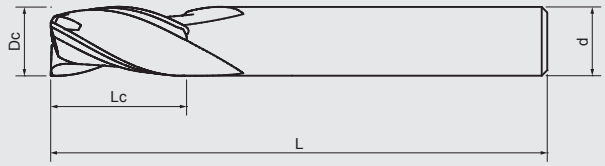
F503HX / F504HX / F603TX

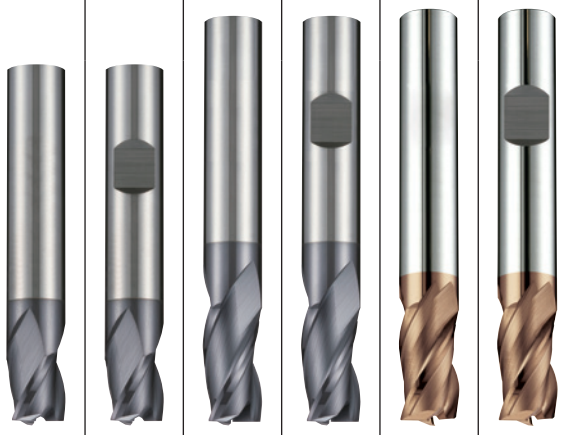
Universal End Mills

F503HX / F504HX With MG carbide material is good for cutting materials < 48HRC.

F603TX With UMG carbide material is good for cutting hardened materials < 62HRC.

Good wear resistance and lubricating effect with Nano multilayer coating.





F503HX / F504HX With sharp cutting edge is good for cutting different steels below 48HRC as well as cast iron.

F603TX With stronger strength of cutting edge is suitable for steels below 62HRC.

Various application for general cutting.

P H K	P H K	P H K	P H K	P H	P H
AlTiCrN <48HRC	AlTiCrN <48HRC	AlTiCrN <48HRC	AlTiCrN <48HRC	AlTiSiN <62HRC	AlTiSiN <62HRC

DIN 6527 Stub Length

Dc $^{0}_{-0.02}$	Lc mm	L mm	d h5	45° mm	F503HX HA	F503HX HB				
2	3	50	6	0.02	●	●				
3	4	50	6	0.03	●	●				
4	5	54	6	0.04	●	●				
5	6	54	6	0.05	●	●				
6	7	54	6	0.06	●	●				
8	9	58	8	0.08	●	●				
10	11	66	10	0.10	●	●				
12	12	73	12	0.12	●	●				
14	14	75	14	0.14	●	●				
16	16	82	16	0.16	●	●				
18	18	84	18	0.18	●	●				
20	20	92	20	0.20	●	●				

DIN 6527 Standard Length

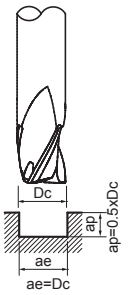
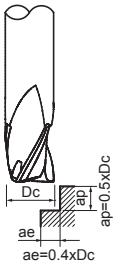
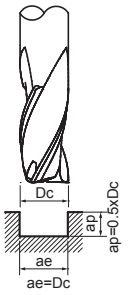
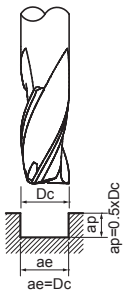
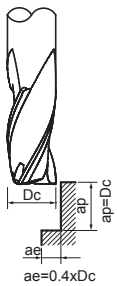
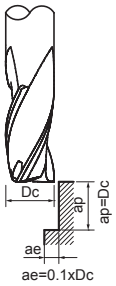
Dc $^{0}_{-0.02}$	Lc mm	L mm	d h5	45° mm			F504HX HA	F504HX HB		
3	7	57	6	0.03			●	●		
4	8	57	6	0.04			●	●		
5	10	57	6	0.05			●	●		
6	10	57	6	0.06			●	●		
8	16	63	8	0.08			●	●		
10	19	72	10	0.10			●	●		
12	22	83	12	0.12			●	●		
14	22	83	14	0.14			●	●		
16	26	92	16	0.16			●	●		
18	26	92	18	0.18			●	●		
20	32	104	20	0.20			●	●		

DIN 6527 Standard Length

Dc $^{0}_{-0.02}$	Lc mm	L mm	d h5	45° mm					F603TX HA	F603TX HB
3	7	57	6	0.03					●	●
4	8	57	6	0.04					●	●
5	10	57	6	0.05					●	●
6	10	57	6	0.06					●	●
8	16	63	8	0.08					●	●
10	19	72	10	0.10					●	●
12	22	83	12	0.12					●	●
16	26	92	16	0.16					●	●
20	32	104	20	0.20					●	●

Cutting Conditions

F503HX
F504HX
F603TX

		F503HX		F503HX		F504HX		F504HX		F603TX		F603TX		F603TX	
															
		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)	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)
	Carbon Steel Materials														
P	GRI Carbon Steel	120	0.004xDc	120	0.005xDc	130	0.005xDc	140	0.006xDc	120	0.004xDc	120	0.005xDc	130	0.005xDc
P	GR2 <24HRC Low-alloyed Steel	120	0.003xDc	120	0.004xDc	130	0.004xDc	140	0.005xDc	120	0.003xDc	120	0.004xDc	130	0.004xDc
P	GR3 <30HRC Hi-alloyed Steel	80	0.003xDc	80	0.003xDc	90	0.003xDc	100	0.004xDc	80	0.003xDc	80	0.003xDc	90	0.003xDc
	Hardened Steel Materials														
H	GR4 30~38HRC Hardened Steel	65	0.002xDc	65	0.002xDc	65	0.002xDc	70	0.002xDc	65	0.002xDc	65	0.002xDc	65	0.002xDc
H	GR5 38~48HRC Hardened Steel	60	0.0018xDc	60	0.0018xDc	60	0.0018xDc	65	0.0018xDc	60	0.0018xDc	60	0.0018xDc	60	0.0018xDc
H	GR6 48~56HRC Hardened Steel									55	0.0015xDc	55	0.0015xDc	55	0.0015xDc
	Cast Lron Materials														
K	GR9-1 Grey cast iron	120	0.004xDc	120	0.005xDc	130	0.005xDc	140	0.006xDc						
K	GR9-2 Nodular cast iron	120	0.004xDc	120	0.005xDc	130	0.005xDc	140	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.