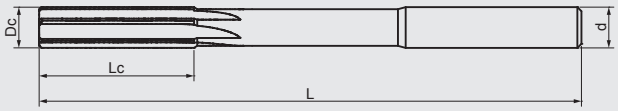
R300

Machine Reamers

Designed with left helix and right cutting flutes.
Downward chip evacuation.

Tolerance: Dc
+0.004/+0.008: 0.5~3.0
+0.005/+0.010: 3.0~6.0
+0.006/+0.012: 6.0~10
+0.008/+0.015: 10~18
+0.009/+0.017: 18~30



VHM Carbide | **HM Carbide Tipped** | **Uncoated Bright** | 0° | Z | **Steel** Cast Iron AL, Copper

Application for reaming different steels below 48HRC, cast iron...and etc.

P H K — VHM

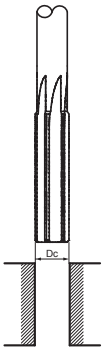
P H K — HM

Standard Length

Dc H7	Lc mm	L mm	d mm	Z teeth	R300 Bright	R300 Bright	
1	6	34	1	4	●		
1.5	8	40	1.5	4	●		
2	11	49	2	4	●		
2.5	14	57	2.5	4	●		
3	15	61	3	4	●		
3.5	18	70	3.5	4	●		
4	19	75	4	4	●		
4.5	21	80	4.5	4	●		
5	23	86	5	6	●		
6	26	93	6	6	●		
7	31	109	7	6	●		
8	33	117	8	6	●		
9	36	125	9	6	●		
10	38	133	10(※10)	6	●	●	
11	41	142	10(※11)	6	●	●	
12	44	151	10(※12)	6	●	●	
13	44	151	10	6		●	
14	47	160	12.5	6		●	
15	50	162	12.5	6		●	
16	52	170	12.5	6		●	
18	56	182	14.0	6		●	
20	60	195	16.0	6		●	

Please refer to page 317 for parameters.

Cutting Conditions

		R300		R301		R302		R303	
R300 R301 R302 R303									
		cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)
P	Carbon Steel Materials								
	GR1 Carbon Steel	15	0.008xDc	15	0.008xDc	15	0.008xDc	15	0.007xDc
	GR2 <24HRC Low-alloyed Steel	15	0.008xDc	15	0.008xDc	15	0.008xDc	15	0.007xDc
	GR3 <30HRC Hi-alloyed Steel	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
H	Hardened Steel Materials								
	GR4 30~38HRC Hardened Steel	8	0.005xDc	8	0.005xDc	8	0.005xDc	8	0.005xDc
	GR5 38~48HRC Hardened Steel	5	0.003xDc	5	0.003xDc	5	0.003xDc	5	0.003xDc
M	Stainless Steel Materials								
	GR8-1 Ferritic、Martensitic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-2 Austenitic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-3 Austenitic-ferritic	12	0.006xDc	12	0.006xDc	12	0.006xDc	12	0.006xDc
	GR8-4 Austenitic-ferritic Heat-resistant	8	0.004xDc	8	0.004xDc	8	0.004xDc	8	0.004xDc
K	Cast Lron Materials								
	GR9-1 Grey cast iron	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR9-2 Nodular cast iron	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
N	Aluminium Steel Materials								
	GR10-1 Wrought Aluminium alloys	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
	GR10-2 Aluminium cast alloys <10%	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
	GR10-3 Aluminium cast alloys >10%	20	0.006xDc	20	0.006xDc	20	0.006xDc	20	0.006xDc
	Copper Steel Materials								
	GR11-1 Pure Copper	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR11-2 Brass	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc
	GR11-2 Bronze	15	0.006xDc	15	0.006xDc	15	0.006xDc	15	0.006xDc

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location
1. Please work with good rigidity / high precision facilities and collet chuck.
2. Please choose proper cutting fluid.
3. The cutting data is reference value only. Please adjust it according to your real working conditions.
4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
5. If vibration occurs during cutting, please reduce cutting parameter.