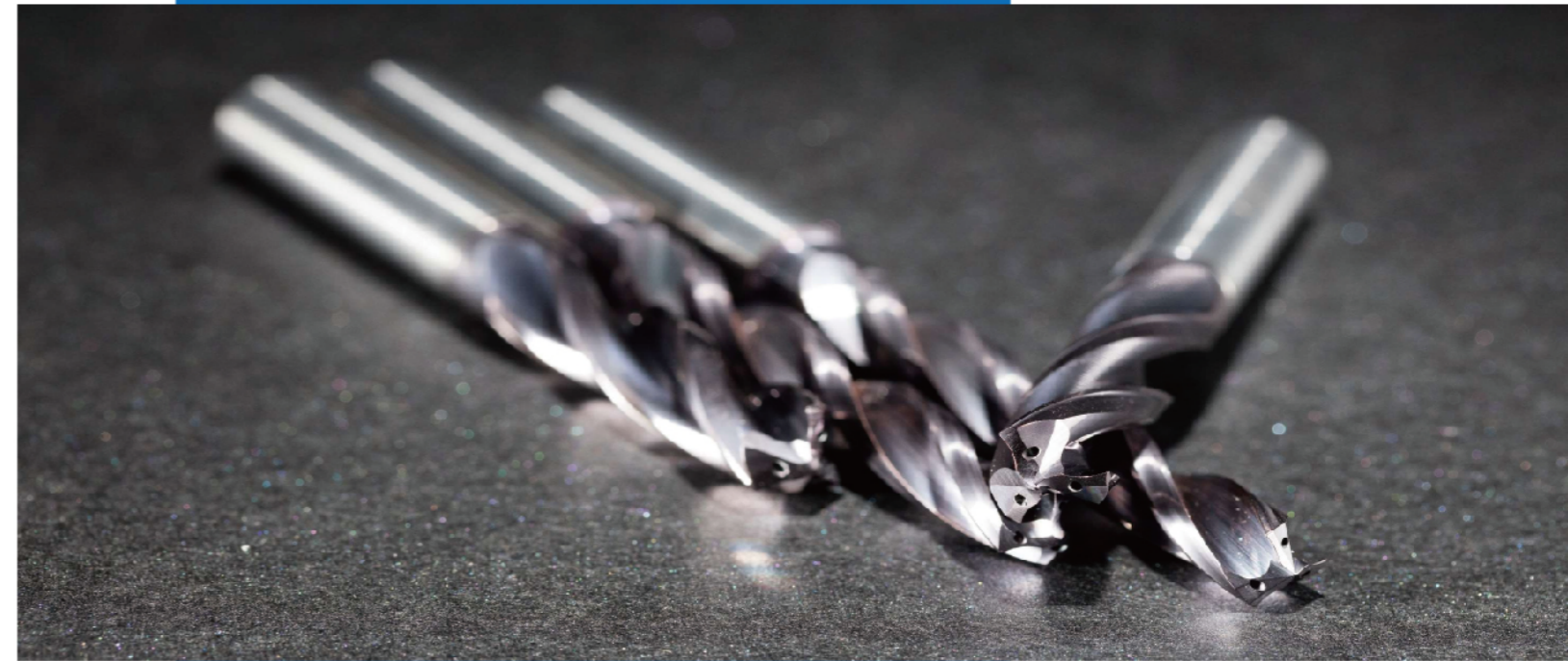


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MODULAR CROWN DRILL PRODUCT INTRODUCTION



ZHANGJIAGANG BONDED ZONE HUANATOOLS CO., LTD.

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what'sAPP/Phone:+86-18505123093

QQ: 2429261288 WeChat:756541917

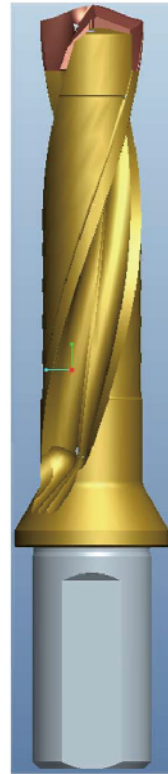
Email:info@huanatools.com;michael@huanatools.com

Website:www.huanatools.com

ZHANGJIAGANG BONDED ZONE HUANATOOLS CO., LTD.

Product Introduction

Code nomenclature



MODULAR CROWN DRILL

Feature:

1. Knife body: special steel; Blade: solid carbide
2. Sharp angle 140°, helix angle 25°
3. Drilling depth: 1-10xDc
4. Blade diameter range: φ16.00-36.00mm
5. Blade diameter tolerance: +0.005/-0.015
6. Shank structure: DIN6535 HB cylindrical flattened shank
7. Cooling method: internal cooling

Applications:

1. Suitable for steel, cast iron, stainless steel and heat-resistant alloy materials
2. Used in heat exchange, wind power, construction machinery, automobile and other industries
4. Available hole diameter tolerance: IT9-11

MS MODULAR CROWN DRILL BODY

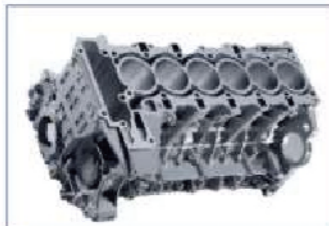
MS	160	R3	B	20
1	2	3	4	5

1. MS series modular crown drill
2. Minimum drill diameter (mm)-D such as 160=Dc16mm
3. Maximum drilling depth (mm)- L2 eg R3 = 3xDc
4. Tool holder interface form - side fixed handle DIN6535 HB
5. Shank size (mm)- Ds

MS	100	P	1600	A40	H
1	2	3	4	5	6

1. MS series modular crown drill
2. Product series
3. Machinable material ISO P such as P=steel
4. Drill diameter (mm)- D such as 1600=Dc 16.00mm
5. Drill material grade
6. Coated DH

Auto parts industry



Construction machinery industry



Wind power industry



Heat exchange board industry



Select guide

MODULAR CROWN DRILL	Series	P	M	K	N	S	H	Hole Tolerance	D mm		Drilling Depth L/Dc mm	Internal Cooling	Coating		Through Hole	Blind hole	Laminate	Exit Slope	Entrance Slope	Cross Hole	Precast Hole							
									Min	Max			DH	DP														
	MS blade	MS100P	●	○	●			○	IT9-IT11	16.00	36.00		●		●	●	●	●	○	○	○							
		MS366P	●	○	●			○															●	●	●	○	○	
		MS366M		●				○																●	●	○	○	
		MS366S		○				●																●	●	○	○	
	MS body									16.00	18.00	1-10×D	●															
										18.01	19.99		●															
										20.00	22.00		●															
										22.01	24.00		●															
										24.01	26.00		●															
										26.01	28.00		●															
										28.01	30.00		●															
										30.01	32.00		●															
										32.01	36.00		●															
														1-8×D	●													

Explanation ● Most Suitable ○ Suitable

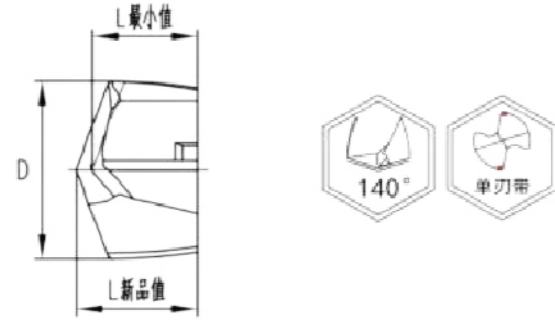
1. MS100P is used in general machinery industry

2. MS366P is used in heat exchange and wind power industry

Cutting data

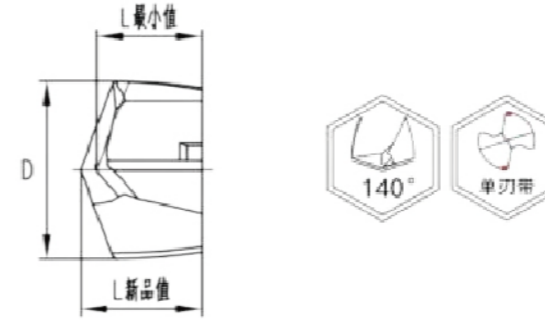
Material Group	Workpiece material	Cutting speed-Vc			Metric system					
		Area-m/min			Feed rate(f)					
		MIN	Initial value	MAX		16	20	25.4	32	36
P	1 non-alloy steel	80	100	120	mm/r	0.17-0.36	0.19-0.41	0.25-0.53	0.29-0.6	0.33-0.69
	2 Low-alloy steel	80	90	100	mm/r	0.17-0.36	0.19-0.41	0.25-0.53	0.29-0.6	0.33-0.69
	3 high alloy steel	60	70	80	mm/r	0.17-0.31	0.19-0.36	0.25-0.46	0.23-0.53	0.33-0.6
	4 Ferritic, martensitic stainless steel	60	70	80	mm/r	0.14-0.31	0.16-0.36	0.2-0.46	0.23-0.53	0.3-0.6
K	1 malleable cast iron	100	110	120	mm/r	0.21-0.42	0.25-0.48	0.31-0.59	0.37-0.7	0.43-0.81
	2 gray cast iron	90	100	110	mm/r	0.21-0.41	0.25-0.48	0.31-0.59	0.37-0.7	0.43-0.81
	3 Ductile Iron	80	90	100	mm/r	0.20-0.41	0.21-0.44	0.23-0.48	0.25-0.53	0.27-0.57
M	1 Austenitic stainless steel	50	60	70	mm/r	0.11-0.17	0.13-0.20	0.16-0.25	0.18-0.28	0.21-0.31
	2 Super austenitic (nickel ≥ 20%) stainless steel	20	40	60	mm/r	0.11-0.17	0.13-0.20	0.16-0.25	0.18-0.28	0.21-0.31
	3 Duplex (austenitic/ferritic) stainless steel	40	55	70	mm/r	0.11-0.17	0.13-0.20	0.16-0.25	0.18-0.28	0.21-0.31
S	Superalloy	20	40	60	mm/r	0.11-0.17	0.13-0.20	0.16-0.25	0.18-0.28	0.21-0.31

Insert



D mm	Tolerance
16.00-36.00	+0.005/-0.015

Insert



D mm	Tolerance
16.00-36.00	+0.005/-0.015

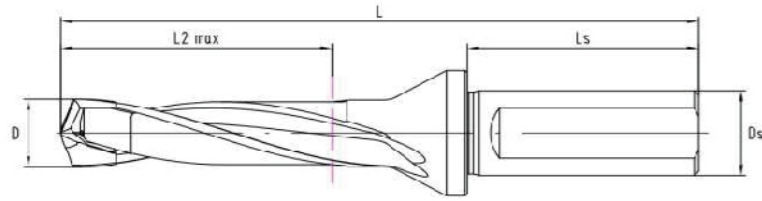
MS100P-Dc	MS366P -Dc	D mm		L mm		Knife Block Size																								
		Min	Max	New Value	Min																									
 <table border="1" data-bbox="196 1170 317 1429"> <tr><td>P</td><td>●</td></tr> <tr><td>M</td><td>○</td></tr> <tr><td>K</td><td>●</td></tr> <tr><td>N</td><td>○</td></tr> <tr><td>S</td><td>○</td></tr> <tr><td>H</td><td>○</td></tr> </table>	P	●	M	○	K	●	N	○	S	○	H	○	 <table border="1" data-bbox="498 1170 619 1429"> <tr><td>P</td><td>●</td></tr> <tr><td>M</td><td>○</td></tr> <tr><td>K</td><td>●</td></tr> <tr><td>N</td><td>○</td></tr> <tr><td>S</td><td>○</td></tr> <tr><td>H</td><td>○</td></tr> </table>	P	●	M	○	K	●	N	○	S	○	H	○	16	17	12	10.3	1
	P	●																												
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17	18	12	10.3	1																										
18	18	12	10.3	1																										
18	19	13	11.2	2																										
19	20	13	11.2	2																										
20	21	14	12.1	3																										
21	22	14	12.1	3																										
22	22	14	12.1	3																										
22	23	15	13	4																										
23	24	15	13	4																										
24	24	15	13	4																										
24	25	16	13.9	5																										
25	26	16	13.9	5																										
26	26	16	13.9	5																										

MS366M-Dc	MS366S -Dc	D mm		L mm		Knife Block Size																								
		Min	Max	New Value	Min																									
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17	18	12	10.3	1																										
18	18	12	10.3	1																										
18.01	19	13	11.2	2																										
19.01	19.99	13	11.2	2																										
20	21	14	12.1	3																										
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22	22	14	12.1	3																										
22.01	23	15	13	4																										
23.01	24	15	13	4																										
24	24	15	13	4																										
24.01	25	16	13.9	5																										
25	26	16	13.9	5																										
26	26	16	13.9	5																										

- MS100P series - recommended for drilling steel parts in the general machinery industry
- MS366P series - Recommended for drilling heat exchanger plates and parts for the wind power industry
- Order example: Drill bit with a diameter of DC18.3 for processing steel parts in the general machinery industry, the order number is MS100P.1830-A46H
- The blade can be reground, depending on the wear condition, the number of regrinding is 1-3 times

- MS366M Series - recommended for drilling stainless steel parts
- MS366S Series - Recommended for drilling titanium/heat resistant alloy parts
- Order example: Drill bit with a diameter of DC18.3 for machining stainless steel parts, the order number is MS366M.1830-A46P
- The blade can be reground, depending on the wear condition, the number of regrinding is 1-3 times

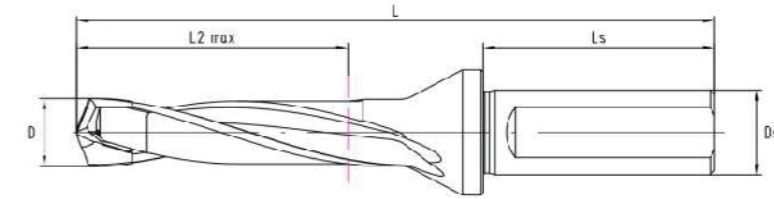
1xD Drill body



1xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size
					Min	Max	
MS160R1B20	104	18	50	20	16.00	18.00	1
MS181R1B25	113	20	56	25	18.01	19.99	2
MS200R1B25	114	22	56	25	20.00	22.00	3
MS221R1B25	115	24	56	25	22.01	24.00	4
MS241R1B32	124	26	60	32	24.01	26.00	5
MS261R1B32	126	28	60	32	26.01	28.00	6
MS281R1B32	127	30	60	32	28.01	30.00	7
MS301R1B32	130	32	60	32	30.01	32.00	8
MS321R1B32	150	36	70	40	32.01	36.00	9

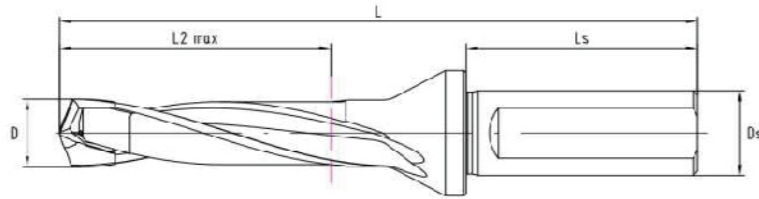
• 1xD body dedicated to pilot hole machining

3xD Drill body



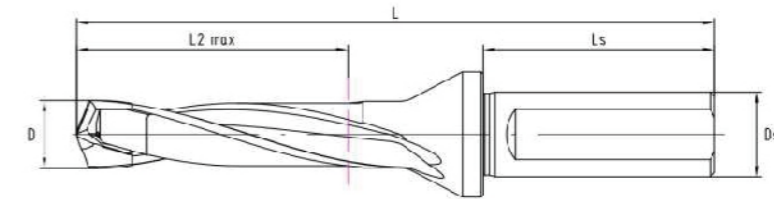
3xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size
					Min	Max	
MS160R3B20	128	48	50	20	16.00	17.00	1
MS170R3B20	131	51	50	20	17.00	18.00	1
MS180R3B20	135	54	50	20	18.00	19.00	1
MS181R3B25	146	55	56	25	18.01	19.00	2
MS190R3B25	149	57	56	25	19.00	19.99	2
MS200R3B25	152	60	56	25	20.00	21.00	3
MS210R3B25	156	63	56	25	21.00	22.00	3
MS220R3B25	159	66	56	25	22.00	22.00	3
MS221R3B25	159	67	56	25	22.01	23.00	4
MS230R3B25	162	69	56	25	23.01	24.00	4
MS240R3B25	165	72	56	25	24.00	24.00	4
MS241R3B32	175	73	60	32	24.01	25.00	5
MS250R3B32	179	75	60	32	25.00	26.00	5
MS260R3B32	182	78	60	32	26.00	26.00	5
MS261R3B32	182	79	60	32	26.01	27.00	6
MS270R3B32	185	81	60	32	27.00	28.00	6
MS280R3B32	188	84	60	32	28.00	28.00	6
MS281R3B32	188	85	60	32	28.01	29.00	7
MS290R3B32	192	87	60	32	29.00	30.00	7
MS300R3B32	195	90	60	32	30.00	30.00	7
MS301R3B32	195	91	60	32	30.01	31.00	8
MS310R3B32	198	93	60	32	31.00	32.00	8
MS320R3B32	202	96	60	32	32.00	32.00	8
MS321R3B40	220	97	70	40	32.01	33.00	9
MS330R3B40	223	99	70	40	33.00	34.00	9
MS340R3B40	226	102	70	40	34.00	35.00	9
MS350R3B40	229	105	70	40	35.00	36.00	9
MS360R3B40	232	108	70	40	36.00	36.00	9

5xD Drill body



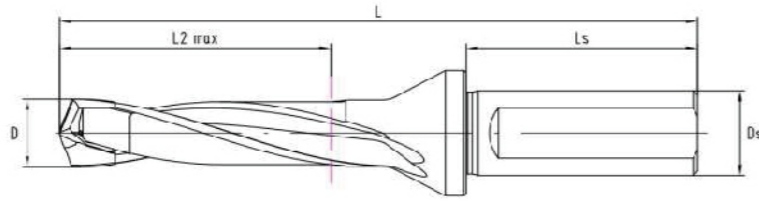
5xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size
					Min	Max	
MS160R5B20	160	80	50	20	16.00	17.00	1
MS170R5B20	165	85	50	20	17.00	18.00	1
MS180R5B20	171	90	50	20	18.00	19.00	1
MS181R5B25	182	91	56	25	18.01	19.00	2
MS190R5B25	187	95	56	25	19.00	19.99	2
MS200R5B25	192	100	56	25	20.00	21.00	3
MS210R5B25	198	105	56	25	21.00	22.00	3
MS220R5B25	203	110	56	25	22.00	22.00	3
MS221R5B25	203	111	56	25	22.01	23.00	4
MS230R5B25	208	115	56	25	23.01	24.00	4
MS240R5B25	213	120	56	25	24.00	24.00	4
MS241R5B32	224	121	60	32	24.01	25.00	5
MS250R5B32	229	125	60	32	25.00	26.00	5
MS260R5B32	234	130	60	32	26.00	26.00	5
MS261R5B32	234	131	60	32	26.01	27.00	6
MS270R5B32	239	135	60	32	27.00	28.00	6
MS280R5B32	244	140	60	32	28.00	28.00	6
MS281R5B32	245	141	60	32	28.01	29.00	7
MS290R5B32	250	145	60	32	29.00	30.00	7
MS300R5B32	255	150	60	32	30.00	30.00	7
MS301R5B32	256	151	60	32	30.01	31.00	8
MS310R5B32	260	155	60	32	31.00	32.00	8
MS320R5B32	266	160	60	32	32.00	32.00	8
MS321R5B40	284	161	70	40	32.01	33.00	9
MS330R5B40	289	165	70	40	33.00	34.00	9
MS340R5B40	294	170	70	40	34.00	35.00	9
MS350R5B40	299	175	70	40	35.00	36.00	9
MS360R5B40	304	180	70	40	36.00	36.00	9

7xD Drill body



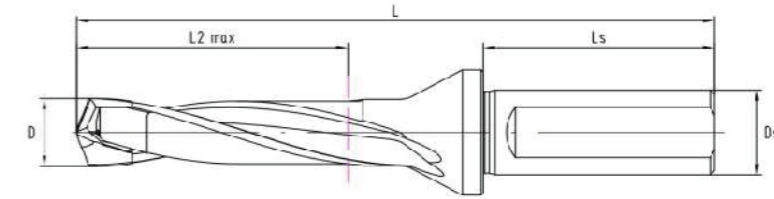
7xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size
					Min	Max	
MS160R7B20	192	112	50	20	16.00	17.00	1
MS170R7B20	199	119	50	20	17.00	18.00	1
MS180R7B20	207	126	50	20	18.00	19.00	1
MS181R7B25	218	127	56	25	18.01	19.00	2
MS190R7B25	225	133	56	25	19.00	19.99	2
MS200R7B25	232	140	56	25	20.00	21.00	3
MS210R7B25	240	147	56	25	21.00	22.00	3
MS220R7B25	247	154	56	25	22.00	22.00	3
MS221R7B25	247	155	56	25	22.01	23.00	4
MS230R7B25	254	161	56	25	23.01	24.00	4
MS240R7B25	261	168	56	25	24.00	24.00	4
MS241R7B32	272	169	60	32	24.01	25.00	5
MS250R7B32	279	175	60	32	25.00	26.00	5
MS260R7B32	286	182	60	32	26.00	26.00	5
MS261R7B32	287	183	60	32	26.01	27.00	6
MS270R7B32	293	189	60	32	27.00	28.00	6
MS280R7B32	300	196	60	32	28.00	28.00	6
MS281R7B32	301	197	60	32	28.01	29.00	7
MS290R7B32	308	203	60	32	29.00	30.00	7
MS300R7B32	315	210	60	32	30.00	30.00	7
MS301R7B32	316	211	60	32	30.01	31.00	8
MS310R7B32	322	217	60	32	31.00	32.00	8
MS320R7B32	330	224	60	32	32.00	32.00	8
MS321R7B40	348	225	70	40	32.01	33.00	9
MS330R7B40	355	231	70	40	33.00	34.00	9
MS340R7B40	362	238	70	40	34.00	35.00	9
MS350R7B40	369	245	70	40	35.00	36.00	9
MS360R7B40	376	252	70	40	36.00	36.00	9

8xD Drill body



8xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size	Central locking screw	Wrench	Untaxed price
					Min	Max				
MS160R8B20	208	128	50	20	16.00	17.00	1	LD-M2.5×M3.5	BS225-1,5x1,5	1947.37
MS170R8B20	216	136	50	20	17.00	18.00	1	LD-M2.5×M3.5	BS225-1,5x1,5	
MS180R8B20	225	144	50	20	18.00	19.00	1	LD-M2.5×M3.5	BS225-1,5x1,5	
MS181R8B25	236	145	56	25	18.01	19.00	2	LD-M2.5×M3.5	BS270-1,5x1,5	
MS190R8B25	244	152	56	25	19.00	19.99	2	LD-M2.5×M3.5	BS270-1,5x1,5	2052.63
MS200R8B25	252	160	56	25	20.00	21.00	3	LD-M3×M4	BS260-2x2	
MS210R8B25	261	168	56	25	21.00	22.00	3	LD-M3×M4	BS260-2x2	
MS220R8B25	269	176	56	25	22.00	22.00	3	LD-M3×M4	BS273-2x2	
MS221R8B25	270	177	56	25	22.01	23.00	4	LD-M3×M4	BS273-2x2	
MS230R8B25	277	184	56	25	23.01	24.00	4	LD-M3×M4	BS273-2x2	
MS240R8B25	285	192	56	25	24.00	24.00	4	LD-M3×M4	BS282-2x2	
MS241R8B32	296	193	60	32	24.01	25.00	5	LD-M4×M5	BS295-2.5x2.5	
MS250R8B32	304	200	60	32	25.00	26.00	5	LD-M4×M5	BS393-2.5x2.5	
MS260R8B32	312	208	60	32	26.00	26.00	5	LD-M4×M5	BS393-2.5x2.5	
MS261R8B32	313	209	60	32	26.01	27.00	6	LD-M4×M5	BS393-2.5x2.5	
MS270R8B32	320	216	60	32	27.00	28.00	6	LD-M4×M5	BS393-2.5x2.5	
MS280R8B32	328	224	60	32	28.00	28.00	6	LD-M4×M5	BS393-2.5x2.5	
MS281R8B32	329	225	60	32	28.01	29.00	7	LD-M5×M6	BS330-3x3	
MS290R8B32	337	232	60	32	29.00	30.00	7	LD-M5×M6	BS440-3x3	
MS300R8B32	345	240	60	32	30.00	30.00	7	LD-M5×M6	BS440-3x3	
MS301R8B32	346	241	60	32	30.01	31.00	8	LD-M5×M6	BS440-3x3	
MS310R8B32	353	248	60	32	31.00	32.00	8	LD-M5×M6	BS440-3x3	
MS320R8B32	362	256	60	32	32.00	32.00	8	LD-M5×M6	BS440-3x3	3368.42
MS321R8B40	380	257	70	40	32.01	33.00	9	LD-M6×M6	BS440-3x3	
MS330R8B40	388	264	70	40	33.00	34.00	9	LD-M6×M6	BS440-3x3	
MS340R8B40	396	272	70	40	34.00	35.00	9	LD-M6×M6	BS40-3x3	
MS350R8B40	404	280	70	40	35.00	36.00	9	LD-M6×M6	BS440-3x3	
MS360R8B40	412	288	70	40	36.00	36.00	9	LD-M6×M6	BS440-3x3	

10xD Drill body



10xD	L mm	L2 mm	Ls mm	Ds mm	D mm		Knife Block Size	Central locking screw	Wrench	Untaxed price
					Min	Max				
MS160R10B20	240	160	50	20	16.00	17.00	1	LD-M2.5×M3.5	BS270-1,5x1,5	2105.26
MS170R10B20	250	170	50	20	17.00	18.00	1	LD-M2.5×M3.5	BS270-1,5x1,5	2210.53
MS180R10B20	261	180	50	20	18.00	19.00	1	LD-M2.5×M3.5	BS270-1,5x1,5	
MS181R10B25	273	181	56	25	18.01	19.00	2	LD-M2.5×M3.5	BS270-1,5x1,5	2263.16
MS190R10B25	282	190	56	25	19.00	19.99	2	LD-M2.5×M3.5	BS281-1,5x1,5	2315.79
MS200R10B25	292	200	56	25	20.00	21.00	3	LD-M3×M4	BS343-2x2	2263.16
MS210R10B25	303	210	56	25	21.00	22.00	3	LD-M3×M4	BS343-2x2	2263.16
MS220R10B25	313	220	56	25	22.00	22.00	3	LD-M3×M4	BS343-2x2	2263.16
MS221R10B25	313	221	56	25	22.01	23.00	4	LD-M3×M4	BS343-2x2	
MS230R10B25	323	230	56	25	23.01	24.00	4	LD-M3×M4	BS343-2x2	
MS240R10B25	333	240	56	25	24.00	24.00	4	LD-M3×M4	BS343-2x2	
MS241R10B32	344	241	60	32	24.01	25.00	5	LD-M4×M5	BS393-2.5x2.5	2526.32
MS250R10B32	354	250	60	32	25.00	26.00	5	LD-M4×M5	BS393-2.5x2.5	2526.32
MS260R10R32	364	260	60	32	26.00	26.00	5	LD-M4×M5	BS393-2.5x2.5	
MS261R10B32	365	261	60	32	26.01	27.00	6	LD-M4×M5	BS393-2.5x2.5	
MS270R10B32	374	270	60	32	27.00	28.00	6	LD-M4×M5	BS393-2.5x2.5	
MS280R10B32	384	280	60	32	28.00	28.00	6	LD-M4×M5	BS393-2.5x2.5	
MS281R10B32	385	281	60	32	28.01	29.00	7	LD-M5×M6	BS440-3x3	
MS290R10B32	395	290	60	32	29.00	30.00	7	LD-M5×M6	BS440-3x3	3052.63
MS300R10B32	405	300	60	32	30.00	30.00	7	LD-M5×M6	BS440-3x3	
MS301R10B32	406	301	60	32	30.01	31.00	8	LD-M5×M6	BS440-3x3	3473.68
MS310R10B32	415	310	60	32	31.00	32.00	8	LD-M5×M6	BS440-3x3	
MS320R10B32	443	320	60	32	32.00	32.00	8	LD-M5×M6	BS440-3x3	