

Cooling	 
Tolerance	e8
Coating	TiSiN- α

HA

ETC

HPC



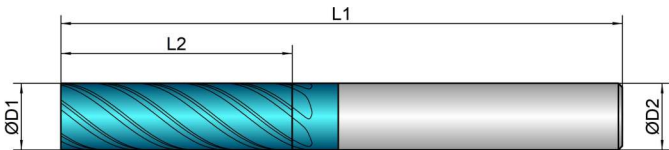




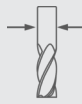
Expert



HA K201533



Steel			Hardened steel				Stainless steel (VA)	Castings	Non-ferrous materials				Inconel	Abrasive material		Titanium
< 850 N/mm	< 1100 N/mm	< 1400 N/mm	< 55 HRC	< 60 HRC	< 67 HRC	< 70 HRC			Al	Copper	Mg	Plastics		CFRP / GFRP	Graphite	
		180	175	150	110	40										

K201533	D1	L2	L1	D2	z	
	 mm ø	 mm	 mm	 mm ø	 #	
6X21	6.0	21.0	65.0	6.0	6	37.5
8X28	8.0	28.0	75.0	8.0	6	37.5
10X35	10.0	35.0	85.0	10.0	6	37.5
12X45	12.0	45.0	100.0	12.0	6	37.5
14X45	14.0	45.0	100.0	14.0	6	37.5
16X50	16.0	50.0	110.0	16.0	8	37.5
16X65	16.0	65.0	125.0	16.0	8	37.5
18X54	18.0	54.0	114.0	18.0	10	37.5
20X55	20.0	55.0	126.0	20.0	10	37.5
20X70	20.0	70.0	135.0	20.0	10	37.5
20X75	20.0	75.0	135.0	20.0	10	37.5
25X75	25.0	75.0	150.0	25.0	10	37.5

Kühlung

Toleranz

±8

Beschichtung

TiSiN-α

HA

ETC

HPC

Expert



Werkstoff / Material	Festigkeit / strength (N/mm²)		Vc m/min	Ø 0,1 - 2		Ø 3 - 4		Ø 5		Ø 6		Ø 8		Ø 10		Ø 12		Ø 16		Ø 20	
				ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD	ae= 1xD	ae= 0,05xD
				ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}	ap= 1xD	ap= L2 _{max}
				fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)	fz (mm/Z)
Stahl / Steel	< 850																				
Stahl / Steel	< 1100																				
Stahl / Steel	< 1400		180								0,025		0,028		0,03		0,035		0,04		0,045
Gehärteter Stahl / Hardness Steel	< 55HRC		175								0,025		0,028		0,03		0,035		0,04		0,045
Gehärteter Stahl / Hardness Steel	< 60HRC		150								0,025		0,028		0,03		0,035		0,04		0,045
Gehärteter Stahl / Hardness Steel	< 67HRC		110								0,022		0,025		0,027		0,032		0,037		0,042
Gehärteter Stahl / Hardness Steel	≤ 70HRC		40								0,019		0,022		0,024		0,029		0,034		0,039
INOX	< 700																				
INOX	< 850																				
Guss / Castings																					
Aluminium / Al																					
Kupfer / Cooper																					
Kunststoffe / Plastics																					
Inconel																					
Titan / Titanium																					
Grafit / Graphite																					
GFK / CFK																					

Bitte beachten, hierbei handelt es sich lediglich um Richtwerte! / Caution, these are only guide values!