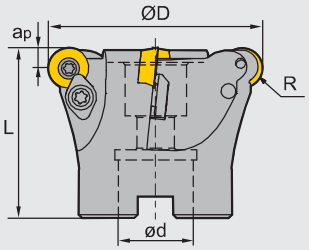
Face milling tools

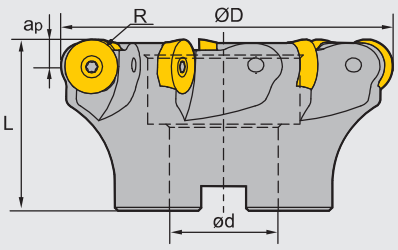
FMR04

P M K

A type of mounting



B type of mounting



Specification of tools

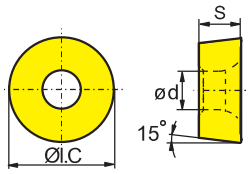
Type		Dimensions(inch)						
		ØD	R	ød	L	apmax	Z (Number of teeth)	Interface form
FMR04	-2.00″-A0.75″-RD12-04	2.00	0.236	0.75	2.00	0.236	4	A
	-2.50″-A0.75″-RD12-04	2.50	0.236	0.75	2.00	0.236	4	A
	-3.00″-A1.00″-RD16-05	3.00	0.315	1.00	2.00	0.315	5	A
	-4.00″-B1.25″-RD16-06	4.00	0.315	1.25	2.00	0.315	6	B
	-5.00″-B1.50″-RD20-06	5.00	0.394	1.50	2.50	0.394	6	B
	-6.00″-B1.50″-RD20-07	6.00	0.394	1.50	2.50	0.394	7	B

D

Spare parts

Diameter ØD	Insert specifrication	Insert screw	Wedge	Wedge Screw	Wrench	Sketch of installation
						
Ø2.00″~Ø2.50″	RDKW1204MO	I60M3.5×10	WD-204	I60M4×10	WT15IT	
Ø3.00″~Ø4.00″	RDKW1605MO	I60M5×13	WD-207	I60M5x13	WT20IT	
Ø5.00″~Ø6.00″	RDKW2006MO	I43M6×16	--	--	WT25IT	

Selection of inserts



Insert shape	Type	Dimensions(inch)			Coated grade														Cermet		Cemented carbide			
		ØI.C	S	ød	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YB9320	YBG302	YBG152	YBG252	YBS203	YBS303	YNG151	YNG151C	YC30S	YD051	YD101	YD201
	RDKW1204MO	0.472	0.187	0.173		●		●				●	●		●										
	RDKW1605MO	0.630	0.219	0.217				○				○	●		○										
	RDKW2006MO	0.787	0.250	0.256				○					○												

● Always stock available ○ Produce according to order

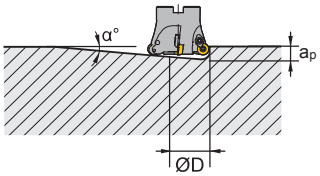
Recommended cutting parameters

Workpiece material		Hardness HB	Insert grade	Cutting parameters	
				V(SFPM)	f(IPT)
P	Low-carbon steel、Soft steel	≤180	YBM251	900(700-1200)	0.008(0.003-0.018)
			YBM351 YBG302	700(600-1000)	0.01(0.006-0.018)
			YBG202	900(650-1200)	0.008(0.004-0.018)
	High-carbon steel、Alloy steel	180-280	YBM251	800(650-1000)	0.008(0.003-0.018)
			YBM351 YBG302	650(500-1000)	0.01(0.006-0.018)
			YBG202	800(600-1200)	0.008(0.004-0.018)
	Alloy tool steel	280-350	YBM251	700(600-1000)	0.008(0.003-0.018)
			YBM351 YBG302	600(500-800)	0.01(0.006-0.018)
			YBG202	700(550-1100)	0.008(0.004-0.018)
M	Stainless steel	≤270	YBM251	500(400-800)	0.008(0.003-0.018)
			YBM351 YBG302	500(300-700)	0.01(0.004-0.018)
			YBG202 YBG205	500(350-900)	0.008(0.004-0.018)
K	Cast iron	180-250	YBG302	700(400-1000)	0.008(0.004-0.018)

D

Ramp milling, helical interpolation milling

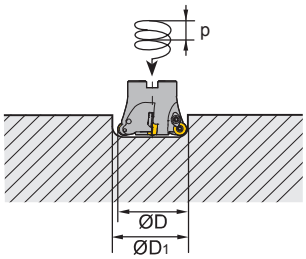
● Ramp milling



$$L_m = \frac{a_p}{\tan\alpha}$$

α:Plunge angle

● Helical interpolation milling



$$P = \tan\alpha \times \pi \times D_1$$

α:Helix angle

Insert	Diameter ØD(in)	Max.cutting depth ap(in)	Max.cutting depth α°	Min.length L_m(in)	Min.diameter $ØD_1$(in)	Max.diameter (in)
RDKW12**	2.00"	0.236	7.1	1.890	3.465	0.236
	2.50"	0.236	5.1	2.638	4.488	0.236
RDKW16**	3.00"	0.315	5.6	3.209	5.669	0.315
	4.00"	0.315	4.1	4.350	7.244	0.315
RDKW20**	5.00"	0.394	4.2	5.360	9.055	0.394
	6.00"	0.394	3.0	7.480	11.810	0.394

Reduce the feed rate when plunging and circular milling.
"Attention"—drilling can form long chips.

D