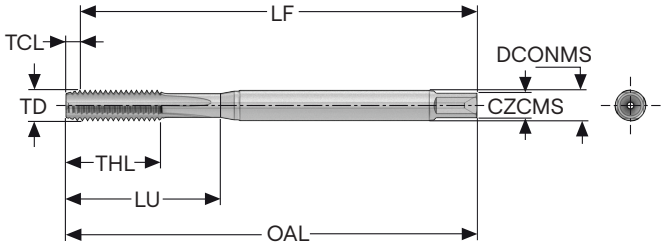

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN376
–Thread tolerance class: 6HX
–For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS01C06-8X1.25-65R-K | 10309996 | M8 | 1,25 | 3,63<br>*0.143* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 86,4<br>*3.402* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 6,8<br>*0.268* | 4 | C |
| T35-SS01C06-10X1.5-65R-K | 10309997 | M10 | 1,5 | 4,31<br>*0.170* | 10,0<br>*0.394* | 20,0<br>*0.787* | 77<br>*3.031* | 95,7<br>*3.768* | 100,0<br>*3.937* | 7,0<br>*0.276* | 7.00x5.50 | 8,5<br>*0.335* | 4 | C |
| T35-SS01C06-12X1.75-65R-K | 10309999 | M12 | 1,75 | 5,0<br>*0.197* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 105,0<br>*4.134* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 4 | C |
| T35-SS01C06-14X2-65R-K | 10310002 | M14 | 2,0 | 5,77<br>*0.227* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 104,2<br>*4.102* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T35-SS01C06-16X2-65R-K | 10310004 | M16 | 2,0 | 5,87<br>*0.231* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 104,1<br>*4.098* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T35-SS01C06-18X2.5-65R-K | 10310025 | M18 | 2,5 | 7,29<br>*0.287* | 18,0<br>*0.709* | 32,0<br>*1.260* | 81<br>*3.189* | 117,7<br>*4.634* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00x11.00 | 15,5<br>*0.610* | 4 | C |
| T35-SS01C06-20X2.5-65R-K | 10310007 | M20 | 2,5 | 6,99<br>*0.275* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 133,0<br>*5.236* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |

## T35A-SSC-K

Blind holes – Metric coarse threads





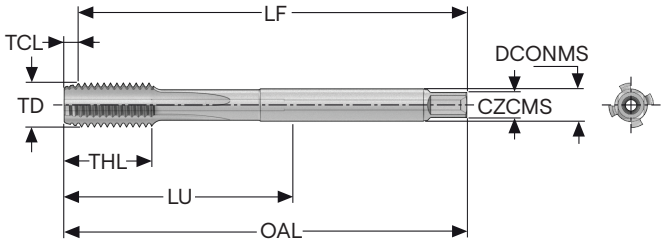

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- FHA = 0°
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35A-SS01C03-6X1-65R-K | 10309845 | M6 | 1,0 | 2,8<br>*0.110* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 77,2<br>*3.039* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 4 | C |
| T35A-SS01C03-8X1.25-65R-K | 10309846 | M8 | 1,25 | 3,63<br>*0.143* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 86,4<br>*3.402* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 4 | C |
| T35A-SS01C03-10X1.5-65R-K | 10309847 | M10 | 1,5 | 4,42<br>*0.174* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 95,6<br>*3.764* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 4 | C |

## T35A-SSC-K

Blind holes – Metric coarse threads





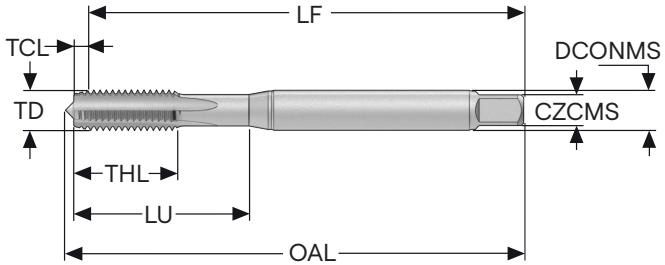

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN376
- Thread tolerance class: 6HX
- FHA = 0°
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35A-SS01C06-12X1.75-65R-K | 10309899 | M12 | 1,75 | 5,0<br>*0.197* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 105,0<br>*4.134* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 4 | C |
| T35A-SS01C06-14X2-65R-K | 10309900 | M14 | 2,0 | 5,77<br>*0.227* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 104,2<br>*4.102* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | C |
| T35A-SS01C06-16X2-65R-K | 10309867 | M16 | 2,0 | 5,87<br>*0.231* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 104,1<br>*4.098* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | C |
| T35A-SS01C06-20X2.5-65R-K | 10309868 | M20 | 2,5 | 6,99<br>*0.275* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 133,0<br>*5.236* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | C |

## T35-SSC-K

Blind and through holes – MF threads





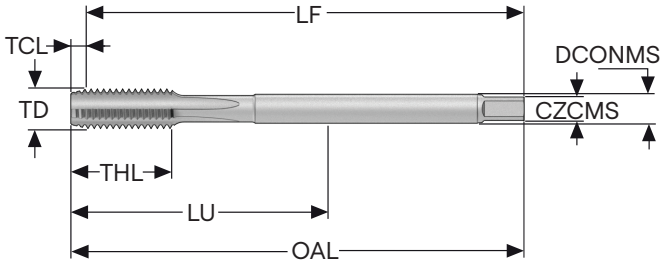

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS02C03-8X1-65R-K | 10310019 | MF8X1 | 1,0 | 2,96<br>*0.117* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,0<br>*3.425* | 91,8<br>*3.614* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | C |
| T35-SS02C03-10X1-65R-K | 10310020 | MF10X1 | 1,0 | 2,96<br>*0.117* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 87,0<br>*3.425* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | C |
| T35-SS02C03-10X1.25-65R-K | 10309986 | MF10X1.25 | 1,25 | 3,73<br>*0.147* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 96,3<br>*3.791* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,8<br>*0.346* | 3 | C |

## T35-SSC-K

Blind and through holes – MF threads





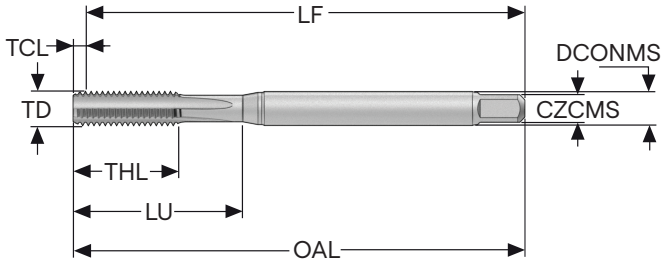

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN374
- Thread tolerance class: 6HX
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS02C05-8X1-65R-K | 10310021 | MF8X1 | 1,0 | 2,96<br>*0.117* | 8,0<br>*0.315* | 20,0<br>*0.787* | 67<br>*2.638* | 87,0<br>*3.425* | 90,0<br>*3.543* | 6,0<br>*0.236* | 6.00x4.90 | 7,0<br>*0.276* | 4 | C |
| T35-SS02C05-10X1-65R-K | 10309998 | MF10X1 | 1,0 | 2,96<br>*0.117* | 10,0<br>*0.394* | 20,0<br>*0.787* | 67<br>*2.638* | 87,0<br>*3.425* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00x5.50 | 9,0<br>*0.354* | 4 | C |
| T35-SS02C05-12X1-65R-K | 10310022 | MF12X1 | 1,0 | 2,98<br>*0.117* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 96,8<br>*3.811* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 4 | C |
| T35-SS02C05-12X1.25-65R-K | 10310000 | MF12X1.25 | 1,25 | 3,67<br>*0.144* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 96,1<br>*3.783* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,8<br>*0.425* | 4 | C |
| T35-SS02C05-12X1.5-65R-K | 10310001 | MF12X1.5 | 1,5 | 4,54<br>*0.179* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 95,5<br>*3.760* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 4 | C |
| T35-SS02C05-14X1-65R-K | 10310023 | MF14X1 | 1,0 | 2,98<br>*0.117* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 96,7<br>*3.807* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 4 | C |
| T35-SS02C05-14X1.5-65R-K | 10310003 | MF14X1.5 | 1,5 | 4,44<br>*0.175* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 95,6<br>*3.764* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 3 | C |
| T35-SS02C05-16X1-65R-K | 10310024 | MF16X1 | 1,0 | 2,98<br>*0.117* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 97,0<br>*3.819* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 15,0<br>*0.591* | 4 | C |
| T35-SS02C05-16X1.5-65R-K | 10310005 | MF16X1.5 | 1,5 | 4,44<br>*0.175* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 95,6<br>*3.764* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | C |
| T35-SS02C05-18X1-65R-K | 10310026 | MF18X1 | 1,0 | 2,98<br>*0.117* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 106,7<br>*4.201* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 17,0<br>*0.669* | 4 | C |
| T35-SS02C05-18X1.5-65R-K | 10310006 | MF18X1.5 | 1,5 | 4,44<br>*0.175* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 105,6<br>*4.157* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | C |
| T35-SS02C05-20X1.5-65R-K | 10310008 | MF20X1.5 | 1,5 | 4,54<br>*0.179* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 120,5<br>*4.744* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | C |

## T35-SSE-K

Blind and through holes – Metric coarse threads





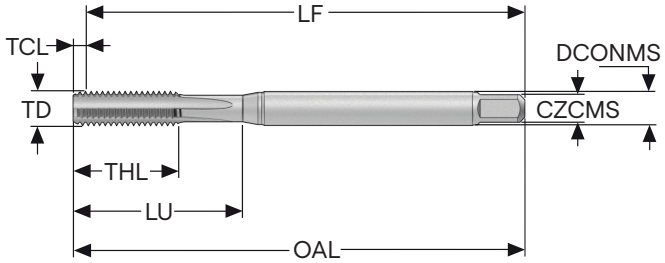

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS01E03-3X0.5-65R-K | 10309987 | M3 | 0,5 | 0,85<br>*0.033* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 55,1<br>*2.169* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 3 | E |
| T35-SS01E03-4X0.7-65R-K | 10309988 | M4 | 0,7 | 1,12<br>*0.044* | 4,0<br>*0.157* | 12,0<br>*0.472* | 21<br>*0.827* | 61,9<br>*2.437* | 63,0<br>*2.480* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 3 | E |
| T35-SS01E03-5X0.8-65R-K | 10309989 | M5 | 0,8 | 1,25<br>*0.049* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 68,7<br>*2.705* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | E |
| T35-SS01E03-6X1-65R-K | 10309990 | M6 | 1,0 | 1,52<br>*0.060* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 78,4<br>*3.087* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 3 | E |
| T35-SS01E03-8X1.25-65R-K | 10309991 | M8 | 1,25 | 2,2<br>*0.087* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,8<br>*3.457* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 3 | E |
| T35-SS01E03-10X1.5-65R-K | 10309993 | M10 | 1,5 | 2,69<br>*0.106* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 97,3<br>*3.831* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 3 | E |

## T35-SSE-K

Blind and through holes – Metric coarse threads





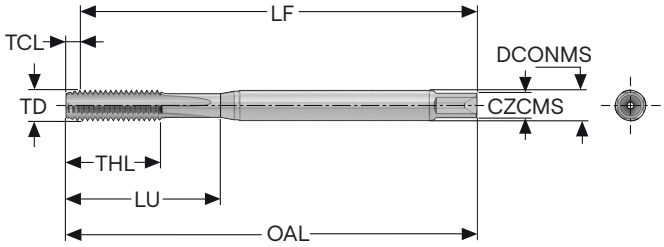

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN376
—Thread tolerance class: 6HX
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS01E06-12X1.75-65R-K | 10310009 | M12 | 1,75 | 3,07<br>*0.121* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 106,9<br>*4.209* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 4 | E |
| T35-SS01E06-14X2-65R-K | 10310011 | M14 | 2,0 | 3,55<br>*0.140* | 14,0<br>*0.551* | 25,0<br>*0.984* | 81<br>*3.189* | 106,4<br>*4.189* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00x9.00 | 12,0<br>*0.472* | 4 | E |
| T35-SS01E06-16X2-65R-K | 10310014 | M16 | 2,0 | 3,25<br>*0.128* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 106,7<br>*4.201* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | E |
| T35-SS01E06-20X2.5-65R-K | 10310017 | M20 | 2,5 | 4,41<br>*0.174* | 20,0<br>*0.787* | 32,0<br>*1.260* | 95<br>*3.740* | 135,6<br>*5.339* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00x12.00 | 17,5<br>*0.689* | 4 | E |

## T35A-SSE-K

Blind holes – Metric coarse threads





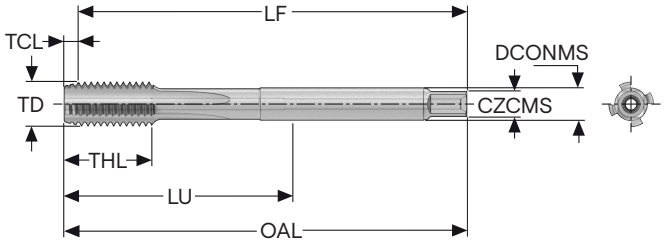

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- FHA = 0°
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35A-SS01E03-5X0.8-65R-K | 10309848 | M5 | 0,8 | 1,45<br>*0.057* | 5,0<br>*0.197* | 14,0<br>*0.551* | 25<br>*0.984* | 68,6<br>*2.701* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 3 | E |
| T35A-SS01E03-6X1-65R-K | 10309849 | M6 | 1,0 | 1,69<br>*0.067* | 6,0<br>*0.236* | 18,0<br>*0.709* | 30<br>*1.181* | 78,3<br>*3.083* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 4 | E |
| T35A-SS01E03-8X1.25-65R-K | 10309850 | M8 | 1,25 | 2,2<br>*0.087* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,8<br>*3.457* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 4 | E |
| T35A-SS01E03-10X1.5-65R-K | 10309852 | M10 | 1,5 | 2,69<br>*0.106* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 97,3<br>*3.831* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 4 | E |

## T35A-SSE-K

Blind holes – Metric coarse threads





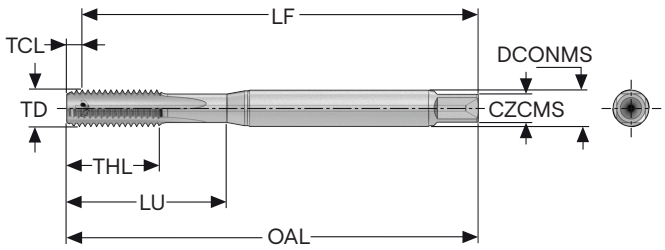

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN376
- Thread tolerance class: 6HX
- FHA = 0°
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35A-SS01E06-12X1.75-65R-K | 10309869 | M12 | 1,75 | 3,07<br>*0.121* | 12,0<br>*0.472* | 24,0<br>*0.945* | 83<br>*3.268* | 106,9<br>*4.209* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 4 | E |
| T35A-SS01E06-16X2-65R-K | 10309901 | M16 | 2,0 | 3,65<br>*0.144* | 16,0<br>*0.630* | 32,0<br>*1.260* | 68<br>*2.677* | 106,3<br>*4.185* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 4 | E |

## T35B-SSE-K

Blind and through holes – Metric coarse threads





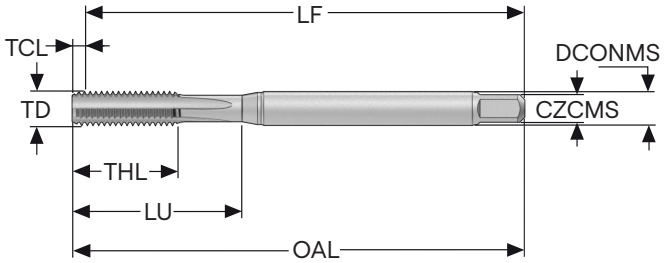

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35B-SS01E03-8X1.25-65R-K | 10309946 | M8 | 1,25 | 2,2<br>*0.087* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 87,8<br>*3.457* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 4 | E |
| T35B-SS01E03-10X1.5-65R-K | 10309947 | M10 | 1,5 | 2,59<br>*0.102* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 97,4<br>*3.835* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 4 | E |

## T35-SSE-K

Blind and through holes – MF threads





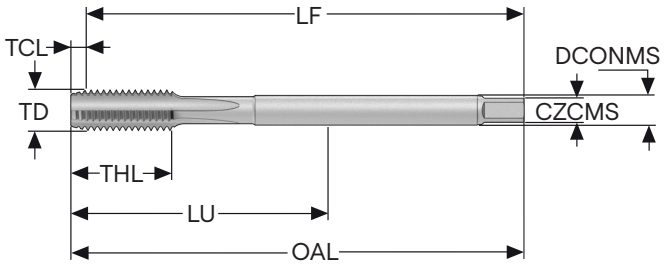

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS02E03-8X1-65R-K | 10309992 | MF8X1 | 1,0 | 1,82<br>*0.072* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 88,2<br>*3.472* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 3 | E |
| T35-SS02E03-10X1-65R-K | 10309994 | MF10X1 | 1,0 | 1,82<br>*0.072* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 88,2<br>*3.472* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 3 | E |
| T35-SS02E03-10X1.25-65R-K | 10309995 | MF10X1.25 | 1,25 | 2,3<br>*0.091* | 10,0<br>*0.394* | 20,0<br>*0.787* | 39<br>*1.535* | 97,7<br>*3.846* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00x8.00 | 8,8<br>*0.346* | 3 | E |

## T35-SSE-K

Blind and through holes – MF threads





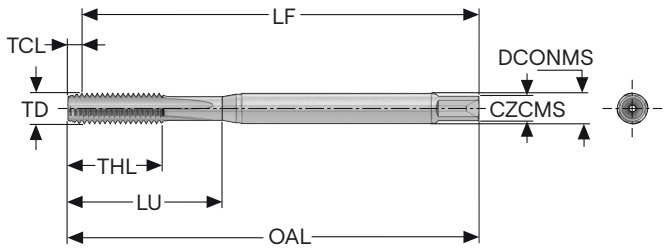

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN374
—Thread tolerance class: 6HX
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-SS02E05-12X1-65R-K | 10310010 | MF12X1 | 1,0 | 1,83<br>*0.072* | 12,0<br>*0.472* | 20,0<br>*0.787* | 83<br>*3.268* | 108,2<br>*4.260* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 11,0<br>*0.433* | 4 | E |
| T35-SS02E05-12X1.5-65R-K | 10310027 | MF12X1.5 | 1,5 | 2,81<br>*0.111* | 12,0<br>*0.472* | 20,0<br>*0.787* | 73<br>*2.874* | 97,2<br>*3.827* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00x7.00 | 10,5<br>*0.413* | 4 | E |
| T35-SS02E05-14X1-65R-K | 10310012 | MF14X1 | 1,0 | 1,83<br>*0.072* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 98,2<br>*3.866* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 13,0<br>*0.512* | 4 | E |
| T35-SS02E05-14X1.5-65R-K | 10310013 | MF14X1.5 | 1,5 | 2,71<br>*0.107* | 14,0<br>*0.551* | 20,0<br>*0.787* | 71<br>*2.795* | 97,3<br>*3.831* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00x9.00 | 12,5<br>*0.492* | 4 | E |
| T35-SS02E05-16X1.5-65R-K | 10310015 | MF16X1.5 | 1,5 | 2,61<br>*0.103* | 16,0<br>*0.630* | 20,0<br>*0.787* | 58<br>*2.283* | 97,4<br>*3.835* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00x9.00 | 14,5<br>*0.571* | 4 | E |
| T35-SS02E05-18X1.5-65R-K | 10310016 | MF18X1.5 | 1,5 | 2,71<br>*0.107* | 18,0<br>*0.709* | 24,0<br>*0.945* | 66<br>*2.598* | 107,3<br>*4.224* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00x11.00 | 16,5<br>*0.650* | 4 | E |
| T35-SS02E05-20X1.5-65R-K | 10310018 | MF20X1.5 | 1,5 | 2,81<br>*0.111* | 20,0<br>*0.787* | 24,0<br>*0.945* | 80<br>*3.150* | 122,2<br>*4.811* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00x12.00 | 18,5<br>*0.728* | 4 | E |

## T35A-SSE-K

Blind holes – MF threads





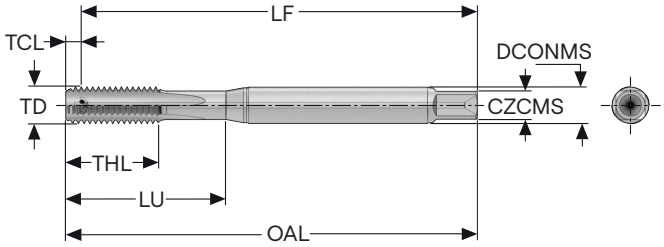

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 0°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35A-SS02E03-8X1-65R-K | 10309851 | MF8X1 | 1,0 | 1,82<br>*0.072* | 8,0<br>*0.315* | 20,0<br>*0.787* | 35<br>*1.378* | 88,2<br>*3.472* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00x6.20 | 7,0<br>*0.276* | 4 | E |
| T35A-SS02E03-10X1-65R-K | 10309895 | MF10X1 | 1,0 | 1,82<br>*0.072* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 88,2<br>*3.472* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 4 | E |

## T35B-SSE-K

Blind and through holes – MF threads





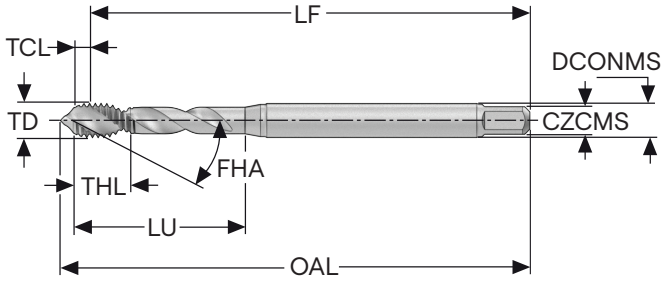

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35B-SS02E03-10X1-65R-K | 10309964 | MF10X1 | 1,0 | 1,82<br>*0.072* | 10,0<br>*0.394* | 20,0<br>*0.787* | 35<br>*1.378* | 88,2<br>*3.472* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00x8.00 | 9,0<br>*0.354* | 4 | E |

## T35-R45UC-N

Blind holes – Metric coarse threads



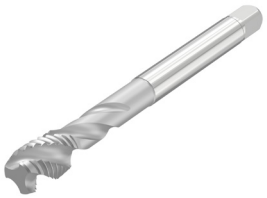


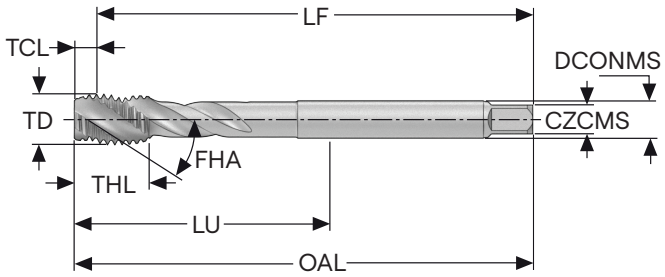

—Substrate: HSSE
—Uncoated
—Standard: DIN371
—Thread tolerance class: 6H
—FHA = 45°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-R45U01C03-3X0.5-63R-N | 10309889 | M3 | 0,5 | 1,17<br>*0.046* | 3,0<br>*0.118* | 5,0<br>*0.197* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50x2.70 | 2,5<br>*0.098* | 2 | C |
| T35-R45U01C03-4X0.7-63R-N | 10309890 | M4 | 0,7 | 1,72<br>*0.068* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50x3.40 | 3,3<br>*0.130* | 2 | C |
| T35-R45U01C03-5X0.8-63R-N | 10309891 | M5 | 0,8 | 1,9<br>*0.075* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00x4.90 | 4,2<br>*0.165* | 2 | C |
| T35-R45U01C03-6X1-63R-N | 10309892 | M6 | 1,0 | 2,28<br>*0.090* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00x4.90 | 5,0<br>*0.197* | 2 | C |
| T35-R45U01C03-8X1.25-63R-N | 10309893 | M8 | 1,25 | 3,25<br>*0.128* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 88,5<br>*3.484* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00x6.20 | 6,8<br>*0.268* | 2 | C |
| T35-R45U01C03-10X1.5-63R-N | 10309894 | M10 | 1,5 | 3,9<br>*0.154* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,2<br>*3.787* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00x8.00 | 8,5<br>*0.335* | 2 | C |

## T35-R45UC-N

Blind holes – Metric coarse threads





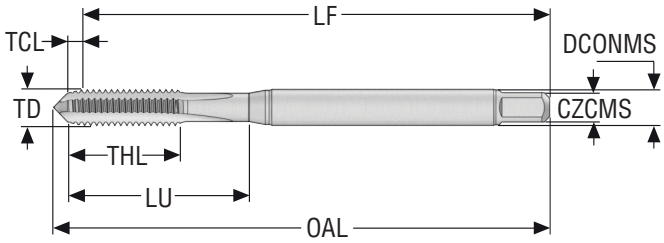

—Substrate: HSSE
—Uncoated
—Standard: DIN376
—Thread tolerance class: 6H
—FHA = 45°
—For cutting data see page(s) 253

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T35-R45U01C06-12X1.75-63R-N | 10309897 | M12 | 1,75 | 4,41<br>*0.174* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 105,6<br>*4.157* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00x7.00 | 10,2<br>*0.402* | 3 | C |
| T35-R45U01C06-16X2-63R-N | 10309898 | M16 | 2,0 | 5,15<br>*0.203* | 16,0<br>*0.630* | 20,0<br>*0.787* | 68<br>*2.677* | 104,8<br>*4.126* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,0<br>*0.551* | 3 | C |

## T35-SSC-H

Blind and through holes – Metric coarse threads





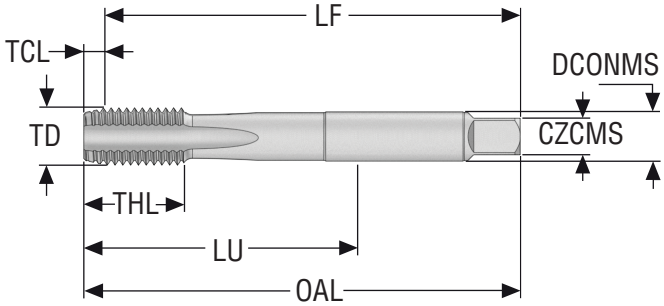

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-SS01C03-3X0.5-65R-H | 10265557 | M3 | 0,5 | 1,49 | 3,0 | 10,0 | 18 | 54,5 | 57,2 | 3,5 | 3.50x2.70 | 2,5 | 3 | C |
| T35-SS01C03-4X0.7-65R-H | 10265558 | M4 | 0,7 | 1,96 | 4,0 | 12,0 | 21 | 61,0 | 64,6 | 4,5 | 4.50x3.40 | 3,3 | 3 | C |
| T35-SS01C03-5X0.8-65R-H | 10265559 | M5 | 0,8 | 2,19 | 5,0 | 14,0 | 25 | 67,8 | 72,0 | 6,0 | 6.00x4.90 | 4,2 | 3 | C |
| T35-SS01C03-6X1-65R-H | 10265560 | M6 | 1,0 | 2,66 | 6,0 | 18,0 | 30 | 77,3 | 82,4 | 6,0 | 6.00x4.90 | 5,0 | 3 | C |
| T35-SS01C03-8X1.25-65R-H | 10265561 | M8 | 1,25 | 3,63 | 8,0 | 20,0 | 35 | 86,4 | 91,7 | 8,0 | 8.00x6.20 | 6,8 | 3 | C |
| T35-SS01C03-10X1.5-65R-H | 10265562 | M10 | 1,5 | 4,42 | 10,0 | 20,0 | 39 | 95,6 | 100,0 | 10,0 | 10.00x8.00 | 8,5 | 3 | C |

## T35-SSC-H

Blind and through holes – Metric coarse threads





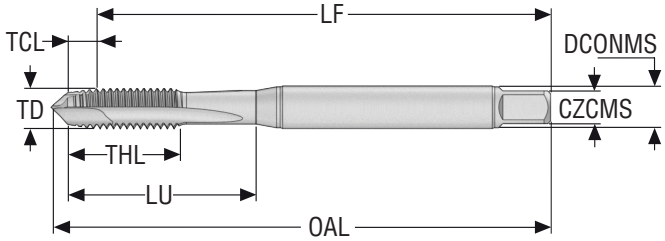

–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN376
–Thread tolerance class: 6HX
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-SS01C06-12X1.75-65R-H | 10265563 | M12 | 1,75 | 5,0 | 12,0 | 24,0 | 83 | 105,0 | 110,0 | 9,0 | 9.00x7.00 | 10,2 | 3 | C |
| T35-SS01C06-16X2-65R-H | 10265564 | M16 | 2,0 | 5,87 | 16,0 | 32,0 | 68 | 104,1 | 110,0 | 12,0 | 12.00x9.00 | 14,0 | 4 | C |
| T35-SS01C06-20X2.5-65R-H | 10265565 | M20 | 2,5 | 7,29 | 20,0 | 32,0 | 95 | 132,5 | 140,0 | 16,0 | 16.00x12.00 | 17,5 | 4 | C |

## T35-PSB-H

Through holes – Metric coarse threads





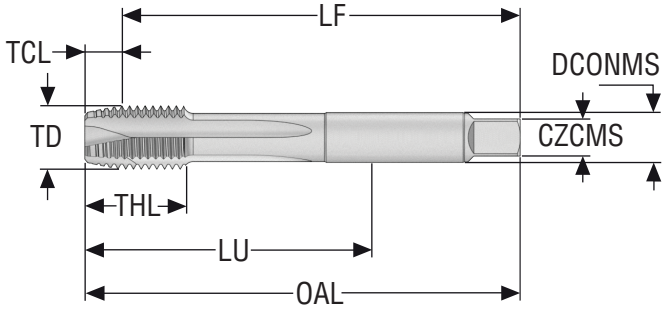

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-PS01B03-3X0.5-65R-H | 10265546 | M3 | 0,5 | 2,3 | 3,0 | 13,0 | 13 | 53,7 | 57,2 | 3,5 | 3.50x2.70 | 2,5 | 3 | B |
| T35-PS01B03-4X0.7-65R-H | 10265547 | M4 | 0,7 | 3,0 | 4,0 | 16,0 | 16 | 60,0 | 64,6 | 4,5 | 4.50x3.40 | 3,3 | 3 | B |
| T35-PS01B03-5X0.8-65R-H | 10265548 | M5 | 0,8 | 3,7 | 5,0 | 20,0 | 20 | 66,3 | 72,0 | 6,0 | 6.00x4.90 | 4,2 | 3 | B |
| T35-PS01B03-6X1-65R-H | 10265549 | M6 | 1,0 | 4,4 | 6,0 | 25,0 | 25 | 75,6 | 82,4 | 6,0 | 6.00x4.90 | 5,0 | 3 | B |
| T35-PS01B03-8X1.25-65R-H | 10265550 | M8 | 1,25 | 5,5 | 8,0 | 20,0 | 35 | 84,6 | 93,3 | 8,0 | 8.00x6.20 | 6,8 | 3 | B |
| T35-PS01B03-10X1.5-65R-H | 10265551 | M10 | 1,5 | 6,9 | 10,0 | 20,0 | 39 | 93,1 | 101,8 | 10,0 | 10.00x8.00 | 8,5 | 3 | B |

## T35-PSB-H

Through holes – Metric coarse threads





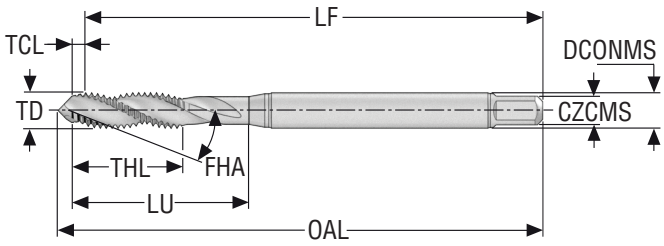

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN376
- Thread tolerance class: 6HX
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-PS01B06-12X1.75-65R-H | 10265552 | M12 | 1,75 | 8,11 | 12,0 | 24,0 | 83 | 101,9 | 110,0 | 9,0 | 9.00x7.00 | 10,2 | 3 | B |
| T35-PS01B06-14X2-65R-H | 10265553 | M14 | 2,0 | 9,26 | 14,0 | 25,0 | 81 | 100,7 | 110,0 | 11,0 | 11.00x9.00 | 12,0 | 3 | B |
| T35-PS01B06-16X2-65R-H | 10265554 | M16 | 2,0 | 9,36 | 16,0 | 32,0 | 68 | 100,6 | 110,0 | 12,0 | 12.00x9.00 | 14,0 | 3 | B |
| T35-PS01B06-18X2.5-65R-H | 10265555 | M18 | 2,5 | 10,83 | 18,0 | 32,0 | 81 | 114,2 | 125,0 | 14,0 | 14.00x11.00 | 15,5 | 4 | B |
| T35-PS01B06-20X2.5-65R-H | 10265556 | M20 | 2,5 | 11,7 | 20,0 | 32,0 | 95 | 128,3 | 140,0 | 16,0 | 16.00x12.00 | 17,5 | 4 | B |

## T35-R15SC-H

Blind holes – Metric coarse threads



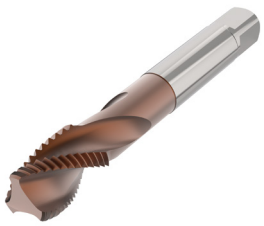


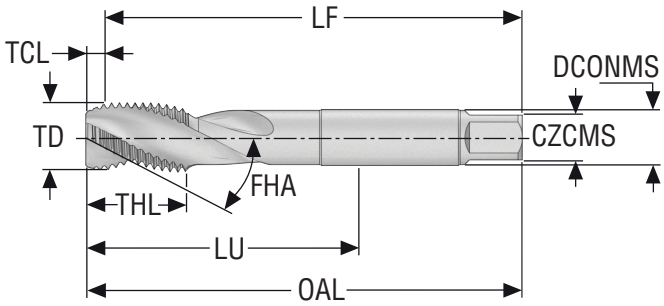

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN371
—Thread tolerance class: 6HX
—FHA = 15°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-R15S01C03-3X0.5-65R-H | 10265499 | M3 | 0,5 | 1,49 | 3,0 | 10,0 | 18 | 54,5 | 57,2 | 3,5 | 3.50x2.70 | 2,5 | 3 | C |
| T35-R15S01C03-4X0.7-65R-H | 10265500 | M4 | 0,7 | 1,96 | 4,0 | 12,0 | 21 | 61,0 | 64,6 | 4,5 | 4.50x3.40 | 3,3 | 3 | C |
| T35-R15S01C03-5X0.8-65R-H | 10265501 | M5 | 0,8 | 2,19 | 5,0 | 14,0 | 25 | 67,8 | 72,0 | 6,0 | 6.00x4.90 | 4,2 | 3 | C |
| T35-R15S01C03-6X1-65R-H | 10265502 | M6 | 1,0 | 2,66 | 6,0 | 18,0 | 30 | 77,3 | 82,4 | 6,0 | 6.00x4.90 | 5,0 | 3 | C |
| T35-R15S01C03-8X1.25-65R-H | 10265503 | M8 | 1,25 | 3,73 | 8,0 | 20,0 | 35 | 86,3 | 91,8 | 8,0 | 8.00x6.20 | 6,8 | 3 | C |
| T35-R15S01C03-10X1.5-65R-H | 10265504 | M10 | 1,5 | 4,42 | 10,0 | 20,0 | 39 | 95,6 | 101,8 | 10,0 | 10.00x8.00 | 8,5 | 3 | C |

## T35-R15SC-H

Blind holes – Metric coarse threads





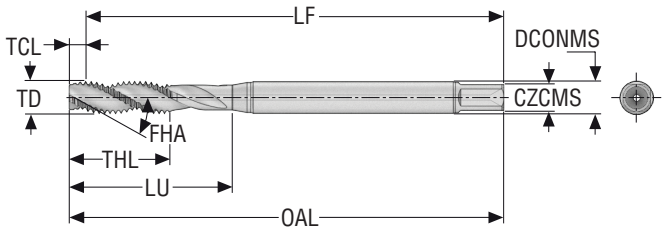

—Substrate: HSSE-PM
—Coating: TiAlSiN
—Standard: DIN376
—Thread tolerance class: 6HX
—FHA = 15°
—For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-R15S01C06-12X1.75-65R-H | 10265505 | M12 | 1,75 | 5,0 | 12,0 | 24,0 | 83 | 105,0 | 110,0 | 9,0 | 9.00x7.00 | 10,2 | 3 | C |
| T35-R15S01C06-14X2-65R-H | 10265506 | M14 | 2,0 | 5,77 | 14,0 | 25,0 | 81 | 104,2 | 110,0 | 11,0 | 11.00x9.00 | 12,0 | 3 | C |
| T35-R15S01C06-16X2-65R-H | 10265507 | M16 | 2,0 | 5,87 | 16,0 | 32,0 | 68 | 104,1 | 110,0 | 12,0 | 12.00x9.00 | 14,0 | 3 | C |
| T35-R15S01C06-18X2.5-65R-H | 10265508 | M18 | 2,5 | 7,29 | 18,0 | 32,0 | 81 | 117,7 | 125,0 | 14,0 | 14.00x11.00 | 15,5 | 3 | C |
| T35-R15S01C06-20X2.5-65R-H | 10265509 | M20 | 2,5 | 7,49 | 20,0 | 32,0 | 95 | 132,7 | 140,0 | 16,0 | 16.00x12.00 | 17,5 | 3 | C |
| T35-R15S01C06-22X2.5-65R-H | 10265510 | M22 | 2,5 | 7,29 | 22,0 | 32,0 | 93 | 132,7 | 140,0 | 18,0 | 18.00x14.50 | 19,5 | 3 | C |
| T35-R15S01C06-24X3-65R-H | 10265511 | M24 | 3,0 | 8,65 | 24,0 | 38,0 | 113 | 151,3 | 160,0 | 18,0 | 18.00x14.50 | 21,0 | 4 | C |
| T35-R15S01C06-27X3-65R-H | 10265512 | M27 | 3,0 | 8,65 | 27,0 | 38,0 | 97 | 151,7 | 160,0 | 20,0 | 20.00x16.00 | 24,0 | 4 | C |
| T35-R15S01C06-30X3.5-65R-H | 10265513 | M30 | 3,5 | 9,96 | 30,0 | 45,0 | 115 | 170,0 | 180,0 | 22,0 | 22.00x18.00 | 26,5 | 4 | C |

## T35A-R15SC-H

Blind holes – Metric coarse threads





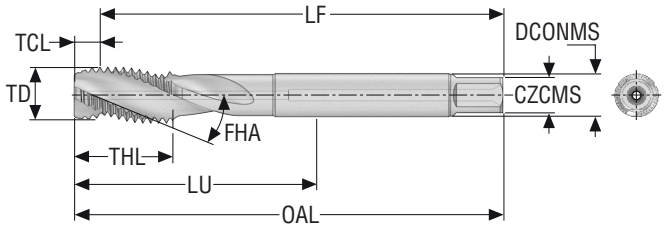

–Internal coolant
–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN371
–Thread tolerance class: 6HX
–FHA = 15°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35A-R15S01C03-5X0.8-65R-H | 10265526 | M5 | 0,8 | 2,19 | 5,0 | 14,0 | 25 | 67,6 | 70,0 | 6,0 | 6.00x4.90 | 4,2 | 3 | C |
| T35A-R15S01C03-6X1-65R-H | 10265527 | M6 | 1,0 | 2,66 | 6,0 | 18,0 | 30 | 77,1 | 80,0 | 6,0 | 6.00x4.90 | 5,0 | 3 | C |
| T35A-R15S01C03-8X1.25-65R-H | 10265528 | M8 | 1,25 | 3,73 | 8,0 | 20,0 | 35 | 86,4 | 90,0 | 8,0 | 8.00x6.20 | 6,8 | 3 | C |
| T35A-R15S01C03-10X1.5-65R-H | 10265529 | M10 | 1,5 | 4,42 | 10,0 | 20,0 | 39 | 95,6 | 100,0 | 10,0 | 10.00x8.00 | 8,5 | 3 | C |

## T35A-R15SC-H

Blind holes – Metric coarse threads



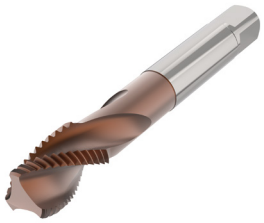


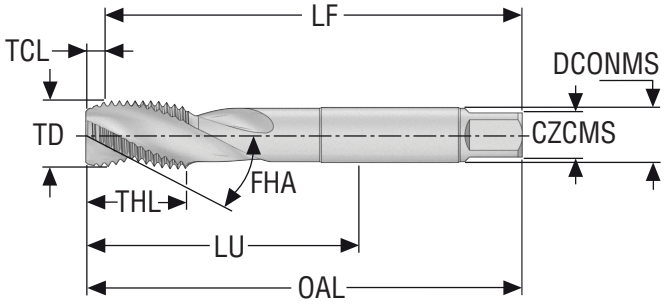

–Internal coolant
–Substrate: HSSE-PM
–Coating: TiAlSiN
–Standard: DIN376
–Thread tolerance class: 6HX
–FHA = 15°
–For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35A-R15S01C06-12X1.75-65R-H | 10265530 | M12 | 1,75 | 5,0 | 12,0 | 24,0 | 83 | 105,0 | 110,0 | 9,0 | 9.00x7.00 | 10,2 | 3 | C |
| T35A-R15S01C06-14X2-65R-H | 10265531 | M14 | 2,0 | 5,77 | 14,0 | 25,0 | 81 | 104,2 | 110,0 | 11,0 | 11.00x9.00 | 12,0 | 3 | C |
| T35A-R15S01C06-16X2-65R-H | 10265532 | M16 | 2,0 | 5,87 | 16,0 | 32,0 | 68 | 104,1 | 110,0 | 12,0 | 12.00x9.00 | 14,0 | 3 | C |
| T35A-R15S01C06-20X2.5-65R-H | 10265533 | M20 | 2,5 | 7,49 | 20,0 | 32,0 | 95 | 132,7 | 140,0 | 16,0 | 16.00x12.00 | 17,5 | 3 | C |

## T35-R15SC-H

Blind holes – MF threads





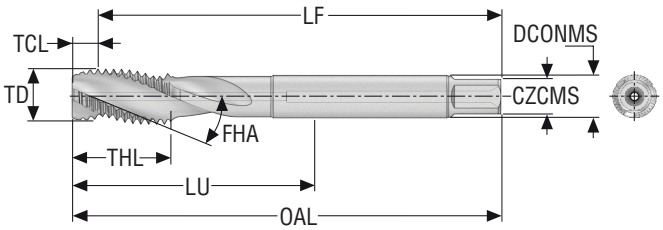

- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN374
- Thread tolerance class: 6HX
- FHA = 15°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35-R15S02C05-8X1-65R-H | 10265516 | MF8X1 | 1,0 | 2,96 | 8,0 | 20,0 | 67 | 87,0 | 90,0 | 6,0 | 6.00x4.90 | 7,0 | 3 | C |
| T35-R15S02C05-10X1-65R-H | 10265517 | MF10X1 | 1,0 | 2,96 | 10,0 | 20,0 | 67 | 86,9 | 90,0 | 7,0 | 7.00x5.50 | 9,0 | 3 | C |
| T35-R15S02C05-10X1.25-65R-H | 10265518 | MF10X1.25 | 1,25 | 3,63 | 10,0 | 20,0 | 77 | 96,4 | 100,0 | 7,0 | 7.00x5.50 | 8,8 | 3 | C |
| T35-R15S02C05-12X1-65R-H | 10265519 | MF12X1 | 1,0 | 2,98 | 12,0 | 20,0 | 73 | 96,8 | 100,0 | 9,0 | 9.00x7.00 | 11,0 | 3 | C |
| T35-R15S02C05-12X1.25-65R-H | 10265514 | MF12X1.25 | 1,25 | 3,67 | 12,0 | 20,0 | 73 | 96,1 | 100,0 | 9,0 | 9.00x7.00 | 10,8 | 3 | C |
| T35-R15S02C05-12X1.5-65R-H | 10265520 | MF12X1.5 | 1,5 | 4,44 | 12,0 | 20,0 | 73 | 95,5 | 100,0 | 9,0 | 9.00x7.00 | 10,5 | 3 | C |
| T35-R15S02C05-14X1-65R-H | 10265521 | MF14X1 | 1,0 | 2,98 | 14,0 | 20,0 | 71 | 97,0 | 100,0 | 11,0 | 11.00x9.00 | 13,0 | 3 | C |
| T35-R15S02C05-14X1.5-65R-H | 10265515 | MF14X1.5 | 1,5 | 4,44 | 14,0 | 20,0 | 71 | 95,4 | 100,0 | 11,0 | 11.00x9.00 | 12,5 | 3 | C |
| T35-R15S02C05-16X1-65R-H | 10265522 | MF16X1 | 1,0 | 2,98 | 16,0 | 20,0 | 58 | 97,0 | 100,0 | 12,0 | 12.00x9.00 | 15,0 | 3 | C |
| T35-R15S02C05-16X1.5-65R-H | 10265523 | MF16X1.5 | 1,5 | 4,44 | 16,0 | 20,0 | 58 | 95,6 | 100,0 | 12,0 | 12.00x9.00 | 14,5 | 3 | C |
| T35-R15S02C05-18X1.5-65R-H | 10265524 | MF18X1.5 | 1,5 | 4,44 | 18,0 | 24,0 | 81 | 105,6 | 110,0 | 14,0 | 14.00x11.00 | 16,5 | 3 | C |
| T35-R15S02C05-20X1.5-65R-H | 10265525 | MF20X1.5 | 1,5 | 4,44 | 20,0 | 24,0 | 80 | 120,6 | 125,0 | 16,0 | 16.00x12.00 | 18,5 | 3 | C |

## T35A-R15SC-H

Blind holes – MF threads





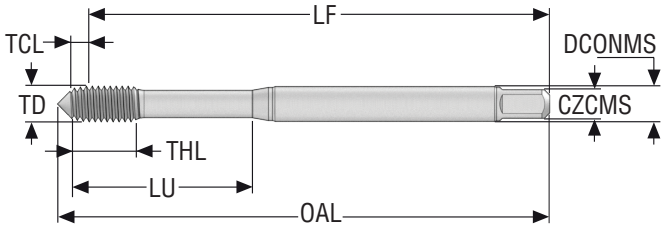

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiAlSiN
- Standard: DIN374
- Thread tolerance class: 6HX
- FHA = 15°
- For cutting data see page(s) 249

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T35A-R15S02C05-8X1-65R-H | 10265536 | MF8X1 | 1,0 | 2,96 | 8,0 | 20,0 | 67 | 87,0 | 90,0 | 6,0 | 6.00x4.90 | 7,0 | 3 | C |
| T35A-R15S02C05-10X1-65R-H | 10265537 | MF10X1 | 1,0 | 2,96 | 10,0 | 20,0 | 67 | 96,9 | 90,0 | 7,0 | 7.00x5.50 | 9,0 | 3 | C |
| T35A-R15S02C05-10X1.25-65R-H | 10265538 | MF10X1.25 | 1,25 | 3,63 | 10,0 | 20,0 | 77 | 96,4 | 100,0 | 7,0 | 7.00x5.50 | 8,8 | 3 | C |
| T35A-R15S02C05-12X1-65R-H | 10265539 | MF12X1 | 1,0 | 2,98 | 12,0 | 20,0 | 73 | 96,8 | 100,0 | 9,0 | 9.00x7.00 | 11,0 | 3 | C |
| T35A-R15S02C05-12X1.25-65R-H | 10265534 | MF12X1.25 | 1,25 | 3,67 | 12,0 | 20,0 | 73 | 96,1 | 100,0 | 9,0 | 9.00x7.00 | 10,8 | 3 | C |
| T35A-R15S02C05-12X1.5-65R-H | 10265540 | MF12X1.5 | 1,5 | 4,44 | 12,0 | 20,0 | 73 | 95,5 | 100,0 | 9,0 | 9.00x7.00 | 10,5 | 3 | C |
| T35A-R15S02C05-14X1-65R-H | 10265541 | MF14X1 | 1,0 | 2,98 | 14,0 | 20,0 | 71 | 97,0 | 100,0 | 11,0 | 11.00x9.00 | 13,0 | 3 | C |
| T35A-R15S02C05-14X1.5-65R-H | 10265535 | MF14X1.5 | 1,5 | 4,44 | 14,0 | 20,0 | 71 | 95,4 | 100,0 | 11,0 | 11.00x9.00 | 12,5 | 3 | C |
| T35A-R15S02C05-16X1-65R-H | 10265542 | MF16X1 | 1,0 | 2,98 | 16,0 | 20,0 | 58 | 97,0 | 100,0 | 12,0 | 12.00x9.00 | 15,0 | 3 | C |
| T35A-R15S02C05-16X1.5-65R-H | 10265543 | MF16X1.5 | 1,5 | 4,44 | 16,0 | 20,0 | 58 | 95,6 | 100,0 | 12,0 | 12.00x9.00 | 14,5 | 3 | C |
| T35A-R15S02C05-18X1.5-65R-H | 10265544 | MF18X1.5 | 1,5 | 4,44 | 18,0 | 24,0 | 81 | 105,6 | 110,0 | 14,0 | 14.00x11.00 | 16,5 | 3 | C |
| T35A-R15S02C05-20X1.5-65R-H | 10265545 | MF20X1.5 | 1,5 | 4,44 | 20,0 | 24,0 | 80 | 121,6 | 125,0 | 16,0 | 16.00x12.00 | 18,5 | 3 | C |

## T33-FNC

Forming taps – Blind and through holes – Metric coarse threads





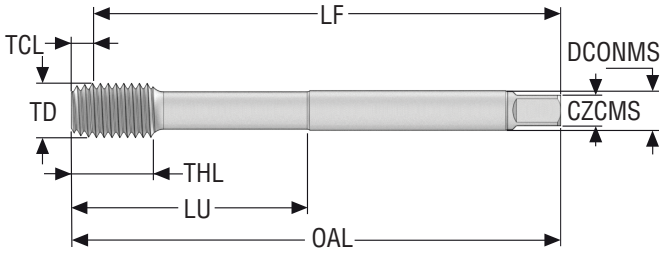

—Substrate: HSSE-PM
—Coating: TiAlN + TiN
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FN01C03-2X0.4-65R | 10139189 | M2 | 0,4 | 1,02<br>*0.040* | 2,0<br>*0.079* | 8,0<br>*0.315* | 8<br>*0.315* | 43,98<br>*1.731* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,85<br>*0.073* | 0 | C |
| T33-FN01C03-2.5X0.45-65R | 10139190 | M2.5 | 0,45 | 1,1<br>*0.043* | 2,5<br>*0.098* | 9,0<br>*0.354* | 9<br>*0.354* | 48,9<br>*1.925* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,33<br>*0.092* | 0 | C |
| T33-FN01C03-3X0.5-65R | 10139191 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,8<br>*0.110* | 0 | C |
| T33-FN01C03-4X0.7-65R | 10139192 | M4 | 0,7 | 1,6<br>*0.063* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,4<br>*2.417* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,7<br>*0.146* | 0 | C |
| T33-FN01C03-5X0.8-65R | 10139193 | M5 | 0,8 | 2,1<br>*0.083* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,9<br>*2.673* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 0 | C |
| T33-FN01C03-6X1-65R | 10139195 | M6 | 1,0 | 2,3<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 0 | C |
| T33-FN01C03-8X1.25-65R | 10139196 | M8 | 1,25 | 3,1<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 0 | C |
| T33-FN01C03-10X1.5-65R | 10139197 | M10 | 1,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,5<br>*3.799* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 0 | C |

## T33-FNC

Forming taps – Blind and through holes – Metric coarse threads





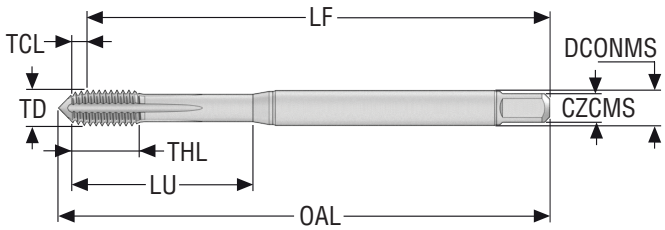

—Substrate: HSSE
—Coating: TiAlN + TiN
—Standard: DIN376
—Thread tolerance class: 6HX
—For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FN01C06-12X1.75-65R | 10139198 | M12 | 1,75 | 3,7<br>*0.146* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 106,3<br>*4.185* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 11,25<br>*0.443* | 0 | C |
| T33-FN01C06-14X2-65R | 10139199 | M14 | 2,0 | 4,6<br>*0.181* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 105,4<br>*4.150* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 13,1<br>*0.516* | 0 | C |
| T33-FN01C06-16X2-65R | 10139200 | M16 | 2,0 | 4,6<br>*0.181* | 16,0<br>*0.630* | 20,0<br>*0.787* | 81<br>*3.189* | 105,4<br>*4.150* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 15,1<br>*0.594* | 0 | C |
| T33-FN01C06-18X2.5-65R | 10139201 | M18 | 2,5 | 5,76<br>*0.227* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 119,24<br>*4.694* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,85<br>*0.663* | 0 | C |
| T33-FN01C06-20X2.5-65R | 10139202 | M20 | 2,5 | 5,8<br>*0.228* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 134,2<br>*5.283* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,85<br>*0.742* | 0 | C |

## T33-FSNC

Forming taps – Blind and through holes – Metric coarse threads





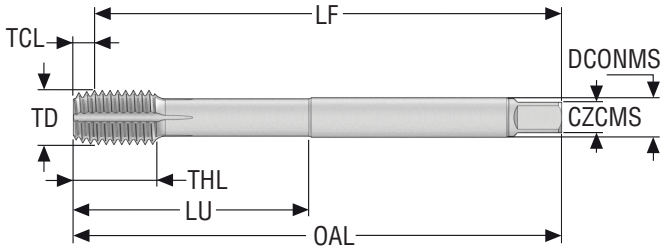

–Substrate: HSSE-PM
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN01C03-2X0.4-65R | 10139204 | M2 | 0,4 | 1,02<br>*0.040* | 2,0<br>*0.079* | 8,0<br>*0.315* | 8<br>*0.315* | 43,98<br>*1.731* | 46,3<br>*1.823* | 2,8<br>*0.110* | 2.80X2.10 | 1,85<br>*0.073* | 3 | C |
| T33-FSN01C03-2.5X0.45-65R | 10139205 | M2.5 | 0,45 | 1,1<br>*0.043* | 2,5<br>*0.098* | 9,0<br>*0.354* | 9<br>*0.354* | 48,9<br>*1.925* | 51,7<br>*2.035* | 2,8<br>*0.110* | 2.80X2.10 | 2,33<br>*0.092* | 3 | C |
| T33-FSN01C03-3X0.5-65R | 10139206 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,8<br>*0.110* | 3 | C |
| T33-FSN01C03-4X0.7-65R | 10139207 | M4 | 0,7 | 1,6<br>*0.063* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,4<br>*2.417* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,7<br>*0.146* | 5 | C |
| T33-FSN01C03-5X0.8-65R | 10139208 | M5 | 0,8 | 2,1<br>*0.083* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,9<br>*2.673* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | C |
| T33-FSN01C03-6X1-65R | 10139209 | M6 | 1,0 | 2,3<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 5 | C |
| T33-FSN01C03-8X1.25-65R | 10139210 | M8 | 1,25 | 3,1<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | C |
| T33-FSN01C03-10X1.5-65R | 10139211 | M10 | 1,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,5<br>*3.799* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 5 | C |

## T33-FSNC

Forming taps – Blind and through holes – Metric coarse threads





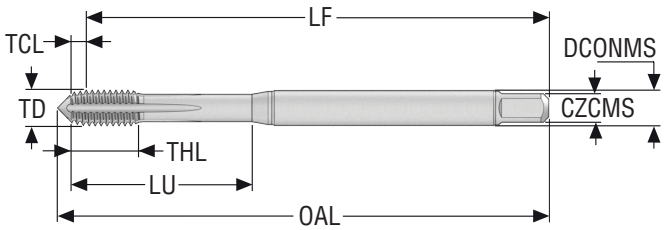

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN01C06-12X1.75-65R | 10139212 | M12 | 1,75 | 3,9<br>*0.154* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 106,1<br>*4.177* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 11,25<br>*0.443* | 5 | C |
| T33-FSN01C06-14X2-65R | 10139213 | M14 | 2,0 | 4,77<br>*0.188* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 105,23<br>*4.143* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 13,1<br>*0.516* | 6 | C |
| T33-FSN01C06-16X2-65R | 10139214 | M16 | 2,0 | 4,6<br>*0.181* | 16,0<br>*0.630* | 20,0<br>*0.787* | 81<br>*3.189* | 105,4<br>*4.150* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 15,1<br>*0.594* | 6 | C |
| T33-FSN01C06-18X2.5-65R | 10139215 | M18 | 2,5 | 5,76<br>*0.227* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 119,24<br>*4.694* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,85<br>*0.663* | 6 | C |
| T33-FSN01C06-20X2.5-65R | 10139216 | M20 | 2,5 | 5,47<br>*0.215* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 134,53<br>*5.296* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,85<br>*0.742* | 6 | C |

## T33-FSNC

Forming taps – Blind and through holes – Metric coarse threads, 6GX





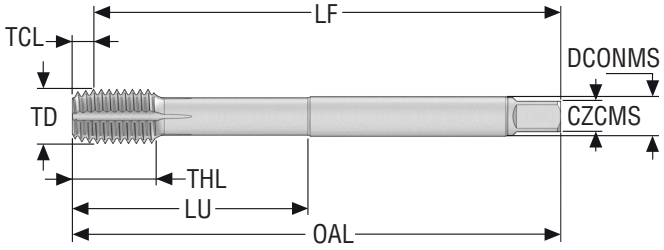

–Substrate: HSSE-PM
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6GX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN01C03-3X0.5-62R | 10139258 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,8<br>*0.110* | 3 | C |
| T33-FSN01C03-4X0.7-62R | 10139259 | M4 | 0,7 | 1,7<br>*0.067* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,3<br>*2.413* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,7<br>*0.146* | 5 | C |
| T33-FSN01C03-5X0.8-62R | 10139260 | M5 | 0,8 | 2,2<br>*0.087* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,8<br>*2.669* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | C |
| T33-FSN01C03-6X1-62R | 10139261 | M6 | 1,0 | 2,3<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 5 | C |
| T33-FSN01C03-8X1.25-62R | 10139262 | M8 | 1,25 | 3,2<br>*0.126* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,8<br>*3.417* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | C |
| T33-FSN01C03-10X1.5-62R | 10139263 | M10 | 1,5 | 4,4<br>*0.173* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 95,6<br>*3.764* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 5 | C |

## T33-FSNC

Forming taps – Blind and through holes – Metric coarse threads, 6GX





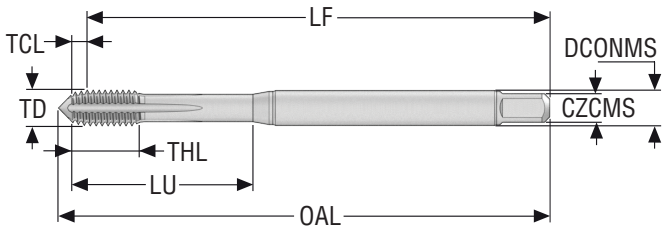

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 6GX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN01C06-12X1.75-62R | 10139264 | M12 | 1,75 | 3,9<br>*0.154* | 12,0<br>*0.472* | 18,0<br>*0.709* | 83<br>*3.268* | 106,1<br>*4.177* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 11,25<br>*0.443* | 5 | C |
| T33-FSN01C06-14X2-62R | 10139265 | M14 | 2,0 | 4,77<br>*0.188* | 14,0<br>*0.551* | 20,0<br>*0.787* | 81<br>*3.189* | 105,23<br>*4.143* | 110,0<br>*4.331* | 11,0<br>*0.433* | 11.00X9.00 | 13,1<br>*0.516* | 6 | C |
| T33-FSN01C06-16X2-62R | 10139266 | M16 | 2,0 | 5,88<br>*0.231* | 16,0<br>*0.630* | 20,0<br>*0.787* | 81<br>*3.189* | 104,12<br>*4.099* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 15,1<br>*0.594* | 6 | C |
| T33-FSN01C06-18X2.5-62R | 10139267 | M18 | 2,5 | 5,47<br>*0.215* | 18,0<br>*0.709* | 25,0<br>*0.984* | 81<br>*3.189* | 119,53<br>*4.706* | 125,0<br>*4.921* | 14,0<br>*0.551* | 14.00X11.00 | 16,85<br>*0.663* | 6 | C |
| T33-FSN01C06-20X2.5-62R | 10139268 | M20 | 2,5 | 6,68<br>*0.263* | 20,0<br>*0.787* | 25,0<br>*0.984* | 95<br>*3.740* | 133,32<br>*5.249* | 140,0<br>*5.512* | 16,0<br>*0.630* | 16.00X12.00 | 18,85<br>*0.742* | 6 | C |

## T33-FSNC

Forming taps – Blind and through holes – MF threads



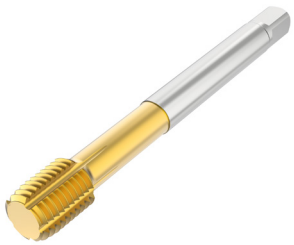


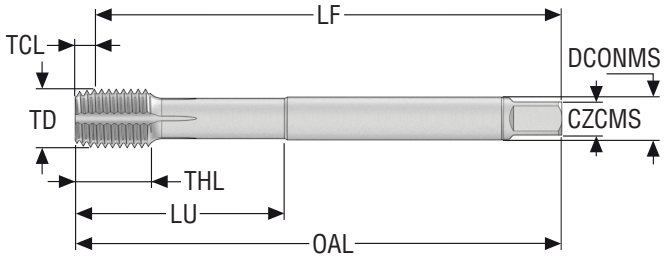

–Substrate: HSSE-PM
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN02C03-4X0.5-65R | 10139217 | MF4X0.5 | 0,5 | 1,4<br>*0.055* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,6<br>*2.425* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,8<br>*0.150* | 5 | C |
| T33-FSN02C03-5X0.5-65R | 10139218 | MF5X0.5 | 0,5 | 1,2<br>*0.047* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,8<br>*2.709* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,8<br>*0.189* | 5 | C |
| T33-FSN02C03-6X0.5-65R | 10139219 | MF6X0.5 | 0,5 | 1,35<br>*0.053* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,65<br>*3.096* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,8<br>*0.228* | 5 | C |
| T33-FSN02C03-6X0.75-65R | 10139220 | MF6X0.75 | 0,75 | 1,8<br>*0.071* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,2<br>*3.079* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,7<br>*0.224* | 5 | C |
| T33-FSN02C03-8X1-65R | 10139221 | MF8X1.0 | 1,0 | 2,25<br>*0.089* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,75<br>*3.455* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,6<br>*0.299* | 5 | C |
| T33-FSN02C03-10X1-65R | 10139222 | MF10X1.0 | 1,0 | 2,9<br>*0.114* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,1<br>*3.429* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,6<br>*0.378* | 5 | C |
| T33-FSN02C03-10X1.25-65R | 10139223 | MF10X1.25 | 1,25 | 3,1<br>*0.122* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,9<br>*3.815* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,45<br>*0.372* | 5 | C |

## T33-FSNC

Forming taps – Blind and through holes – MF threads





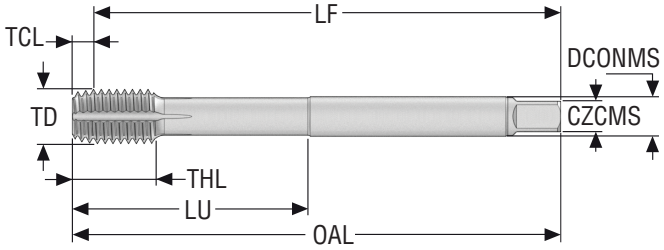

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN374
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN02C05-12X1-65R | 10139224 | MF12X1.0 | 1,0 | 3,27<br>*0.129* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 96,73<br>*3.808* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,6<br>*0.457* | 5 | C |
| T33-FSN02C05-12X1.25-65R | 10139225 | MF12X1.25 | 1,25 | 3,96<br>*0.156* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,04<br>*3.781* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,45<br>*0.451* | 5 | C |
| T33-FSN02C05-12X1.5-65R | 10139226 | MF12X1.5 | 1,5 | 4,15<br>*0.163* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 95,85<br>*3.774* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,35<br>*0.447* | 5 | C |
| T33-FSN02C05-16X1.5-65R | 10139227 | MF16X1.5 | 1,5 | 4,33<br>*0.170* | 16,0<br>*0.630* | 15,0<br>*0.591* | 71<br>*2.795* | 95,67<br>*3.767* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,35<br>*0.604* | 6 | C |
| T33-FSN02C05-18X1.5-65R | 10139228 | MF18X1.5 | 1,5 | 4,4<br>*0.173* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,6<br>*4.157* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 17,35<br>*0.683* | 6 | C |
| T33-FSN02C05-20X1.5-65R | 10139229 | MF20X1.5 | 1,5 | 4,6<br>*0.181* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,4<br>*4.740* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,35<br>*0.762* | 6 | C |

## T33-FSNC

Forming taps – Blind and through holes – UNC threads





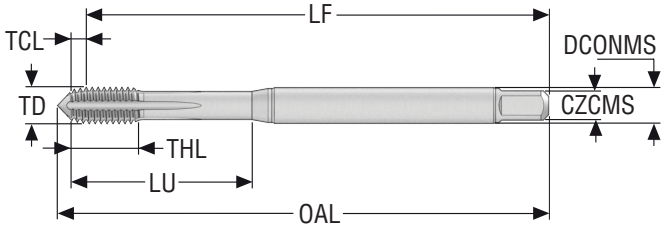

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN376
–Thread tolerance class: 2BX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN08C06-7/16-14-22R | 10139238 | UNC7/16-14 | 14,0 | 5,4<br>*0.213* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 94,6<br>*3.724* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 10,25<br>*0.404* | 5 | C |
| T33-FSN08C06-1/2-13-22R | 10139239 | UNC1/2-13 | 13,0 | 5,8<br>*0.228* | 12,7<br>*0.500* | 18,0<br>*0.709* | 83<br>*3.268* | 104,2<br>*4.102* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 11,8<br>*0.465* | 5 | C |
| T33-FSN08C06-5/8-11-22R | 10139240 | UNC5/8-11 | 11,0 | 6,8<br>*0.268* | 15,875<br>*0.625* | 20,0<br>*0.787* | 81<br>*3.189* | 103,2<br>*4.063* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00x9.00 | 14,8<br>*0.583* | 6 | C |

## T33-FSNC

Forming taps – Blind and through holes – UNC threads



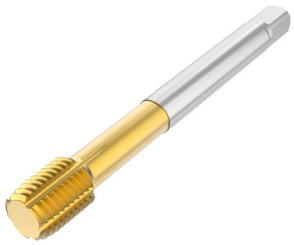


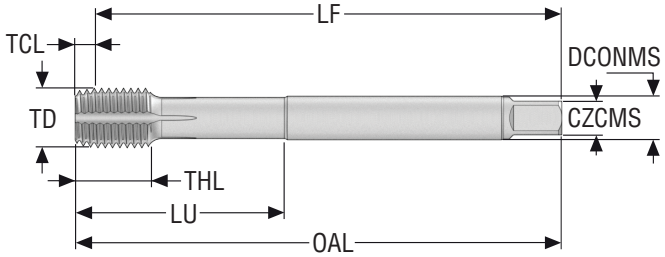

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 2BX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN08C03-5-40-22R | 10139230 | UNC5-40 | 40,0 | 1,6<br>*0.063* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,4<br>*2.142* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,9<br>*0.114* | 3 | C |
| T33-FSN08C03-6-32-22R | 10139231 | UNC6-32 | 32,0 | 1,8<br>*0.071* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,2<br>*2.134* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 3,15<br>*0.124* | 3 | C |
| T33-FSN08C03-8-32-22R | 10139232 | UNC8-32 | 32,0 | 2,0<br>*0.079* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,0<br>*2.402* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,8<br>*0.150* | 5 | C |
| T33-FSN08C03-10-24-22R | 10139233 | UNC10-24 | 24,0 | 2,7<br>*0.106* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 67,3<br>*2.650* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,35<br>*0.171* | 5 | C |
| T33-FSN08C03-12-24-22R | 10139234 | UNC12-24 | 24,0 | 2,7<br>*0.106* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 77,3<br>*3.043* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,0<br>*0.197* | 5 | C |
| T33-FSN08C03-1/4-20-22R | 10139235 | UNC1/4-20 | 20,0 | 3,9<br>*0.154* | 6,35<br>*0.250* | 13,0<br>*0.512* | 30<br>*1.181* | 76,1<br>*2.996* | 80,0<br>*3.150* | 7,0<br>*0.276* | 7.00X5.50 | 5,75<br>*0.226* | 5 | C |
| T33-FSN08C03-5/16-18-22R | 10139236 | UNC5/16-18 | 18,0 | 3,6<br>*0.142* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 86,4<br>*3.402* | 93,3<br>*3.673* | 8,2<br>*0.323* | 8.20X6.20 | 7,3<br>*0.287* | 5 | C |
| T33-FSN08C03-3/8-16-22R | 10139237 | UNC3/8-16 | 16,0 | 4,74<br>*0.187* | 9,525<br>*0.375* | 15,0<br>*0.591* | 39<br>*1.535* | 95,26<br>*3.750* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 8,8<br>*0.346* | 5 | C |

## T33-FSNC

Forming taps – Blind and through holes – UNF threads





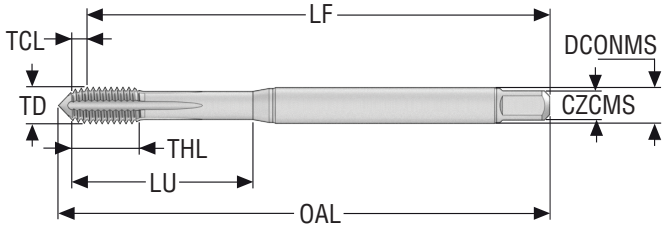

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN374
–Thread tolerance class: 2BX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN09C05-7/16-20-22R | 10139249 | UNF7/16-20 | 20,0 | 3,8<br>*0.150* | 11,112<br>*0.437* | 15,0<br>*0.591* | 76<br>*2.992* | 96,2<br>*3.787* | 100,0<br>*3.937* | 8,0<br>*0.315* | 8.00X6.20 | 10,55<br>*0.415* | 5 | C |
| T33-FSN09C05-1/2-20-22R | 10139250 | UNF1/2-20 | 20,0 | 3,8<br>*0.150* | 12,7<br>*0.500* | 15,0<br>*0.591* | 83<br>*3.268* | 106,2<br>*4.181* | 110,0<br>*4.331* | 9,0<br>*0.354* | 9.00X7.00 | 12,15<br>*0.478* | 5 | C |
| T33-FSN09C05-5/8-18-22R | 10139251 | UNF5/8-18 | 18,0 | 4,7<br>*0.185* | 15,875<br>*0.625* | 15,0<br>*0.591* | 68<br>*2.677* | 105,3<br>*4.146* | 110,0<br>*4.331* | 12,0<br>*0.472* | 12.00X9.00 | 15,25<br>*0.600* | 6 | C |

## T33-FSNC

Forming taps – Blind and through holes – UNF threads



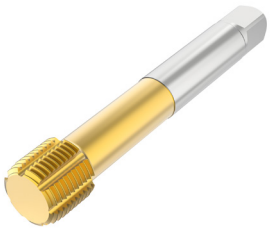


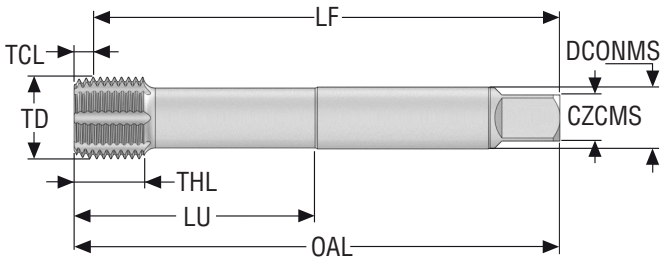

–Substrate: HSSE
–Coating: TiAlN + TiN
–Standard: DIN371
–Thread tolerance class: 2BX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN09C03-5-44-22R | 10139241 | UNF5-44 | 44,0 | 1,4<br>*0.055* | 3,175<br>*0.125* | 7,0<br>*0.276* | 18<br>*0.709* | 54,6<br>*2.150* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,92<br>*0.115* | 3 | C |
| T33-FSN09C03-6-40-22R | 10139242 | UNF6-40 | 40,0 | 1,6<br>*0.063* | 3,505<br>*0.138* | 6,0<br>*0.236* | 20<br>*0.787* | 54,4<br>*2.142* | 57,4<br>*2.260* | 4,0<br>*0.157* | 4.00X3.00 | 3,22<br>*0.127* | 3 | C |
| T33-FSN09C03-8-36-22R | 10139243 | UNF8-36 | 36,0 | 1,8<br>*0.071* | 4,166<br>*0.164* | 7,0<br>*0.276* | 21<br>*0.827* | 61,2<br>*2.409* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,85<br>*0.152* | 5 | C |
| T33-FSN09C03-10-32-22R | 10139244 | UNF10-32 | 32,0 | 1,9<br>*0.075* | 4,826<br>*0.190* | 8,0<br>*0.315* | 25<br>*0.984* | 68,1<br>*2.681* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,45<br>*0.175* | 5 | C |
| T33-FSN09C03-12-28-22R | 10139245 | UNF12-28 | 28,0 | 1,9<br>*0.075* | 5,486<br>*0.216* | 10,0<br>*0.394* | 30<br>*1.181* | 78,1<br>*3.075* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,1<br>*0.201* | 5 | C |
| T33-FSN09C03-1/4-28-22R | 10139246 | UNF1/4-28 | 28,0 | 2,23<br>*0.088* | 6,35<br>*0.250* | 10,0<br>*0.394* | 30<br>*1.181* | 77,77<br>*3.062* | 82,4<br>*3.244* | 7,0<br>*0.276* | 7.00X5.50 | 5,95<br>*0.234* | 5 | C |
| T33-FSN09C03-5/16-24-22R | 10139247 | UNF5/16-24 | 24,0 | 2,6<br>*0.102* | 7,937<br>*0.312* | 13,0<br>*0.512* | 35<br>*1.378* | 87,4<br>*3.441* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | C |
| T33-FSN09C03-3/8-24-22R | 10139248 | UNF3/8-24 | 24,0 | 3,5<br>*0.138* | 9,525<br>*0.375* | 15,0<br>*0.591* | 35<br>*1.378* | 86,5<br>*3.406* | 90,0<br>*3.543* | 10,0<br>*0.394* | 10.00X8.00 | 9,05<br>*0.356* | 5 | C |

## T33-FSNC

Forming taps – Blind and through holes – G threads





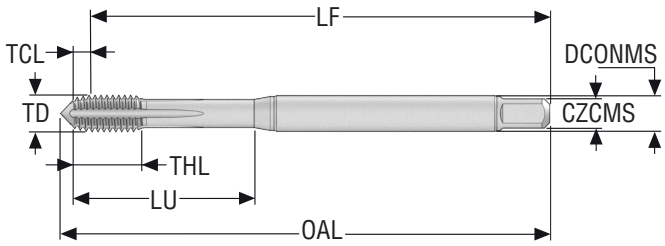

- Substrate: HSSE
- Coating: TiAlN + TiN
- Standard: DIN5156
- Thread tolerance class: NORMAL-X
- For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSN21C09-1/8-28-12R | 10139252 | G1/8-28 | 28,0 | 2,6<br>*0.102* | 9,728<br>*0.383* | 10,0<br>*0.394* | 67<br>*2.638* | 87,4<br>*3.441* | 90,0<br>*3.543* | 7,0<br>*0.276* | 7.00X5.50 | 9,25<br>*0.364* | 5 | C |
| T33-FSN21C09-1/4-19-12R | 10139253 | G1/4-19 | 19,0 | 3,7<br>*0.146* | 13,157<br>*0.518* | 14,0<br>*0.551* | 71<br>*2.795* | 96,3<br>*3.791* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 12,55<br>*0.494* | 6 | C |
| T33-FSN21C09-3/8-19-12R | 10139254 | G3/8-19 | 19,0 | 3,85<br>*0.152* | 16,662<br>*0.656* | 15,0<br>*0.591* | 71<br>*2.795* | 96,15<br>*3.785* | 100,0<br>*3.937* | 11,0<br>*0.433* | 11.00X9.00 | 16,05<br>*0.632* | 7 | C |
| T33-FSN21C09-1/2-14-12R | 10139255 | G1/2-14 | 14,0 | 5,1<br>*0.201* | 20,955<br>*0.825* | 17,0<br>*0.669* | 80<br>*3.150* | 119,9<br>*4.720* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 20,1<br>*0.791* | 7 | C |
| T33-FSN21C09-5/8-14-12R | 10139256 | G5/8-14 | 14,0 | 5,1<br>*0.201* | 22,911<br>*0.902* | 20,0<br>*0.787* | 78<br>*3.071* | 119,9<br>*4.720* | 125,0<br>*4.921* | 18,0<br>*0.709* | 18.00X14.50 | 22,05<br>*0.868* | 7 | C |
| T33-FSN21C09-3/4-14-12R | 10139257 | G3/4-14 | 14,0 | 5,1<br>*0.201* | 26,441<br>*1.041* | 22,0<br>*0.866* | 73<br>*2.874* | 134,9<br>*5.311* | 140,0<br>*5.512* | 20,0<br>*0.787* | 20.00X16.00 | 25,6<br>*1.008* | 7 | C |

## T33-FSCC

Forming taps – Blind and through holes – Metric coarse threads





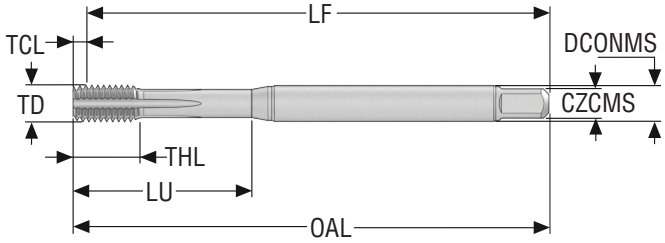

–Substrate: HSSE-PM
–Coating: TiN + TiCN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSC01C03-3X0.5-65R | 10139282 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,8<br>*2.157* | 57,2<br>*2.252* | 3,5<br>*0.138* | 3.50X2.70 | 2,8<br>*0.110* | 3 | C |
| T33-FSC01C03-4X0.7-65R | 10139283 | M4 | 0,7 | 1,6<br>*0.063* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,4<br>*2.417* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,7<br>*0.146* | 5 | C |
| T33-FSC01C03-5X0.8-65R | 10139284 | M5 | 0,8 | 2,1<br>*0.083* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 67,9<br>*2.673* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | C |
| T33-FSC01C03-6X1-65R | 10139285 | M6 | 1,0 | 2,3<br>*0.091* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 77,7<br>*3.059* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 5 | C |
| T33-FSC01C03-8X1.25-65R | 10139286 | M8 | 1,25 | 3,1<br>*0.122* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 86,9<br>*3.421* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | C |
| T33-FSC01C03-10X1.5-65R | 10139287 | M10 | 1,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,5<br>*3.799* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 5 | C |

## T33-FSCE

Forming taps – Blind and through holes – Metric coarse threads





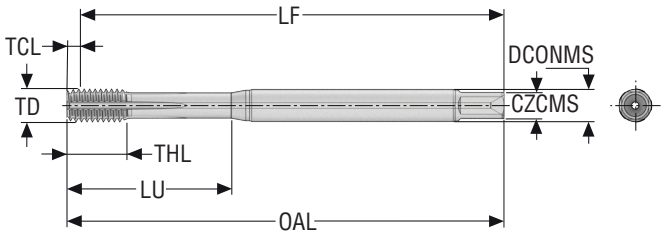

–Substrate: HSSE-PM
–Coating: TiN + TiCN
–Standard: DIN371
–Thread tolerance class: 6HX
–For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSC01E03-3X0.5-65R | 10139288 | M3 | 0,5 | 1,2<br>*0.047* | 3,0<br>*0.118* | 10,0<br>*0.394* | 18<br>*0.709* | 54,8<br>*2.157* | 56,0<br>*2.205* | 3,5<br>*0.138* | 3.50X2.70 | 2,8<br>*0.110* | 3 | E |
| T33-FSC01E03-4X0.7-65R | 10139289 | M4 | 0,7 | 1,6<br>*0.063* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,4<br>*2.417* | 63,0<br>*2.480* | 4,5<br>*0.177* | 4.50X3.40 | 3,7<br>*0.146* | 5 | E |
| T33-FSC01E03-5X0.8-65R | 10139290 | M5 | 0,8 | 1,5<br>*0.059* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,5<br>*2.697* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | E |

## T33A-FSCE

Forming taps – Blind holes – Metric coarse threads





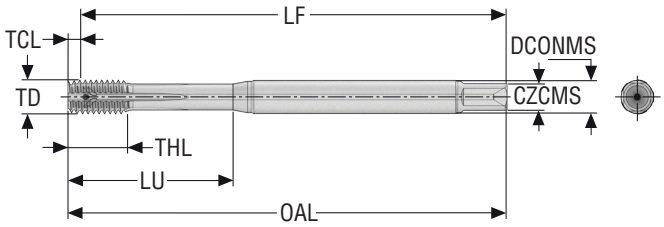

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiN + TiCN
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33A-FSC01E03-5X0.8-65R | 10139294 | M5 | 0,8 | 1,7<br>*0.067* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,3<br>*2.689* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | E |
| T33A-FSC01E03-6X1-65R | 10139295 | M6 | 1,0 | 1,95<br>*0.077* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,05<br>*3.073* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 5 | E |
| T33A-FSC01E03-8X1.25-65R | 10139296 | M8 | 1,25 | 2,55<br>*0.100* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,45<br>*3.443* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | E |
| T33A-FSC01E03-10X1.5-65R | 10139297 | M10 | 1,5 | 2,84<br>*0.112* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 97,16<br>*3.825* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 5 | E |

## T33B-FSCE

Forming taps – Blind and through holes – Metric coarse threads





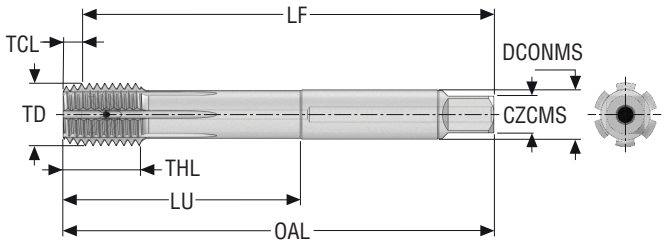

—Internal coolant
—Substrate: HSSE-PM
—Coating: TiN + TiCN
—Standard: DIN371
—Thread tolerance class: 6HX
—For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33B-FSC01E03-5X0.8-65R | 10139298 | M5 | 0,8 | 1,57<br>*0.062* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,43<br>*2.694* | 70,0<br>*2.756* | 6,0<br>*0.236* | 6.00X4.90 | 4,65<br>*0.183* | 5 | E |
| T33B-FSC01E03-6X1-65R | 10139299 | M6 | 1,0 | 1,95<br>*0.077* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,05<br>*3.073* | 80,0<br>*3.150* | 6,0<br>*0.236* | 6.00X4.90 | 5,6<br>*0.220* | 5 | E |
| T33B-FSC01E03-8X1.25-65R | 10139300 | M8 | 1,25 | 2,42<br>*0.095* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,58<br>*3.448* | 90,0<br>*3.543* | 8,0<br>*0.315* | 8.00X6.20 | 7,45<br>*0.293* | 5 | E |
| T33B-FSC01E03-10X1.5-65R | 10139301 | M10 | 1,5 | 2,84<br>*0.112* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 97,16<br>*3.825* | 100,0<br>*3.937* | 10,0<br>*0.394* | 10.00X8.00 | 9,35<br>*0.368* | 5 | E |

## T33B-FSCC

Forming taps – Blind and through holes – Metric coarse threads





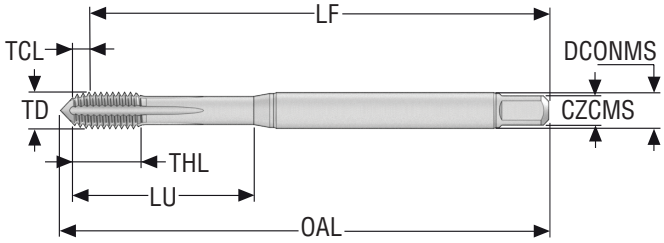

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN376
- Thread tolerance class: 6HX
- For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T33B-FSC01C06-12X1.75-65R | 10208929 | M12 | 1,75 | 3,9 | 18,0 | 83 | 105,1 | 110,0 | 9,0 | 9.00x7.00 | 11,25 | 5 | C |
| T33B-FSC01C06-14X2-65R | 10208930 | M14 | 2,0 | 5,88 | 20,0 | 81 | 104,3 | 110,0 | 11,0 | 11.00x9.00 | 13,1 | 6 | C |
| T33B-FSC01C06-16X2-65R | 10208931 | M16 | 2,0 | 5,88 | 20,0 | 68 | 104,3 | 110,0 | 12,0 | 12.00x9.00 | 15,1 | 6 | C |
| T33B-FSC01C06-18X2.5-65R | 10208932 | M18 | 2,5 | 6,95 | 25,0 | 81 | 118,0 | 125,0 | 14,0 | 14.00x11.00 | 16,85 | 6 | C |
| T33B-FSC01C06-20X2.5-65R | 10208933 | M20 | 2,5 | 6,62 | 25,0 | 95 | 133,0 | 140,0 | 16,0 | 16.00x12.00 | 18,85 | 6 | C |
| T33B-FSC01C06-22X2.5-65R | 10208934 | M22 | 2,5 | 6,92 | 25,0 | 93 | 133,0 | 140,0 | 18,0 | 18.00x14.50 | 20,85 | 6 | C |
| T33B-FSC01C06-24X3-65R | 10208935 | M24 | 3,0 | 8,44 | 30,0 | 113 | 151,3 | 160,0 | 18,0 | 18.00x14.50 | 22,65 | 6 | C |

## T33-FSCC

Forming taps – Blind and through holes – MF threads





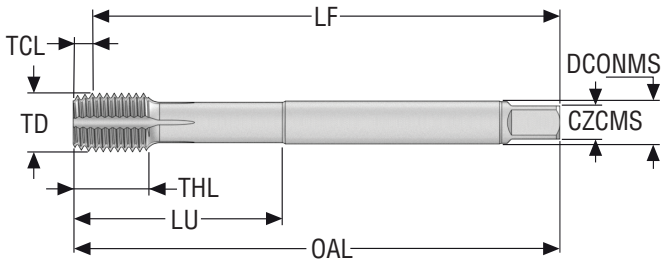

- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN371
- Thread tolerance class: 6HX
- For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSC02C03-4X0.5-65R | 10139269 | MF4X0.5 | 0,5 | 1,4<br>*0.055* | 4,0<br>*0.157* | 7,0<br>*0.276* | 21<br>*0.827* | 61,6<br>*2.425* | 64,6<br>*2.543* | 4,5<br>*0.177* | 4.50X3.40 | 3,8<br>*0.150* | 5 | C |
| T33-FSC02C03-5X0.5-65R | 10139270 | MF5X0.5 | 0,5 | 1,2<br>*0.047* | 5,0<br>*0.197* | 8,0<br>*0.315* | 25<br>*0.984* | 68,8<br>*2.709* | 72,0<br>*2.835* | 6,0<br>*0.236* | 6.00X4.90 | 4,8<br>*0.189* | 5 | C |
| T33-FSC02C03-6X0.5-65R | 10139271 | MF6X0.5 | 0,5 | 1,35<br>*0.053* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,65<br>*3.096* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,8<br>*0.228* | 5 | C |
| T33-FSC02C03-6X0.75-65R | 10139272 | MF6X0.75 | 0,75 | 1,8<br>*0.071* | 6,0<br>*0.236* | 10,0<br>*0.394* | 30<br>*1.181* | 78,2<br>*3.079* | 82,4<br>*3.244* | 6,0<br>*0.236* | 6.00X4.90 | 5,7<br>*0.224* | 5 | C |
| T33-FSC02C03-8X1-65R | 10139273 | MF8X1.0 | 1,0 | 2,25<br>*0.089* | 8,0<br>*0.315* | 13,0<br>*0.512* | 35<br>*1.378* | 87,75<br>*3.455* | 93,3<br>*3.673* | 8,0<br>*0.315* | 8.00X6.20 | 7,6<br>*0.299* | 5 | C |
| T33-FSC02C03-10X1-65R | 10139274 | MF10X1.0 | 1,0 | 2,9<br>*0.114* | 10,0<br>*0.394* | 13,0<br>*0.512* | 35<br>*1.378* | 87,1<br>*3.429* | 91,8<br>*3.614* | 10,0<br>*0.394* | 10.00X8.00 | 9,6<br>*0.378* | 5 | C |
| T33-FSC02C03-10X1.25-65R | 10139275 | MF10X1.25 | 1,25 | 4,0<br>*0.157* | 10,0<br>*0.394* | 15,0<br>*0.591* | 39<br>*1.535* | 96,0<br>*3.780* | 101,8<br>*4.008* | 10,0<br>*0.394* | 10.00X8.00 | 9,45<br>*0.372* | 5 | C |

## T33-FSCC

Forming taps – Blind and through holes – MF threads





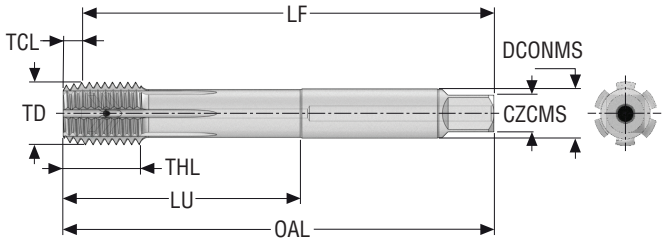

- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN374
- Thread tolerance class: 6HX
- For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | TD | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | mm<br>*Inch* | | |
| T33-FSC02C05-12X1-65R | 10139276 | MF12X1.0 | 1,0 | 3,27<br>*0.129* | 12,0<br>*0.472* | 10,0<br>*0.394* | 73<br>*2.874* | 96,73<br>*3.808* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,6<br>*0.457* | 5 | C |
| T33-FSC02C05-12X1.25-65R | 10139277 | MF12X1.25 | 1,25 | 3,96<br>*0.156* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 96,04<br>*3.781* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,45<br>*0.451* | 5 | C |
| T33-FSC02C05-12X1.5-65R | 10139278 | MF12X1.5 | 1,5 | 4,2<br>*0.165* | 12,0<br>*0.472* | 15,0<br>*0.591* | 73<br>*2.874* | 95,8<br>*3.772* | 100,0<br>*3.937* | 9,0<br>*0.354* | 9.00X7.00 | 11,35<br>*0.447* | 5 | C |
| T33-FSC02C05-16X1.5-65R | 10139279 | MF16X1.5 | 1,5 | 4,33<br>*0.170* | 16,0<br>*0.630* | 15,0<br>*0.591* | 71<br>*2.795* | 95,67<br>*3.767* | 100,0<br>*3.937* | 12,0<br>*0.472* | 12.00X9.00 | 15,35<br>*0.604* | 5 | C |
| T33-FSC02C05-18X1.5-65R | 10139280 | MF18X1.5 | 1,5 | 4,4<br>*0.173* | 18,0<br>*0.709* | 17,0<br>*0.669* | 66<br>*2.598* | 105,6<br>*4.157* | 110,0<br>*4.331* | 14,0<br>*0.551* | 14.00X11.00 | 17,35<br>*0.683* | 5 | C |
| T33-FSC02C05-20X1.5-65R | 10139281 | MF20X1.5 | 1,5 | 4,6<br>*0.181* | 20,0<br>*0.787* | 17,0<br>*0.669* | 80<br>*3.150* | 120,4<br>*4.740* | 125,0<br>*4.921* | 16,0<br>*0.630* | 16.00X12.00 | 19,35<br>*0.762* | 5 | C |

## T33B-FSCC

Forming taps – Blind and through holes – MF threads





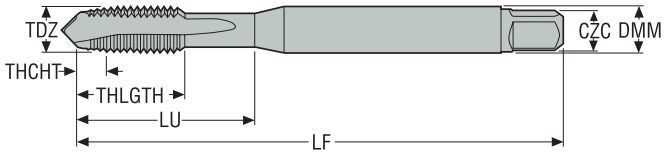

- Internal coolant
- Substrate: HSSE-PM
- Coating: TiN + TiCN
- Standard: DIN374
- Thread tolerance class: 6HX
- For cutting data see page(s) 257

| Designation | Item number | TDZ | Pitch | TCL | THL | LU | LF | OAL | DCONMS | CZCMS | PHDR Ø | NOF | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | | mm | | |
| T33B-FSC02C05-12X1.25-65R | 10208936 | MF12X1.25 | 1,25 | 3,96 | 15,0 | 73 | 95,9 | 100,0 | 9,0 | 9.00x7.00 | 11,45 | 5 | C |
| T33B-FSC02C05-14X1.5-65R | 10208937 | MF14X1.5 | 1,5 | 4,33 | 15,0 | 81 | 95,7 | 100,0 | 11,0 | 11.00x9.00 | 13,35 | 6 | C |
| T33B-FSC02C05-16X1.5-65R | 10208938 | MF16X1.5 | 1,5 | 4,27 | 15,0 | 58 | 95,7 | 100,0 | 12,0 | 12.00x9.00 | 15,35 | 6 | C |

## MTP-P003

Through holes – Metric coarse threads





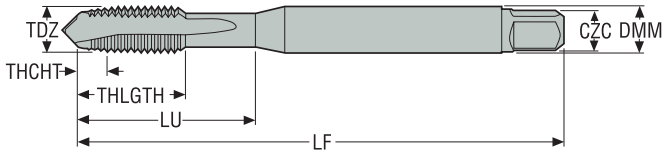

—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 261

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M1X0.25ISO5HX-TB-P003 | 02999897 | M1 | 0,25 | 2,5<br>*0.098* | 20,0<br>*0.787* | 5,0<br>*0.197* | 38,87<br>*1.530* | 0,75<br>*0.030* | 2.50X2.10 | 2 | DIN371 | 5HX | B |
| MTP-M1.2X0.25ISO5HX-TB-P003 | 02999898 | M1.2 | 0,25 | 2,5<br>*0.098* | 20,0<br>*0.787* | 5,0<br>*0.197* | 38,87<br>*1.530* | 0,95<br>*0.037* | 2.50X2.10 | 2 | DIN371 | 5HX | B |
| MTP-M1.4X0.30ISO5HX-TB-P003 | 02999899 | M1.4 | 0,3 | 2,5<br>*0.098* | 20,0<br>*0.787* | 6,5<br>*0.256* | 38,65<br>*1.522* | 1,1<br>*0.043* | 2.50X2.10 | 2 | DIN371 | 5HX | B |
| MTP-M1.6X0.35ISO6HX-TB-P003 | 02999900 | M1.6 | 0,35 | 2,5<br>*0.098* | 12,5<br>*0.492* | 7,0<br>*0.276* | 38,42<br>*1.513* | 1,3<br>*0.051* | 2.50X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M1.8X0.35ISO6HX-TB-P003 | 02999901 | M1.8 | 0,35 | 2,5<br>*0.098* | 20,0<br>*0.787* | 7,0<br>*0.276* | 38,42<br>*1.513* | 1,5<br>*0.059* | 2.50X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2X0.40ISO6HX-TB-P003 | 02999902 | M2 | 0,4 | 2,8<br>*0.110* | 9,0<br>*0.354* | 6,0<br>*0.236* | 43,2<br>*1.701* | 1,6<br>*0.063* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2.2X0.45ISO6HX-TB-P003 | 02999903 | M2.2 | 0,45 | 2,8<br>*0.110* | 12,0<br>*0.472* | 7,0<br>*0.276* | 42,97<br>*1.692* | 1,8<br>*0.071* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2.3X0.40ISO6HX-TB-P003 | 02999904 | M2.3 | 0,4 | 2,8<br>*0.110* | 12,0<br>*0.472* | 7,0<br>*0.276* | 43,2<br>*1.701* | 1,9<br>*0.075* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2.5X0.45ISO6HX-TB-P003 | 02999905 | M2.5 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 8,0<br>*0.315* | 47,97<br>*1.889* | 2,1<br>*0.083* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2.6X0.45ISO6HX-TB-P003 | 02999906 | M2.6 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 8,0<br>*0.315* | 47,97<br>*1.889* | 2,15<br>*0.085* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M3X0.50ISO6HX-TB-P003 | 02999907 | M3 | 0,5 | 3,5<br>*0.138* | 18,0<br>*0.709* | 8,9<br>*0.350* | 53,6875<br>*2.114* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6HX | B |
| MTP-M3.5X0.60ISO6HX-TB-P003 | 02999908 | M3.5 | 0,6 | 4,0<br>*0.157* | 20,0<br>*0.787* | 10,8<br>*0.425* | 53,225<br>*2.095* | 2,9<br>*0.114* | 4.00X3.00 | 3 | DIN371 | 6HX | B |
| MTP-M4X0.70ISO6HX-TB-P003 | 02999909 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 11,7<br>*0.461* | 59,7625<br>*2.353* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | B |
| MTP-M5X0.80ISO6HX-TB-P003 | 02999910 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 12,6<br>*0.496* | 66,3<br>*2.610* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M6X1.00ISO6HX-TB-P003 | 02999911 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 14,5<br>*0.571* | 75,375<br>*2.968* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M7X1.00ISO6HX-TB-P003 | 02999912 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 14,5<br>*0.571* | 78,275<br>*3.082* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6HX | B |
| MTP-M8X1.25ISO6HX-TB-P003 | 02999913 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 17,4<br>*0.685* | 84,21875<br>*3.316* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | B |
| MTP-M10X1.50ISO6HX-TB-P003 | 02999914 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 19,2<br>*0.756* | 93,0625<br>*3.664* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | B |

## MTP-P003-A

Through holes – Metric coarse threads





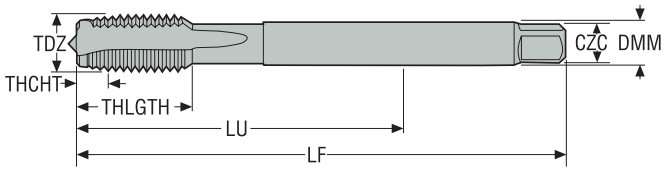

—Internal coolant
—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 261

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M4X0.70ISO6HX-TB-P003-A | 02999929 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 11,7<br>*0.461* | 59,73<br>*2.352* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | B |
| MTP-M5X0.80ISO6HX-TB-P003-A | 02999930 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 12,6<br>*0.496* | 66,35<br>*2.612* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M6X1.00ISO6HX-TB-P003-A | 02999931 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 14,5<br>*0.571* | 75,51<br>*2.973* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M7X1.00ISO6HX-TB-P003-A | 02999932 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 14,5<br>*0.571* | 75,51<br>*2.973* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6HX | B |
| MTP-M8X1.25ISO6HX-TB-P003-A | 02999933 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 17,4<br>*0.685* | 84,48<br>*3.326* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | B |
| MTP-M10X1.50ISO6HX-TB-P003-A | 02999934 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 19,2<br>*0.756* | 93,46<br>*3.680* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | B |

## MTP-P004

Through holes – Metric coarse threads





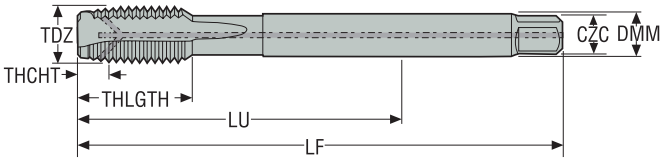

—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 261

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M4X0.70ISO6HX-TB-P004 | 02999915 | M4 | 0,7 | 2,8<br>*0.110* | 43,0<br>*1.693* | 12,0<br>*0.472* | 59,7625<br>*2.353* | 3,4<br>*0.134* | 2.80X2.10 | 3 | DIN376 | 6HX | B |
| MTP-M5X0.80ISO6HX-TB-P004 | 02999916 | M5 | 0,8 | 3,5<br>*0.138* | 49,0<br>*1.929* | 13,2<br>*0.520* | 66,3<br>*2.610* | 4,3<br>*0.169* | 3.50X2.70 | 3 | DIN376 | 6HX | B |
| MTP-M6X1.00ISO6HX-TB-P004 | 02999917 | M6 | 1,0 | 4,5<br>*0.177* | 59,0<br>*2.323* | 15,1<br>*0.594* | 75,375<br>*2.968* | 5,1<br>*0.201* | 4.50X3.40 | 3 | DIN376 | 6HX | B |
| MTP-M8X1.25ISO6HX-TB-P004 | 02999918 | M8 | 1,25 | 6,0<br>*0.236* | 67,0<br>*2.638* | 18,0<br>*0.709* | 84,21875<br>*3.316* | 6,8<br>*0.268* | 6.00X4.90 | 3 | DIN376 | 6HX | B |
| MTP-M10X1.50ISO6HX-TB-P004 | 02999919 | M10 | 1,5 | 7,0<br>*0.276* | 77,0<br>*3.031* | 19,8<br>*0.780* | 93,0625<br>*3.664* | 8,6<br>*0.339* | 7.00X5.50 | 3 | DIN376 | 6HX | B |
| MTP-M12X1.75ISO6HX-TB-P004 | 02999920 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 101,90625<br>*4.012* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6HX | B |
| MTP-M14X2.00ISO6HX-TB-P004 | 02999921 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 100,75<br>*3.967* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6HX | B |
| MTP-M16X2.00ISO6HX-TB-P004 | 02999922 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 100,75<br>*3.967* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | B |
| MTP-M18X2.50ISO6HX-TB-P004 | 02999923 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 30,0<br>*1.181* | 114,46<br>*4.506* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6HX | B |
| MTP-M20X2.50ISO6HX-TB-P004 | 02999924 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 128,4375<br>*5.057* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | B |
| MTP-M22X2.50ISO6HX-TB-P004 | 02999925 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 34,0<br>*1.339* | 129,36<br>*5.093* | 19,7<br>*0.776* | 18.00X14.50 | 4 | DIN376 | 6HX | B |
| MTP-M24X3.00ISO6HX-TB-P004 | 02999926 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 38,0<br>*1.496* | 146,125<br>*5.753* | 21,0<br>*0.827* | 18.00X14.50 | 4 | DIN376 | 6HX | B |
| MTP-M27X3.00ISO6HX-TB-P004 | 02999927 | M27 | 3,0 | 20,0<br>*0.787* | 97,0<br>*3.819* | 38,0<br>*1.496* | 147,37<br>*5.802* | 24,0<br>*0.945* | 20.00X16.00 | 4 | DIN376 | 6HX | B |
| MTP-M30X3.50ISO6HX-TB-P004 | 02999928 | M30 | 3,5 | 22,0<br>*0.866* | 115,0<br>*4.528* | 45,0<br>*1.772* | 165,42<br>*6.513* | 26,5<br>*1.043* | 22.00X18.00 | 4 | DIN376 | 6HX | B |

## MTP-P004-A

Through holes – Metric coarse threads





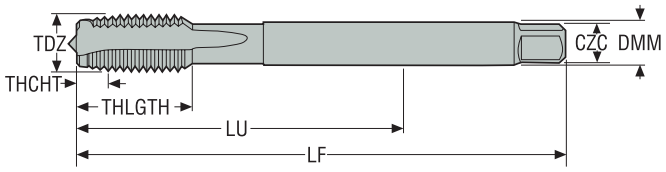

—Internal coolant
—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 261

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6HX-TB-P004-A | 02999935 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 101,90625<br>*4.012* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6HX | B |
| MTP-M14X2.00ISO6HX-TB-P004-A | 02999936 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 101,41<br>*3.993* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6HX | B |
| MTP-M16X2.00ISO6HX-TB-P004-A | 02999937 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 100,75<br>*3.967* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | B |
| MTP-M18X2.50ISO6HX-TB-P004-A | 02999938 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 30,0<br>*1.181* | 114,46<br>*4.506* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6HX | B |
| MTP-M20X2.50ISO6HX-TB-P004-A | 02999939 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 129,46<br>*5.097* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | B |
| MTP-M22X2.50ISO6HX-TB-P004-A | 02999940 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 34,0<br>*1.339* | 129,36<br>*5.093* | 19,7<br>*0.776* | 18.00X14.50 | 4 | DIN376 | 6HX | B |
| MTP-M24X3.00ISO6HX-TB-P004-A | 02999941 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 38,0<br>*1.496* | 146,125<br>*5.753* | 21,0<br>*0.827* | 18.00X14.50 | 4 | DIN376 | 6HX | B |
| MTP-M27X3.00ISO6HX-TB-P004-A | 02999942 | M27 | 3,0 | 20,0<br>*0.787* | 97,0<br>*3.819* | 38,0<br>*1.496* | 147,37<br>*5.802* | 24,0<br>*0.945* | 20.00X16.00 | 4 | DIN376 | 6HX | B |
| MTP-M30X3.50ISO6HX-TB-P004-A | 02999943 | M30 | 3,5 | 22,0<br>*0.866* | 115,0<br>*4.528* | 45,0<br>*1.772* | 165,42<br>*6.513* | 26,5<br>*1.043* | 22.00X18.00 | 4 | DIN376 | 6HX | B |

## MTP-P011

Through holes – MF threads






–Substrate: HSS-E-PM
–Coating: AlTiN-based
–For cutting data see page(s) 261

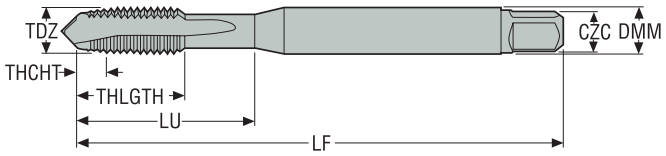
| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M4X0.50ISO6HX-TB-P011 | 02999944 | MF4X0.5 | 0,5 | 2,8<br>*0.110* | 43,0<br>*1.693* | 12,0<br>*0.472* | 60,6875<br>*2.389* | 3,5<br>*0.138* | 2.80X2.10 | 3 | DIN374 | 6HX | B |
| MTP-M5X0.50ISO6HX-TB-P011 | 02999945 | MF5X0.5 | 0,5 | 3,5<br>*0.138* | 49,0<br>*1.929* | 13,0<br>*0.512* | 67,57<br>*2.660* | 4,5<br>*0.177* | 3.50X2.70 | 3 | DIN374 | 6HX | B |
| MTP-M6X0.75ISO6HX-TB-P011 | 02999946 | MF6X0.75 | 0,75 | 4,5<br>*0.177* | 59,0<br>*2.323* | 15,0<br>*0.591* | 76,5<br>*3.012* | 5,3<br>*0.209* | 4.50X3.40 | 3 | DIN374 | 6HX | B |
| MTP-M8X0.75ISO6HX-TB-P011 | 02999947 | MF8X0.75 | 0,75 | 6,0<br>*0.236* | 57,0<br>*2.244* | 15,0<br>*0.591* | 76,43<br>*3.009* | 7,3<br>*0.287* | 6.00X4.90 | 3 | DIN374 | 6HX | B |
| MTP-M8X1.00ISO6HX-TB-P011 | 02999948 | MF8X1.0 | 1,0 | 6,0<br>*0.236* | 67,0<br>*2.638* | 18,0<br>*0.709* | 85,375<br>*3.361* | 7,1<br>*0.280* | 6.00X4.90 | 3 | DIN374 | 6HX | B |
| MTP-M10X0.75ISO6HX-TB-P011 | 02999949 | MF10X0.75 | 0,75 | 7,0<br>*0.276* | 67,0<br>*2.638* | 17,6<br>*0.693* | 86,42<br>*3.402* | 9,3<br>*0.366* | 7.00X5.50 | 3 | DIN374 | 6HX | B |
| MTP-M10X1.00ISO6HX-TB-P011 | 02999950 | MF10X1.0 | 1,0 | 7,0<br>*0.276* | 67,0<br>*2.638* | 17,6<br>*0.693* | 85,375<br>*3.361* | 9,1<br>*0.358* | 7.00X5.50 | 3 | DIN374 | 6HX | B |
| MTP-M10X1.25ISO6HX-TB-P011 | 02999951 | MF10X1.25 | 1,25 | 7,0<br>*0.276* | 77,0<br>*3.031* | 19,8<br>*0.780* | 98,51875<br>*3.879* | 8,8<br>*0.346* | 7.00X5.50 | 3 | DIN374 | 6HX | B |
| MTP-M12X1.00ISO6HX-TB-P011 | 02999952 | MF12X1.0 | 1,0 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 95,36<br>*3.754* | 11,1<br>*0.437* | 9.00X7.00 | 4 | DIN374 | 6HX | B |
| MTP-M12X1.25ISO6HX-TB-P011 | 02999953 | MF12X1.25 | 1,25 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 94,21875<br>*3.709* | 10,8<br>*0.425* | 9.00X7.00 | 4 | DIN374 | 6HX | B |
| MTP-M12X1.50ISO6HX-TB-P011 | 02999954 | MF12X1.5 | 1,5 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 93,37<br>*3.676* | 10,6<br>*0.417* | 9.00X7.00 | 4 | DIN374 | 6HX | B |
| MTP-M14X1.00ISO6HX-TB-P011 | 02999955 | MF14X1.0 | 1,0 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 95,35<br>*3.754* | 13,1<br>*0.516* | 11.00X9.00 | 4 | DIN374 | 6HX | B |
| MTP-M14X1.25ISO6HX-TB-P011 | 02999956 | MF14X1.25 | 1,25 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 94,33<br>*3.714* | 12,8<br>*0.504* | 11.00X9.00 | 4 | DIN374 | 6HX | B |
| MTP-M14X1.50ISO6HX-TB-P011 | 02999957 | MF14X1.5 | 1,5 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 93,0625<br>*3.664* | 12,6<br>*0.496* | 11.00X9.00 | 4 | DIN374 | 6HX | B |
| MTP-M16X1.00ISO6HX-TB-P011 | 02999958 | MF16X1.0 | 1,0 | 12,0<br>*0.472* | 58,0<br>*2.283* | 21,0<br>*0.827* | 95,35<br>*3.754* | 15,1<br>*0.594* | 12.00X9.00 | 4 | DIN374 | 6HX | B |
| MTP-M16X1.50ISO6HX-TB-P011 | 02999959 | MF16X1.5 | 1,5 | 12,0<br>*0.472* | 58,0<br>*2.283* | 21,0<br>*0.827* | 93,0625<br>*3.664* | 14,6<br>*0.575* | 12.00X9.00 | 4 | DIN374 | 6HX | B |
| MTP-M18X1.00ISO6HX-TB-P011 | 02999960 | MF18X1.0 | 1,0 | 14,0<br>*0.551* | 66,0<br>*2.598* | 24,0<br>*0.945* | 105,35<br>*4.148* | 17,1<br>*0.673* | 14.00X11.00 | 4 | DIN374 | 6HX | B |
| MTP-M18X1.50ISO6HX-TB-P011 | 02999961 | MF18X1.5 | 1,5 | 14,0<br>*0.551* | 66,0<br>*2.598* | 24,0<br>*0.945* | 103,35<br>*4.069* | 16,6<br>*0.654* | 14.00X11.00 | 4 | DIN374 | 6HX | B |
| MTP-M20X1.00ISO6HX-TB-P011 | 02999962 | MF20X1.0 | 1,0 | 16,0<br>*0.630* | 80,0<br>*3.150* | 24,0<br>*0.945* | 120,24<br>*4.734* | 19,1<br>*0.752* | 16.00X12.00 | 4 | DIN374 | 6HX | B |
| MTP-M20X1.50ISO6HX-TB-P011 | 02999963 | MF20X1.5 | 1,5 | 16,0<br>*0.630* | 80,0<br>*3.150* | 24,0<br>*0.945* | 118,25<br>*4.656* | 18,6<br>*0.732* | 16.00X12.00 | 4 | DIN374 | 6HX | B |
| MTP-M22X1.50ISO6HX-TB-P011 | 02999964 | MF22X1.5 | 1,5 | 18,0<br>*0.709* | 78,0<br>*3.071* | 25,0<br>*0.984* | 118,25<br>*4.656* | 20,5<br>*0.807* | 18.00X14.50 | 4 | DIN374 | 6HX | B |
| MTP-M24X1.50ISO6HX-TB-P011 | 02999965 | MF24X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 28,0<br>*1.102* | 133,23<br>*5.245* | 22,5<br>*0.886* | 18.00X14.50 | 4 | DIN374 | 6HX | B |
| MTP-M24X2.00ISO6HX-TB-P011 | 02999966 | MF24X2.0 | 2,0 | 18,0<br>*0.709* | 93,0<br>*3.661* | 28,0<br>*1.102* | 131,28<br>*5.169* | 22,0<br>*0.866* | 18.00X14.50 | 4 | DIN374 | 6HX | B |
| MTP-M25X1.50ISO6HX-TB-P011 | 02999967 | MF25X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 28,0<br>*1.102* | 133,23<br>*5.245* | 23,5<br>*0.925* | 18.00X14.50 | 4 | DIN374 | 6HX | B |
| MTP-M26X1.50ISO6HX-TB-P011 | 02999968 | MF26X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 28,0<br>*1.102* | 133,23<br>*5.245* | 24,5<br>*0.965* | 18.00X14.50 | 4 | DIN374 | 6HX | B |
| MTP-M27X1.50ISO6HX-TB-P011 | 02999969 | MF27X1.5 | 1,5 | 20,0<br>*0.787* | 77,0<br>*3.031* | 28,0<br>*1.102* | 133,22<br>*5.245* | 25,5<br>*1.004* | 20.00X16.00 | 4 | DIN374 | 6HX | B |

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M27X2.00ISO6HX-TB-P011 | 02999970 | MF27X2.0 | 2,0 | 20,0<br>*0.787* | 77,0<br>*3.031* | 28,0<br>*1.102* | 131,28<br>*5.169* | 25,0<br>*0.984* | 20.00X16.00 | 4 | DIN374 | 6HX | B |
| MTP-M28X1.50ISO6HX-TB-P011 | 02999971 | MF28X1.5 | 1,5 | 20,0<br>*0.787* | 77,0<br>*3.031* | 28,0<br>*1.102* | 133,22<br>*5.245* | 26,5<br>*1.043* | 20.00X16.00 | 4 | DIN374 | 6HX | B |
| MTP-M30X1.50ISO6HX-TB-P011 | 02999972 | MF30X1.5 | 1,5 | 22,0<br>*0.866* | 85,0<br>*3.346* | 28,0<br>*1.102* | 143,22<br>*5.639* | 28,5<br>*1.122* | 22.00X18.00 | 4 | DIN374 | 6HX | B |
| MTP-M30X2.00ISO6HX-TB-P011 | 02999973 | MF30X2.0 | 2,0 | 22,0<br>*0.866* | 85,0<br>*3.346* | 28,0<br>*1.102* | 141,27<br>*5.562* | 28,0<br>*1.102* | 22.00X18.00 | 4 | DIN374 | 6HX | B |

## MTP-M003-A

Through holes – Metric coarse threads





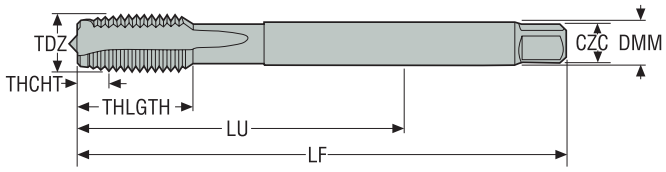

—Internal coolant
—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M4X0.70ISO6H-TB-M003-A | 03000094 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 11,7<br>*0.461* | 59,82<br>*2.355* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6H | B |
| MTP-M5X0.80ISO6H-TB-M003-A | 03000095 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 12,6<br>*0.496* | 66,4<br>*2.614* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6H | B |
| MTP-M6X1.00ISO6H-TB-M003-A | 03000096 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 14,5<br>*0.571* | 75,375<br>*2.968* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | B |
| MTP-M8X1.25ISO6H-TB-M003-A | 03000097 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 17,4<br>*0.685* | 84,21875<br>*3.316* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | B |
| MTP-M10X1.50ISO6H-TB-M003-A | 03000098 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 19,2<br>*0.756* | 93,0625<br>*3.664* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | B |

## MTP-M004

Through holes – Metric coarse threads





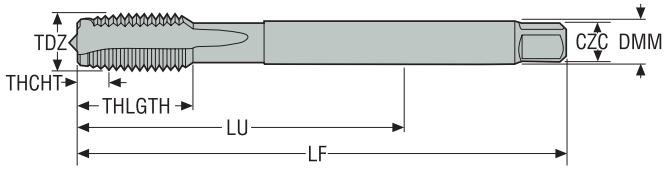

—Internal coolant
—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6H-TB-M004 | 03000087 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 101,90625<br>*4.012* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6H | B |
| MTP-M14X2.00ISO6H-TB-M004 | 03000088 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 100,75<br>*3.967* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M16X2.00ISO6H-TB-M004 | 03000090 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 100,75<br>*3.967* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M18X2.50ISO6H-TB-M004 | 03000091 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 30,0<br>*1.181* | 113,4375<br>*4.466* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6H | B |
| MTP-M20X2.50ISO6H-TB-M004 | 03000092 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 128,4375<br>*5.057* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6H | B |

## MTP-M004

Through holes – Metric coarse threads





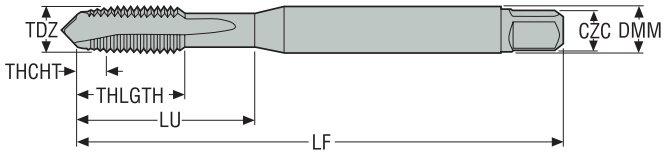

—Internal coolant
—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6H-TB-M004-A | 03000099 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 101,90625<br>*4.012* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6H | B |
| MTP-M14X2.00ISO6H-TB-M004-A | 03000100 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 101,14<br>*3.982* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M16X2.00ISO6H-TB-M004-A | 03000101 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 101,05<br>*3.978* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M18X2.50ISO6H-TB-M004-A | 03000102 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 30,0<br>*1.181* | 114,15<br>*4.494* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6H | B |
| MTP-M20X2.50ISO6H-TB-M004-A | 03000103 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 129,15<br>*5.085* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6H | B |
| MTP-M22X2.50ISO6H-TB-M004-A | 03000104 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 34,0<br>*1.339* | 129,53<br>*5.100* | 19,7<br>*0.776* | 18.00X14.50 | 4 | DIN376 | 6H | B |
| MTP-M24X3.00ISO6H-TB-M004-A | 03000105 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 38,0<br>*1.496* | 147,58<br>*5.810* | 21,0<br>*0.827* | 18.00X14.50 | 4 | DIN376 | 6H | B |

## MTP-N001

Through holes – Metric coarse threads





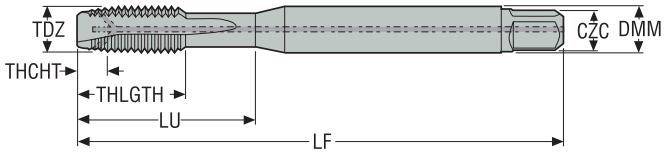

—Substrate: HSS-E
—Coating: BRIGHT
—For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M3X0.50ISO6H-TB-N001 | 03000136 | M3 | 0,5 | 3,5<br>*0.138* | 16,0<br>*0.630* | 9,0<br>*0.354* | 54,625<br>*2.151* | 2,5<br>*0.098* | 3.50X2.70 | 2 | DIN371 | 6H | B |
| MTP-M4X0.70ISO6H-TB-N001 | 03000137 | M4 | 0,7 | 4,5<br>*0.177* | 19,0<br>*0.748* | 12,0<br>*0.472* | 59,85<br>*2.356* | 3,4<br>*0.134* | 4.50X3.40 | 2 | DIN371 | 6H | B |
| MTP-M5X0.80ISO6H-TB-N001 | 03000138 | M5 | 0,8 | 6,0<br>*0.236* | 23,0<br>*0.906* | 13,0<br>*0.512* | 66,4<br>*2.614* | 4,3<br>*0.169* | 6.00X4.90 | 2 | DIN371 | 6H | B |
| MTP-M6X1.00ISO6H-TB-N001 | 03000139 | M6 | 1,0 | 6,0<br>*0.236* | 27,0<br>*1.063* | 15,0<br>*0.591* | 75,375<br>*2.968* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | B |
| MTP-M8X1.25ISO6H-TB-N001 | 03000140 | M8 | 1,25 | 8,0<br>*0.315* | 28,0<br>*1.102* | 18,0<br>*0.709* | 84,21875<br>*3.316* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | B |
| MTP-M10X1.50ISO6H-TB-N001 | 03000141 | M10 | 1,5 | 10,0<br>*0.394* | 30,0<br>*1.181* | 20,0<br>*0.787* | 93,25<br>*3.671* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | B |

## MTP-N001-A

Through holes – Metric coarse threads





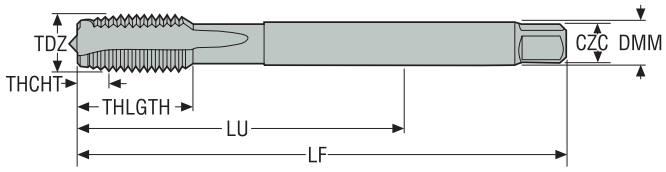

—Internal coolant
—Substrate: HSS-PM
—Coating: BRIGHT
—For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M4X0.70ISO6H-TB-N001-A | 03000145 | M4 | 0,7 | 4,5<br>*0.177* | 19,0<br>*0.748* | 12,0<br>*0.472* | 59,85<br>*2.356* | 3,4<br>*0.134* | 4.50X3.40 | 2 | DIN371 | 6H | B |
| MTP-M5X0.80ISO6H-TB-N001-A | 03000146 | M5 | 0,8 | 6,0<br>*0.236* | 23,0<br>*0.906* | 13,0<br>*0.512* | 66,4<br>*2.614* | 4,3<br>*0.169* | 6.00X4.90 | 2 | DIN371 | 6H | B |
| MTP-M6X1.00ISO6H-TB-N001-A | 03000147 | M6 | 1,0 | 6,0<br>*0.236* | 27,0<br>*1.063* | 15,0<br>*0.591* | 75,5<br>*2.972* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | B |
| MTP-M8X1.25ISO6H-TB-N001-A | 03000148 | M8 | 1,25 | 8,0<br>*0.315* | 28,0<br>*1.102* | 18,0<br>*0.709* | 84,37<br>*3.322* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | B |
| MTP-M10X1.50ISO6H-TB-N001-A | 03000149 | M10 | 1,5 | 10,0<br>*0.394* | 30,0<br>*1.181* | 20,0<br>*0.787* | 93,25<br>*3.671* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | B |

## MTP-N002

Through holes – Metric coarse threads





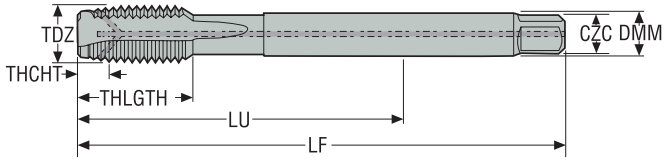

–Substrate: HSS-E
–Coating: BRIGHT
–For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6H-TB-N002 | 03000142 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 102,1<br>*4.020* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6H | B |
| MTP-M14X2.00ISO6H-TB-N002 | 03000143 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 101,0<br>*3.976* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M16X2.00ISO6H-TB-N002 | 03000144 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 101,0<br>*3.976* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | B |

## MTP-N002-A

Through holes – Metric coarse threads





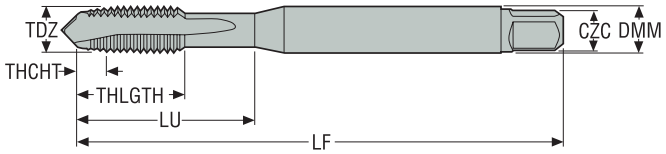

–Internal coolant
–Substrate: HSS-PM
–Coating: BRIGHT
–For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6H-TB-N002-A | 03000150 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 102,1<br>*4.020* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6H | B |
| MTP-M14X2.00ISO6H-TB-N002-A | 03000151 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 101,0<br>*3.976* | 12,1<br>*0.476* | 11.00X9.00 | 4 | DIN376 | 6H | B |
| MTP-M16X2.00ISO6H-TB-N002-A | 03000152 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 101,0<br>*3.976* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | B |

## MTP-S001

Through holes – Metric coarse threads





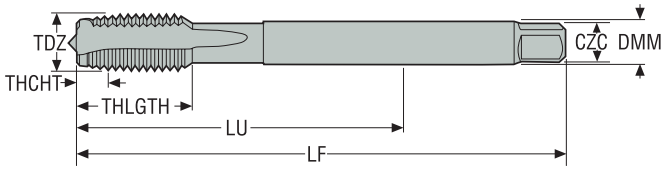

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M2X0.40ISO6HX-TB-S001 | 10001159 | M2 | 0,4 | 2,8<br>*0.110* | 8,0<br>*0.315* | 8,0<br>*0.315* | 43,2<br>*1.701* | 1,6<br>*0.063* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M2.5X0.45ISO6HX-TB-S001 | 10001161 | M2.5 | 0,45 | 2,8<br>*0.110* | 9,0<br>*0.354* | 9,0<br>*0.354* | 47,97<br>*1.889* | 2,1<br>*0.083* | 2.80X2.10 | 2 | DIN371 | 6HX | B |
| MTP-M3X0.50ISO6HX-TB-S001 | 10001162 | M3 | 0,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 10,0<br>*0.394* | 53,75<br>*2.116* | 2,5<br>*0.098* | 3.50X2.70 | 2 | DIN371 | 6HX | B |
| MTP-M3.5X0.60ISO6HX-TB-S001 | 10001163 | M3.5 | 0,6 | 4,0<br>*0.157* | 12,0<br>*0.472* | 12,0<br>*0.472* | 53,3<br>*2.098* | 2,9<br>*0.114* | 4.00X3.00 | 3 | DIN371 | 6HX | B |
| MTP-M4X0.70ISO6HX-TB-S001 | 10001164 | M4 | 0,7 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 59,85<br>*2.356* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | B |
| MTP-M5X0.80ISO6HX-TB-S001 | 10001165 | M5 | 0,8 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 66,4<br>*2.614* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M6X1.00ISO6HX-TB-S001 | 10001166 | M6 | 1,0 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 75,5<br>*2.972* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M8X1.25ISO6HX-TB-S001 | 10001167 | M8 | 1,25 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 84,37<br>*3.322* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | B |
| MTP-M10X1.50ISO6HX-TB-S001 | 10001168 | M10 | 1,5 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 93,25<br>*3.671* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | B |

## MTP-S002

Through holes – Metric coarse threads





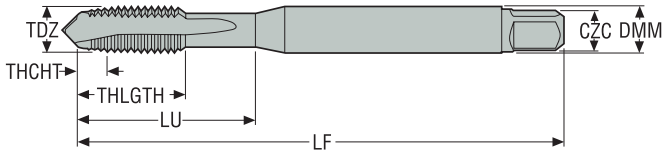

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M12X1.75ISO6HX-TB-S002 | 10001169 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 102,12<br>*4.020* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6HX | B |
| MTP-M16X2.00ISO6HX-TB-S002 | 10001170 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 101,0<br>*3.976* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | B |
| MTP-M20X2.50ISO6HX-TB-S002 | 10001171 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 128,75<br>*5.069* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | B |

## MTP-S011

Through holes – MF threads





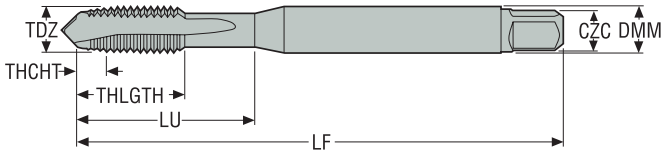

- Substrate: HSS-E-PM
- Coating: AlCrN
- For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-M6X0.75ISO6HX-TB-S011 | 10001176 | MF6X0.75 | 0,75 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 76,62<br>*3.017* | 5,25<br>*0.207* | 6.00X4.90 | 3 | DIN371 | 6HX | B |
| MTP-M8X0.750ISO6HX-TB-S011 | 10001177 | MF8X0.75 | 0,75 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 86,62<br>*3.410* | 7,25<br>*0.285* | 8.00X6.20 | 3 | DIN371 | 6HX | B |
| MTP-M8X1.00ISO6HX-TB-S011 | 10001178 | MF8X1.0 | 1,0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 85,5<br>*3.366* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN371 | 6HX | B |
| MTP-M10X1.00ISO6HX-TB-S011 | 10001179 | MF10X1.0 | 1,0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 95,5<br>*3.760* | 9,0<br>*0.354* | 10.00X8.00 | 3 | DIN371 | 6HX | B |
| MTP-M12X1.00ISO6HX-TB-S011 | 10001180 | MF12X1.0 | 1,0 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 95,5<br>*3.760* | 11,0<br>*0.433* | 9.00X7.00 | 4 | DIN374 | 6HX | B |
| MTP-M12X1.50ISO6HX-TB-S011 | 10001181 | MF12X1.5 | 1,5 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 93,25<br>*3.671* | 10,5<br>*0.413* | 9.00X7.00 | 4 | DIN374 | 6HX | B |
| MTP-M14X1.50ISO6HX-TB-S011 | 10001182 | MF14X1.5 | 1,5 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 93,25<br>*3.671* | 12,5<br>*0.492* | 11.00X9.00 | 4 | DIN374 | 6HX | B |

## MTP-S012

Through holes – MJ threads





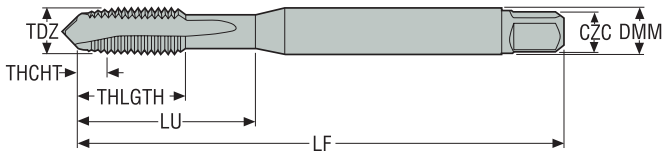

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-MJ4X0.70ISO4H-TB-S012 | 10001172 | MJ4X0.7 | 0,7 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 59,85<br>*2.356* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 4H | B |
| MTP-MJ5X0.80ISO4H-TB-S012 | 10001173 | MJ5X0.8 | 0,8 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 66,4<br>*2.614* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 4H | B |
| MTP-MJ6X1.00ISO4H-TB-S012 | 10001174 | MJ6X1 | 1,0 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 75,5<br>*2.972* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 4H | B |
| MTP-MJ8X1.25ISO4H-TB-S012 | 10001175 | MJ8X1.25 | 1,25 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 84,37<br>*3.322* | 6,9<br>*0.272* | 8.00X6.20 | 3 | DIN371 | 4H | B |

## MTP-S013

Through holes – EGM threads





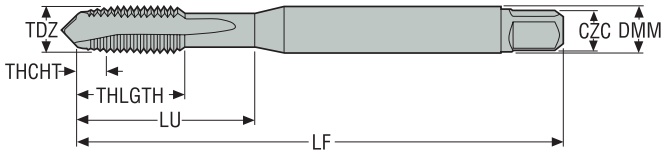

—Substrate: HSS-E-PM
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | | | | | |
| MTP-EGM4X0.7ISO4H-TB-S013<br>*MTP-STIM4X0.7ISO4H-TB-S013* | 10001218 | EGM4 | 0,7 | 6,0<br>*0.236* | 16<br>*0.630* | 16,0<br>*0.630* | 66,9<br>*2.632* | 4,2<br>*0.165* | 6.00X4.90 | 3 | DIN40435 | 4H | B |
| MTP-EGM5X0.8ISO4H-TB-S013<br>*MTP-STIM5X0.8ISO4H-TB-S013* | 10001219 | EGM5 | 0,8 | 6,0<br>*0.236* | 23<br>*0.906* | 15,0<br>*0.591* | 76,4<br>*3.008* | 5,3<br>*0.207* | 6.00X4.90 | 3 | DIN40435 | 4H | B |
| MTP-EGM6X1.0ISO4H-TB-S013<br>*MTP-STIM6X1.0ISO4H-TB-S013* | 10001220 | EGM6 | 1,0 | 8,0<br>*0.315* | 35<br>*1.378* | 18,0<br>*0.709* | 85,5<br>*3.366* | 6,3<br>*0.248* | 8.00X6.20 | 3 | DIN40435 | 4H | B |
| MTP-EGM8X1.25ISO4H-TB-S013<br>*MTP-STIM8X1.25ISO4H-TB-S013* | 10001221 | EGM8 | 1,25 | 10,0<br>*0.394* | 34<br>*1.319* | 20,0<br>*0.787* | 94,4<br>*3.715* | 8,4<br>*0.331* | 10.00X8.00 | 3 | DIN40435 | 4H | B |

## MTP-S042

Through holes – UNJF threads





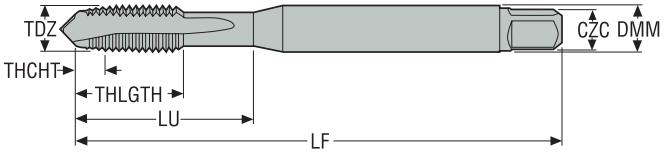

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-10-32UNJF3B-TB-S042 | 10001183 | UNJF10-32 | 32.0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 66,43<br>*2.615* | 4,15<br>*0.163* | 6.00X4.90 | 3 | DIN2184-1 | 3B | B |
| MTP-1/4-28UNJF3B-TB-S042 | 10001184 | UNJF1/4-28 | 28.0 | 7,0<br>*0.276* | 25,0<br>*0.984* | 15,0<br>*0.591* | 75,92<br>*2.989* | 5,6<br>*0.220* | 7.00X5.50 | 3 | DIN2184-1 | 3B | B |
| MTP-5/16-24UNJF3B-TB-S042 | 10001186 | UNJF5/16-24 | 24.0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 85,24<br>*3.356* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN2184-1 | 3B | B |
| MTP-3/8-24UNJF3B-TB-S042 | 10001185 | UNJF3/8-24 | 24.0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 95,24<br>*3.750* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN2184-1 | 3B | B |

## MTP-S043

Through holes – EGUNF threads





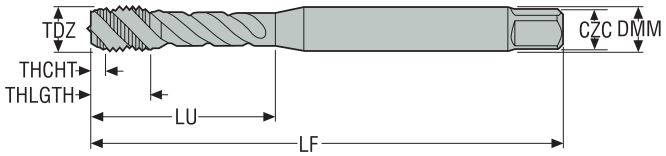

—Substrate: HSS-E-PM
—For cutting data see page(s) 271

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTP-10-32EGUNF3B-TB-S043 | 10001214 | EGUNF10-32 | 32.0 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 76,43<br>*3.009* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN2184-1 | 3B | B |
| MTP-1/4-28EGUNF3B-TB-S043 | 10001215 | EGUNF1/4-28 | 28.0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 85,92<br>*3.383* | 6,6<br>*0.260* | 8.00X6.20 | 3 | DIN2184-1 | 3B | B |
| MTP-5/16-24EGUNF3B-TB-S043 | 10001216 | EGUNF5/16-24 | 24.0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 95,24<br>*3.750* | 8,2<br>*0.323* | 10.00X8.00 | 3 | DIN2184-1 | 3B | B |
| MTP-3/8-24EGUNF3B-TB-S043 | 10001217 | EGUNF3/8-24 | 24.0 | 8,0<br>*0.315* | 76,0<br>*2.992* | 20,0<br>*0.787* | 95,24<br>*3.750* | 9,8<br>*0.386* | 8.00X6.20 | 3 | DIN2184-1 | 3B | B |

## MTH-P003

Blind holes – Metric coarse threads





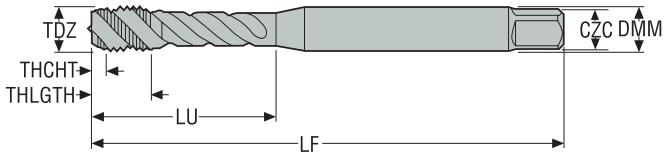

—Internal coolant
—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 259

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M1.6X0.35ISO6HX-BC-P003 | 02999995 | M1.6 | 0,35 | 2,5<br>*0.098* | 6,0<br>*0.236* | 4,0<br>*0.157* | 39,3<br>*1.547* | 1,3<br>*0.051* | 2.50X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M2X0.40ISO6HX-BC-P003 | 02999996 | M2 | 0,4 | 2,8<br>*0.110* | 9,0<br>*0.354* | 4,0<br>*0.157* | 44,2<br>*1.740* | 1,6<br>*0.063* | 2.80X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M2.2X0.45ISO6HX-BC-P003 | 02999997 | M2.2 | 0,45 | 2,8<br>*0.110* | 12,0<br>*0.472* | 4,0<br>*0.157* | 44,1<br>*1.736* | 1,8<br>*0.071* | 2.80X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M2.3X0.40ISO6HX-BC-P003 | 02999998 | M2.3 | 0,4 | 2,8<br>*0.110* | 12,0<br>*0.472* | 4,0<br>*0.157* | 44,2<br>*1.740* | 1,9<br>*0.075* | 2.80X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M2.5X0.45ISO6HX-BC-P003 | 02999999 | M2.5 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 4,0<br>*0.157* | 49,1<br>*1.933* | 2,1<br>*0.083* | 2.80X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M2.6X0.45ISO6HX-BC-P003 | 03000000 | M2.6 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 4,0<br>*0.157* | 49,1<br>*1.933* | 2,15<br>*0.085* | 2.80X2.10 | 2 | DIN371 | 6HX | C |
| MTH-M3X0.50ISO6HX-BC-P003 | 03000001 | M3 | 0,5 | 3,5<br>*0.138* | 18,0<br>*0.709* | 5,9<br>*0.232* | 54,625<br>*2.151* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6HX | C |
| MTH-M3.5X0.60ISO6HX-BC-P003 | 03000002 | M3.5 | 0,6 | 4,0<br>*0.157* | 20,0<br>*0.787* | 7,0<br>*0.276* | 54,35<br>*2.140* | 2,9<br>*0.114* | 4.00X3.00 | 3 | DIN371 | 6HX | C |
| MTH-M4X0.70ISO6HX-BC-P003 | 03000003 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 6,7<br>*0.264* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | C |
| MTH-M5X0.80ISO6HX-BC-P003 | 03000004 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 7,7<br>*0.303* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-P003 | 03000006 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M7X1.00ISO6HX-BC-P003 | 03000007 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-P003 | 03000008 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 11,6<br>*0.457* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-P003 | 03000009 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 15,1<br>*0.594* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | C |

## MTH-P003-A

Blind holes – Metric coarse threads





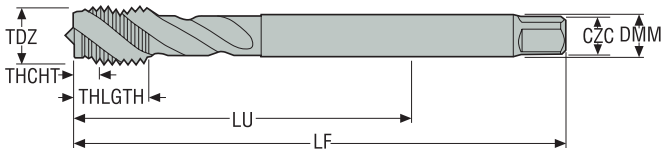

—Internal coolant
—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 259

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M4X0.70ISO6HX-BC-P003-A | 03000024 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 6,7<br>*0.264* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | C |
| MTH-M5X0.80ISO6HX-BC-P003-A | 03000025 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 7,7<br>*0.303* | 68,1<br>*2.681* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-P003-A | 03000026 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,39<br>*3.047* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M7X1.00ISO6HX-BC-P003-A | 03000027 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-P003-A | 03000028 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 11,6<br>*0.457* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-P003-A | 03000029 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 15,1<br>*0.594* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | C |

## MTH-P004

Blind holes – Metric coarse threads





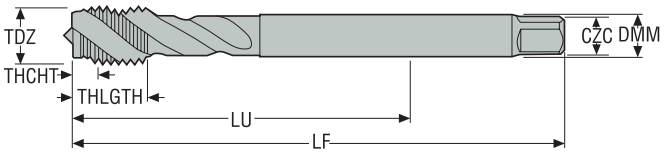

—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 259

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M5X0.80ISO6HX-BC-P004 | 03000010 | M5 | 0,8 | 3,5<br>*0.138* | 49,0<br>*1.929* | 8,0<br>*0.315* | 67,8<br>*2.669* | 4,3<br>*0.169* | 3.50X2.70 | 3 | DIN376 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-P004 | 03000011 | M6 | 1,0 | 4,5<br>*0.177* | 59,0<br>*2.323* | 10,0<br>*0.394* | 77,25<br>*3.041* | 5,1<br>*0.201* | 4.50X3.40 | 3 | DIN376 | 6HX | C |
| MTH-M7X1.00ISO6HX-BC-P004 | 03000012 | M7 | 1,0 | 5,5<br>*0.217* | 59,0<br>*2.323* | 10,0<br>*0.394* | 77,25<br>*3.041* | 6,1<br>*0.240* | 5.50X4.30 | 3 | DIN376 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-P004 | 03000013 | M8 | 1,25 | 6,0<br>*0.236* | 67,0<br>*2.638* | 13,0<br>*0.512* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 6.00X4.90 | 3 | DIN376 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-P004 | 03000014 | M10 | 1,5 | 7,0<br>*0.276* | 77,0<br>*3.031* | 20,0<br>*0.787* | 95,875<br>*3.775* | 8,6<br>*0.339* | 7.00X5.50 | 3 | DIN376 | 6HX | C |
| MTH-M12X1.75ISO6HX-BC-P004 | 03000015 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 16,0<br>*0.630* | 105,59<br>*4.157* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6HX | C |
| MTH-M14X2.00ISO6HX-BC-P004 | 03000016 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 104,5<br>*4.114* | 12,1<br>*0.476* | 11.00X9.00 | 3 | DIN376 | 6HX | C |
| MTH-M16X2.00ISO6HX-BC-P004 | 03000017 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 20,0<br>*0.787* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | C |
| MTH-M18X2.50ISO6HX-BC-P004 | 03000018 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 25,0<br>*0.984* | 118,75<br>*4.675* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6HX | C |
| MTH-M20X2.50ISO6HX-BC-P004 | 03000019 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 25,0<br>*0.984* | 133,75<br>*5.266* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | C |
| MTH-M22X2.50ISO6HX-BC-P004 | 03000020 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 25,0<br>*0.984* | 133,73<br>*5.265* | 19,7<br>*0.776* | 18.00X14.50 | 4 | DIN376 | 6HX | C |
| MTH-M24X3.00ISO6HX-BC-P004 | 03000021 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 30,0<br>*1.181* | 152,72<br>*6.013* | 21,0<br>*0.827* | 18.00X14.50 | 4 | DIN376 | 6HX | C |
| MTH-M27X3.00ISO6HX-BC-P004 | 03000022 | M27 | 3,0 | 20,0<br>*0.787* | 97,0<br>*3.819* | 30,0<br>*1.181* | 152,76<br>*6.014* | 24,0<br>*0.945* | 20.00X16.00 | 4 | DIN376 | 6HX | C |
| MTH-M30X3.50ISO6HX-BC-P004 | 03000023 | M30 | 3,5 | 22,0<br>*0.866* | 115,0<br>*4.528* | 36,0<br>*1.417* | 171,78<br>*6.763* | 26,5<br>*1.043* | 22.00X18.00 | 4 | DIN376 | 6HX | C |

## MTH-P004-A

Blind holes – Metric coarse threads





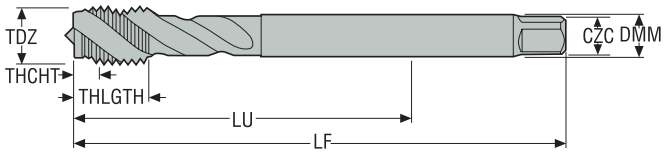

—Internal coolant
—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 259

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6HX-BC-P004-A | 03000030 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 16,0<br>*0.630* | 105,59<br>*4.157* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6HX | C |
| MTH-M14X2.00ISO6HX-BC-P004-A | 03000031 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 105,08<br>*4.137* | 12,1<br>*0.476* | 11.00X9.00 | 3 | DIN376 | 6HX | C |
| MTH-M16X2.00ISO6HX-BC-P004-A | 03000032 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 20,0<br>*0.787* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | C |
| MTH-M18X2.50ISO6HX-BC-P004-A | 03000033 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 25,0<br>*0.984* | 118,75<br>*4.675* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6HX | C |
| MTH-M20X2.50ISO6HX-BC-P004-A | 03000034 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 25,0<br>*0.984* | 133,75<br>*5.266* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | C |
| MTH-M22X2.50ISO6HX-BC-P004-A | 03000036 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 25,0<br>*0.984* | 133,73<br>*5.265* | 19,7<br>*0.776* | 18.00X14.50 | 4 | DIN376 | 6HX | C |
| MTH-M24X3.00ISO6HX-BC-P004-A | 03000037 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 30,0<br>*1.181* | 152,72<br>*6.013* | 21,0<br>*0.827* | 18.00X14.50 | 4 | DIN376 | 6HX | C |
| MTH-M27X3.00ISO6HX-BC-P004-A | 03000038 | M27 | 3,0 | 20,0<br>*0.787* | 97,0<br>*3.819* | 30,0<br>*1.181* | 151,75<br>*5.974* | 24,0<br>*0.945* | 20.00X16.00 | 4 | DIN376 | 6HX | C |
| MTH-M30X3.50ISO6HX-BC-P004-A | 03000039 | M30 | 3,5 | 22,0<br>*0.866* | 115,0<br>*4.528* | 36,0<br>*1.417* | 171,78<br>*6.763* | 26,5<br>*1.043* | 22.00X18.00 | 4 | DIN376 | 6HX | C |

## MTH-P011

Blind holes – MF threads






—Substrate: HSS-E-PM
—Coating: AlTiN-based
—For cutting data see page(s) 259

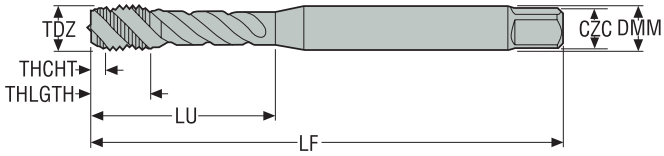
| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M4X0.50ISO6HX-BC-P011 | 03000040 | MF4X0.5 | 0,5 | 2,8<br>*0.110* | 43,0<br>*1.693* | 7,0<br>*0.276* | 61,625<br>*2.426* | 3,5<br>*0.138* | 2.80X2.10 | 3 | DIN374 | 6HX | C |
| MTH-M5X0.50ISO6HX-BC-P011 | 03000041 | MF5X0.5 | 0,5 | 3,5<br>*0.138* | 49,0<br>*1.929* | 8,0<br>*0.315* | 68,75<br>*2.707* | 4,5<br>*0.177* | 3.50X2.70 | 3 | DIN374 | 6HX | C |
| MTH-M6X0.75ISO6HX-BC-P011 | 03000042 | MF6X0.75 | 0,75 | 4,5<br>*0.177* | 59,0<br>*2.323* | 10,0<br>*0.394* | 77,7<br>*3.059* | 5,3<br>*0.209* | 4.50X3.40 | 3 | DIN374 | 6HX | C |
| MTH-M8X0.75ISO6HX-BC-P011 | 03000043 | MF8X0.75 | 0,75 | 6,0<br>*0.236* | 57,0<br>*2.244* | 13,0<br>*0.512* | 77,72<br>*3.060* | 7,3<br>*0.287* | 6.00X4.90 | 3 | DIN374 | 6HX | C |
| MTH-M8X1.00ISO6HX-BC-P011 | 03000044 | MF8X1.0 | 1,0 | 6,0<br>*0.236* | 67,0<br>*2.638* | 13,0<br>*0.512* | 87,2<br>*3.433* | 7,1<br>*0.280* | 6.00X4.90 | 3 | DIN374 | 6HX | C |
| MTH-M10X0.75ISO6HX-BC-P011 | 03000045 | MF10X0.75 | 0,75 | 7,0<br>*0.276* | 67,0<br>*2.638* | 13,0<br>*0.512* | 87,73<br>*3.454* | 9,3<br>*0.366* | 7.00X5.50 | 3 | DIN374 | 6HX | C |
| MTH-M10X1.00ISO6HX-BC-P011 | 03000046 | MF10X1.0 | 1,0 | 7,0<br>*0.276* | 67,0<br>*2.638* | 13,0<br>*0.512* | 87,25<br>*3.435* | 9,1<br>*0.358* | 7.00X5.50 | 3 | DIN374 | 6HX | C |
| MTH-M10X1.25ISO6HX-BC-P011 | 03000047 | MF10X1.25 | 1,25 | 7,0<br>*0.276* | 77,0<br>*3.031* | 15,0<br>*0.591* | 96,5625<br>*3.802* | 8,8<br>*0.346* | 7.00X5.50 | 3 | DIN374 | 6HX | C |
| MTH-M12X1.00ISO6HX-BC-P011 | 03000048 | MF12X1.0 | 1,0 | 9,0<br>*0.354* | 73,0<br>*2.874* | 15,0<br>*0.591* | 97,25<br>*3.829* | 11,1<br>*0.437* | 9.00X7.00 | 3 | DIN374 | 6HX | C |
| MTH-M12X1.25ISO6HX-BC-P011 | 03000049 | MF12X1.25 | 1,25 | 9,0<br>*0.354* | 73,0<br>*2.874* | 15,0<br>*0.591* | 96,5625<br>*3.802* | 10,8<br>*0.425* | 9.00X7.00 | 3 | DIN374 | 6HX | C |
| MTH-M12X1.50ISO6HX-BC-P011 | 03000050 | MF12X1.5 | 1,5 | 9,0<br>*0.354* | 73,0<br>*2.874* | 15,0<br>*0.591* | 96,07<br>*3.782* | 10,6<br>*0.417* | 9.00X7.00 | 3 | DIN374 | 6HX | C |
| MTH-M14X1.00ISO6HX-BC-P011 | 03000051 | MF14X1.0 | 1,0 | 11,0<br>*0.433* | 71,0<br>*2.795* | 15,0<br>*0.591* | 97,11<br>*3.823* | 13,1<br>*0.516* | 11.00X9.00 | 3 | DIN374 | 6HX | C |
| MTH-M14X1.25ISO6HX-BC-P011 | 03000052 | MF14X1.25 | 1,25 | 11,0<br>*0.433* | 71,0<br>*2.795* | 15,0<br>*0.591* | 96,5625<br>*3.802* | 12,8<br>*0.504* | 11.00X9.00 | 3 | DIN374 | 6HX | C |
| MTH-M14X1.50ISO6HX-BC-P011 | 03000053 | MF14X1.5 | 1,5 | 11,0<br>*0.433* | 71,0<br>*2.795* | 15,0<br>*0.591* | 95,875<br>*3.775* | 12,6<br>*0.496* | 11.00X9.00 | 3 | DIN374 | 6HX | C |
| MTH-M16X1.00ISO6HX-BC-P011 | 03000054 | MF16X1.0 | 1,0 | 12,0<br>*0.472* | 58,0<br>*2.283* | 15,0<br>*0.591* | 97,25<br>*3.829* | 15,1<br>*0.594* | 12.00X9.00 | 4 | DIN374 | 6HX | C |
| MTH-M16X1.50ISO6HX-BC-P011 | 03000055 | MF16X1.5 | 1,5 | 12,0<br>*0.472* | 58,0<br>*2.283* | 15,0<br>*0.591* | 95,875<br>*3.775* | 14,6<br>*0.575* | 12.00X9.00 | 4 | DIN374 | 6HX | C |
| MTH-M18X1.00ISO6HX-BC-P011 | 03000056 | MF18X1.0 | 1,0 | 14,0<br>*0.551* | 66,0<br>*2.598* | 17,0<br>*0.669* | 105,875<br>*4.168* | 17,1<br>*0.673* | 14.00X11.00 | 4 | DIN374 | 6HX | C |
| MTH-M18X1.50ISO6HX-BC-P011 | 03000057 | MF18X1.5 | 1,5 | 14,0<br>*0.551* | 66,0<br>*2.598* | 17,0<br>*0.669* | 105,71<br>*4.162* | 16,6<br>*0.654* | 14.00X11.00 | 4 | DIN374 | 6HX | C |
| MTH-M20X1.00ISO6HX-BC-P011 | 03000058 | MF20X1.0 | 1,0 | 16,0<br>*0.630* | 80,0<br>*3.150* | 17,0<br>*0.669* | 122,25<br>*4.813* | 19,1<br>*0.752* | 16.00X12.00 | 4 | DIN374 | 6HX | C |
| MTH-M20X1.50ISO6HX-BC-P011 | 03000059 | MF20X1.5 | 1,5 | 16,0<br>*0.630* | 80,0<br>*3.150* | 17,0<br>*0.669* | 120,875<br>*4.759* | 18,6<br>*0.732* | 16.00X12.00 | 4 | DIN374 | 6HX | C |
| MTH-M22X1.50ISO6HX-BC-P011 | 03000060 | MF22X1.5 | 1,5 | 18,0<br>*0.709* | 78,0<br>*3.071* | 17,0<br>*0.669* | 120,875<br>*4.759* | 20,5<br>*0.807* | 18.00X14.50 | 4 | DIN374 | 6HX | C |
| MTH-M24X1.50ISO6HX-BC-P011 | 03000061 | MF24X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 20,0<br>*0.787* | 135,875<br>*5.349* | 22,5<br>*0.886* | 18.00X14.50 | 4 | DIN374 | 6HX | C |
| MTH-M24X2.00ISO6HX-BC-P011 | 03000062 | MF24X2.0 | 2,0 | 18,0<br>*0.709* | 93,0<br>*3.661* | 20,0<br>*0.787* | 134,7<br>*5.303* | 22,0<br>*0.866* | 18.00X14.50 | 4 | DIN374 | 6HX | C |
| MTH-M25X1.50ISO6HX-BC-P011 | 03000063 | MF25X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 20,0<br>*0.787* | 135,7<br>*5.343* | 23,5<br>*0.925* | 18.00X14.50 | 4 | DIN374 | 6HX | C |
| MTH-M26X1.50ISO6HX-BC-P011 | 03000064 | MF26X1.5 | 1,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 20,0<br>*0.787* | 135,7<br>*5.343* | 24,5<br>*0.965* | 18.00X14.50 | 4 | DIN374 | 6HX | C |
| MTH-M27X1.50ISO6HX-BC-P011 | 03000065 | MF27X1.5 | 1,5 | 20,0<br>*0.787* | 77,0<br>*3.031* | 20,0<br>*0.787* | 135,875<br>*5.349* | 25,5<br>*1.004* | 20.00X16.00 | 4 | DIN374 | 6HX | C |

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M27X2.00ISO6HX-BC-P011 | 03000066 | MF27X2.0 | 2,0 | 20,0<br>*0.787* | 77,0<br>*3.031* | 20,0<br>*0.787* | 134,73<br>*5.304* | 25,0<br>*0.984* | 20.00X16.00 | 4 | DIN374 | 6HX | C |
| MTH-M28X1.50ISO6HX-BC-P011 | 03000067 | MF28X1.5 | 1,5 | 20,0<br>*0.787* | 77,0<br>*3.031* | 20,0<br>*0.787* | 135,72<br>*5.343* | 26,5<br>*1.043* | 20.00X16.00 | 4 | DIN374 | 6HX | C |
| MTH-M30X1.50ISO6HX-BC-P011 | 03000068 | MF30X1.5 | 1,5 | 22,0<br>*0.866* | 85,0<br>*3.346* | 20,0<br>*0.787* | 150,0<br>*5.906* | 28,5<br>*1.122* | 22.00X18.00 | 4 | DIN374 | 6HX | C |
| MTH-M30X2.00ISO6HX-BC-P011 | 03000069 | MF30X2.0 | 2,0 | 22,0<br>*0.866* | 85,0<br>*3.346* | 20,0<br>*0.787* | 144,73<br>*5.698* | 28,0<br>*1.102* | 22.00X18.00 | 4 | DIN374 | 6HX | C |

## MTH-M003

Blind holes – Metric coarse threads





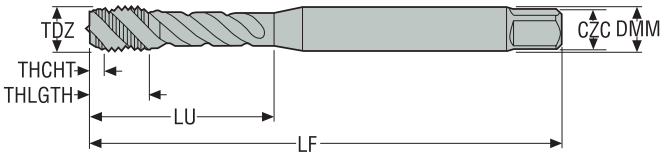

—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M1.6X0.35ISO6H-BC-M003 | 03000106 | M1.6 | 0,35 | 2,5<br>*0.098* | 6,0<br>*0.236* | 4,0<br>*0.157* | 39,21<br>*1.544* | 1,3<br>*0.051* | 2.50X2.10 | 2 | DIN371 | 6H | C |
| MTH-M2X0.40ISO6H-BC-M003 | 03000107 | M2 | 0,4 | 2,8<br>*0.110* | 9,0<br>*0.354* | 4,0<br>*0.157* | 44,2<br>*1.740* | 1,6<br>*0.063* | 2.80X2.10 | 3 | DIN371 | 6H | C |
| MTH-M2.2X0.45ISO6H-BC-M003 | 03000108 | M2.2 | 0,45 | 2,8<br>*0.110* | 12,0<br>*0.472* | 4,0<br>*0.157* | 44,41<br>*1.748* | 1,8<br>*0.071* | 2.80X2.10 | 3 | DIN371 | 6H | C |
| MTH-M2.5X0.45ISO6H-BC-M003 | 03000110 | M2.5 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 4,0<br>*0.157* | 49,32<br>*1.942* | 2,1<br>*0.083* | 2.80X2.10 | 3 | DIN371 | 6H | C |
| MTH-M2.6X0.45ISO6H-BC-M003 | 03000111 | M2.6 | 0,45 | 2,8<br>*0.110* | 12,5<br>*0.492* | 4,0<br>*0.157* | 49,32<br>*1.942* | 2,15<br>*0.085* | 2.80X2.10 | 3 | DIN371 | 6H | C |
| MTH-M3X0.50ISO6H-BC-M003 | 03000112 | M3 | 0,5 | 3,5<br>*0.138* | 18,0<br>*0.709* | 5,9<br>*0.232* | 54,625<br>*2.151* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6H | C |
| MTH-M3.5X0.60ISO6H-BC-M003 | 03000113 | M3.5 | 0,6 | 4,0<br>*0.157* | 20,0<br>*0.787* | 7,0<br>*0.276* | 54,35<br>*2.140* | 2,9<br>*0.114* | 4.00X3.00 | 3 | DIN371 | 6H | C |
| MTH-M4X0.70ISO6H-BC-M003 | 03000114 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 6,7<br>*0.264* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6H | C |
| MTH-M5X0.80ISO6H-BC-M003 | 03000115 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 7,7<br>*0.303* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M6X1.00ISO6H-BC-M003 | 03000116 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M7X1.00ISO6H-BC-M003 | 03000117 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6H | C |
| MTH-M8X1.25ISO6H-BC-M003 | 03000118 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 11,6<br>*0.457* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | C |
| MTH-M10X1.50ISO6H-BC-M003 | 03000119 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 15,1<br>*0.594* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | C |

## MTH-M003-A

Blind holes – Metric coarse threads





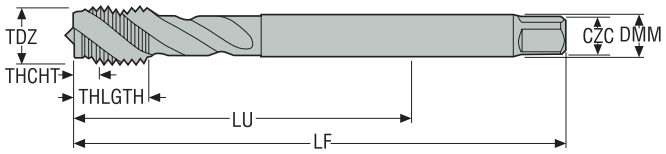

—Internal coolant
—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M4X0.70ISO6H-BC-M003-A | 03000125 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 6,7<br>*0.264* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6H | C |
| MTH-M5X0.80ISO6H-BC-M003-A | 03000126 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 7,7<br>*0.303* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M6X1.00ISO6H-BC-M003-A | 03000127 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M7X1.00ISO6H-BC-M003-A | 03000128 | M7 | 1,0 | 7,0<br>*0.276* | 30,0<br>*1.181* | 10,0<br>*0.394* | 77,57<br>*3.054* | 6,1<br>*0.240* | 7.00X5.50 | 3 | DIN371 | 6H | C |
| MTH-M8X1.25ISO6H-BC-M003-A | 03000129 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 11,6<br>*0.457* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | C |
| MTH-M10X1.50ISO6H-BC-M003-A | 03000130 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 15,1<br>*0.594* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | C |

## MTH-M004

Blind holes – Metric coarse threads





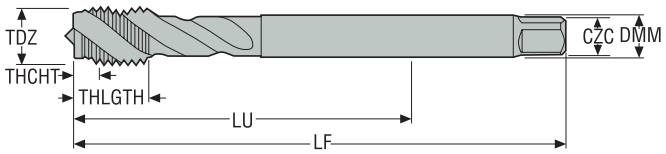

—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6H-BC-M004 | 03000120 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,1875<br>*4.141* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6H | C |
| MTH-M14X2.00ISO6H-BC-M004 | 03000121 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 104,5<br>*4.114* | 12,1<br>*0.476* | 11.00X9.00 | 3 | DIN376 | 6H | C |
| MTH-M16X2.00ISO6H-BC-M004 | 03000122 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 20,0<br>*0.787* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | C |
| MTH-M18X2.50ISO6H-BC-M004 | 03000123 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 25,0<br>*0.984* | 118,125<br>*4.651* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6H | C |
| MTH-M20X2.50ISO6H-BC-M004 | 03000124 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 25,0<br>*0.984* | 133,125<br>*5.241* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6H | C |

## MTH-M004-A

Blind holes – Metric coarse threads





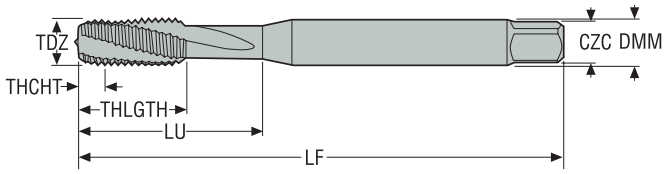

—Internal coolant
—Substrate: HSS-E
—Coating: TiCN
—For cutting data see page(s) 263

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6H-BC-M004-A | 03000131 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,1875<br>*4.141* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6H | C |
| MTH-M14X2.00ISO6H-BC-M004-A | 03000132 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 105,63<br>*4.159* | 12,1<br>*0.476* | 11.00X9.00 | 3 | DIN376 | 6H | C |
| MTH-M16X2.00ISO6H-BC-M004-A | 03000133 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 20,0<br>*0.787* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6H | C |
| MTH-M18X2.50ISO6H-BC-M004-A | 03000134 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 25,0<br>*0.984* | 119,42<br>*4.702* | 15,7<br>*0.618* | 14.00X11.00 | 4 | DIN376 | 6H | C |
| MTH-M20X2.50ISO6H-BC-M004-A | 03000135 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 25,0<br>*0.984* | 134,43<br>*5.293* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6H | C |

## MTH-N001

Blind holes – Metric coarse threads





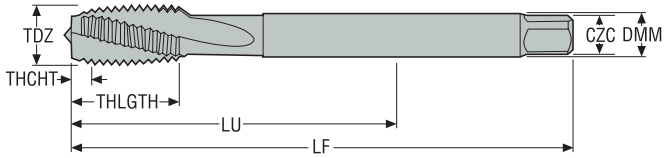

–Substrate: HSS-E-PM
–Coating: BRIGHT
–For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M3X0.50ISO6H-BC-N001 | 03000153 | M3 | 0,5 | 3,5<br>*0.138* | 18,0<br>*0.709* | 9,0<br>*0.354* | 54,625<br>*2.151* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6H | C |
| MTH-M4X0.70ISO6H-BC-N001 | 03000154 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 12,0<br>*0.472* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6H | C |
| MTH-M5X0.80ISO6H-BC-N001 | 03000155 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 13,0<br>*0.512* | 68,2<br>*2.685* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M6X1.00ISO6H-BC-N001 | 03000156 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 15,0<br>*0.591* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6H | C |
| MTH-M8X1.25ISO6H-BC-N001 | 03000157 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 18,0<br>*0.709* | 87,0<br>*3.425* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6H | C |
| MTH-M10X1.50ISO6H-BC-N001 | 03000158 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 20,0<br>*0.787* | 96,3<br>*3.791* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6H | C |

## MTH-N002

Blind holes – Metric coarse threads





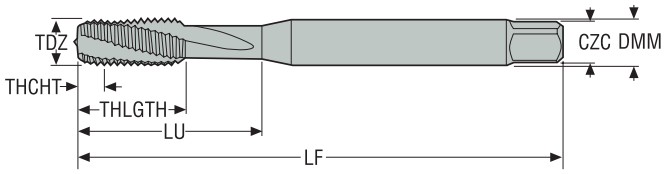

–Substrate: HSS-E-PM
–Coating: BRIGHT
–For cutting data see page(s) 265

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6H-BC-N002 | 03000159 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,25<br>*4.144* | 10,4<br>*0.409* | 9.00X7.00 | 3 | DIN376 | 6H | C |
| MTH-M14X2.00ISO6H-BC-N002 | 03000160 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 104,6<br>*4.118* | 12,1<br>*0.476* | 11.00X9.00 | 3 | DIN376 | 6H | C |
| MTH-M16X2.00ISO6H-BC-N002 | 03000161 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 3 | DIN376 | 6H | C |

## MTH-S001

Blind holes – Metric coarse threads





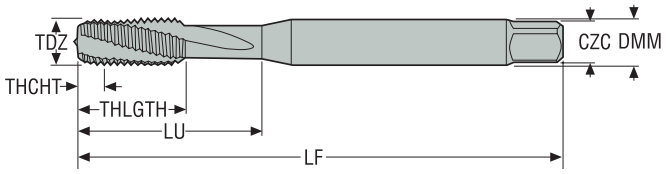

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M3X0.50ISO6HX-BC-S001 | 10001105 | M3 | 0,5 | 3,5<br>*0.138* | 8,0<br>*0.315* | 8,0<br>*0.315* | 54,75<br>*2.156* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6HX | C |
| MTH-M4X0.70ISO6HX-BC-S001 | 10001106 | M4 | 0,7 | 4,5<br>*0.177* | 10,5<br>*0.413* | 10,5<br>*0.413* | 61,25<br>*2.411* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | C |
| MTH-M5X0.80ISO6HX-BC-S001 | 10001107 | M5 | 0,8 | 6,0<br>*0.236* | 13,0<br>*0.512* | 13,0<br>*0.512* | 68,0<br>*2.677* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-S001 | 10001108 | M6 | 1,0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 77,5<br>*3.051* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-S001 | 10001109 | M8 | 1,25 | 8,0<br>*0.315* | 20,5<br>*0.807* | 20,5<br>*0.807* | 86,87<br>*3.420* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-S001 | 10001110 | M10 | 1,5 | 10,0<br>*0.394* | 25,5<br>*1.004* | 25,5<br>*1.004* | 96,25<br>*3.789* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | C |

## MTH-S002

Blind holes – Metric coarse threads



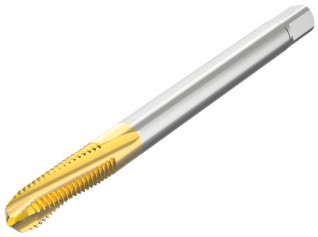


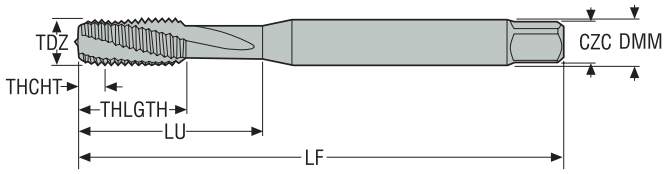

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6HX-BC-S002 | 10001111 | M12 | 1,75 | 12,0<br>*0.472* | 30,5<br>*1.201* | 30,5<br>*1.201* | 105,09<br>*4.137* | 10,4<br>*0.409* | 12.00X9.00 | 4 | DIN371 | 6HX | C |
| MTH-M16X2.00ISO6HX-BC-S002 | 10001112 | M16 | 2,0 | 16,0<br>*0.630* | 39,5<br>*1.555* | 39,5<br>*1.555* | 104,4<br>*4.110* | 14,1<br>*0.555* | 16.00X12.00 | 4 | DIN371 | 6HX | C |

## MTH-S003

Blind holes – Metric coarse threads



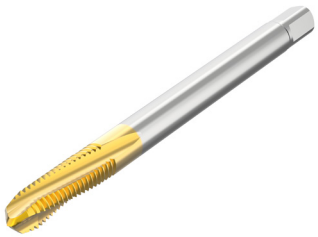


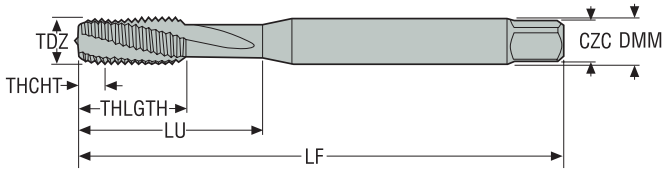

—Substrate: HSS-E-PM
—Coating: TiN
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M3X0.50ISO6HX-BC-S003 | 10001073 | M3 | 0,5 | 3,5<br>*0.138* | 8,0<br>*0.315* | 8,0<br>*0.315* | 54,75<br>*2.156* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6HX | C |
| MTH-M4X0.70ISO6HX-BC-S003 | 10001074 | M4 | 0,7 | 4,5<br>*0.177* | 10,5<br>*0.413* | 10,5<br>*0.413* | 61,25<br>*2.411* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | C |
| MTH-M5X0.80ISO6HX-BC-S003 | 10001075 | M5 | 0,8 | 6,0<br>*0.236* | 13,0<br>*0.512* | 13,0<br>*0.512* | 68,0<br>*2.677* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-S003 | 10001076 | M6 | 1,0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 77,5<br>*3.051* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-S003 | 10001077 | M8 | 1,25 | 8,0<br>*0.315* | 20,5<br>*0.807* | 20,5<br>*0.807* | 86,87<br>*3.420* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-S003 | 10001078 | M10 | 1,5 | 10,0<br>*0.394* | 25,5<br>*1.004* | 25,5<br>*1.004* | 96,25<br>*3.789* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | C |

## MTH-S004

Blind holes – Metric coarse threads





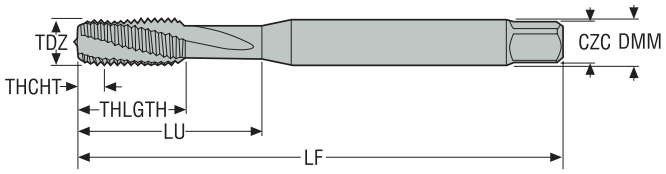

—Substrate: HSS-E-PM
—Coating: TiN
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6HX-BC-S004 | 10001079 | M12 | 1,75 | 12,0<br>*0.472* | 30,5<br>*1.201* | 30,5<br>*1.201* | 105,09<br>*4.137* | 10,4<br>*0.409* | 12.00X9.00 | 4 | DIN371 | 6HX | C |
| MTH-M16X2.00ISO6HX-BC-S004 | 10001080 | M16 | 2,0 | 16,0<br>*0.630* | 39,5<br>*1.555* | 39,5<br>*1.555* | 104,4<br>*4.110* | 14,1<br>*0.555* | 16.00X12.00 | 4 | DIN371 | 6HX | C |

## MTH-S011

Blind holes – MF threads





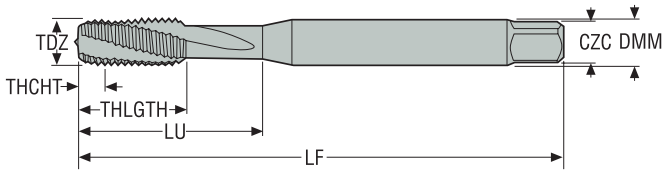

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M8X1.00ISO6HX-BC-S011 | 10001082 | MF8X1.0 | 1,0 | 8,0<br>*0.315* | 20,0<br>*0.787* | 20,0<br>*0.787* | 87,5<br>*3.445* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.00ISO6HX-BC-S011 | 10001083 | MF10X1.0 | 1,0 | 10,0<br>*0.394* | 24,0<br>*0.945* | 24,0<br>*0.945* | 87,5<br>*3.445* | 9,0<br>*0.354* | 10.00X8.00 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.25ISO6HX-BC-S011 | 10001084 | MF10X1.25 | 1,25 | 10,0<br>*0.394* | 24,5<br>*0.965* | 24,5<br>*0.965* | 96,87<br>*3.814* | 8,75<br>*0.344* | 10.00X8.00 | 3 | DIN371 | 6HX | C |
| MTH-M12X1.25ISO6HX-BC-S011 | 10001085 | MF12X1.25 | 1,25 | 12,0<br>*0.472* | 28,5<br>*1.122* | 28,5<br>*1.122* | 96,49<br>*3.799* | 10,75<br>*0.423* | 12.00X9.00 | 4 | DIN371 | 6HX | C |
| MTH-M12X1.50ISO6HX-BC-S011 | 10001086 | MF12X1.5 | 1,5 | 12,0<br>*0.472* | 29,5<br>*1.161* | 29,5<br>*1.161* | 95,8<br>*3.772* | 10,5<br>*0.413* | 12.00X9.00 | 4 | DIN371 | 6HX | C |

## MTH-S012

Blind holes – MJ threads





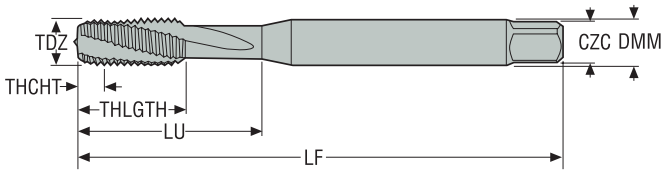

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-MJ3X0.50ISO4H-BC-S012 | 10001069 | MJ3X0.5 | 0,5 | 3,5<br>*0.138* | 8,0<br>*0.315* | 8,0<br>*0.315* | 54,75<br>*2.156* | 2,6<br>*0.102* | 3.50X2.70 | 3 | DIN371 | 4H | C |
| MTH-MJ4X0.70ISO4H-BC-S012 | 10001070 | MJ4X0.7 | 0,7 | 4,5<br>*0.177* | 10,5<br>*0.413* | 10,5<br>*0.413* | 61,25<br>*2.411* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 4H | C |
| MTH-MJ5X0.80ISO4H-BC-S012 | 10001071 | MJ5X0.8 | 0,8 | 6,0<br>*0.236* | 13,0<br>*0.512* | 13,0<br>*0.512* | 68,0<br>*2.677* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 4H | C |
| MTH-MJ6X1.00ISO4H-BC-S012 | 10001072 | MJ6X1 | 1,0 | 6,0<br>*0.236* | 15,5<br>*0.610* | 15,5<br>*0.610* | 77,5<br>*3.051* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 4H | C |

## MTH-S031

Blind holes – UNC threads





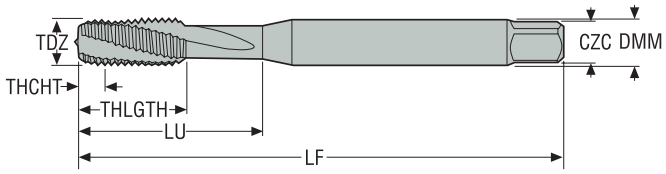

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-2-56UNC2B-BC-S031 | 10001113 | UNC2-56 | 56.0 | 2,8<br>*0.110* | 9,0<br>*0.354* | 9,0<br>*0.354* | 43,87<br>*1.727* | 1,85<br>*0.073* | 2.80X2.10 | 3 | DIN2184-1 | 2B | C |
| MTH-3-48UNC2B-BC-S031 | 10001114 | UNC3-48 | 48.0 | 2,8<br>*0.110* | 9,0<br>*0.354* | 9,0<br>*0.354* | 48,68<br>*1.917* | 2,1<br>*0.083* | 2.80X2.10 | 3 | DIN2184-1 | 2B | C |
| MTH-4-40UNC2B-BC-S031 | 10001115 | UNC4-40 | 40.0 | 3,5<br>*0.138* | 10,0<br>*0.394* | 10,0<br>*0.394* | 54,41<br>*2.142* | 2,35<br>*0.093* | 3.50X2.70 | 3 | DIN2184-1 | 2B | C |
| MTH-6-32UNC2B-BC-S031 | 10001116 | UNC6-32 | 32.0 | 4,0<br>*0.157* | 12,0<br>*0.472* | 12,0<br>*0.472* | 54,02<br>*2.127* | 2,85<br>*0.112* | 4.00X3.00 | 3 | DIN2184-1 | 2B | C |
| MTH-8-32UNC2B-BC-S031 | 10001117 | UNC8-32 | 32.0 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 61,02<br>*2.402* | 3,5<br>*0.138* | 4.50X3.40 | 3 | DIN2184-1 | 2B | C |
| MTH-10-24UNC2B-BC-S031 | 10001119 | UNC10-24 | 24.0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 67,35<br>*2.652* | 3,9<br>*0.154* | 6.00X4.90 | 3 | DIN2184-1 | 2B | C |
| MTH-1/4-20UNC2B-BC-S031 | 10001120 | UNC1/4-20 | 20.0 | 7,0<br>*0.276* | 15,0<br>*0.591* | 15,0<br>*0.591* | 76,44<br>*3.009* | 5,1<br>*0.201* | 7.00X5.50 | 3 | DIN2184-1 | 2B | C |
| MTH-5/16-18UNC2B-BC-S031 | 10001122 | UNC5/16-18 | 18.0 | 8,0<br>*0.315* | 18,0<br>*0.709* | 18,0<br>*0.709* | 86,05<br>*3.388* | 6,6<br>*0.260* | 8.00X6.20 | 3 | DIN2184-1 | 2B | C |
| MTH-3/8-16UNC2B-BC-S031 | 10001121 | UNC3/8-16 | 16.0 | 10,0<br>*0.394* | 20,0<br>*0.787* | 20,0<br>*0.787* | 95,55<br>*3.762* | 8,0<br>*0.315* | 10.00X8.00 | 4 | DIN2184-1 | 2B | C |

## MTH-S032

Blind holes – UNJC threads





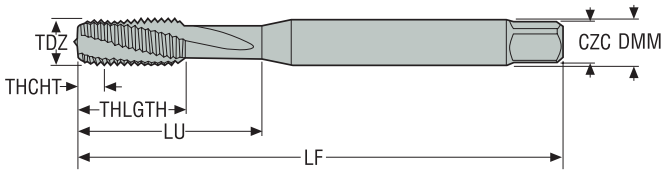

—Substrate: HSS-E-PM
—For cutting data see page(s) 267

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-4-40UNJC3B-BC-S032 | 10001087 | UNJC4-40 | 40.0 | 3,5<br>*0.138* | 8,0<br>*0.315* | 8,0<br>*0.315* | 54,41<br>*2.142* | 2,3<br>*0.091* | 3.50X2.70 | 3 | DIN2184-1 | 3B | C |
| MTH-6-32UNJC3B-BC-S032 | 10001088 | UNJC6-32 | 32.0 | 4,0<br>*0.157* | 10,0<br>*0.394* | 10,0<br>*0.394* | 54,02<br>*2.127* | 2,8<br>*0.110* | 4.00X3.00 | 3 | DIN2184-1 | 3B | C |
| MTH-8-32UNJC3B-BC-S032 | 10001089 | UNJC8-32 | 32.0 | 4,5<br>*0.177* | 11,0<br>*0.433* | 11,0<br>*0.433* | 61,02<br>*2.402* | 3,5<br>*0.138* | 4.50X3.40 | 3 | DIN2184-1 | 3B | C |
| MTH-10-24UNJC3B-BC-S032 | 10001090 | UNJC10-24 | 24.0 | 6,0<br>*0.236* | 13,5<br>*0.531* | 13,5<br>*0.531* | 67,35<br>*2.652* | 3,9<br>*0.154* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-20UNJC3B-BC-S032 | 10001091 | UNJC1/4-20 | 20.0 | 7,0<br>*0.276* | 17,5<br>*0.689* | 17,5<br>*0.689* | 76,82<br>*3.024* | 5,2<br>*0.205* | 7.00X5.50 | 3 | DIN2184-1 | 3B | C |
| MTH-5/16-18UNJC3B-BC-S032 | 10001093 | UNJC5/16-18 | 18.0 | 8,0<br>*0.315* | 21,0<br>*0.827* | 21,0<br>*0.827* | 86,47<br>*3.404* | 6,7<br>*0.264* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-16UNJC3B-BC-S032 | 10001092 | UNJC3/8-16 | 16.0 | 10,0<br>*0.394* | 25,0<br>*0.984* | 25,0<br>*0.984* | 96,03<br>*3.781* | 8,1<br>*0.319* | 10.00X8.00 | 3 | DIN2184-1 | 3B | C |

## MTH-S041

Blind holes – UNF threads





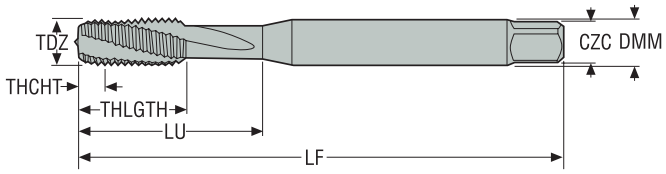

—Substrate: HSS-E-PM
—For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-6-40UNF3B-BC-S041 | 10001123 | UNF6-40 | 40.0 | 4,0<br>*0.157* | 12,0<br>*0.472* | 12,0<br>*0.472* | 54,41<br>*2.142* | 2,95<br>*0.116* | 4.00X3.00 | 3 | DIN2184-1 | 3B | C |
| MTH-8-36UNF3B-BC-S041 | 10001126 | UNF8-36 | 36.0 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 61,24<br>*2.411* | 3,5<br>*0.138* | 4.50X3.40 | 3 | DIN2184-1 | 3B | C |
| MTH-10-32UNF3B-BC-S041 | 10001127 | UNF10-32 | 32.0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 68,02<br>*2.678* | 4,1<br>*0.161* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-12-28UNF3B-BC-S041 | 10001129 | UNF12-28 | 28.0 | 6,0<br>*0.236* | 15,0<br>*0.591* | 15,0<br>*0.591* | 77,46<br>*3.050* | 4,6<br>*0.181* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-28UNF3B-BC-S041 | 10001130 | UNF1/4-28 | 28.0 | 7,0<br>*0.276* | 25,0<br>*0.984* | 15,0<br>*0.591* | 77,46<br>*3.050* | 5,5<br>*0.217* | 7.00X5.50 | 3 | DIN2184-1 | 3B | C |
| MTH-5/16-24UNF3B-BC-S041 | 10001133 | UNF5/16-24 | 24.0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 87,03<br>*3.426* | 6,9<br>*0.272* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-24UNF3B-BC-S041 | 10001131 | UNF3/8-24 | 24.0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 97,03<br>*3.820* | 8,5<br>*0.335* | 10.00X8.00 | 4 | DIN2184-1 | 3B | C |

## MTH-S042

Blind holes – UNJF threads





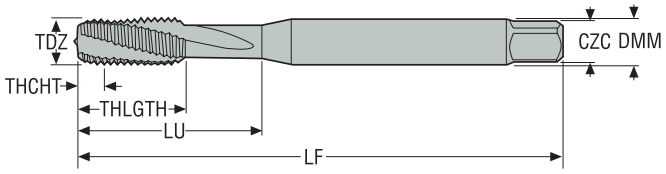

—Substrate: HSS-E-PM
—For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-6-40UNJF3B-BC-S042 | 10001094 | UNJF6-40 | 40.0 | 4,0<br>*0.157* | 9,5<br>*0.374* | 9,5<br>*0.374* | 54,41<br>*2.142* | 2,95<br>*0.116* | 4.00X3.00 | 3 | DIN2184-1 | 3B | C |
| MTH-8-36UNJF3B-BC-S042 | 10001095 | UNJF8-36 | 36.0 | 4,5<br>*0.177* | 11,0<br>*0.433* | 11,0<br>*0.433* | 61,24<br>*2.411* | 3,6<br>*0.142* | 4.50X3.40 | 3 | DIN2184-1 | 3B | C |
| MTH-10-32UNJF3B-BC-S042 | 10001097 | UNJF10-32 | 32.0 | 6,0<br>*0.236* | 12,5<br>*0.492* | 12,5<br>*0.492* | 68,02<br>*2.678* | 4,15<br>*0.163* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-28UNJF3B-BC-S042 | 10001098 | UNJF1/4-28 | 28.0 | 7,0<br>*0.276* | 16,0<br>*0.630* | 16,0<br>*0.630* | 77,73<br>*3.060* | 5,6<br>*0.220* | 7.00X5.50 | 3 | DIN2184-1 | 3B | C |
| MTH-5/16-24UNJF3B-BC-S042 | 10001100 | UNJF5/16-24 | 24.0 | 8,0<br>*0.315* | 20,0<br>*0.787* | 20,0<br>*0.787* | 87,35<br>*3.439* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-24UNJF3B-BC-S042 | 10001099 | UNJF3/8-24 | 24.0 | 10,0<br>*0.394* | 23,0<br>*0.906* | 23,0<br>*0.906* | 97,35<br>*3.833* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN2184-1 | 3B | C |

## MTH-S043

Blind holes – EGUNF threads





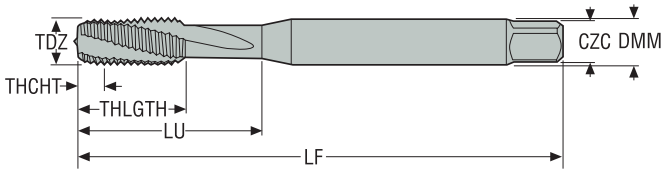

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 269

| Designation | Item number | TDZ | TPIN | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | | | | | |
| MTH-10-32EGUNF3B-BC-S043<br>*MTH-10-32STIUNF3B-BC-S043* | 10001199 | EGUNF10-32 | 32,0 | 6,0<br>*0.236* | 23<br>*0.906* | 15,0<br>*0.591* | 77,8<br>*3.062* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-28EGUNF3B-BC-S043<br>*MTH-1/4-28STIUNF3B-BC-S043* | 10001200 | EGUNF1/4-28 | 28,0 | 8,0<br>*0.315* | 30<br>*1.161* | 18,0<br>*0.709* | 87,5<br>*3.443* | 6,6<br>*0.260* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-5/16-24EGUNF3B-BC-S043<br>*MTH-5/16-24STIUNF3B-BC-S043* | 10001201 | EGUNF5/16-24 | 24,0 | 10,0<br>*0.394* | 34<br>*1.319* | 20,0<br>*0.787* | 97,0<br>*3.820* | 8,2<br>*0.323* | 10.00X8.00 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-24EGUNF3B-BC-S043<br>*MTH-3/8-24STIUNF3B-BC-S043* | 10001202 | EGUNF3/8-24 | 24,0 | 8,0<br>*0.315* | 76<br>*2.992* | 20,0<br>*0.787* | 97,0<br>*3.820* | 9,8<br>*0.386* | 8.00X6.20 | 4 | DIN2184-1 | 3B | C |

## MTH-S044

Blind holes – EGUNF threads





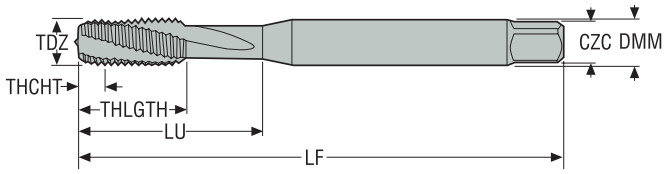

—Substrate: HSS-E-PM
—For cutting data see page(s) 269

| Designation | Item number | TDZ | TPIN | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | mm<br>*inch* | | | | | |
| MTH-10-32EGUNF3B-BC-S044<br>*MTH-10-32STIUNF3B-BC-S044* | 10001101 | EGUNF10-32 | 32,0 | 6,0<br>*0.236* | 15<br>*0.591* | 15,0<br>*0.591* | 78,0<br>*3.072* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-28EGUNF3B-BC-S044<br>*MTH-1/4-28STIUNF3B-BC-S044* | 10001102 | EGUNF1/4-28 | 28,0 | 8,0<br>*0.315* | 18<br>*0.709* | 18,0<br>*0.709* | 87,7<br>*3.454* | 6,6<br>*0.260* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-24EGUNF3B-BC-S044<br>*MTH-3/8-24STIUNF3B-BC-S044* | 10001103 | EGUNF3/8-24 | 24,0 | 11,0<br>*0.433* | 20<br>*0.787* | 20,0<br>*0.787* | 87,0<br>*3.426* | 9,8<br>*0.386* | 11.00X9.00 | 4 | DIN2184-1 | 3B | C |
| MTH-5/16-24EGUNF3B-BC-S044<br>*MTH-5/16-24STIUNF3B-BC-S044* | 10001104 | EGUNF5/16-24 | 24,0 | 10,0<br>*0.394* | 20<br>*0.787* | 20,0<br>*0.787* | 87,4<br>*3.439* | 8,2<br>*0.323* | 10.00X8.00 | 3 | DIN2184-1 | 3B | C |

## MTH-S101

Blind holes – Metric coarse threads





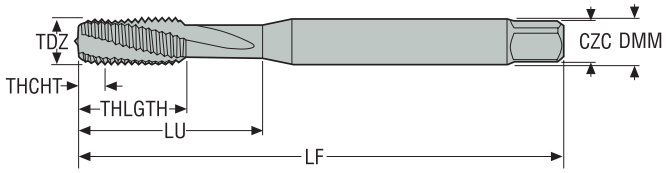

–Substrate: HSS-E-PM
–Coating: AlCrN
–For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M2X0.40ISO6HX-BC-S101 | 10001134 | M2 | 0,4 | 2,8<br>*0.110* | 8,0<br>*0.315* | 8,0<br>*0.315* | 44,0<br>*1.732* | 1,6<br>*0.063* | 2.80X2.10 | 3 | DIN371 | 6HX | C |
| MTH-M2.5X0.45ISO6HX-BC-S101 | 10001135 | M2.5 | 0,45 | 2,8<br>*0.110* | 9,0<br>*0.354* | 9,0<br>*0.354* | 48,87<br>*1.924* | 2,1<br>*0.083* | 2.80X2.10 | 3 | DIN371 | 6HX | C |
| MTH-M3X0.50ISO6HX-BC-S101 | 10001136 | M3 | 0,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 10,0<br>*0.394* | 54,75<br>*2.156* | 2,5<br>*0.098* | 3.50X2.70 | 3 | DIN371 | 6HX | C |
| MTH-M3.5X0.60ISO6HX-BC-S101 | 10001137 | M3.5 | 0,6 | 4,0<br>*0.157* | 12,0<br>*0.472* | 12,0<br>*0.472* | 54,5<br>*2.146* | 2,9<br>*0.114* | 4.00X3.00 | 3 | DIN371 | 6HX | C |
| MTH-M4X0.70ISO6HX-BC-S101 | 10001138 | M4 | 0,7 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 61,25<br>*2.411* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 6HX | C |
| MTH-M5X0.80ISO6HX-BC-S101 | 10001139 | M5 | 0,8 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 68,0<br>*2.677* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M6X1.00ISO6HX-BC-S101 | 10001140 | M6 | 1,0 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 77,2<br>*3.039* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.25ISO6HX-BC-S101 | 10001141 | M8 | 1,25 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 86,49<br>*3.405* | 6,8<br>*0.268* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.50ISO6HX-BC-S101 | 10001142 | M10 | 1,5 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 95,8<br>*3.772* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN371 | 6HX | C |

## MTH-S102

Blind holes – Metric coarse threads





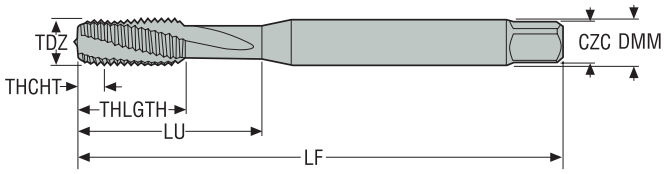

–Substrate: HSS-E-PM
–Coating: AlCrN
–For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M12X1.75ISO6HX-BC-S102 | 10001143 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,09<br>*4.137* | 10,4<br>*0.409* | 9.00X7.00 | 4 | DIN376 | 6HX | C |
| MTH-M16X2.00ISO6HX-BC-S102 | 10001145 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 104,4<br>*4.110* | 14,1<br>*0.555* | 12.00X9.00 | 4 | DIN376 | 6HX | C |
| MTH-M20X2.50ISO6HX-BC-S102 | 10001146 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 133,0<br>*5.236* | 17,7<br>*0.697* | 16.00X12.00 | 4 | DIN376 | 6HX | C |

## MTH-S111

Blind holes – MF threads





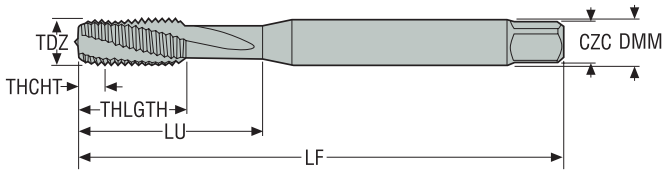

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-M6X0.75ISO6HX-BC-S111 | 10001147 | MF6X0.75 | 0,75 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 77,89<br>*3.067* | 5,25<br>*0.207* | 6.00X4.90 | 3 | DIN371 | 6HX | C |
| MTH-M8X0.75ISO6HX-BC-S111 | 10001148 | MF8X0.75 | 0,75 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 87,89<br>*3.460* | 7,25<br>*0.285* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M8X1.00ISO6HX-BC-S111 | 10001149 | MF8X1.0 | 1,0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 87,2<br>*3.433* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN371 | 6HX | C |
| MTH-M10X1.00ISO6HX-BC-S111 | 10001150 | MF10X1.0 | 1,0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 97,2<br>*3.827* | 9,0<br>*0.354* | 10.00X8.00 | 3 | DIN371 | 6HX | C |
| MTH-M12X1.50ISO6HX-BC-S111 | 10001151 | MF12X1.5 | 1,5 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 95,8<br>*3.772* | 10,5<br>*0.413* | 9.00X7.00 | 4 | DIN374 | 6HX | C |
| MTH-M14X1.50ISO6HX-BC-S111 | 10001152 | MF14X1.5 | 1,5 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 95,8<br>*3.772* | 12,5<br>*0.492* | 11.00X9.00 | 4 | DIN374 | 6HX | C |

## MTH-S112

Blind holes – MJ threads





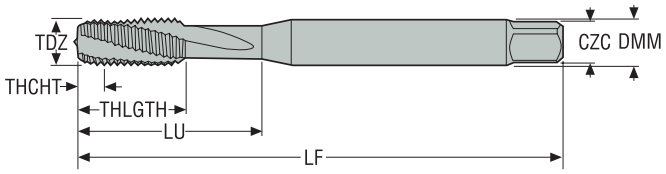

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-MJ3X0.50ISO4H-BC-S112 | 10001203 | MJ3X0.5 | 0,5 | 3,5<br>*0.138* | 10,0<br>*0.394* | 10,0<br>*0.394* | 54,75<br>*2.156* | 2,6<br>*0.102* | 3.50X2.70 | 3 | DIN371 | 4H | C |
| MTH-MJ4X0.70ISO4H-BC-S112 | 10001204 | MJ4X0.7 | 0,7 | 4,5<br>*0.177* | 13,0<br>*0.512* | 13,0<br>*0.512* | 61,25<br>*2.411* | 3,4<br>*0.134* | 4.50X3.40 | 3 | DIN371 | 4H | C |
| MTH-MJ5X0.80ISO4H-BC-S112 | 10001205 | MJ5X0.8 | 0,8 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 68,0<br>*2.677* | 4,3<br>*0.169* | 6.00X4.90 | 3 | DIN371 | 4H | C |
| MTH-MJ6X1.00ISO4H-BC-S112 | 10001206 | MJ6X1 | 1,0 | 6,0<br>*0.236* | 23,0<br>*0.906* | 15,0<br>*0.591* | 77,2<br>*3.039* | 5,1<br>*0.201* | 6.00X4.90 | 3 | DIN371 | 4H | C |
| MTH-MJ8X1.25ISO4H-BC-S112 | 10001207 | MJ8X1.25 | 1,25 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 86,49<br>*3.405* | 6,9<br>*0.272* | 8.00X6.20 | 3 | DIN371 | 4H | C |
| MTH-MJ10X1.5ISO4H-BC-S112 | 10001208 | MJ10X1.5 | 1,5 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 95,8<br>*3.772* | 8,7<br>*0.343* | 10.00X8.00 | 3 | DIN371 | 4H | C |

## MTH-S142

Blind holes – UNJF threads





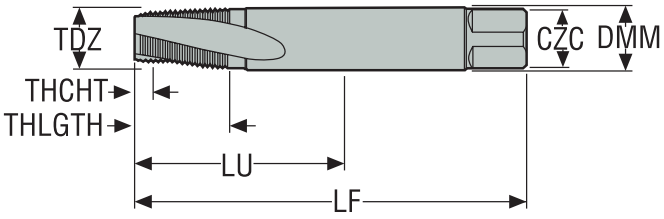

—Substrate: HSS-E-PM
—Coating: AlCrN
—For cutting data see page(s) 269

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-10-32UNJF3B-BC-S142 | 10001153 | UNJF10-32 | 32.0 | 6,0<br>*0.236* | 16,0<br>*0.630* | 16,0<br>*0.630* | 68,02<br>*2.678* | 4,15<br>*0.163* | 6.00X4.90 | 3 | DIN2184-1 | 3B | C |
| MTH-1/4-28UNJF3B-BC-S142 | 10001154 | UNJF1/4-28 | 28.0 | 7,0<br>*0.276* | 25,0<br>*0.984* | 15,0<br>*0.591* | 77,73<br>*3.060* | 5,6<br>*0.220* | 7.00X5.50 | 3 | DIN2184-1 | 3B | C |
| MTH-5/16-24UNJF3B-BC-S142 | 10001155 | UNJF5/16-24 | 24.0 | 8,0<br>*0.315* | 29,5<br>*1.161* | 18,0<br>*0.709* | 87,03<br>*3.426* | 7,0<br>*0.276* | 8.00X6.20 | 3 | DIN2184-1 | 3B | C |
| MTH-3/8-24UNJF3B-BC-S142 | 10001156 | UNJF3/8-24 | 24.0 | 10,0<br>*0.394* | 33,5<br>*1.319* | 20,0<br>*0.787* | 97,03<br>*3.820* | 8,6<br>*0.339* | 10.00X8.00 | 3 | DIN2184-1 | 3B | C |

## MTH-V048

Blind holes – NPT threads





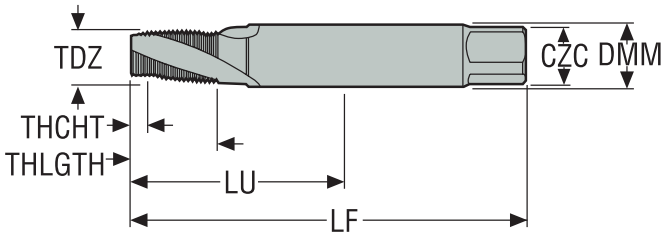

- Substrate: HSS-E
- Vaporized
- For cutting data see page(s) 275

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-1/16-27NPT-XC-V048 | 02880750 | NPT1/16-27 | 27.0 | 7,95<br>*0.313* | 56,0<br>*2.205* | 14,0<br>*0.551* | 80,0<br>*3.150* | 6,15<br>*0.242* | 7.95X5.94 | 3 | DIN/ANSI | NORMAL | C |
| MTH-1/8-27NPT-XC-V048 | 02880751 | NPT1/8-27 | 27.0 | 11,1<br>*0.437* | 64,0<br>*2.520* | 14,0<br>*0.551* | 90,0<br>*3.543* | 8,4<br>*0.331* | 11.10X8.33 | 4 | DIN/ANSI | NORMAL | C |
| MTH-1/4-18NPT-XC-V048 | 02880752 | NPT1/4-18 | 18.0 | 14,27<br>*0.562* | 59,0<br>*2.323* | 20,0<br>*0.787* | 100,0<br>*3.937* | 11,1<br>*0.437* | 14.27X10.69 | 4 | DIN/ANSI | NORMAL | C |
| MTH-3/8-18NPT-XC-V048 | 02880753 | NPT3/8-18 | 18.0 | 17,78<br>*0.700* | 67,0<br>*2.638* | 20,0<br>*0.787* | 110,0<br>*4.331* | 14,3<br>*0.563* | 17.78X13.49 | 5 | DIN/ANSI | NORMAL | C |
| MTH-1/2-14NPT-XC-V048 | 02880754 | NPT1/2-14 | 14.0 | 17,45<br>*0.687* | 79,0<br>*3.110* | 26,0<br>*1.024* | 125,0<br>*4.921* | 17,9<br>*0.705* | 17.45X13.08 | 5 | DIN/ANSI | NORMAL | C |
| MTH-3/4-14NPT-XC-V048 | 02880755 | NPT3/4-14 | 14.0 | 23,01<br>*0.906* | 78,0<br>*3.071* | 26,0<br>*1.024* | 140,0<br>*5.512* | 23,2<br>*0.913* | 23.01X17.25 | 5 | DIN/ANSI | NORMAL | C |
| MTH-1-11.5NPT-XC-V048 | 02880756 | NPT1-11.5 | 11.5 | 28,58<br>*1.125* | 58,0<br>*2.283* | 31,0<br>*1.220* | 150,0<br>*5.906* | 29,0<br>*1.142* | 28.58X21.41 | 5 | DIN/ANSI | NORMAL | C |

## MTH-V050

Blind holes – NPTF threads





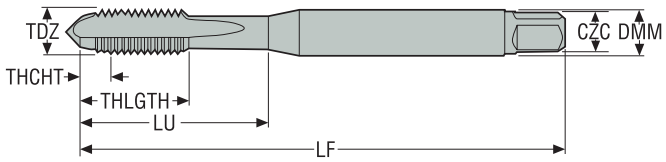

—Substrate: HSS-E
—Vaporized
—For cutting data see page(s) 275

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTH-1/16-27NPTF-XC-V050 | 02880757 | NPTF1/16-27 | 27.0 | 7,95<br>*0.313* | 56,0<br>*2.205* | 14,0<br>*0.551* | 80,0<br>*3.150* | 6,1<br>*0.240* | 7.95X5.94 | 3 | DIN/ANSI | NORMAL | C |
| MTH-1/8-27NPTF-XC-V050 | 02880758 | NPTF1/8-27 | 27.0 | 11,1<br>*0.437* | 64,0<br>*2.520* | 14,0<br>*0.551* | 90,0<br>*3.543* | 8,4<br>*0.331* | 11.10X8.33 | 4 | DIN/ANSI | NORMAL | C |
| MTH-1/4-18NPTF-XC-V050 | 02880759 | NPTF1/4-18 | 18.0 | 14,27<br>*0.562* | 59,0<br>*2.323* | 20,0<br>*0.787* | 100,0<br>*3.937* | 11,0<br>*0.433* | 14.27X10.69 | 4 | DIN/ANSI | NORMAL | C |
| MTH-3/8-18NPTF-XC-V050 | 02880760 | NPTF3/8-18 | 18.0 | 17,78<br>*0.700* | 67,0<br>*2.638* | 20,0<br>*0.787* | 110,0<br>*4.331* | 14,3<br>*0.563* | 17.78X13.49 | 5 | DIN/ANSI | NORMAL | C |
| MTH-1/2-14NPTF-XC-V050 | 02880761 | NPTF1/2-14 | 14.0 | 17,45<br>*0.687* | 79,0<br>*3.110* | 26,0<br>*1.024* | 125,0<br>*4.921* | 17,6<br>*0.693* | 17.45X13.08 | 5 | DIN/ANSI | NORMAL | C |
| MTH-3/4-14NPTF-XC-V050 | 02880762 | NPTF3/4-14 | 14.0 | 23,01<br>*0.906* | 78,0<br>*3.071* | 26,0<br>*1.024* | 140,0<br>*5.512* | 23,0<br>*0.906* | 23X17.25 | 5 | DIN/ANSI | NORMAL | C |

## MTS-K101

Blind and through holes – Metric coarse threads





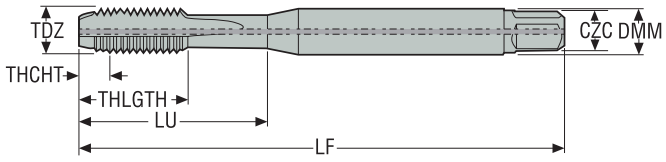

—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-M3X0.50ISO6HX-XC-K101 | 03305497 | M3 | 0,5 | 3,5<br>*0.138* | 18,0<br>*0.709* | 9,0<br>*0.354* | 54,625<br>*2.151* | 2,5<br>*0.098* | 3.50X2.70 | 4 | DIN371 | 6HX | C |
| MTS-M4X0.70ISO6HX-XC-K101 | 03305498 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 12,0<br>*0.472* | 61,075<br>*2.405* | 3,4<br>*0.134* | 4.50X3.40 | 4 | DIN371 | 6HX | C |
| MTS-M5X0.80ISO6HX-XC-K101 | 03305499 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 13,0<br>*0.512* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 5 | DIN371 | 6HX | C |
| MTS-M6X1.00ISO6HX-XC-K101 | 03305500 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 15,0<br>*0.591* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 5 | DIN371 | 6HX | C |
| MTS-M8X1.25ISO6HX-XC-K101 | 03305501 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 18,0<br>*0.709* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 5 | DIN371 | 6HX | C |
| MTS-M10X1.50ISO6HX-XC-K101 | 03305502 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 20,0<br>*0.787* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 5 | DIN371 | 6HX | C |

## MTS-K101-A

Blind and through holes – Metric coarse threads





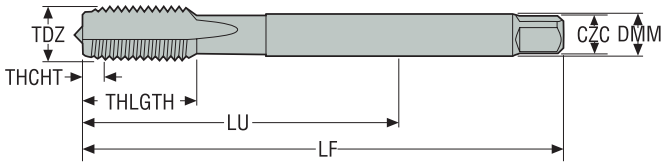

—Internal coolant
—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-M4X0.70ISO6HX-XC-K101-A | 03305448 | M4 | 0,7 | 4,5<br>*0.177* | 21,0<br>*0.827* | 12,0<br>*0.472* | 61,07<br>*2.404* | 3,4<br>*0.134* | 4.50X3.40 | 4 | DIN371 | 6HX | C |
| MTS-M5X0.80ISO6HX-XC-K101-A | 03305450 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 13,0<br>*0.512* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 5 | DIN371 | 6HX | C |
| MTS-M5X0.80ISO6HX-XE-K101-A | 03305460 | M5 | 0,8 | 6,0<br>*0.236* | 25,0<br>*0.984* | 13,0<br>*0.512* | 67,8<br>*2.669* | 4,3<br>*0.169* | 6.00X4.90 | 5 | DIN371 | 6HX | E |
| MTS-M6X1.00ISO6HX-XC-K101-A | 03305451 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 15,0<br>*0.591* | 77,25<br>*3.041* | 5,1<br>*0.201* | 6.00X4.90 | 5 | DIN371 | 6HX | C |
| MTS-M6X1.00ISO6HX-XE-K101-A | 03305461 | M6 | 1,0 | 6,0<br>*0.236* | 30,0<br>*1.181* | 15,0<br>*0.591* | 78,25<br>*3.081* | 5,1<br>*0.201* | 6.00X4.90 | 5 | DIN371 | 6HX | E |
| MTS-M8X1.25ISO6HX-XC-K101-A | 03305452 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 18,0<br>*0.709* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 8.00X6.20 | 5 | DIN371 | 6HX | C |
| MTS-M8X1.25ISO6HX-XE-K101-A | 03305462 | M8 | 1,25 | 8,0<br>*0.315* | 35,0<br>*1.378* | 18,0<br>*0.709* | 87,8125<br>*3.457* | 6,8<br>*0.268* | 8.00X6.20 | 5 | DIN371 | 6HX | E |
| MTS-M10X1.50ISO6HX-XC-K101-A | 03305453 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 20,0<br>*0.787* | 95,875<br>*3.775* | 8,6<br>*0.339* | 10.00X8.00 | 5 | DIN371 | 6HX | C |
| MTS-M10X1.50ISO6HX-XE-K101-A | 03305463 | M10 | 1,5 | 10,0<br>*0.394* | 39,0<br>*1.535* | 20,0<br>*0.787* | 97,375<br>*3.834* | 8,6<br>*0.339* | 10.00X8.00 | 5 | DIN371 | 6HX | E |

## MTS-K002

Blind and through holes – Metric coarse threads





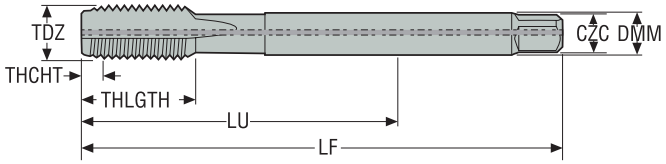

—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | | | | | |
| MTS-M27X3.00ISO6HX-XC-K002 | 02999880 | M27 | 3,0 | 20,0<br>0.787 | 97,0<br>3.819 | 38,0<br>1.496 | 151,6<br>5.969 | 24,0<br>0.945 | 20.00X16.00 | 4 | DIN376 | 6HX | C |
| MTS-M30X3.50ISO6HX-XC-K002 | 02999881 | M30 | 3,5 | 22,0<br>0.866 | 115,0<br>4.528 | 45,0<br>1.772 | 170,2<br>6.701 | 26,5<br>1.043 | 22.00X18.00 | 4 | DIN376 | 6HX | C |
| MTS-M33X3.50ISO6HX-XC-K002 | 02999882 | M33 | 3,5 | 25,0<br>0.984 | 113,0<br>4.449 | 50,0<br>1.969 | 170,2<br>6.701 | 29,5<br>1.161 | 25.00X20.00 | 4 | DIN376 | 6HX | C |
| MTS-M36X4.00ISO6HX-XC-K002 | 02999883 | M36 | 4,0 | 28,0<br>1.102 | 131,0<br>5.157 | 55,0<br>2.165 | 188,8<br>7.433 | 32,0<br>1.260 | 28.00X22.00 | 4 | DIN376 | 6HX | C |
| MTS-M39X4.00ISO6HX-XC-K002 | 02999884 | M39 | 4,0 | 32,0<br>1.260 | 102,0<br>4.016 | 60,0<br>2.362 | 188,8<br>7.433 | 35,0<br>1.378 | 32.00X24.00 | 4 | DIN376 | 6HX | C |
| MTS-M42X4.50ISO6HX-XC-K002 | 02999885 | M42 | 4,5 | 32,0<br>1.260 | 102,0<br>4.016 | 60,0<br>2.362 | 187,4<br>7.378 | 37,5<br>1.476 | 32.00X24.00 | 4 | DIN376 | 6HX | C |

## MTS-K002-A

Blind and through holes – Metric coarse threads





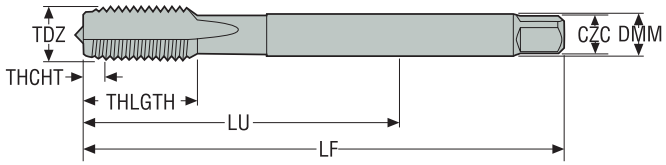

—Internal coolant
—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | mm<br>Inch | | | | | |
| MTS-M27X3.00ISO6HX-XC-K002-A | 02999838 | M27 | 3,0 | 20,0<br>0.787 | 97,0<br>3.819 | 38,0<br>1.496 | 152,5<br>6.004 | 24,0<br>0.945 | 20.00X16.00 | 4 | DIN376 | 6HX | C |
| MTS-M30X3.50ISO6HX-XC-K002-A | 02999839 | M30 | 3,5 | 22,0<br>0.866 | 115,0<br>4.528 | 45,0<br>1.772 | 171,25<br>6.742 | 26,5<br>1.043 | 22.00X18.00 | 4 | DIN376 | 6HX | C |
| MTS-M33X3.50ISO6HX-XC-K002-A | 02999840 | M33 | 3,5 | 25,0<br>0.984 | 113,0<br>4.449 | 50,0<br>1.969 | 170,2<br>6.701 | 29,5<br>1.161 | 25.00X20.00 | 4 | DIN376 | 6HX | C |
| MTS-M36X4.00ISO6HX-XC-K002-A | 02999841 | M36 | 4,0 | 28,0<br>1.102 | 131,0<br>5.157 | 55,0<br>2.165 | 188,8<br>7.433 | 32,0<br>1.260 | 28.00X22.00 | 4 | DIN376 | 6HX | C |
| MTS-M39X4.00ISO6HX-XC-K002-A | 02999842 | M39 | 4,0 | 32,0<br>1.260 | 102,0<br>4.016 | 60,0<br>2.362 | 188,8<br>7.433 | 35,0<br>1.378 | 32.00X24.00 | 4 | DIN376 | 6HX | C |
| MTS-M42X4.50ISO6HX-XC-K002-A | 02999843 | M42 | 4,5 | 32,0<br>1.260 | 102,0<br>4.016 | 60,0<br>2.362 | 187,4<br>7.378 | 37,5<br>1.476 | 32.00X24.00 | 4 | DIN376 | 6HX | C |

## MTS-K102

Blind and through holes – Metric coarse threads





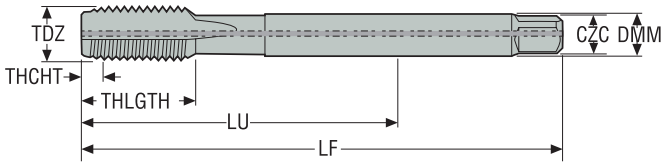

—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-M8X1.25ISO6HX-XC-K102 | 03305503 | M8 | 1,25 | 6,0<br>*0.236* | 67,0<br>*2.638* | 20,0<br>*0.787* | 86,5625<br>*3.408* | 6,8<br>*0.268* | 6.00X4.90 | 5 | DIN376 | 6HX | C |
| MTS-M10X1.50ISO6HX-XC-K102 | 03305504 | M10 | 1,5 | 7,0<br>*0.276* | 77,0<br>*3.031* | 23,5<br>*0.925* | 95,875<br>*3.775* | 8,6<br>*0.339* | 7.00X5.50 | 5 | DIN376 | 6HX | C |
| MTS-M12X1.75ISO6HX-XC-K102 | 03305505 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,1875<br>*4.141* | 10,4<br>*0.409* | 9.00X7.00 | 5 | DIN376 | 6HX | C |
| MTS-M14X2.00ISO6HX-XC-K102 | 03305506 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 104,5<br>*4.114* | 12,1<br>*0.476* | 11.00X9.00 | 5 | DIN376 | 6HX | C |
| MTS-M16X2.00ISO6HX-XC-K102 | 03305507 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 5 | DIN376 | 6HX | C |
| MTS-M18X2.50ISO6HX-XC-K102 | 03305508 | M18 | 2,5 | 14,0<br>*0.551* | 81,0<br>*3.189* | 30,0<br>*1.181* | 118,125<br>*4.651* | 15,7<br>*0.618* | 14.00X11.00 | 5 | DIN376 | 6HX | C |
| MTS-M20X2.50ISO6HX-XC-K102 | 03305509 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 133,125<br>*5.241* | 17,7<br>*0.697* | 16.00X12.00 | 5 | DIN376 | 6HX | C |
| MTS-M22X2.50ISO6HX-XC-K102 | 03305510 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 34,0<br>*1.339* | 133,125<br>*5.241* | 19,7<br>*0.776* | 18.00X14.50 | 5 | DIN376 | 6HX | C |
| MTS-M24X3.00ISO6HX-XC-K102 | 03305511 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 38,0<br>*1.496* | 151,75<br>*5.974* | 21,0<br>*0.827* | 18.00X14.50 | 5 | DIN376 | 6HX | C |

## MTS-K102-A

Blind and through holes – Metric coarse threads





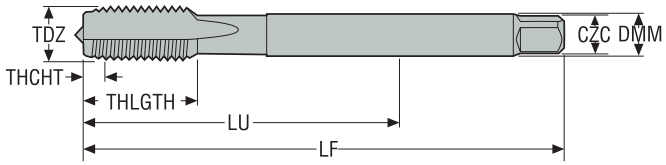

—Internal coolant
—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-M12X1.75ISO6HX-XC-K102-A | 03305454 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 105,1875<br>*4.141* | 10,4<br>*0.409* | 9.00X7.00 | 5 | DIN376 | 6HX | C |
| MTS-M12X1.75ISO6HX-XE-K102-A | 03305464 | M12 | 1,75 | 9,0<br>*0.354* | 83,0<br>*3.268* | 23,0<br>*0.906* | 106,9375<br>*4.210* | 10,4<br>*0.409* | 9.00X7.00 | 5 | DIN376 | 6HX | E |
| MTS-M14X2.00ISO6HX-XC-K102-A | 03305455 | M14 | 2,0 | 11,0<br>*0.433* | 81,0<br>*3.189* | 25,0<br>*0.984* | 104,5<br>*4.114* | 12,1<br>*0.476* | 11.00X9.00 | 5 | DIN376 | 6HX | C |
| MTS-M16X2.00ISO6HX-XC-K102-A | 03305456 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 104,5<br>*4.114* | 14,1<br>*0.555* | 12.00X9.00 | 5 | DIN376 | 6HX | C |
| MTS-M16X2.00ISO6HX-XE-K102-A | 03305465 | M16 | 2,0 | 12,0<br>*0.472* | 68,0<br>*2.677* | 25,0<br>*0.984* | 106,5<br>*4.193* | 14,1<br>*0.555* | 12.00X9.00 | 5 | DIN376 | 6HX | E |
| MTS-M20X2.50ISO6HX-XC-K102-A | 03305457 | M20 | 2,5 | 16,0<br>*0.630* | 95,0<br>*3.740* | 30,0<br>*1.181* | 133,125<br>*5.241* | 17,7<br>*0.697* | 16.00X12.00 | 5 | DIN376 | 6HX | C |
| MTS-M22X2.50ISO6HX-XC-K102-A | 03305458 | M22 | 2,5 | 18,0<br>*0.709* | 93,0<br>*3.661* | 34,0<br>*1.339* | 133,125<br>*5.241* | 19,7<br>*0.776* | 18.00X14.50 | 5 | DIN376 | 6HX | C |
| MTS-M24X3.00ISO6HX-XC-K102-A | 03305459 | M24 | 3,0 | 18,0<br>*0.709* | 113,0<br>*4.449* | 38,0<br>*1.496* | 151,75<br>*5.974* | 21,0<br>*0.827* | 18.00X14.50 | 5 | DIN376 | 6HX | C |

## MTS-K111

Blind and through holes – MF threads





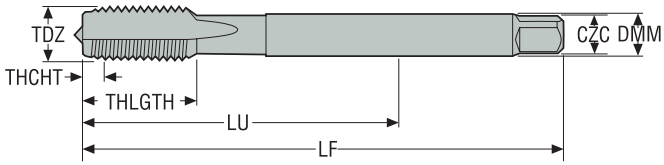

—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-M10X1.00ISO6HX-XC-K111 | 03305466 | MF10X1.0 | 1,0 | 7,0<br>*0.276* | 67,0<br>*2.638* | 18,0<br>*0.709* | 87,25<br>*3.435* | 9,0<br>*0.354* | 7.00X5.50 | 5 | DIN374 | 6HX | C |
| MTS-M10X1.25ISO6HX-XC-K111 | 03305467 | MF10X1.25 | 1,25 | 7,0<br>*0.276* | 77,0<br>*3.031* | 20,0<br>*0.787* | 96,5625<br>*3.802* | 8,8<br>*0.346* | 7.00X5.50 | 5 | DIN374 | 6HX | C |
| MTS-M12X1.25ISO6HX-XC-K111 | 03305468 | MF12X1.25 | 1,25 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 96,5625<br>*3.802* | 10,75<br>*0.423* | 9.00X7.00 | 5 | DIN374 | 6HX | C |
| MTS-M12X1.50ISO6HX-XC-K111 | 03305469 | MF12X1.5 | 1,5 | 9,0<br>*0.354* | 73,0<br>*2.874* | 21,0<br>*0.827* | 95,875<br>*3.775* | 10,5<br>*0.413* | 9.00X7.00 | 5 | DIN374 | 6HX | C |
| MTS-M14X1.50ISO6HX-XC-K111 | 03305470 | MF14X1.5 | 1,5 | 11,0<br>*0.433* | 71,0<br>*2.795* | 21,0<br>*0.827* | 95,875<br>*3.775* | 12,5<br>*0.492* | 11.00X9.00 | 5 | DIN374 | 6HX | C |
| MTS-M16X1.50ISO6HX-XC-K111 | 03305471 | MF16X1.5 | 1,5 | 12,0<br>*0.472* | 58,0<br>*2.283* | 21,0<br>*0.827* | 95,875<br>*3.775* | 14,5<br>*0.571* | 12.00X9.00 | 5 | DIN374 | 6HX | C |
| MTS-M18X1.50ISO6HX-XC-K111 | 03305472 | MF18X1.5 | 1,5 | 14,0<br>*0.551* | 66,0<br>*2.598* | 24,0<br>*0.945* | 105,875<br>*4.168* | 16,5<br>*0.650* | 14.00X11.00 | 5 | DIN374 | 6HX | C |
| MTS-M20X1.50ISO6HX-XC-K111 | 03305473 | MF20X1.5 | 1,5 | 16,0<br>*0.630* | 80,0<br>*3.150* | 24,0<br>*0.945* | 120,875<br>*4.759* | 18,5<br>*0.728* | 16.00X12.00 | 5 | DIN374 | 6HX | C |

## MTS-K121

Blind and through holes – G threads





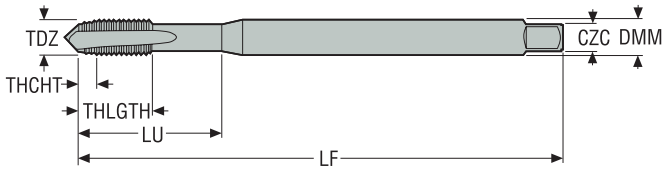

–Substrate: HSS-E-PM
–Coating: TiAlN
–For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-1/8-28G-XC-K121 | 03305474 | G1/8-28 | 28.0 | 7,0<br>*0.276* | 67,0<br>*2.638* | 13,0<br>*0.512* | 87,51<br>*3.445* | 8,8<br>*0.346* | 7.00X5.50 | 4 | DIN5156 | NORMAL-X | C |
| MTS-1/4-19G-XC-K121 | 03305475 | G1/4-19 | 19.0 | 11,0<br>*0.433* | 71,0<br>*2.795* | 15,0<br>*0.591* | 96,32<br>*3.792* | 11,8<br>*0.465* | 11.00X9.00 | 4 | DIN5156 | NORMAL-X | C |
| MTS-3/8-19G-XC-K121 | 03305476 | G3/8-19 | 19.0 | 12,0<br>*0.472* | 58,0<br>*2.283* | 21,0<br>*0.827* | 96,32<br>*3.792* | 15,25<br>*0.600* | 12.00X9.00 | 5 | DIN5156 | NORMAL-X | C |
| MTS-1/2-14G-XC-K121 | 03305477 | G1/2-14 | 14.0 | 16,0<br>*0.630* | 80,0<br>*3.150* | 21,0<br>*0.827* | 120,01<br>*4.725* | 19,0<br>*0.748* | 16.00X12.00 | 5 | DIN5156 | NORMAL-X | C |
| MTS-3/4-14G-XC-K121 | 03305478 | G3/4-14 | 14.0 | 20,0<br>*0.787* | 77,0<br>*3.031* | 21,0<br>*0.827* | 135,01<br>*5.315* | 24,5<br>*0.965* | 20.00X16.00 | 6 | DIN5156 | NORMAL-X | C |
| MTS-1-11G-XC-K121 | 03305479 | G1-11 | 11.0 | 25,0<br>*0.984* | 93,0<br>*3.661* | 27,0<br>*1.063* | 153,65<br>*6.049* | 30,75<br>*1.211* | 25.00X20.00 | 6 | DIN5156 | NORMAL-X | C |

## MTS-K131

Blind and through holes – UNC threads





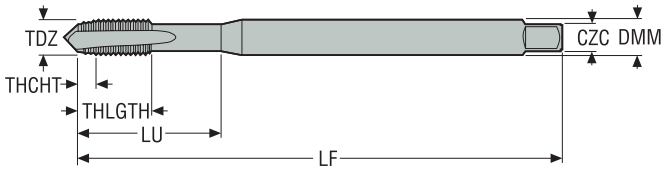

—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-1/4-20UNC-XC-K131 | 03305480 | UNC1/4-20 | 20.0 | 7,0<br>*0.276* | 25,0<br>*0.984* | 15,6<br>*0.614* | 76,50<br>*3.012* | 5,1<br>*0.201* | 8.25X5.5 | 5 | DIN2184-1 | 2BX | C |
| MTS-5/16-18UNC-XC-K131 | 03305481 | UNC5/16-18 | 18.0 | 8,0<br>*0.315* | 33,5<br>*1.319* | 18,7<br>*0.736* | 86,12<br>*3.391* | 6,6<br>*0.260* | 9.25X6.20 | 5 | DIN2184-1 | 2BX | C |
| MTS-3/8-16UNC-XC-K131 | 03305482 | UNC3/8-16 | 16.0 | 10,0<br>*0.394* | 38,0<br>*1.496* | 20,6<br>*0.811* | 95,63<br>*3.765* | 8,0<br>*0.315* | 11.25X8.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-7/16-14UNC-XC-K131 | 03305483 | UNC7/16-14 | 14.0 | 8,0<br>*0.315* | 72,7<br>*2.862* | 20,0<br>*0.787* | 95,01<br>*3.741* | 9,4<br>*0.370* | 9.25X6.20 | 5 | DIN2184-1 | 2BX | C |
| MTS-1/2-13UNC-XC-K131 | 03305484 | UNC1/2-13 | 13.0 | 9,0<br>*0.354* | 81,9<br>*3.224* | 23,0<br>*0.906* | 104,63<br>*4.119* | 10,8<br>*0.425* | 10.25X7.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-5/8-11UNC-XC-K131 | 03305485 | UNC5/8-11 | 11.0 | 12,0<br>*0.472* | 65,7<br>*2.587* | 23,0<br>*0.906* | 103,65<br>*4.081* | 13,5<br>*0.531* | 12.25X9.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-3/4-10UNC-XC-K131 | 03305486 | UNC3/4-10 | 10.0 | 14,0<br>*0.551* | 77,5<br>*3.051* | 30,0<br>*1.181* | 118,02<br>*4.646* | 16,5<br>*0.650* | 14.25X11.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-7/8-9UNC-XC-K131 | 03305487 | UNC7/8-9 | 9.0 | 18,0<br>*0.709* | 90,95<br>*3.581* | 34,0<br>*1.339* | 132,24<br>*5.206* | 19,5<br>*0.768* | 17.25X14.5 | 5 | DIN2184-1 | 2BX | C |

## MTS-K141

Blind and through holes – UNF threads






—Substrate: HSS-E-PM
—Coating: TiAlN
—For cutting data see page(s) 273

| Designation | Item number | TDZ | Pitch | DMM | LU | THLGTH | LF | PHDR | CZC | NOF | BSG | TCTR | THCHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TPI | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | mm<br>*Inch* | | | | | |
| MTS-1/4-28UNF-XC-K141 | 03305488 | UNF1/4-28 | 28.0 | 7,0<br>*0.276* | 25,0<br>*0.984* | 15,6<br>*0.614* | 77,50<br>*3.051* | 5,5<br>*0.217* | 8.25X5.5 | 5 | DIN2184-1 | 2BX | C |
| MTS-5/16-24UNF-XC-K141 | 03305489 | UNF5/16-24 | 24.0 | 8,0<br>*0.315* | 33,5<br>*1.319* | 18,7<br>*0.736* | 87,09<br>*3.429* | 6,9<br>*0.272* | 9.25X6.20 | 5 | DIN2184-1 | 2BX | C |
| MTS-3/8-24UNF-XC-K141 | 03305491 | UNF3/8-24 | 24.0 | 10,0<br>*0.394* | 38,0<br>*1.496* | 20,6<br>*0.811* | 97,09<br>*3.822* | 8,5<br>*0.335* | 11.25X8.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-7/16-20UNF-XC-K141 | 03305492 | UNF7/16-20 | 20.0 | 8,0<br>*0.315* | 72,7<br>*2.862* | 20,0<br>*0.787* | 96,51<br>*3.800* | 9,9<br>*0.390* | 9.25X6.20 | 5 | DIN2184-1 | 2BX | C |
| MTS-1/2-20UNF-XC-K141 | 03305493 | UNF1/2-20 | 20.0 | 9,0<br>*0.354* | 71,9<br>*2.831* | 23,0<br>*0.906* | 106,51<br>*4.193* | 11,5<br>*0.453* | 10.25X7.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-5/8-18UNF-XC-K141 | 03305494 | UNF5/8-18 | 18.0 | 12,0<br>*0.472* | 55,7<br>*2.193* | 23,0<br>*0.906* | 106,12<br>*4.178* | 14,5<br>*0.571* | 12.25X9.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-3/4-16UNF-XC-K141 | 03305495 | UNF3/4-16 | 16.0 | 14,0<br>*0.551* | 62,5<br>*2.461* | 25,0<br>*0.984* | 120,63<br>*4.749* | 17,5<br>*0.689* | 14.25X11.00 | 5 | DIN2184-1 | 2BX | C |
| MTS-7/8-14UNF-XC-K141 | 03305496 | UNF7/8-14 | 14.0 | 18,0<br>*0.709* | 75,95<br>*2.990* | 25,0<br>*0.984* | 135,01<br>*5.315* | 20,4<br>*0.803* | 17.25X14.5 | 5 | DIN2184-1 | 2BX | C |

## Cemented carbide inserts and insert carriers

Cemented carbide inserts and cemented carbide insert carriers from Seco Tools are not included in the product range intended for the following requirements.
Nevertheless Seco Tools can make the following declaration.
These products meet all requirements in RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) and ELV (End of Life Vehicles) requirements.
Products do not contain mercury, lead, hexavalent chromium, cadmium, CFC, HCFC, flame retardants or solvents in concentrations that exceed specifications in the regulations.

**Regrinding:**
Wet or dry grinding can produce potentially hazardous dusts or mists that can irritate skin, eyes, nose, throat and result in lung damage or disease. To avoid injury use proper safety precautions and protective equipment.

**Disposal:**
Seco Tools will buy back used inserts and solid carbide tools for recycling. Inserts and solid carbide tools should be separated from other metal waste (steel, aluminium, copper etc).
All packing material is fully recyclable.

## CBN and PCD inserts

Inserts from Seco Tools are not included in the product range intended for the following requirements. Nevertheless Seco Tools can make the following declaration.
This product meets all requirements in RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) and ELV (End of Life Vehicles) requirements.
Products do not contain mercury, lead, hexavalent chromium, cadmium, CFC, HCFC, flame retardants or solvents in concentrations that exceed specifications in the regulations.

**Regrinding:**
Wet or dry grinding can produce potentially hazardous dusts or mists that can irritate skin, eyes, nose, throat and result in lung damage or disease. To avoid injury use proper safety precautions and protective equipment.

**Disposal:**
Seco Tools will buy back used CBN- or PCD-tipped inserts for recycling. Inserts should be separated from other metal waste (steel, aluminium, copper etc). Solid CBN-inserts may be discarded as landfill waste.
All packing material is fully recyclable.

## Black oxide insert carriers

Insert carriers from Seco Tools are not included in the product range intended for the following requirements. Nevertheless Seco Tools can make the following declaration.
This product meets all requirements in RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) and ELV (End of Life Vehicles) requirements.
Products do not contain mercury, lead, hexavalent chromium, cadmium, CFC, HCFC, flame retardants or solvents in concentrations that exceed specifications in the regulations.

**Disposal:**
Used insert carriers may be sent for recycling together with ordinary steel waste (swarf and discarded steel scrap) for recycling.
All packing material is fully recyclable.

## Cermet inserts

Inserts from Seco Tools are not included in the product range intended for the following requirements. Nevertheless Seco Tools can make the following declaration.
This product meets all requirements in RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) and ELV (End of Life Vehicles) requirements.
Cermet grade C15M inserts do contain nickel and will leach nickel when in contact with the skin. Amount of leaching is higher than specified in norm SS-EN 1811 Reference test method for release of nickel from products intended to come into direct and prolonged contact with the skin. These norms are intended for products that are in direct and prolonged contact with the skin and are therefore not directly applicable for cermet inserts. Persons with known allergic reactions to nickel are advised to wear protective gloves when handling cermet inserts.

**Regrinding:**
Wet or dry grinding can produce potentially hazardous dusts or mists that can irritate skin, eyes, nose, throat and result in lung damage or disease. To avoid injury use proper safety precautions and protective equipment.

**Disposal:**
Used inserts may be recycled. Inserts should be separated from other metal waste (steel, aluminium, copper, etc) including cemented carbide inserts.
All packing material is fully recyclable.

## Nickel coated insert carriers

Insert carriers from Seco Tools are not included in the product range intended for the following requirements. Nevertheless Seco Tools can make the following declaration.
This product meets all requirements in RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), WEEE (Waste Electrical & Electronic Equipment) and ELV (End of Life Vehicles) requirements.
Products do not contain mercury, lead, hexavalent chromium, cadmium, CFC, HCFC, flame retardants or solvents in concentrations that exceed specifications in the regulations.
Insert carriers do contain nickel and will leach nickel when in contact with the skin. Amount of leaching is not higher then norm SS-EN 1811 Reference test method for release of nickel from products intended to come into direct and prolonged contact with the skin.
These norms are intended for products that are in direct and prolonged contact with the skin and are therefore not directly applicable for insert carriers.
Persons with known allergic reactions to nickel are advised to wear protective gloves when handling nickel coated insert carriers.

**Disposal:**
Used tools maybe sent for recycling together with ordinary steel waste (swarf and discarded steel scrap) for recycling.
All packing material is fully recyclable.

## Intentionally added alloying elements

| Grade | Cemented carbide | | | | | | | | | | | Coating | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | Ti | Ta | Nb | Co | Cr | Ni | Mo | C | N | Ru | Ti | Al | C | N | O | Si | Nb |
| CP20 | ■ | | | | ■ | | | | ■ | | | ■ | | | ■ | | | |
| CP200 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| CP300 | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | | ■ | | | |
| CP500 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| CP600 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| C15M | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | | | | | | | | |
| CF | ■ | | ■ | | ■ | | ■ | ■ | ■ | | | | | | | | | |
| CM | ■ | | ■ | | ■ | | ■ | ■ | ■ | | | | | | | | | |
| DP2000 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| DP3000 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| DS2050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | ■ |
| DS4050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | ■ |
| F15M | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| F25M | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | | ■ | | | |
| F30M | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| F40M | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| HX | ■ | | ■ | | ■ | | | | ■ | | | | | | | | | |
| H02 | ■ | | ■ | | ■ | ■ | | | ■ | | | | | | | | | |
| H15 | ■ | | | | ■ | ■ | | | ■ | | | | | | | | | |
| H25 | ■ | | | | ■ | ■ | | | ■ | | | | | | | | | |
| KX | ■ | | | | ■ | ■ | | | ■ | | | | | | | | | |
| MH1000 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| MK1500 | ■ | | ■ | | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MK2050 | ■ | | ■ | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| MM4500 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MP1501 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MP2050 | ■ | | | | ■ | | | | | | ■ | ■ | ■ | | ■ | | ■ | |
| MP2501 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MP3000 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| MP3501 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MS2500 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| MS2050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | ■ |
| RX1500 | ■ | | ■ | | ■ | | ■ | ■ | ■ | | | ■ | ■ | | ■ | | | |
| RX2000 | ■ | | ■ | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| RM2020 | ■ | | | | ■ | | | | ■ | | | ■ | | | | | | |
| RM2090 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | | | ■ | |
| RN2010 | ■ | | | | ■ | ■ | | | ■ | | | | | | | | | |
| RS2090 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | | | ■ | |
| T350M | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| T25M | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | | ■ | ■ | | | |
| TGH1050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| TGK1500 | ■ | | ■ | | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TGP25 | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TGP35 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TGP45 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TGS2050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| TH1000 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| TH1500 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TK0501 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TK1501 | ■ | | ■ | | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TM1501 | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TM2000 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TM2501 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TM3501 | ■ | | | | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TM4000 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP0501 | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| TP1020 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | | | | | | | |

| Grade | Cemented carbide | | | | | | | | | | | Coating | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | Ti | Ta | Nb | Co | Cr | Ni | Mo | C | N | Ru | Ti | Al | C | N | O | Si | Nb |
| TP1030 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | | ■ | | ■ | |
| TP1501 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP25 | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP200 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP2501 | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP3501 | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| TP40 | ■ | | ■ | ■ | ■ | | | | ■ | | | ■ | | ■ | ■ | | | |
| TS2000 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| TS2050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| TS2500 | ■ | | ■ | | ■ | | | | ■ | | | ■ | ■ | | ■ | | | |
| TTP2050 | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | ■ | |
| T250D | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| T400D | ■ | | | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| T100R | ■ | | ■ | | ■ | ■ | | | ■ | | | ■ | ■ | | ■ | | | |
| T60M | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | ■ | ■ | | ■ | | | |
| 883 | ■ | | ■ | | ■ | | | | ■ | | | | | | | | | |
| 890 | ■ | | | | ■ | ■ | | | ■ | | | | | | | | | |

## Steels, ferritic and martensitic stainless steels

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| P1 | Free-cutting steels | 360 < $R_m$ < 880 | 11 SMn30<br>$R_m$ = 385 N/mm² | 1500 | 0,14 |
| P2 | Low-alloy ferritic steels,<br>C < 0.25%wt<br>Low-alloy weldable general structural steels | 320 < $R_m$ < 600 | S235JRG2<br>$R_m$ = 420 N/mm² | 1600 | 0,23 |
| P3 | Ferritic & ferritic/pearlitic steels, C < 0.25%wt<br>Weldable general structural steels<br>Case-hardening steels | 430 < $R_m$ < 610 | 16 MnCr 5<br>$R_m$ = 550 N/mm² | 1800 | 0,14 |
| P4 | Low-alloy general structural steels, 0.25% < C < 0.67%wt<br>Low-alloy Quench & Temper steels | 520 < $R_m$ < 1200 | C 45E<br>$R_m$ = 660 N/mm² | 2000 | 0,15 |
| P5 | Structural steels, 0.25% < C < 0.67%wt<br>Quench & Temper steels | 550 < $R_m$ < 1200 | 42 CrMo 4<br>$R_m$ = 700 N/mm² | 2020 | 0,18 |
| P6 | Low-alloy through-hardening steels, C > 0.67%wt<br>Low-alloy spring and bearing steels | 520 < $R_m$ < 1200 | C 100S<br>$R_m$ = 600 N/mm² | 2100 | 0,17 |
| P7 | Through-hardening steels, C > 0.67%wt<br>Spring and bearing steels | 600 < $R_m$ < 1200 | 100 Cr 6<br>$R_m$ = 650 N/mm² | 2160 | 0,17 |
| P8 | Tool steels<br>High Speed Steels (HSS) | 600 < $R_m$ < 1200 | X 40 CrMoV 5 1<br>$R_m$ = 700 N/mm² | 2400 | 0,20 |
| P11 | Ferritic & martensitic stainless steels | 415 < $R_m$ < 1200 | X 20 Cr 13<br>$R_m$ = 675 N/mm² | 2000 | 0,15 |
| P12 | Maraging and precipitation-hardening stainless steels | 500 < $R_m$ < 1200 | X 5 CrNiCuNb 16 4<br>$R_m$ = 1100 N/mm² | 2100 | 0,17 |

## Free-cutting, austenitic and duplex stainless steels

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| M1 | Free-cutting austenitic stainless steels | | X 10 CrNiS 18 9 | 1700 | 0,14 |
| M2 | Low-alloy austenitic stainless steels | | X 5 CrNi 18 10 | 1920 | 0,18 |
| M3 | Medium-alloy austenitic stainless steels | | X 2 CrNiMo 18 14 3 | 2070 | 0,17 |
| M4 | High-alloy austenitic and duplex stainless steels | | X 2 CrNiMoN 22 5 3 | 2230 | 0,16 |
| M5 | Difficult high-alloy austenitic and duplex stainless steels | | X 2 CrNiMoN 25 7 4 | 2510 | 0,13 |

## Cast irons

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| K1 | Grey cast irons (GCI) | | EN-GJL-250 | 930 | 0,32 |
| K2 | Compacted graphite irons (CGI) | | EN-GJV-400 | 1000 | 0,35 |
| K3 | Malleable cast irons (MCI) | | EN-GJMB-550-4 | 1050 | 0,37 |
| K4 | Nodular cast irons (SGI) | | EN-GJS-500-7 | 1160 | 0,37 |
| K5 | Austempered ductile irons (ADI) | | EN-GJS-1000-5 | 0 | |
| K6 | Austenitic lamellar cast irons | | EN-GJLA-XNiCuCr15-6-2 | 0 | |
| K7 | Austenitic nodular cast irons | | EN-GJSA-XNiMn23-4 | 0 | |

## Non-ferrous metals

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| N1 | Aluminium alloys, Si < 9% | | AW-7075 | 0 | |
| N2 | Aluminium alloys, 9% < Si < 16% | | AC-44200 Si = 12% | 0 | |
| N3 | Aluminium alloys, Si >16% | | AlSi17Cu5 | 0 | |
| N11 | Copper alloys | | CW614N | 740 | 0,26 |

## Superalloys and titanium

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| S1 | Iron-based superalloys | | Discalloy | 0 | |
| S2 | Cobalt-based superalloys | | Stellite 21 | 0 | |
| S3 | Nickel-based superalloys | | Inconel 718 | 2530 | 0,21 |
| S11 | Titanium, low alloyed, ($\alpha$) | | Ti | 0 | |
| S12 | Titanium, medium alloyed, ($\alpha$+$\beta$) | | TiAl6V4 | 1500 | 0,24 |
| S13 | Titanium, high alloyed, (near $\beta$ and $\beta$) | | Ti10V2Fe3Al | 0 | |

## Hard materials

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| **H3** | Case-hardened steels | 58 < HRC < 62 | 16 MnCr 5<br>60 HRC | 2070 | 0,14 |
| **H5** | Quenched & Tempered steels | 38 < HRC < 56 | 42 CrMo 4<br>50 HRC | 2320 | 0,18 |
| **H7** | Quenched & Tempered steels<br>Bearing steels | 56 < HRC < 64 | 100 Cr 6<br>60 HRC | 2480 | 0,17 |
| **H8** | Tool steels<br>High Speed Steels (HSS) | 38 < HRC < 64 | X 40 CrMoV 5 1<br>50 HRC | 2750 | 0,20 |
| **H11** | Martensitic stainless steels | 38 < HRC < 50 | X 20 Cr 13<br>45 HRC | 2300 | 0,15 |
| **H12** | Maraged and precipitation-hardened stainless steels | 1200 < $R_m$ < 1650 | X 5 CrNiCuNb 16 4<br>$R_m$ = 1450 N/mm$^2$ | 2410 | 0,17 |
| **H21** | Manganese steels | 23 < HRC < 64 | X 120 Mn 12<br>50 HRC | 0 | |
| **H31** | White cast irons | 50 < HRC < 64 | EN-GJN-HV600(XCr11)<br>55 HRC | 0 | |

## Other difficult materials

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| **PM1** | Low-alloy PM-materials | | F-0008 Fe-0.7C | 0 | |
| **PM2** | Medium-alloy PM-materials | | FLC-4608<br>Fe2Cu1.8Ni<br>0.5Mo0.2Mn0.8C | 0 | |
| **PM3** | High-alloy PM-materials<br>Exhaust valve seat materials, etc. | | | 0 | |
| **HF1** | Hardfacing alloys<br>Welded or plasma-deposited iron-based alloys | | | 0 | |
| **HF2** | Hardfacing alloys<br>Welded or plasma-deposited cobalt- and nickel-based alloys | | | 0 | |
| **CC1** | Sintered tungsten carbide | | G50 | 0 | |

## Plastics and Composites

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| **TS1** | Thermosetting polymers | | Urea formaldehyde (UF) | 0 | |
| **TS2** | Thermosetting carbon-fibre composites | | T300 T700 T800 HTA-S IMA - Epoxy (M21)... | 0 | |
| **TS3** | Thermosetting glass-fibre composites | | Epoxy - HX..(42..)/E glass (7781...)... | 0 | |
| **TS4** | Thermosetting aramide-fibre composites | | Kevlar 49 | 0 | |
| **TP1** | Thermoplastic polymers | | Polycarbonate (PC) | 0 | |
| **TP2** | Thermoplastic carbon-fibre composites | | PPS/PEEK - T300.. | 0 | |
| **TP3** | Thermoplastic glass-fibre composites | | PPS/PEEK - E-glass or A-glass... | 0 | |
| **TP4** | Thermoplastic aramide-fibre composites | | | 0 | |

## Graphite

| SMG | Description | Properties | Reference | $k_{c1.1}$ | $m_c$ |
|---|---|---|---|---|---|
| **GR1** | Graphite | | R 8500 | 0 | |

| SMG | EN | EN-Nr | W.-Nr | DIN | AFNOR | BS | UNI | JIS | SS | UNS |
|---|---|---|---|---|---|---|---|---|---|---|
| P1 | 11 SMn 30 | 1.0715 | 1.0715 | 9 SMn 28 | S 250 | 230 M 07 | CF 9 SMn 28 | SUM 22 | 1912 | G12130 |
| | 11 SMnPb 30 | 1.0718 | 1.0718 | 9 SMnPb 28 | S 250 Pb | | CF 9 SMnPb 28 | SUM 22 L | 1914 | G12134 |
| | 10 S 20 | 1.0721 | 1.0721 | 10 S 20 | 10 F 1 | 210 M 15 | CF 10 S 20 | | | |
| | | | 1.0722 | 10 SPb 20 | 10 PbF 2 | | CF 10 SPb 20 | | | |
| | 15 SMn 13 | 1.0725 | 1.0723 | 15 S 20 | | 210 A 15 | | SUM 32 | 1922 | |
| | 35 S20 | 1.0726 | 1.0726 | 35 S 20 | 35 MF 4 | 212 M 36 | | | 1957 | G11400 |
| | 46 S20 | 1.0727 | 1.0727 | 46 S 20 | 45 MF 4 | 212 M 44 | | | 1973 | G11460 |
| | 11 SMn 37 | 1.0736 | 1.0736 | 9 SMn 36 | S 300 | 240 M 07 | CF 9 SMn 36 | | | G12150 |
| | 11 SMn 37 | 1.0736 | 1.0736 | 9 SMn 36 | S 300 | 240 M 07 | CF 9 SMn 36 | | | G12150 |
| P2 | S235JR | 1.0037 | 1.0037 | St 37-2 | E 24-2 | | Fe 360 B | STKM 12 C | 1311 | |
| | S235JRG2 | 1.0038 | 1.0116 | St 37-3 | E 24-3, E 24-4 | 4360-40 C | Fe 360 D FF | | 1312, 1313 | |
| | S275J2G3 | 1.0144 | 1.0144 | St 44-3 N | E 28-3, E 28-4 | 4360-43 C | Fe 430 D FF | SM 41 C | 1412, 1414 | |
| | C 10 | 1.0301 | 1.0301 | C 10 | 34 C 10, XC 10 | 045 M 10 | C 10 | S 10 C | | G10100 |
| | | | 1.0401 | C 15 | 37 C 12, XC 18 | 080 M 15 | C 15, C 16 | | 1350 | G10170 |
| | C22 | 1.0402 | 1.0402 | C 22 | C 20 | 050 A 20 | C 20, C 21 | | 1450 | G10200 |
| | S355JR | 1.0570 | 1.0570 | St 52-3 | E 36-3, E 36-4 | 4360-50 C | Fe 510 B | SM 50 YA | 2172, 2132 | |
| | C 15R | 1.1141 | 1.1141 | Ck 15 | XC 15, XC 18 | 080 M 15 | C 15, C 16 | S 15 C, S 15 CK | 1370 | G10170 |
| | | | 1.1158 | Ck 25 | XC 25 | 060 A 25 | C 25 | S 25 C | | G10250 |
| P3 | | | 1.2162 | 21 MnCr 5 | 20 NC 5 | | | SCR 420 H | | |
| | 16 Mo 3 | 1.5415 | 1.5415 | 15 Mo 3 | 15 D 3 | 1501-240 | 16 Mo 3 | | 2912 | |
| | | | 1.5423 | 16 Mo 5 | | 1503-245-420 | 16 Mo 5 | SB 450 M | | G45200 |
| | 14 NiCr 14 | 1.5752 | 1.5752 | 14 NiCr 14 | 12 NC 15 | 655 M 13 | | SNC 815 (H) | | G33106 |
| | | | 1.5919 | 15 CrNi 6 | 16 NC 6 | S 107 | 16 CrNi 4 | | | |
| | 18 NiCrMo 7 6 | 1.6587 | 1.6587 | 18 CrNiMo 7 6 | 18 NCD 6 | 820 A 16 | 18 NiCrMo 7 | | | |
| | 16 MnCr 5 | 1.7131 | 1.7131 | 16 MnCr 5 | 16 MC 5 | 527 M 17 | 16 MnCr 5 | SCR 415 | 2511 | G51170 |
| | 16 MnCrS 5 | 1.7139 | 1.7139 | 16 MnCrS 5 | | | | | | |
| | 20 MnCr 5 | 1.7147 | 1.7147 | 20 MnCr 5 | 20 MC 5 | | 20 MnCr 5 | SMnC 420 (H) | | G51200 |
| | 20 MnCrS 5 | 1.7149 | 1.7149 | 20 MnCrS 5 | 20 MnCrS 5 | | | SMnC 21 H | | |
| | 13 CrMo 4 5 | 1.7335 | 1.7335 | 13 CrMo 4 4 | 15 CD 3.5 | 1501-620 Gr. 27 | 14 CrMo 4 5 | | 2216 | |
| | | | 1.7337 | 16 CrMo 4 4 | 15 CD 4.5 | 1501-620 Gr. 27 | 14 CrMo 4 5 | | 2216 | |
| | 10 CrMo 9 10 | 1.7380 | 1.7380 | 10 CrMo 9 10 | 10 CD 9.10 | 1501-622 Gr. 31 | 12 CrMo 9 10 | | 2218 | J21890 |
| P4 | C35 | | 1.0501 | C 35 | 55 C 35 | 060 A 35 | C 35 | | 1550 | G10350 |
| | E 335 | 1.0503 | 1.0503 | C 45 | 65 C 45 | 80 M 46 | C 45 | S 45 C | 1650 | G10430 |
| | C40 | | 1.0511 | C 40 | 60 C 40 | 080 M 40 | C 40 | S 40 C | | |
| | E 360 | 1.0070 | 1.0535 | St 70-2 | A 70-2 | | Fe 690 | | 1655 | |
| | C60 | 1.0601 | 1.0601 | C 60 | CC 55 | 080 A 62 | C 60 | | | G10600 |
| | | | 1.1157 | 40 Mn 4 | 35 M 5 | 150 M 36 | | | | G10390 |
| | G 28 Mn6 | 1.1165 | 1.1165 | 30 Mn 5 | | 120 M 36 | | SMn 1 H, SCMn 2 | | G13300 |
| | C 35E | 1.1181 | 1.1181 | Ck 35 | XC 38 H1 | 080 M 36 | C 35 | S 35 C | 1572 | G10340 |
| | C 45E | 1.1191 | 1.1191 | Ck 45 | XC 42 | 080 M 46 | C 45 | S 45 C | 1672 | G10420 |
| | C 60E | 1.1221 | 1.1221 | Ck 60 | XC 60 | 080 A 62 | C 60 | S 58 C | 1665, 1678 | G10640 |
| | | | 1.1740 | C 60 W | Y3 55 | | | SK 7 | | |
| P5 | 55 SiCr7 | 1.7100 | 1.0904 | 55 Si 7 | 55 S 7 | 250 A 53 | 55 Si 8 | | 2085, 2090 | |
| | | | 1.2330 | 35 CrMo 4 | 34 CD 4 | 708 A 37 | 35 CrMo 4 | | 2234 | T51620 |
| | | | 1.2542 | 45 WCrV 7 | | BS 1 | 45 WCrV 8 KU | | 2710 | T41901 |
| | | 1.2714 | 1.2714 | 56 NiCrMoV 7 | | BH 224-5 | 56 NiCrMoV7-KU | SKT 4 | | T61206 |
| | | | 1.5121 | 46 MnSi 4 | | | | | | |
| | | | 1.5710 | 36 NiCr 6 | 35 NC 6 | 640 A 35 | | SNC 236 | | |
| | | | 1.5736 | 36 NiCr 10 | 35 NC 11 | | 35 NiCr 9 | SNC 631 (H) | | |
| | 36 CrNiMo 4 | | 1.6511 | 36 CrNiMo 4 | 40 NCD 3 | 816 M 40 | 38 NiCrMo 4 (KB) | | | G98400 |
| | 34 CrNiMo 6 | 1.6582 | 1.6582 | 34 CrNiMo 6 | 35 NCD 6 | 817 M 40 | 35 NiCrMo 6 (KW) | SNCM 447 | 2541 | G43400 |
| | 34 Cr 4 | 1.7033 | 1.7033 | 34 Cr 4 | 32 C 4 | 530 A 32 | 34 Cr 4 (KB) | SCR 430 (H) | | G51320 |
| | 41 Cr 4 | 1.7035 | 1.7035 | 41 Cr 4 | 42 C 4 | 530 M 40 | 41 Cr 4 | SCR 440 (H) | | G51400 |
| | 25 CrMo 4 | 1.7218 | 1.7218 | 25 CrMo 4 | 25 CD 4 S | 708 M 25 | 25 CrMo 4 (KB) | SCM 425 | 2225 | G41300 |
| | 42 CrMo 4 | 1.7225 | 1.7225 | 42 CrMo 4 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 2244 | G41400 |
| | 42 CrMo 4 | 1.7225 | 1.7225 | 42 CrMo 4 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 2244 | G41400 |
| | | | 1.7361 | 32 CrMo 12 | 30 CD 12 | 722 M 24 | 32 CrMo 12 | | 2240 | |
| | 50 CrV 4 | 1.8159 | 1.8159 | 50 CrV 4 | 50 CV 4 | 735 A 50 | 51 CrV 4 | SUP 10 | 2230 | H61500 |
| | 41 CrAlMo 7 10 | 1.8509 | 1.8509 | 41 CrAlMo 7 | 40 CAD 6.12 | 905 M 39 | 41 CrAlMo 7 | SACM 645 | 2940 | K24065 |
| P6 | C 67S | 1.1231 | 1.1231 | Ck 67 | XC 68 | 060 A 67 | C 70 | | 1770 | G10700 |
| | C 100S | 1.1274 | 1.1274 | Ck 101 | | 060 A 96 | | SUP 4 | 1870 | G10950 |
| | C 105U | 1.1545 | 1.1545 | C 105 W1 | Y1 105 | | C 100 KU | | 1880 | |
| | | | 1.1645 | C 105 W2 | Y1 105 | | C 100 KU | SK 3 | | |
| | | | 1.1663 | C 125 W | Y2 120 | | C 120 KU | SK 2 | | |

| U.N.E./ I.H.A. | AISI / ASTM | GOST | CSN | Misc. Brands | Condition | Structure |
|---|---|---|---|---|---|---|
| | 1213 | | | | Annealed | |
| | 12 L 13 | | | | Annealed | |
| | 1108 | | | | Annealed | |
| | 11 L 08 | | | | Annealed | |
| | | | | | Annealed | |
| | 1140 | 40 | | | Annealed | |
| | 1146 | | | | Annealed | |
| | 1215 | | | | Annealed | |
| | 12 L 14 | | | | Annealed | |
| | | 16D | | | Annealed | |
| | A573 Grade 58 | 18kp | 11 378 | | Annealed | |
| | A573 Grade 70 | St14kP | 11 448 | | Annealed | |
| | 1010 | 10 | | | Annealed | |
| F.1110 | 1015 | 15 | | | Annealed | |
| | 1020, 1023 | 20 | 12 024 | | Annealed | |
| | | 17G1S | 11 523 | | Annealed | |
| F.1511 | 1015 | 15 | | | Annealed | |
| F.1120 | 1025 | 25 | | | Annealed | |
| | | | | | Annealed | |
| | A204 Grade A | | 15 020 | | Annealed | |
| | 4520 | | | | Annealed | |
| | 3310, 9314 | 20X2H4A | 16 420 | | Annealed | |
| | 4320 | | 16 220 | | Annealed | |
| | | | | | Annealed | |
| F.1516 | 5115 | 12KHN2 | 14 220 | | Annealed | |
| | | 18HG | | | Annealed | |
| | 5120 | 20KH | 14 221 | | Annealed | |
| | 5120 H | 20KH | | | Annealed | |
| | A182-F11, A182-F12 | 12KHM | 15 121 | | Annealed | |
| | A387 Grade 12 Cl. 2 | | | | Annealed | |
| F.155 | A182-F22 | 12KH8 | 15 313 | | Annealed | |
| F.1130 | 1035 | 35 | 12 040 | | Annealed | |
| F.5110 | 1045 | 45 | 12 050 | | Annealed | |
| | 1040 | 40 | 12 041 | | Annealed | |
| F.1150 | 1055 | 55 | | | Annealed | |
| | 1060 | 60 | 12 061 | | Annealed | |
| | 1039 | 40G | | | Annealed | |
| | 1330 | 30G2 | | | Annealed | |
| F.1135 | 1035 | 35 | | | Annealed | |
| F.1140 | 1045 | 45 | 12 050 | | Annealed | |
| F.1150 | 1064 | 60 | | | Annealed | |
| | 1060 | 60 | | | Annealed | |
| F.144 | 9255 | 55S2 | | | Annealed | |
| F.1250 | 4135 | 35KHM | | | Annealed | |
| F.5241 | S1 | 5KHV2S | | | Annealed | |
| | L6 | 5KHNV | | | Annealed | |
| | 5045 | | | | Annealed | |
| | 3135 | | | | Quenched & Tempered | |
| | 3435 | | | | Annealed | |
| | 9840 | | | | Quenched & Tempered | |
| F.1280 | 4340 | 38H2N2MA | 16 343 | | Annealed | |
| | 5132 | 35KH | | | Quenched & Tempered | |
| | 5140 | 40H | 14 140 | | Quenched & Tempered | |
| F.1251 | 4130 | 20KHM | 15 130 | | Quenched & Tempered | |
| F.1252 | 4142, 4140 | 38HM | 15 142 | | Annealed | |
| F.1252 | 4142, 4140 | 38HM | 15 142 | | Quenched & Tempered | |
| | | | | | Quenched & Tempered | |
| F.143 | 6150 | 50KHFA | 15 260 | | Quenched & Tempered | |
| F.1740 | A355 Cl. A | | | | Annealed | |
| F.5103 | 1070 | 70 | | | Annealed | |
| F.5117 | 1095 | | | | Annealed | |
| F.5118 | W1 | U10A | | | Annealed | |
| | | U10 | | | Annealed | |
| | W1 | U13 | | | Annealed | |

| SMG | EN | EN-Nr | W.-Nr | DIN | AFNOR | BS | UNI | JIS | SS | UNS |
|---|---|---|---|---|---|---|---|---|---|---|
| P7 | 107 CrV 3 | 1.2210 | 1.2210 | 115 CrV 3 | 100 C 3 | | 107 CrV 3 KU | | | T61202 |
| | | | 1.2510 | 100 MnCrW 4 | 90 MWCV 5 | BO 1 | 95 MnWCr 5 KU | SKS 3 | 2140 | T31501 |
| | 90 MnCrV 8 | 1.2842 | 1.2842 | 90 MnCrV 8 | 90 MV 8 | BO 2 | 90 MnVCr 8 KU | | | T31502 |
| | 100 Cr 6 | 1.3505 | 1.3505 | 100 Cr 6 | 100 C 6 | 534 A 99 | 100 Cr 6 | SUJ 2 | 2258 | G51986 |
| P8 | X 210 Cr 12 | 1.2080 | 1.2080 | X 210 Cr 12 | Z 200 C 12 | BD 3 | X 210 Cr 13 KU | SKD 1 | | T30403 |
| | | | 1.2343 | X 38 CrMoV 5 1 | Z 38 CDV 5 | BH 11 | X 37 CrMoV 5 1 KU | SKD 6 | | T20811 |
| | X 40 CrMoV 5 1 | 1.2344 | 1.2344 | X 40 CrMoV 5 1 | Z 40 CDV 5 | BH 13 | X 40 CrMo 5 1 1 KU | SKD 61 | 2242 | T20813 |
| | X 100 CrMoV 5 | 1.2363 | 1.2363 | X 100 CrMoV 5 1 | Z 100 CDV 5 | BA 2 | X 100 CrMoV 5 1 KU | SKD 12 | 2260 | T30102 |
| | | | 1.2365 | X 32 CrMoV 3 3 | 32 DCV 28 | BH 10 | 30 CrMoV 12 27 KU | SKD 7 | | T20810 |
| | | | 1.2436 | X 210 CrW 12 | | | X 215 CrW 12 1 KU | SKD 2 | 2312 | |
| | | | 1.2601 | X 165 CrMoV 12 | | | X 165 CrMoW 12 KU | | 2310 | |
| | | | 1.2713 | 55 NiCrMoV 6 | 55 NCDV 7 | | | SKT 4 | | T61206 |
| | HS 6-5-2-5 | 1.3243 | 1.3243 | S 6-5-2-5 | Z 85 WDKCV 06-05-05-04-02 | | HS 6-5-2-5 | SKH 55 | 2723 | |
| | HS 2-10-1-8 | 1.3247 | 1.3247 | S 2-10-1-8 | Z 110 DKCWV 09-08-04 | BM 42 | HS 2-9-1-8 | SKH 51 | | T11342 |
| | HS 18-1-2-5 | 1.3255 | 1.3255 | S 18-1-2-5 | Z 80 WKCV 18-05-04-01 | BT 4 | HS 18-1-1-5 | SKH 3 | | T12004 |
| | HS 6-5-2 | 1.3343 | 1.3343 | S 6-5-2 | Z 85 WDCV 06-05-04-02 | BM 2 | HS 6-5-2 | SKH 9, SKH 51 | 2722 | T11302 |
| | HS 2-9-2 | 1.3348 | 1.3348 | S 2-9-2 | Z 100 DCWV 09-04-02-02 | | HS 2-9-2 | SKH 58 | 2782 | T11307 |
| | HS 18-0-1 | 1.3355 | 1.3355 | S 18-0-1 | Z 80 WCV 18-04-01 | BT 1 | HS 18-0-1 | SKH 2 | | T12001 |
| P11 | X 6 Cr 13 | 1.4000 | 1.4000 | X 6 Cr 13 | Z 6 C 12 | 403 S 17 | X 6 Cr 13 | SUS 403 | 2301 | S41008 |
| | X 12 Cr 13 | 1.4006 | 1.4006 | X 10 Cr 13 | Z 10 C 13 | 410 S 21 | X 12 Cr 13 | SUS 410 | 2302 | S41000 |
| | X 6 Cr 17 | 1.4016 | 1.4016 | X 6 Cr 17 | Z 8 C 17 | 430 S 15 | X 8 Cr 17 | SUS 430 | 2320 | S43000 |
| | X 20 Cr 13 | 1.4021 | 1.4021 | X 20 Cr 13 | Z 20 C 13 | 420 S 37 | X 20 Cr 13 | SUS 420 J 1 | 2303 | S42000 |
| | X 39 Cr 13 | 1.4031 | 1.4031 | X 40 Cr 13 | Z 40 C 14 | 420 S 45 | X 40 Cr 14 | SUS 420 | 2304 | S40280 |
| | X 70 CrMo 15 | 1.4109 | 1.4109 | X 65 CrMo 14 | Z 70 D 14 | | | SUS 440 A | | S44002 |
| | X 90 CrMoV 18 | 1.4112 | 1.4112 | X 90 CrMoV 18 | Z 2 CND 18 05 | 409 S 19 | X CrTi 12 | SUS 440 B | 2327 | S44003 |
| | X 105 CrMo 17 | 1.4125 | 1.4125 | X 105 CrMo 17 | Z 100 CD 17 | | X 105 CrMo 17 | SUS 440 C | | S44004 |
| | X 3 CrNIMo 13 3 | 1.4313 | 1.4313 | X 5 CrNi 13 4 | Z 5 CN 13.4 | 425 C 11 | X 6 CrNi 13 04 | SCS 5 | 2385 | S41500 |
| | X 18 CrN 28 | 1.4749 | 1.4749 | X 18 CrN 28 | Z 18 C 25 | | | | 2322 | S44600 |
| P12 | X 6 NiCrTiMoV 25 15 | 1.4534 | 1.4534 | X 3 CrNiMoAl 13 8 2 | | | | | | S13800 |
| | X 4 CrNiCuNb 16 4 | 1.4540 | 1.4540 | X 4 CrNiCuNb 16 4 | | | | | | S15500 |
| | | 1.4540 | 1.4540 | X 4 CrNiCuNb 16 4 | Z 4 CNUNb 16.4 M | | | | | S15500 |
| | X 4 CrNiCuNb 16 4 | 1.4540 | 1.4540 | X 4 CrNiCuNb 16 4 | | | | | | S15500 |
| | X 5 CrNiCuNb 16 4 | 1.4542 | 1.4542 | X 5 CrNiCuNb 16 4 | | | | SUS 630 | | S17400 |
| | X 5 CrNiCuNb 17 4 | 1.4548 | 1.4542 | X 5 CrNiCuNb 17 4 | Z 6 CNU 17.4 | | | SCS 24, SUS 630 | | S17400 |
| | X 7 CrNiAl 17 7 | 1.4564 | 1.4564 | X 7 CrNiAl 17 7 | Z 9 CAN 17.7 | 301 S 81 | X 7 CrNiAl 17 7 | SUS 631 | 2388 | S17700 |
| | X 2 NiCoMoTi 18 12 4 | 1.6356 | 1.6356 | X 2 NiCoMoTi 18 12 4 | | | | | | K93160 |
| | X 2 NiCoMoTi 18 9 5 | 1.6358 | 1.6358 | X 2 NiCoMoTi 18 9 5 | Z 2 NKD 19-09 | | | | | K93120 |
| | X 2 NiCoMo 18 9 5 | 1.6358 | 1.6358 | X 2 NiCoMoTi 18 9 5 | Z 2 NKD 19-09 | | | | | K93120 |
| | X 2 NiCoMo 18 8 5 | 1.6359 | 1.6359 | X 2 NiCoMo 18 8 5 | | S 162 | | | | K92890 |
| | X 2 NiCoMo 18 8 5 | 1.6359 | 1.6359 | X 2 NiCoMo 18 8 5 | | S 162 | | | | K92890 |
| M1 | X 10 CrNiS 18 9 | 1.4305 | 1.4305 | X 10 CrNiS 18 9 | Z 10 CNF 18.09 | 303 S 31 | X 10 CrNi 18 09 | SUS 303 | 2346 | S30300 |
| M2 | X 2 CrNi 19 11 | 1.4306 | 1.4306 | X 2 CrNi 19 11 | Z 2 CN 18.10 | 304 S 12 | X 3 Cr Ni 18 11 | SUS 304 L | 2352 | S30403 |
| | X 5 CrNi 18 10 | 1.4301 | 1.4301 | X 5 CrNi 18 10 | Z 6 CN 18.09 | 304 S 31 | X 5 CrNi 18 11 | SUS 304 | 2333 | S30400 |
| | X 5 CrNiMo 17 12 2 | 1.4401 | 1.4401 | X 5 CrNiMo 17 12 2 | Z 3 CND 17.11.1 | 316 S 31 | X 5 CrNiMo 17 12 | SUS 316 | 2347 | S31600 |
| | X 6 CrNiNb 18 10 | 1.4550 | 1.4550 | X 6 CrNiNb 18 10 | Z 6 CNNb 18.10 | 347 S 31 | X 6 CrNiNb 18 11 | SUS 347 | 2338 | S34700 |
| | X 9 CrNi 18 8 | 1.4310 | 1.4310 | X 12 CrNi 17 7 | Z 12 CN 17.07 | 301 S 21 | X 12 CrNi 17 07 | SUS 301 | (2331) | S30100 |
| | X 12 CrNi 18 8 | 1.4300 | 1.4300 | X 12 CrNi 18 8 | Z 12 CN 18 | 302 S 25 | | SUS 302 | 2331 | S30200 |
| M3 | X 2 CrNiMo 18 14 3 | 1.4435 | 1.4435 | X 2 CrNiMo 18 14 3 | Z 2 CND 17.13 | 316 S 12 | X 2 CrNiMo 17 13 2 | SCS 16, SUS 316 L | 2353 | S31603 |
| | X 2 CrNiMoN 17 13 3 | 1.4429 | 1.4429 | X 2 CrNiMoN 17 13 3 | Z 2 CND 17.13 Az | 316 S 62 | X 2 CrNiMoN 17 13 3 | SUS 316 LN | 2375 | S31653 |
| | X 2 CrNiN 18 10 | 1.4311 | 1.4311 | X 2 CrNiN 19 11 | Z 2 CN 18 .10 Az | 304 S 62 | X 2 CrNiN 18 11 | SUS 304 LN | 2371 | S30453 |
| | X 3 CrNiMo 18 12 3 | 1.4466 | 1.4466 | X 5 CrNi 18 15 | | 317 S 16 | X 5 CrNi 18 15 | SUS 317 | 2366 | S31700 |
| | X 9 CrNiSiNCe 21 11 2 | 1.4835 | 1.4893 | X 9 CrNiSiNCe 21 11 2 | | 310 S 31 | | | 2368 | S30815 |
| | X 12 CrNi 25 21 | 1.4335 | 1.4335 | X 12 CrNi 25 21 | Z 12 CN 25.20 | 310 S 24 | X 6 CrNi 26 20 | SUH 310, SUS 310 S | 2361 | S31008 |
| M4 | X 2 CrNiMoN 22 5 3 | 1.4462 | 1.4462 | X 2 CrNiMoN 22 5 | Z 2 CND 22.05 Az | 332 S 15 | X 2 CrNiMoN 22 5 | | 2377 | S31803 |
| | X 2 CrNiMoSi 19 5 | 1.4424 | 1.4417 | X 2 CrNiMoSi 19 5 | Z 2 CND 18.05.03 | | | | 2376 | S31500 |
| | X 2 NiCrMoCu 25 20 5 | 1.4539 | 1.4539 | X 2 NiCrMoCu 25 20 5 | Z 2 NCDU 25 20 | 904 S 13 | | | 2562 | N08904 |
| | X 3 CrNiMo 27 5 2 | 1.4460 | 1.4460 | X 4 CrNiMo 27 5 2 | Z 3 CND 25.7 Az | | X 3 CrNiMo 27 5 2 | SUS 329 J 1 | 2324 | S32900 |
| | X 5 CrNiCuNb 16 4 | 1.4980 | 1.4943 | X 4 NiCrTi 25 15 | Z 6 NCTDV 25.15 | HR 51 | | SUH 660 | 2570 | S66286 |
| M5 | X 1 CrNiMoN 20 18 7 | 1.4547 | 1.4529 | X 1 CrNiMoN 20 18 7 | Z 1 CNDU 20.18.05 Az | | X 1 CrNiMoN 20 18 7 | | 2778 | S31254 |
| | X 1 CrNiMoN 25 22 8 | 1.4652 | 1.4652 | X 2 CrNiMoN 25 22 7 | | | | | | S32654 |
| | X 10 NiCrAlTi 32 20 | 1.4876 | 1.4876 | X 10 NiCrAlTi 32 20 | Z 10 NC 32.21 | | | NCF 800 | | N08800 |
| | X 2 CrNiMoN 25 7 4 | 1.4410 | 1.4410 | X 2 CrNiMoN 25 7 4 | Z 3 CND 25.07 Az | | X 2 CrNiMoN 25 7 4 | | 2328 | S32750 |

| U.N.E./ I.H.A. | AISI / ASTM | GOST | CSN | Misc. Brands | Condition | Structure |
|---|---|---|---|---|---|---|
| F.520L | L2 | 11KHF | | | Annealed | |
| F.5220 | O1 | 9KHVG | | | Annealed | |
| | O2 | 9G2F | | | Annealed | |
| F.5230 | 52100 | SHKH15 | 14 109 | | Annealed | |
| F.5212 | D3 | KH12 | | | Annealed | |
| | H11 | 4KH5MFS | | | Annealed | |
| F.5318 | H13 | 4KH5MF1S | | | Annealed | |
| F.5227 | A2 | 9KH5VF | | | Annealed | |
| | H10 | 3KH3M3F | | | Annealed | |
| F.5213 | | KH12 | | | Annealed | |
| | | KH12MF | | | Annealed | |
| F.520.S | L6 | 5KHNM | | | Annealed | |
| F.5613 | M35 | R6M5K5 | | | Annealed | |
| | M42 | R2AM9K5 | | | Annealed | |
| | T4 | R18K5F2 | | | Annealed | |
| F.5603 | M2 | R6M5 | | | Annealed | |
| | M7 | | | | Annealed | |
| | T1 | R18 | | | Annealed | |
| | 403 | 08KH13 | | | Annealed | Ferritic |
| F.3401 | 410, CA-15 | 12KH13, 08KH13 | | | Annealed | Martensitic |
| F.3113 | 430 | 12KH17 | | | Annealed | Ferritic |
| F.5261 | 420 | 20KH13 | 17 022 | | Annealed | Martensitic |
| F.3404 | 420 | 40KH13 | | | Annealed | Martensitic |
| | 440 A | | | | Annealed | Martensitic |
| | 440 B | 95KH18 | | | Annealed | Martensitic |
| | 440 C | 95KH18 | | | Annealed | Martensitic |
| | A182 F6NM | | | F6NM | Annealed | Martensitic |
| | 446 | 15KH28 | | | Annealed | Ferritic |
| | XM-13 | | | PH 13-8 Mo | Solution annealed | Austenitic |
| | XM-12 | | | 15-5 PH | H1150 | Martensitic |
| | XM-12 | | | 15-5 PH | Solution annealed | Martensitic |
| | XM-12 | | | 15-5 PH | H1025 | Martensitic |
| | SAE 630 | | | 17-4 PH | H1150 | Martensitic |
| | 630 | | | 17-4 PH | Solution annealed | Martensitic |
| | 631 | 09KH17N7YU1 | | 17-7 PH | Solution annealed | Austenitic/Ferritic |
| | AMS 6515 | | | Marage 350 | Solution annealed | Martensitic |
| | AMS 6521 | | | Marage 300 | Solution annealed | Martensitic |
| | AMS 6514 | | | Marage 300, Vascomax C300 | Solution annealed | Martensitic |
| | AMS 6512 | | | Marage 250 | Solution annealed | Martensitic |
| | AMS 6512 | | | Marage 250, Vascomax C250 | Solution annealed | Martensitic |
| F.3508 | 303 | 12KH19N9 | | | Annealed | Austenitic |
| F.3504 | 304 L | 03KH18N11 | | | Annealed | Austenitic |
| F.3504 | 304 | 08KH18N10 | 17 240 | | Annealed | Austenitic |
| F.3534 | 316 | 08KH17H13M2T | 17 346 | | Annealed | Austenitic |
| F.3524 | 347 | 08KH18N12B | | | Annealed | Austenitic |
| F.3517 | 301 | 07KH16N6 | | | Annealed | Austenitic |
| | 302 | 12KH18N9 | | | Annealed | Austenitic |
| F.3533 | (316 L) | 03KH17N14M3 | 17 349 | | Annealed | Austenitic |
| | 316 LN | 03KH16N15M3 | | | Annealed | Austenitic |
| F.3541 | 304 LN | 03KH18N11 | | | Annealed | Austenitic |
| | 317 | 08KH17H15M3T | | | Annealed | Austenitic |
| | | | | 253 MA | Annealed | Austenitic |
| | 310 S | 12KH25N20 | | | Annealed | Austenitic |
| | 329 LN | | | SAF 2205 | Annealed | Duplex |
| | | | | 3RE60 | Annealed | Duplex |
| | 904L | | | | Annealed | Super austenitic |
| | 329 | | | | Annealed | Duplex |
| | 660 | | | A286 | Solution annealed | Austenitic |
| | | | | 254 SMO | Annealed | Super austenitic |
| | | | | 654 SMO | Annealed | Super austenitic |
| | | | | Alloy 800 | Annealed | Austenitic |
| | F 53 | | | SAF 2507 | Annealed | Super duplex |

| SMG | EN | EN-Nr | W.-Nr | DIN | AFNOR | BS | UNI | JIS | SS | UNS |
|---|---|---|---|---|---|---|---|---|---|---|
| K1 | EN-GJL-150 | 0.6150 | 0.6150 | GG-15 | Ft 15 D | Grade 150 | G15 | FC 150 | 01 15-00 | F11601 |
| | EN-GJL-200 | 0.6200 | 0.6200 | GG-20 | Ft 20 D | Grade 220 | G20 | FC 200 | 01 20-00 | F12101 |
| | EN-GJL-250 | 0.6250 | 0.6250 | GG-25 | Ft 25 D | Grade 260 | G25 | FC 250 | 01 25-00 | F12401 |
| | EN-GJL-350 | 0.6350 | 0.6350 | GG-35 | Ft 35 D | Grade 350 | G35 | FC 350 | 01 35-00 | F13502 |
| | EN-GJL-215 | | | GG-220 HB | | | | | 02 19 | |
| K2 | EN-GJV-300 | | | GJV-300 | | | | | | |
| | EN-GJV-350 | | | GJV-350 | | | | | | |
| | EN-GJV-400 | | | GJV-400 | | | | | | |
| | EN-GJV-450 | | | GJV-450 | | | | | | |
| | EN-GJV-500 | | | GJV-500 | | | | | | |
| K3 | EN-GJMB-550-4 | 0.8155 | | GTS-55-04 | P 540/5 | P 540/5 | P 55-04 | PCMP55-04 | 08 54-00 | F24130 |
| K4 | EN-GJS-350-22 | 0.7033 | 0.7033 | GGG-35.3 | FGS 370-17 | Grade 350/22 | | FCD 350-22L | 07 17-15 | |
| | EN-GJS-400-15 | 0.7040 | 0.7040 | GGG-40 | FGS 400-12 | Grade 420/12 | GS 400-12 | FCD 400-18L | 07 17-02 | F32800 |
| | EN-GJS-400-18 | 0.7043 | 0.7043 | GGG-40.3 | FGS 370-17 | Grade 370/17 | GSO 42/17 | | 07 17-12 | F32800 |
| | EN-GJS-500-7 | 0.7050 | 0.7050 | GGG-50 | FGS 500-7 | Grade 500/7 | GS 500-7 | FCD 500-7 | 07 27-02 | F33800 |
| | EN-GJS-600-3 | 0.7060 | 0.7060 | GGG-60 | FGS 600-3 | Grade 600/3 | GS 600-3 | FCD 600-3 | 07 32-03 | F34100 |
| | EN-GJS-700-2 | 0.7070 | 0.7070 | GGG-70 | FGS 700-2 | Grade 700/2 | GS 700-2 | FCD 700-2 | 07 37-01 | F34800 |
| K5 | | | | | | | | | | ADI grade 5 |
| | EN-GJS-1000-5 | | | GJS-1000-5 | | | | | | ADI grade 2 |
| | EN-GJS-1200-2 | | | GJS-1200-2 | | | | | | ADI grade 3 |
| | EN-GJS-1400-1 | | | GJS-1400-1 | | | | | | ADI grade 4 |
| | EN-GJS-800-8 | | | GJS-800-8 | | | | | | ADI grade 1 |
| K6 | EN-GJLA-XNiCr 20-2 | 0.6660 | 0.6660 | GGL-NiCr 20 2 | FGL Ni20 Cr2 | Grade F2 | | | 05 23-00 | F41002 |
| | EN-GJLA-XNiCr 30-3 | 0.6676 | 0.6676 | GGL-NiCr 30 3 | FGL Ni30 Cr3 | Grade F3 | | | | F41004 |
| | EN-GJLA-XNiCuCr 15-6-2 | 0.6655 | 0.6655 | GGL-NiCuCr 15 6 2 | FGL Ni15 Cu6 Cr2 | Grade F1 | | | | F41000 |
| K7 | EN-GJSA-XNiMn 13-7 | 0.7652 | 0.7652 | GGG-NiMn 13 7 | FGS Ni13 Mn7 | Grade S6 | | | 07 72-00 | |
| | EN-GJSA-XNiCr 20-2 | 0.7660 | 0.7660 | GGG-NiCr 20 2 | FGS Ni20 Cr2 | Grade S2 | | | | F43000 |
| | EN-GJSA-XNiMn 23-4 | 0.7673 | 0.7673 | GGG-NiMn 23 4 | FGS Ni23 Mn4 | Grade S2M | | | | F43010 |
| | EN-GJSA-XNiCr 30-3 | 0.7676 | 0.7676 | GGG-NiCr 30 3 | FGS Ni30 Cr3 | Grade S3 | | | | F43003 |
| | EN-GJSA-XNi 35 | 0.7683 | 0.7683 | GGG-Ni 35 | FGS Ni35 | | | | | F43006 |
| N1 | AW-1050A | Al99.5 | 3.0255 | Al99.5 | A-5/1050A | 1B | | (A1050) | 4007 | AA1050A |
| | AW-2011 | AlCuBiPb | 3.1655 | AlCuBiPb | A-U5PbBi/2011 | FC1 | | A2011 | 4355 | AA2011 |
| | AW-2014 | AlCuSiMn | 3.1255 | AlCuSiMn | A-U4SG/2014 | H15 | | | 4338 | AA2014 |
| | AW-5005 | AlMg1 | 3.3315 | AlMg1 | A-G0.6 | N41 | | | 4106 | AA5005 |
| | AW-6060 | AlMgSi0.5 | 3.3206 | AlMgSi0.5 | A-GS/6060 | (H9) | | | 4103 | AA6060 |
| | AW-6063 | AlMgSi0.7 | 3.3210 | AlMgSi0.7 | A-GSUC/6061 | (H10) | | (A6063) | 4104, 4107 | AA6005 |
| | AW-3103 | AlMn1 | 3.0515 | AlMn1 | | N3 | | | 4054 | AA3103 |
| | AW-3003 | AlMn1Cu | 3.0517 | AlMn1Cu | A-M1/3003 | | | A3003 | | AA3003 |
| | AW-7020 | AlZn4.5Mg1 | 3.4335 | AlZn4.5Mg1 | A-Z5G/7020 | H17 | | | 4425 | AA7020 |
| | AW-7075 | | 3.4365 | AlZnMgCu1.5 | A-Z5GU/7075 | 2L95/2L96 | | A7075 | | AA7075 |
| | AC-42000 | | 3.2341 | G-AlSi5Mg | A-S7G | LM25 | 3599 | AC 4C | 4244 | |
| | AC-46200 | AlSi8Cu3(Si) | 3.2161 | G-AlSi8Cu3 | | | | | 4251 | A13800 |
| | MG-P-63 | MgAl6Zn | 3.5612 | G-MgAl6Zn | G-A6-Z1 | MAG-E-121 | | | | M11600 |
| | MG-P-61 | MgAl8Zn | 3.5812 | G-MgAl8Zn | (G-A7-Z1) | | | | | |
| | MN65120 | MgSe3Zn2Zr1 | 3.5103 | G-MgSe3Zn2Zr1 | ZRE1 | MAG6-TE | | | | M12330 |
| N2 | AC-43400 | AlSi10Mg(Fe) | 3.2381 | G-AlSi10Mg | A-S10G | LM9 | | | 4253 | A13600 |
| | AC-44200 | AlSi12 | 3.2382 | GD-AlSi12 | | | | | | |
| | AW-6082 | AlMgSi1 | 3.2315 | AlMgSi1 | A-SGM0.7/6082 | H30 | | | 4212 | AA6082 |
| N3 | | AlSi17Cu5 | | | | | | ADC14 | | |
| N11 | CC331G | | 2.0940.01 | CuAl10Fe | CuAl10Fe | AB1 | | | 5710 | C95200 |
| | CC333G | | 2.0975.01 | CuAl10Ni | CuAl10Ni5Fe5 | AB2 | | | 5716 | C95500 |
| | | CuNi10Fe1Mn | 2.0872 | CuNi10Fe1Mn | CuNi10Fe1Mn | CN102 | | | 5667 | C70600 |
| | | | | CuNi10Zn45 | | | | | | |
| | | CW408J | 2.0790 | CuNi18Zn19Pb | CuNi18Zn19Pb1 | | | | | C76300 |
| | CW352H | | 2.1176 | CuPb10Sn | CuSn10Pb10 | LB2 | | | 5640 | C93700 |
| | CC480K | | 2.1050.01 | CuSn10 | CuSn10 | CT1 | | | 5443 | C90700 |
| | | | 2.1087 | CuSn10Zn | | | | | 5458 | C90500 |
| | CW452K | CuSn6 | 2.1020 | CuSn6 | CuSn6 | PB103 | | C5191 | 5428 | C51900 |
| | CW502L | CuZn15 | 2.0240 | CuZn15 | CuZn15 | CZ102 | | C2300 | 5112 | C23000 |
| | CW706R | CuZn28Sn1 | 2.0470 | CuZn28Sn1 | CuZn29Sn1 | | | | 5220 | C44300 |
| | CW508L | CuZn37 | 2.0321 | CuZn37 | CuZn37 | CZ108 | | | 5150 | C27200 |
| | CW717R | CuZn38Sn1 | 2.0530 | CuZn38Sn1 | | | | | | C46400 |
| | CW614N | CuZn39Pb3 | 2.0401 | CuZn39Pb3 | CuZn39Pb3 | CZ121 | | | 5170 | C38500 |
| | CW612N | CuZn40Pb2 | 2.0402 | CuZn40Pb2 | CuZn39Pb2 | CZ120 | | | 5168 | C37800 |
| | CW622N | CuZn44Pb2 | 2.0410 | CuZn44Pb2 | | CZ104 | | | 5272 | C68700 |

| U.N.E./ I.H.A. | AISI / ASTM | GOST | CSN | Misc. Brands | Condition | Structure |
|---|---|---|---|---|---|---|
| | A48 25 B | Sc 15 | 422 415 | | | Grey cast iron (GCI) |
| | A48 30 B | Sc 20 | 422 420 | | | Grey cast iron (GCI) |
| | A48 35 B | Sc 25 | 422 425 | | | Grey cast iron (GCI) |
| | A48 50 B | Sc 35 | | | | Grey cast iron (GCI) |
| | G 3500 | | | | | Grey cast iron (GCI) |
| | Grade 350 | | | | | Compacted graphite iron (CGI) |
| | Grade 400 | | | | | Compacted graphite iron (CGI) |
| | Grade 400-15 | | | | | Compacted graphite iron (CGI) |
| | Grade 450 | | | | | Compacted graphite iron (CGI) |
| | Grade 500 | | | | | Compacted graphite iron (CGI) |
| | A220 60004 | | | | Tempered | Malleable cast iron (MCI) |
| | | | | | | Nodular cast iron (SGI) |
| FGE 38-17 | 60-40-18 | Vc 42-12 | 422 304 | | | Nodular cast iron (SGI) |
| | 60-40-18 | Vc 42-12 | | | | Nodular cast iron (SGI) |
| FGE 50-7 | A536, 80-55-06 | Vc 50-2 | 422 305 | | | Nodular cast iron (SGI) |
| FGE 60-2 | A476, 80-60-03 | Vc 60-2 | 422 306 | | | Nodular cast iron (SGI) |
| FGE 70-2 | A536, 100-70-03 | Vc 70-2 | | | | Nodular cast iron (SGI) |
| | 1600/1300/- | | | | | Austempered ductile iron (ADI) |
| | 1050/700/7 | | | | | Austempered ductile iron (ADI) |
| | 1200/850/4 | | | | | Austempered ductile iron (ADI) |
| | 1400/1100/1 | | | | | Austempered ductile iron (ADI) |
| | 850/550/10 | | | | | Austempered ductile iron (ADI) |
| | A436 Type 2 | | | Ni-Resist 2 | | Austenitic lamellar cast iron |
| | A436 Type 3 | | | Ni-Resist 3 | | Austenitic lamellar cast iron |
| | A436 Type 1 | | | Ni-Resist 1 | | Austenitic lamellar cast iron |
| | | | | Nodumag | | Austenitic nodular cast iron |
| | A436 Type D-2 | | | Ni-Resist D-2 | | Austenitic nodular cast iron |
| | A439 Type D-2M | | | Ni-Resist D-2M | | Austenitic nodular cast iron |
| | A436 Type D-3 | | | Ni-Resist D-3 | | Austenitic nodular cast iron |
| | A439 Type D-5 | | | Ni-Resist D-5 | | Austenitic nodular cast iron |
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| | B26 | | | | | |
| | A380 | | | | | |
| | AZ61A | | | | | |
| | AZ80A | | | | | |
| | AMS 4442 | | | | | |
| | B85 | | | | | |
| | A413.2 | | | | | |
| | | | | | | |
| | B390.0 | | | | | |
| | CA952 | BrA9ZH3L | | | | |
| | CA955 | BrA10ZH4N4L | | | | |
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| | | | | | | |
| | CA937 | | | | | |
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| | | | | | | |
| | | BrOF6.5-0.15 | | | | |
| | | L90 | | | | |
| | | LOMsh70-1-0.05 | | | | |
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| | | LO60-1 | | | | |
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| | | LAMsh77-2-0.05 | | | | |

| SMG | EN | EN-Nr | W.-Nr | DIN | AFNOR | BS | UNI | JIS | SS | UNS |
|---|---|---|---|---|---|---|---|---|---|---|
| S1 | | | | | | | | | | |
| S2 | | | | | | | | | | |
| S3 | NiMo30 | | 2.4810 | | | | | | | N10002 |
| | NiMo16Cr15W | | 2.4819 | | | | | | | N10276 |
| | | | | | | | | | | |
| | NiCr19Fe19Nb5Mo3 | | 2.4668 | | | | | | | N07718 |
| | | | 2.4669 | | | | | | | N07750 |
| | NiCr20TiAl | | 2.4631 | | | | | | | N07080 |
| | | | | | | | | | | |
| | NiCr19Co18Mo4Ti3Al3 | | | | | | | | | N07500 |
| | NiCr20Co13Mo4Ti3Al | | 2.4654 | | | | | | | N07001 |
| S11 | | | 3.7024 | | | | | | | |
| | | | | | | | | | | R54620 |
| S12 | | | | | | | | | | R56320 |
| | TiAl6V4 | | 3.7164 | | | | | | | R56400 |
| S13 | | | | TiV10Fe2Al3 | | | | | | |
| H3 | 16 MnCr 5 | 1.7131 | 1.7131 | 16 MnCr 5 | 16 MC 5 | 527 M 17 | 16 MnCr 5 | SCR 415 | 2511 | G51170 |
| H5 | C 67S | 1.1231 | 1.1231 | Ck 67 | XC 68 | 060 A 67 | C 70 | | 1770 | G10700 |
| | C 75S | 1.1248 | 1.1248 | Ck 75 | XC 75 | 060 A 78 | C 75 | | 1774, 1778 | G10780 |
| | C 100S | 1.1274 | 1.1274 | Ck 101 | | 060 A 96 | | SUP 4 | 1870 | G10950 |
| | C 105U | 1.1545 | 1.1545 | C 105 W1 | Y1 105 | | C 100 KU | | 1880 | |
| | | | 1.2550 | 60 WCrV 7 | 55 WC 20 | | 55 WCrV 8 KU | | | |
| | 55 Cr 3 | 1.7176 | 1.7176 | 55 Cr 3 | 55 C 3 | 527 A 60 | 55 Cr 3 | SUP 9 (A) | 2253 | G51550 |
| | 42 CrMo 4 | 1.7225 | 1.7225 | 42 CrMo 4 | 42 CD 4 | 708 M 40 | 42 CrMo 4 | SCM 440 (H) | 2244 | G41400 |
| H7 | 107 CrV 3 | 1.2210 | 1.2210 | 115 CrV 3 | 100 C 3 | | 107 CrV 3 KU | | | T61202 |
| | | | 1.2510 | 100 MnCrW 4 | 90 MWCV 5 | BO 1 | 95 MnWCr 5 KU | SKS 3 | 2140 | T31501 |
| | 90 MnCrV 8 | 1.2842 | 1.2842 | 90 MnCrV 8 | 90 MV 8 | BO 2 | 90 MnVCr 8 KU | | | T31502 |
| | 100 Cr 6 | 1.3505 | 1.3505 | 100 Cr 6 | 100 C 6 | 534 A 99 | 100 Cr 6 | SUJ 2 | 2258 | G51986 |
| H8 | X 40 CrMoV 5 1 | 1.2344 | 1.2344 | X 40 CrMoV 5 1 | Z 40 CDV 5 | BH 13 | X 40 CrMo 5 1 1 KU | SKD 61 | 2242 | T20813 |
| | X 100 CrMoV 5 | 1.2363 | 1.2363 | X 100 CrMoV 5 1 | Z 100 CDV 5 | BA 2 | X 100 CrMoV 5 1 KU | SKD 12 | 2260 | T30102 |
| | X 155 CrVMo 12 1 | | 1.2379 | X 155 CrVMo 12 1 | Z 160 CDV 12 | BD 2 | X 155 CrVMo 12 1 KU | SKD 11 | | T30402 |
| | | | 1.2436 | X 210 CrW 12 | | | X 215 CrW 12 1 KU | SKD 2 | 2312 | |
| | | | 1.2601 | X 165 CrMoV 12 | | | X 165 CrMoW 12 KU | | 2310 | |
| | | | 1.2713 | 55 NiCrMoV 6 | 55 NCDV 7 | | | SKT 4 | | T61206 |
| | HS 6-5-2-5 | 1.3243 | 1.3243 | S 6-5-2-5 | Z 85 WDKCV 06-05-05-04-02 | | HS 6-5-2-5 | SKH 55 | 2723 | |
| | HS 2-10-1-8 | 1.3247 | 1.3247 | S 2-10-1-8 | Z 110 DKCWV 09-08- | BM 42 | HS 2-9-1-8 | SKH 51 | | T11342 |
| | HS 18-0-1 | 1.3355 | 1.3355 | S 18-0-1 | Z 80 WCV 18-04-01 | BT 1 | HS 18-0-1 | SKH 2 | | T12001 |
| H11 | X 20 Cr 13 | 1.4021 | 1.4021 | X 20 Cr 13 | Z 20 C 13 | 420 S 37 | X 20 Cr 13 | SUS 420 J 1 | 2303 | S42000 |
| | X 70 CrMo 15 | 1.4109 | 1.4109 | X 65 CrMo 14 | Z 70 D 14 | | | SUS 440 A | | S44002 |
| | X 90 CrMoV 18 | 1.4112 | 1.4112 | X 90 CrMoV 18 | Z 2 CND 18 05 | 409 S 19 | X CrTi 12 | SUS 440 B | 2327 | S44003 |
| | X 105 CrMo 17 | 1.4125 | 1.4125 | X 105 CrMo 17 | Z 100 CD 17 | | X 105 CrMo 17 | SUS 440 C | | S44004 |
| H12 | X 4 CrNiCuNb 16 4 | 1.4540 | 1.4540 | X 4 CrNiCuNb 16 4 | | | | | | S15500 |
| | X 5 CrNiCuNb 16 4 | 1.4542 | 1.4542 | X 5 CrNiCuNb 16 4 | | | | SUS 630 | | S17400 |
| | X 5 CrNiCuNb 16 4 | 1.4542 | 1.4542 | X 5 CrNiCuNb 16 4 | | | | SUS 630 | | S17400 |
| | X 7 CrNiAl 17 7 | 1.4568 | 1.4568 | X 7 CrNiAl 17 7 | Z 9 CAN 17.7 | 301 S 81 | X 7 CrNiAl 17 7 | SUS 631 | 2388 | S17700 |
| | X 8 CrNiMoAl 15 7 5 | 1.4574 | 1.4574 | X 8 CrNiMoAl 15 7 5 | | | | | | S15700 |
| | X 6 NiCrTiMoV 25 15 | 1.4980 | 1.4943 | X 4 NiCrTi 25 15 | Z 6 NCTDV 25.15 | HR 51 | | SUH 660 | 2570 | S66286 |
| | X 2 NiCoMo 18 8 5 | 1.6359 | 1.6359 | X 2 NiCoMo 18 8 5 | | S 162 | | | | K92890 |
| | X 2 NiCoMoTi 18 9 5 | 1.6358 | 1.6358 | X 2 NiCoMoTi 18 9 5 | Z 2 NKD 19-09 | | | | | K93120 |
| | X 2 NiCoMoTi 18 9 5 | 1.6358 | 1.6358 | X 2 NiCoMoTi 18 9 5 | Z 2 NKD 19-09 | | | | | K93120 |
| | X 2 NiCoMoTi 18 12 4 | 1.6356 | 1.6356 | X 2 NiCoMoTi 18 12 4 | | | | | | K93160 |
| H21 | X 120 Mn 12 | 1.3401 | 1.3401 | X 120 Mn 12 | Z 120 M 12 | BW 10 | | SC MnH 1 | 2183 | |
| H31 | EN-GJN-HV520 | 0.9620 | 0.9620 | G-X330 NiCr 4 2 | FB Ni4 Cr2 BC | Grade 2 A | | | 05 12-00 | F45001 |
| | EN-GJN-HV550 | 0.9625 | 0.9625 | G-X260 NiCr 4 2 | FB Ni4 Cr2 HC | Grade 2 B | | | 05 13-00 | F45000 |
| | EN-GJN-HV600(XCr11) | 0.9630 | 0.9630 | G-X300 CrNiSi 9 5 2 | FB Cr9 Ni5 | Grade 2 C, D, E | | | 04 57-00 | F45003 |

| U.N.E./ I.H.A. | AISI / ASTM | GOST | CSN | Misc. Brands | Condition | Structure |
|---|---|---|---|---|---|---|
| | | | | Discalloy | Precipitation hardened | |
| | | | | Haynes 25 | | |
| | | | | Stellite 21 | | |
| | | | | Hastelloy C | | |
| | | KHN65MV | | Hastelloy C-276 | | |
| | | | | IN 100 | | |
| | | | | Inconel 718 | | |
| | | | | Inconel X-750 | Solution annealed | |
| | | | | Nimonic 80A | | |
| | | | | René 41 | | |
| | | | | Udimet 500 | | |
| | | | | Waspalloy | | |
| | | | | Ti | Commercially pure | Ti (α) |
| | AMS 4919 | | | Ti 6-2-4-2 | Annealed | Ti (α) |
| | AMS 4943 | | | Ti 3Al-2.5V (grd 9) | Annealed | Ti (α+β) |
| | AMS 4920, Grade 5 | VT6 | | Ti 6Al-4V | Annealed | Ti (α+β) |
| | AMS 4986 | | | Ti 10V-2Fe-3Al | Annealed | Ti (β) |
| F.1516 | 5115 | 12KHN2 | 14 220 | | Case hardened | |
| F.5103 | 1070 | 70 | | | Quenched & Tempered | |
| F.5107 | 1078, 1080 | 75 | | | Quenched & Tempered | |
| F.5117 | 1095 | | | | Quenched & Tempered | |
| F.5118 | W1 | U10A | | | Quenched & Tempered | |
| | S1 | 5KHV2SF | | | Quenched & Tempered | |
| | 5155 | | | | Quenched & Tempered | |
| F.1252 | 4142, 4140 | 38HM | 15 142 | | Quenched & Tempered | |
| F.520L | L2 | 11KHF | | | Quenched & Tempered | |
| F.5220 | O1 | 9KHVG | | | Quenched & Tempered | |
| | O2 | 9G2F | | | Quenched & Tempered | |
| F.5230 | 52100 | SHKH15 | 14 109 | | Quenched & Tempered | |
| F.5318 | H13 | 4KH5MF1S | | | Quenched & Tempered | |
| F.5227 | A2 | 9KH5VF | | | Quenched & Tempered | |
| F.5211 | D2 | KH12MF | | | Quenched & Tempered | |
| F.5213 | | KH12 | | | Quenched & Tempered | |
| | | KH12MF | | | Quenched & Tempered | |
| F.520.S | L6 | 5KHNM | | | Quenched & Tempered | |
| F.5613 | M35 | R6M5K5 | | | Quenched & Tempered | |
| | M42 | R2AM9K5 | | | Quenched & Tempered | |
| | T1 | R18 | | | Quenched & Tempered | |
| F.5261 | 420 | 20KH13 | 17 022 | | Quenched & Tempered | Martensitic |
| | 440 A | | | | Quenched & Tempered | Martensitic |
| | 440 B | 95KH18 | | | Quenched & Tempered | Martensitic |
| | 440 C | 95KH18 | | | Quenched & Tempered | Martensitic |
| | XM-12 | | | 15-5 PH | H900 | Martensitic |
| | SAE 630 | | | 17-4 PH | H1025 | Martensitic |
| | SAE 630 | | | 17-4 PH | H900 | Martensitic |
| | AMS 5528 | 09KH17N7YU1 | | 17-7 PH | TH1050 | Martensitic |
| | 632 | | | PH 15-7 Mo | TH1050 | Martensitic |
| | 660 | | | A286 | Precipitation hardened | Austenitic |
| | AMS 6512 | | | Marage 250 | Precipitation hardened | Martensitic |
| | AMS 6521 | | | Marage 300 | Precipitation hardened | Martensitic |
| | AMS 6521 | | | Marage 300 | Precipitation hardened | Martensitic |
| | AMS 6515 | | | Marage 350 | Precipitation hardened | Martensitic |
| | A128 Grade A | | | Hadfield | | |
| | A532 IB (NiCr-LC | | | Ni-Hard 2 | | White cast iron |
| | A532 IA (NiCr-HC) | | | Ni-Hard 1 | | White cast iron |
| | A532 ID (Ni-HiCr) | | | Ni-Hard 4 | | White cast iron |

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