

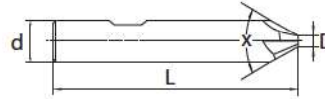
Deburring cutter 60°

General machining

5501/5601R60*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG303
5501R603FM-0300		3	48	0.2	HA	60	3	●
5501R604FM-0400		4	48	0.2	HA	60	4	●
5601R604FM-0600		6	55	0.2	HB	60	4	●
5601R604FM-0800		8	58	0.5	HB	60	4	●
5601R604FM-1000		10	65	0.5	HB	60	4	●
5601R606FM-1000		10	65	0.7	HB	60	6	○
5601R604FM-1200		12	75	0.5	HB	60	4	●
5601R606FM-1200		12	75	0.7	HB	60	6	○
5601R604FM-1600		16	85	0.7	HB	60	4	●
5601R606FM-1600		16	85	0.7	HB	60	6	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓	✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



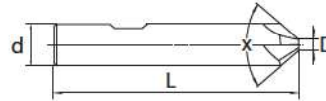
A

Deburring cutter 90° General machining

5501/5601R90*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG303
5501R903FM-0300		3	48	0.2	HA	90	3	●
5501R904FM-0400		4	48	0.2	HA	90	4	●
5601R904FM-0600		6	55	0.2	HB	90	4	●
5601R904FM-0800		8	58	0.5	HB	90	4	●
5601R904FM-1000		10	65	0.5	HB	90	4	●
5601R906FM-1000		10	65	0.7	HB	90	6	○
5601R904FM-1200		12	75	0.5	HB	90	4	●
5601R906FM-1200		12	75	0.7	HB	90	6	○
5501R904FM-1600		16	85	0.7	HA	90	4	○
5601R904FM-1600		16	85	0.7	HB	90	4	●
5601R906FM-1600		16	85	0.7	HB	90	6	○

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

Application field						
P	M	K	N	S	H	
✓	✓	✓	✓			✓ Very suitable
						✓ Suitable

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541

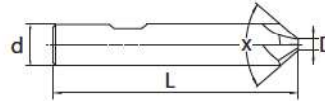
Deburring cutter

General machining

5501/5601R120*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG406
5501R1203FM-0300		3	48	0.2	HA	120	3	o
5501R1204FM-0400		4	48	0.2	HA	120	4	o
5501R1204FM-0600		6	55	0.2	HA	120	4	o
5601R1204FM-0600		6	55	0.2	HB	120	4	o
5501R1204FM-0800		8	58	0.5	HA	120	4	o
5601R1204FM-0800		8	58	0.5	HB	120	4	o
5501R1204FM-1000		10	65	0.5	HA	120	4	o
5601R1204FM-1000		10	65	0.5	HB	120	4	o
5601R1206FM-1000		10	65	0.7	HB	120	6	o
5501R1206FM-1000		10	65	0.7	HA	120	6	o
5501R1204FM-1200		12	75	0.5	HA	120	4	o
5601R1204FM-1200		12	75	0.5	HB	120	4	o
5601R1206FM-1200		12	75	0.7	HB	120	6	o
5501R1206FM-1200		12	75	0.7	HA	120	6	o
5501R1206FM-1600		16	85	0.7	HA	120	6	o
5601R1204FM-1600		16	85	0.7	HB	120	4	o
5501R1204FM-1600		16	85	0.7	HA	120	4	o
5601R1206FM-1600		16	85	0.7	HB	120	6	o

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓	✓		

✓ Very suitable

✓ Suitable

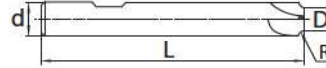
A

Quarter round profile mill General machining

5601R90*FM-R



- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Turning

B

Article	*	Dimensions [mm]				Teeth	Grade
		d(h6)	L	D	R		KMG303
5601R904FM-R02-0600		6	60	5.6	0.2	4	●
5601R904FM-R03-0600		6	60	5.4	0.3	4	●
5601R904FM-R04-0600		6	60	5.2	0.4	4	●
5601R904FM-R05-0800		8	70	7	0.5	4	●
5601R904FM-R06-0800		8	70	6.8	0.6	4	●
5601R904FM-R075-0800		8	70	6.5	0.75	4	●
5601R904FM-R08-0800		8	70	6.4	0.8	4	●
5601R904FM-R10-0800		8	70	6	1	4	●
5601R904FM-R15-1000		10	75	7	1.5	4	●
5601R904FM-R20-1000		10	75	6	2	4	●
5601R904FM-R25-1200		12	75	7	2.5	4	●
5601R904FM-R30-1200		12	75	6	3	4	●
5601R904FM-R40-1600		16	80	8	4	4	●
5601R904FM-R50-2000		20	80	10	5	4	●

Milling

C

● Ex stock ○ On demand

* With internal cooling

Drilling

D

Application field					
P	M	K	N	S	H
✓	✓	✓	✓		

✓ Very suitable
 ✓ Suitable

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541

Deburring cutters – FM series

Material group	Composition / structure / heat treatment	Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]							
				5501 / 5601		5501 / 5601		5601			
				KMG303							
				a_e / D							
				1/1	1/2	1/10	f-group				
P Unalloyed steel	approx. 0,15 % C	annealed	125	1	-	-	230	11			
	approx. 0,45 % C	annealed	190	2	-	-	220	11			
	approx. 0,45 % C	tempered	250	3	-	-	165	11			
	approx. 0,75 % C	annealed	270	4	-	-	140	11			
	approx. 0,75 % C	tempered	300	5	-	-	130	11			
P Low-alloyed steel		annealed	180	6	-	-	175	11			
		tempered	275	7	-	-	140	11			
		tempered	300	8	-	-	130	11			
		tempered	350	9	-	-	120	11			
High-alloyed steel and high-alloyed tool steel		annealed	200	10	-	-	165	11			
		hardened and tempered	325	11	-	-	125	11			
M Stainless steel	ferritic/martensitic	annealed	200	12	-	-	75	11			
	martensitic	tempered	240	13	-	-	65	11			
	austenitic	quench hardened	180	14	-	-	80	11			
	austenitic-ferritic		230	15	-	-	65	11			
K Grey cast iron	perlitic/ferritic		180	16	-	-	170	11			
	perlitic (martensitic)		260	17	-	-	140	11			
K Cast iron with spheroidal graphite	ferritic		160	18	-	-	210	11			
	perlitic		250	19	-	-	165	11			
K Malleable cast iron	ferritic		130	20	-	-	230	11			
	perlitic		230	21	-	-	185	11			
N Aluminium wrought alloys	cannot be hardened		60	22	-	-	1200	11			
	hardenable	hardened	100	23	-	-	720	11			
	≤ 12% Si, cannot be hardened		75	24	-	-	480	11			
	≤ 12% Si, hardenable	hardened	90	25	-	-	600	11			
N Cast aluminium alloys	> 12% Si, cannot be hardened		130	26	-	-	180	11			
	machining steel, PB> 1%		110	27	-	-	360	11			
	CuZn, CuSnZn		90	28	-	-	420	11			
S Copper and copper alloys (bronze/brass)	CuSn, Pb-free copper, electrolytic copper		100	29	-	-	360	11			
	S Heat-resistant alloys	Fe-based alloys	annealed	200	30						
			hardened	280	31						
Ni or Co bass		annealed	250	32							
		hardened	350	33							
S Titanium alloys	cast	320	34								
	pure titanium		R _m 400	35							
H Hardened steel	α and β alloys	hardened	R _m 1050	36							
		hardened and tempered	55 HRC	37							
H Hard cast iron		hardened and tempered	60 HRC	38							
		cast	400	39							
X Non-metallic materials		hardened and tempered	55 HRC	40							
	Thermoplasts			41							
	Thermosetting plastics			42							
	Plastic, glass-fibre reinforced GFRP			43							
	Plastic, carbon fibre reinforced CFRP			44							
	Graphite			45							
	Wood			46							

Note: The given cutting values are guide values, which were determined under ideal conditions.
 The values have to be adapted in individual cases.
 Feed rate recommendations on page B522.
 For examples of material for cutting tool groups view page D11.

