

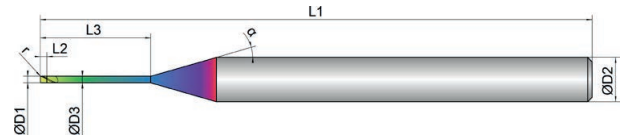
# VEYN1-M16-0023

Cooling	
Tolerance	d04
Coating	AlphaSlide Rainbow

Strategy	<b>HSC</b>
Application	
Features	<b>HA</b>



- Optimized face geometry for excellent surfaces and highest dimensional accuracy
  - Defined microbevel for support and stabilization
  - Polished chip space for ideal chip evacuation
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- Multipass milling of 3D contours
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- Tolerance D1: -0.001/-0.006 mm
  - Tolerance D3: 0/-0.02 mm
  - Radius tolerance r: 0/-0.003 mm (measured from 0-90°)



## Roughing

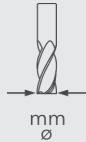
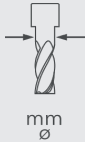

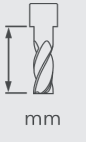








## Finishing



VEYN1-M16-0023	D1  mm ø	D3  mm ø	L2  mm	L3  mm	L1  mm	D2  mm ø	z  #	r  mm	 °	α  °
0,2X0,5	0.2	0.18	0.2	0.5	50.0	4.0	2	0.05	30	16
0,2X1	0.2	0.18	0.2	1.0	50.0	4.0	2	0.05	30	16
0,2X2	0.2	0.18	0.2	2.0	50.0	4.0	2	0.05	30	16
0,2X3	0.2	0.18	0.2	3.0	50.0	4.0	2	0.05	30	16
0,3X1	0.3	0.28	0.3	1.0	50.0	4.0	2	0.05	30	16
0,3X2	0.3	0.28	0.3	2.0	50.0	4.0	2	0.05	30	16
0,3X3	0.3	0.28	0.3	3.0	50.0	4.0	2	0.05	30	16
0,3X4	0.3	0.28	0.3	4.0	50.0	4.0	2	0.05	30	16
0,3X6	0.3	0.28	0.3	6.0	50.0	4.0	2	0.05	30	16
0,4X1	0.4	0.38	0.4	1.0	50.0	4.0	2	0.05	30	16
0,4X2	0.4	0.38	0.4	2.0	50.0	4.0	2	0.05	30	16

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EXN1-M16-0023	D1	D3	L2	L3	L1	D2	z	r		$\alpha$
	 mm $\varnothing$	 mm $\varnothing$	 mm	 mm	 mm	 mm $\varnothing$	 #	 mm	 °	 °
0,4X3	0.4	0.38	0.4	3.0	50.0	4.0	2	0.05	30	16
0,4X4	0.4	0.38	0.4	4.0	50.0	4.0	2	0.05	30	16
0,4X6	0.4	0.38	0.4	6.0	50.0	4.0	2	0.05	30	16
0,4X8	0.4	0.38	0.4	8.0	50.0	4.0	2	0.05	30	16
0,5X1	0.5	0.48	0.5	1.0	50.0	4.0	2	0.05	30	16
0,5X2	0.5	0.48	0.5	2.0	50.0	4.0	2	0.05	30	16
0,5X3	0.5	0.48	0.5	3.0	50.0	4.0	2	0.05	30	16
0,5X4	0.5	0.48	0.5	4.0	50.0	4.0	2	0.05	30	16
0,5X6	0.5	0.48	0.5	6.0	50.0	4.0	2	0.05	30	16
0,5X8	0.5	0.48	0.5	8.0	50.0	4.0	2	0.05	30	16
0,5X10	0.5	0.48	0.5	10.0	50.0	4.0	2	0.05	30	16
0,6X3	0.6	0.58	0.6	3.0	50.0	4.0	2	0.05	30	16
0,6X4	0.6	0.58	0.6	4.0	50.0	4.0	2	0.05	30	16
0,6X6	0.6	0.58	0.6	6.0	50.0	4.0	2	0.05	30	16
0,6X8	0.6	0.58	0.6	8.0	50.0	4.0	2	0.05	30	16
0,6X10	0.6	0.58	0.6	10.0	50.0	4.0	2	0.05	30	16

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Material	Strength (N/mm <sup>2</sup> )	Dimension	Infeed in mm	Application	Ø0.2x0.5			Ø0.2x3			Ø0.3x1			Ø0.3x6		
					ae=1xD	ae=0.25xD	ae=0.1xD	ae=1xD	ae=0.05xD	ae=0.05xD	ae=1xD	ae=0.25xD	ae=0.1xD	ae=1xD	ae=0.03xD	ae=0.01xD
					ap=0.2xD	ap=L2 max	ap=0.1xD	ap=0.06xD	ap=L2 max	ap=0.05xD	ap=0.2xD	ap=L2 max	ap=0.1xD	ap=0.02xD	ap=L2 max	ap=0.01xD
		Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz		
<b>N</b>		Vc (m/min)														
1.1	Aluminium, alloyed	<500	500	0.008	0.012	0.014	0.005	0.007	0.009	0.008	0.012	0.014	0.005	0.007	0.009	
1.2	Aluminium, alloyed	<600	480	0.008	0.012	0.014	0.005	0.007	0.009	0.008	0.012	0.014	0.005	0.007	0.009	
2.1-2.3	Aluminium, casted	<600	450	0.007	0.011	0.013	0.004	0.006	0.008	0.007	0.011	0.013	0.004	0.006	0.008	
3.1-3.3	Cooper, alloyed	<650	220	0.006	0.01	0.012	0.003	0.005	0.007	0.006	0.01	0.012	0.003	0.005	0.007	
4.1	Magnesium, alloyed	<250	500	0.008	0.012	0.014	0.005	0.007	0.009	0.008	0.012	0.014	0.005	0.007	0.009	
5.1	Thermoplastic	<100	400	0.007	0.011	0.013	0.004	0.006	0.008	0.007	0.011	0.013	0.004	0.006	0.008	
5.2	Duroplastic	<150	350	0.006	0.01	0.012	0.003	0.005	0.007	0.006	0.01	0.012	0.003	0.005	0.007	

Material	Strength (N/mm <sup>2</sup> )	Dimension	Infeed in mm	Application	Ø0.4x1			Ø0.4x8			Ø0.5x1			Ø0.5x10		
					ae=1xD	ae=0.25xD	ae=0.1xD	ae=1xD	ae=0.03xD	ae=0.01xD	ae=1xD	ae=0.25xD	ae=0.1xD	ae=1xD	ae=0.03xD	ae=0.01xD
					ap=0.2xD	ap=L2 max	ap=0.1xD	ap=0.02xD	ap=L2 max	ap=0.01xD	ap=0.2xD	ap=L2 max	ap=0.1xD	ap=0.02xD	ap=L2 max	ap=0.01xD
		Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz		
<b>N</b>		Vc (m/min)														
1.1	Aluminium, alloyed	<500	500	0.012	0.016	0.018	0.005	0.007	0.009	0.016	0.02	0.022	0.009	0.013	0.015	
1.2	Aluminium, alloyed	<600	480	0.012	0.016	0.018	0.005	0.007	0.009	0.016	0.02	0.022	0.009	0.013	0.015	
2.1-2.3	Aluminium, casted	<600	450	0.011	0.015	0.017	0.004	0.006	0.008	0.015	0.018	0.021	0.008	0.012	0.014	
3.1-3.3	Cooper, alloyed	<650	220	0.01	0.014	0.016	0.003	0.005	0.007	0.014	0.016	0.02	0.007	0.011	0.013	
4.1	Magnesium, alloyed	<250	500	0.012	0.016	0.018	0.005	0.007	0.009	0.016	0.02	0.022	0.009	0.013	0.015	
5.1	Thermoplastic	<100	400	0.011	0.015	0.017	0.004	0.006	0.008	0.015	0.018	0.021	0.008	0.012	0.014	
5.2	Duroplastic	<150	350	0.01	0.014	0.016	0.003	0.005	0.007	0.014	0.016	0.02	0.007	0.011	0.013	

Material	Strength (N/mm <sup>2</sup> )	Dimension	Infeed in mm	Application	Ø0.6x3			Ø0.6x10					
					ae=1xD	ae=0.25xD	ae=0.1xD	ae=1xD	ae=0.04xD	ae=0.015xD			
					ap=0.2xD	ap=L2 max	ap=0.1xD	ap=0.03xD	ap=L2 max	ap=0.015xD			
		Feed (mm/Z)	fz	fz	fz	fz	fz	fz					
<b>N</b>		Vc (m/min)											
1.1	Aluminium, alloyed	<500	500	0.016	0.02	0.022	0.012	0.015	0.017				
1.2	Aluminium, alloyed	<600	480	0.016	0.02	0.022	0.012	0.015	0.017				
2.1-2.3	Aluminium, casted	<600	450	0.015	0.018	0.021	0.011	0.014	0.016				
3.1-3.3	Cooper, alloyed	<650	220	0.014	0.016	0.02	0.01	0.013	0.015				
4.1	Magnesium, alloyed	<250	500	0.016	0.02	0.022	0.012	0.015	0.017				
5.1	Thermoplastic	<100	400	0.015	0.018	0.021	0.011	0.014	0.016				
5.2	Duroplastic	<150	350	0.014	0.016	0.02	0.01	0.013	0.015				

**NOTE** | Values in the table are the shortest and the longest overhang length (L3) of each dimension; please calculate fz, ap and ae depending on the given values.  
 ae/ap(max) = 0.5x corner radius!