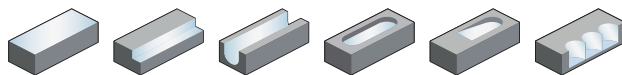


A

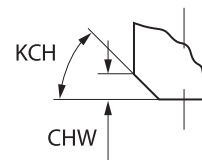
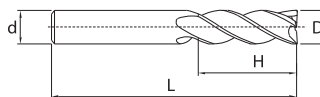
End mill long cutting edge Finishing

Turning

5502R304GF



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



B

Milling

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R304GF-0300		3	6	8	57	0	0	4	●	○
5502R304GF-0400		4	6	11	57	0	0	4	●	○
5502R304GF-0500		5	6	13	57	0	0	4	●	○
5502R304GF-0600		6	6	13	57	45	0.1	4	●	○
5502R304GF-0800		8	8	19	63	45	0.1	4	●	○
5502R304GF-1000		10	10	22	72	45	0.1	4	●	○
5502R304GF-1200		12	12	26	83	45	0.1	4	●	○
5502R304GF-1400		14	14	26	83	45	0.15	4	●	○
5502R304GF-1600		16	16	32	92	45	0.15	4	●	○
5502R304GF-1800		18	18	32	92	45	0.15	4	●	○
5502R304GF-2000		20	20	38	104	45	0.15	4	●	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

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]								
					5501R304GF 5601R304GF 5502R304GF 5602R304GF				GM-4F-G GM-4EFP				
					Slot milling		Shoulder milling		Slot milling		Shoulder milling		
					\varnothing [mm]	$a_{p \max}$	\varnothing [mm]	$a_{e \max}$	\varnothing [mm]	$a_{p \max}$	\varnothing [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	
B Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	155	200	265	2	150	200	270	2
		approx. 0,45 % C	annealed	190	2	150	190	255	2	145	190	260	2
		approx. 0,45 % C	tempered	250	3	110	140	190	2	105	140	190	2
		approx. 0,75 % C	annealed	270	4	95	120	160	2	90	120	165	2
		approx. 0,75 % C	tempered	300	5	90	110	150	2	85	110	150	2
Milling	P Low-alloyed steel		annealed	180	6	120	150	200	2	115	150	205	2
			tempered	275	7	95	120	160	2	90	120	165	2
			tempered	300	8	90	110	150	2	85	110	150	2
			tempered	350	9	85	105	140	2	80	105	145	2
Milling	P High-alloyed steel and high-alloyed tool steel		annealed	200	10	110	140	190	2	105	140	190	2
			hardened and tempered	325	11	85	110	145	2	80	110	145	2
Milling	M Stainless steel	ferritic/martensitic	annealed	200	12	50	65	85	2	50	65	90	2
		martensitic	tempered	240	13	45	60	75	2	45	60	80	2
		austenitic	quench hardened	180	14	55	70	95	2	55	70	95	2
		austenitic-ferritic		230	15	45	60	75	2	45	60	80	2
Drilling	K Grey cast iron	perlitic/ferritic		180	16	115	150	195	2	110	150	200	2
		perlitic (martensitic)		260	17	95	120	160	2	90	120	165	2
	K Cast iron with spheroidal graphite	ferritic		160	18	140	180	240	2	135	180	245	2
		perlitic		250	19	110	140	190	2	105	140	190	2
	K Malleable cast iron	ferritic		130	20	155	200	265	2	150	200	270	2
		perlitic		230	21	125	160	215	2	120	160	220	2
Technical Information	N Aluminium wrought alloys	cannot be hardened		60	22								
		hardenable	hardened	100	23								
	N Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24								
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25								
		$> 12\% \text{ Si}$, cannot be hardened		130	26								
	N Copper and copper alloys (bronze/brass)	machining steel, PB> 1%			110	27							
CuZn, CuSnZn			90	28									
CuSn, Pb-free copper, electrolytic copper			100	29									
Technical Information	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	pure titanium		R_m 400	35								
		α and β alloys	hardened	R_m 1050	36								
Technical Information	H Hardened steel		hardened and tempered	55 HRC	37								
			hardened and tempered	60 HRC	38								
	H Hard cast iron		cast	400	39								
Index	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.