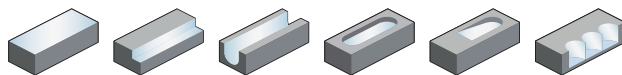


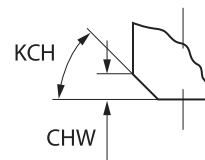
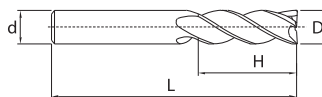
A

End mill long cutting edge Semi-finishing

5502R303GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R303GM-0300		3	6	7	57	0	0	3	●	○
5502R303GM-0400		4	6	8	57	0	0	3	●	○
5502R303GM-0500		5	6	10	57	0	0	3	●	○
5502R303GM-0600		6	6	10	57	45	0.1	3	●	○
5502R303GM-0800		8	8	16	63	45	0.1	3	●	○
5502R303GM-1000		10	10	19	72	45	0.1	3	●	○
5502R303GM-1200		12	12	22	83	45	0.1	3	●	○
5502R303GM-1300		13	14	22	83	45	0.1	3	○	○
5502R303GM-1400		14	14	22	83	45	0.15	3	●	○
5502R303GM-1600		16	16	26	92	45	0.15	3	●	○
5502R303GM-1800		18	18	26	92	45	0.15	3	●	○
5502R303GM-2000		20	20	32	104	45	0.15	3	●	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

Nonstandard order > B541

End mill – GM series

Material group	Composition / structure / heat treatment	Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]									
				5501R302GM 5601R302GM 5502R302GM 5602R302GM				GM-2E GM-2EFP GM-2F					
				Slot milling		Shoulder milling		Slot milling		Shoulder milling			
				\emptyset [mm]	$a_{p \max}$	\emptyset [mm]	$a_{e \max}$	\emptyset [mm]	$a_{p \max}$	\emptyset [mm]	$a_{e \max}$		
				$0 < x < 3$	$0,1 \times D$	$0 < x \leq 20$	$< 0,5 \times D$	$0 < x < 3$	$0,1 \times D$	$0 < x \leq 20$	$< 0,5 \times D$		
				$3 \leq x \leq 20$	$0,8 \times D$			$3 \leq x \leq 20$	$0,8 \times D$				
				KMG303				KMG303					
				a_e / D				a_e / D					
				1/1	1/2	1/10	f-group	1/1	1/2	1/10	f-group		
P Unalloyed steel	approx. 0,15 % C	annealed	125	1	150	200	270	2	150	200	270	2	
	approx. 0,45 % C	annealed	190	2	145	190	260	2	145	190	260	2	
	approx. 0,45 % C	tempered	250	3	105	140	190	2	105	140	190	2	
	approx. 0,75 % C	annealed	270	4	90	120	165	2	90	120	165	2	
	approx. 0,75 % C	tempered	300	5	85	110	150	2	85	110	150	2	
Low-alloyed steel		annealed	180	6	115	150	205	2	115	150	205	2	
		tempered	275	7	90	120	165	2	90	120	165	2	
		tempered	300	8	85	110	150	2	85	110	150	2	
High-alloyed steel and high-alloyed tool steel		annealed	200	10	105	140	190	2	105	140	190	2	
		hardened and tempered	325	11	80	110	145	2	80	110	145	2	
M Stainless steel	ferritic/martensitic	annealed	200	12	50	65	90	2	50	65	90	2	
	martensitic	tempered	240	13	45	60	80	2	45	60	80	2	
	austenitic	quench hardened	180	14	55	70	95	2	55	70	95	2	
	austenitic-ferritic		230	15	45	60	80	2	45	60	80	2	
K Grey cast iron	perlitic/ferritic		180	16	110	150	200	2	110	150	200	2	
	perlitic (martensitic)		260	17	90	120	165	2	90	120	165	2	
Cast iron with spheroidal graphite	ferritic		160	18	135	180	245	2	135	180	245	2	
	perlitic		250	19	105	140	190	2	105	140	190	2	
Malleable cast iron	ferritic		130	20	150	200	270	2	150	200	270	2	
	perlitic		230	21	120	160	220	2	120	160	220	2	
N Aluminium wrought alloys	cannot be hardened		60	22									
	hardenable	hardened	100	23									
	$\leq 12\% \text{ Si}$, cannot be hardened		75	24									
	$\leq 12\% \text{ Si}$, hardenable	hardened	90	25									
Cast aluminium alloys	$> 12\% \text{ Si}$, cannot be hardened		130	26									
	Copper and copper alloys (bronze/brass)		110	27									
			90	28									
S Heat-resistant alloys	machining steel, PB> 1%		100	29									
	Fe-based alloys	annealed	200	30									
		hardened	280	31									
	Ni or Co bass	annealed	250	32									
Titanium alloys		hardened	350	33									
		cast	320	34									
	pure titanium		R_m 400	35									
α and β alloys	hardened	R_m 1050	36										
H Hardened steel		hardened and tempered	55 HRC	37									
		hardened and tempered	60 HRC	38									
Hard cast iron		cast	400	39									
Hardened cast iron		hardened and tempered	55 HRC	40									
X Non-metallic materials	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.

