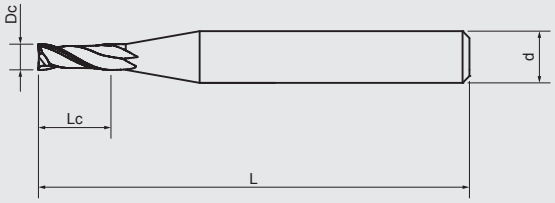
E102HX / E104HX

Universal End Mills / Finishing End Mills

Small diameter series with specification in step of 0.1mm.

Good wear resistance and lubricating effect with Nano multilayer coating.



VHM Carbide | AlTiCrN HX | 30° | N γ10° | 90° | Steel <48HRC

Suitable for cutting different steels below 48HRC as well as cast iron.

Various application for general cutting.

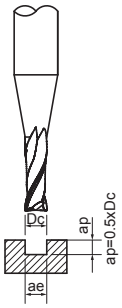
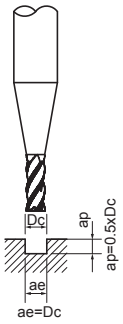
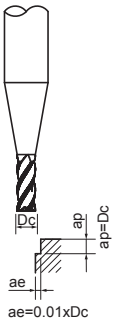
P H K

P H K

Standard Length

Dc $^{0}_{-0.02}$	Lc mm	L mm	d h5	E102HX AlTiCrN	E104HX AlTiCrN				
0.2	0.5	38	3	●					
0.3	0.8	38	3	●					
0.4	1	38	3	●					
0.5	1.2	38	3	●					
0.6	1.5	38	3	●					
0.7	1.8	38	3	●					
0.8	2	38	3	●					
0.9	2.5	38	3	●					
1	3	38	3	●	●				
1.1	3	38	3	●	●				
1.2	4	38	3	●	●				
1.3	4	38	3	●	●				
1.4	4	38	3	●	●				
1.5	5	38	3	●	●				
1.6	5	38	3	●	●				
1.7	5	38	3	●	●				
1.8	5	38	3	●	●				
1.9	5	38	3	●	●				
2	6	38	3	●	●				
2.1	6	38	3	●	●				
2.2	6	38	3	●	●				
2.3	6	38	3	●	●				
2.4	8	38	3	●	●				
2.5	8	38	3	●	●				
2.6	8	38	3	●	●				
2.7	8	38	3	●	●				
2.8	8	38	3	●	●				
2.9	8	38	3	●	●				
3	8	38	3	●	●				

Cutting Conditions

		E102HX		E102HX		E104HX		E104HX	
E102HX E104HX				 ae=0.01xDc		 ae=Dc		 ae=0.01xDc	
		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	GR1 Carbon Steel	120	0.0015xDc	120	0.0018xDc	120	0.0015xDc	120	0.0018xDc
P	GR2 <24HRC Low-alloyed Steel	120	0.0015xDc	120	0.0018xDc	120	0.0015xDc	120	0.0018xDc
P	GR3 <30HRC Hi-alloyed Steel	80	0.0012xDc	80	0.0015xDc	80	0.0012xDc	80	0.0015xDc
	Hardened Steel Materials								
H	GR4 30~38HRC Hardened Steel	60	0.001xDc	65	0.001xDc	60	0.001xDc	65	0.001xDc
H	GR5 38~48HRC Hardened Steel	55	0.001xDc	60	0.001xDc	55	0.001xDc	60	0.001xDc
	Cast Lron Materials								
K	GR9-1 Grey cast iron	120	0.0015xDc	120	0.0018xDc	120	0.0015xDc	120	0.0018xDc
K	GR9-2 Nodular cast iron	120	0.0015xDc	120	0.0018xDc	120	0.0015xDc	120	0.0018xDc

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.