



EP006H

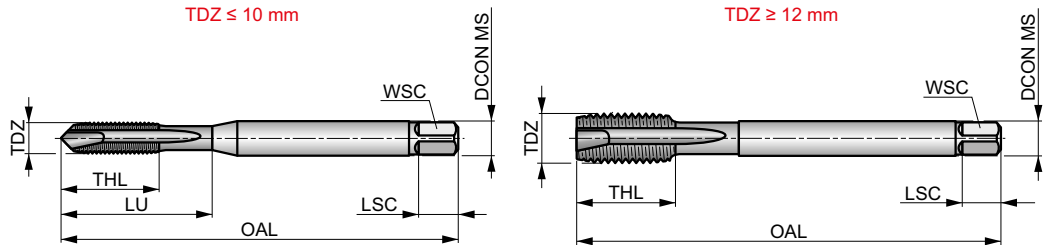


HSS-E-PM Spiral Point Machine Tap, Metric, DIN Standard

Machine tap to produce normal fit threads within 6H tolerance. The spiral point is suited for through holes only. Bright finish to produce more accurate and cleaner threads preventing the workpiece material from sticking to the cutting edges.



	DIN 371/376	6H
	2.5xD	HSS-E PM
B 3.5-5		
Bright		



Workpiece material group suitability and starting values for cutting speed (m/min).

P1.1 ■ 22	P1.2 ■ 24	P1.3 ■ 25	P2.1 ■ 18	P2.2 ■ 16	P2.3 ■ 14	P3.1 ■ 13	P3.2 ■ 10	P4.1 ■ 8	N1.1 ■ 14	N1.2 ■ 10	N1.3 ■ 7	N2.1 ■ 28	N2.2 ■ 25
N2.3 ■ 18	N3.1 ■ 44	N3.2 ■ 27	N3.3 ■ 13	N4.1 ■ 22									

Products from this series are also available in set with drills. Please see L114 or L001.

Product	TDZ	TP	OAL	THL	DCON MS	WSC	LSC	NOF	PHD	LU
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]
EP00M2	2	0.40	50.0	6	2.80	2.10	5	2	1.60	9.00
EP00M2.5	2.5	0.45	50.0	8	2.80	2.10	5	2	2.10	12.50
EP00M3	3	0.50	56.0	9	3.50	2.70	6	3	2.50	18.00
EP00M3DIN376	3	0.50	56.0	10	2.20	1.80	4	3	2.50	18.00
EP00M3.5	3.5	0.60	56.0	11	4.00	3.00	6	3	2.90	20.00
EP00M4	4	0.70	63.0	12	4.50	3.40	6	3	3.30	21.00
EP00M4DIN376	4	0.70	63.0	12	2.80	2.10	5	3	3.30	21.00
EP00M4.5	4.5	0.75	70.0	13	6.00	4.90	8	3	3.80	25.00
EP00M5	5	0.80	70.0	13	6.00	4.90	8	3	4.20	25.00
EP00M5DIN376	5	0.80	70.0	13	3.50	2.70	6	3	4.20	25.00
EP00M6	6	1.00	80.0	15	6.00	4.90	8	3	5.00	30.00
EP00M6DIN376	6	1.00	80.0	15	4.50	3.40	6	3	5.00	30.00
EP00M7	7	1.00	80.0	15	7.00	5.50	8	3	6.00	30.00
EP00M8	8	1.25	90.0	18	8.00	6.20	9	3	6.80	35.00
EP00M8DIN376	8	1.25	90.0	18	6.00	4.90	8	3	6.80	35.00
EP00M10	10	1.50	100.0	20	10.00	8.00	11	3	8.50	39.00
EP00M10DIN376	10	1.50	100.0	20	7.00	5.50	8	3	8.50	–
EP00M12	12	1.75	110.0	23	9.00	7.00	10	3	10.30	–
EP00M14	14	2.00	110.0	25	11.00	9.00	12	3	12.00	–
EP00M16	16	2.00	110.0	25	12.00	9.00	12	3	14.00	–
EP00M18	18	2.50	125.0	30	14.00	11.00	14	4	15.50	–
EP00M20	20	2.50	140.0	30	16.00	12.00	15	4	17.50	–
EP00M22	22	2.50	140.0	34	18.00	14.50	17	4	19.50	–
EP00M24	24	3.00	160.0	38	18.00	14.50	17	4	21.00	–
EP00M27	27	3.00	160.0	38	20.00	16.00	19	4	24.00	–
EP00M30	30	3.50	180.0	45	22.00	18.00	21	4	26.50	–



WMG (WORK MATERIAL GROUP)

ISO group	WMG (Work Material Group)	Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)					
P	P1	P1.1	Sulfurized	< 240 HB	≤ 830			
		P1.2	Free machining steel	Sulfurized and phosphorized	< 180 HB	≤ 620		
		P1.3	(carbon steels with increased machinability)	Sulfurized/phosphorized and leaded	< 180 HB	≤ 620		
	P2	P2.1	Plain carbon steel (steels comprised of mainly iron and carbon)	Containing <0.25 % C	< 180 HB	≤ 620		
		P2.2		Containing <0.55 % C	< 240 HB	≤ 830		
		P2.3		Containing >0.55 % C	< 300 HB	≤ 1030		
	P3	P3.1	Alloy steel (carbon steels with an alloying content ≤ 10%)	Annealed	< 180 HB	≤ 620		
		P3.2		Hardened and tempered	180 – 260 HB	> 620 ≤ 900		
		P3.3			260 – 360 HB	> 900 ≤ 1240		
	P4	P4.1	Tool steel (special alloy steel for tools, dies and molds)	Annealed	< 26 HRC	≤ 900		
P4.2		Hardened and tempered		26 – 39 HRC	> 900 ≤ 1240			
P4.3				39 – 45 HRC	> 1240 ≤ 1450			
M	M1	Ferritic stainless steel (straight chromium non-hardenable alloys)	Annealed	< 160 HB	≤ 520			
				160 – 220 HB	> 520 ≤ 700			
	M2	Martensitic stainless steel (straight chromium hardenable alloys)	Quenched and tempered	200 – 280 HB	> 670 ≤ 950			
				Precipitation-hardened	280 – 380 HB	> 950 ≤ 1300		
					< 200 HB	≤ 750		
	M3	Austenitic stainless steel (chromium-nickel and chromium-nickel-manganese alloys)	Annealed	200 – 260 HB	> 750 ≤ 870			
				Quenched and tempered	260 – 300 HB	> 870 ≤ 1040		
					< 300 HB	≤ 990		
	M4	M4.1	Austenitic-ferritic (DUPLEX) or super-austenitic stainless steel	Annealed	< 300 HB	≤ 990		
		M4.2	Precipitation hardening austenitic stainless steel		300 – 380 HB	≤ 1320		
K	K1	Gray iron or Automotive Gray iron (GG) (iron-carbon castings with a lamellar graphite microstructure)	Ferritic or ferritic-pearlitic	< 180 HB	≤ 190			
				Ferritic-pearlitic or pearlitic	180 – 240 HB	> 190 ≤ 310		
				Pearlitic	240 – 280 HB	> 310 ≤ 390		
	K2	Malleable iron (GTS/GTW) (iron-carbon castings with a graphite-free microstructure)	Ferritic	Ferritic or pearlitic	< 160 HB	≤ 400		
					160 – 200 HB	> 400 ≤ 550		
					200 – 240 HB	> 550 ≤ 660		
	K3	Ductile iron (GGG) (iron-carbon castings with a nodular graphite microstructure)	Ferritic	Ferritic or pearlitic	< 180 HB	≤ 560		
					180 – 220 HB	> 560 ≤ 680		
					220 – 260 HB	> 680 ≤ 800		
	K4	K4.1	Austenitic gray iron (ASTM A436) (iron-carbon alloy castings with an austenitic lamellar graphite microstructure)	Annealed	< 180 HB	≤ 190		
< 240 HB					≤ 740			
K4.2		Austenitic ductile iron (ASTM A439 or ASTM A571) (iron-carbon alloy castings with an austenitic nodular graphite microstructure)	Annealed	< 280 HB	> 840 ≤ 980			
				280 – 320 HB	> 980 ≤ 1130			
				320 – 360 HB	> 1130 ≤ 1280			
K5	K4.3	Austempered ductile iron (ASTM A897) (iron-carbon alloy castings with an ausferrite microstructure)	Annealed	< 180 HB	≤ 400			
				180 – 220 HB	> 400 ≤ 450			
				220 – 260 HB	> 450 ≤ 500			
N	N1	Commercially pure wrought aluminium	Half hard tempered	< 60 HB	≤ 240			
				60 – 100 HB	> 240 ≤ 400			
				100 – 150 HB	> 400 ≤ 590			
	N2	Wrought aluminium alloys	Full hard tempered	< 75 HB	≤ 240			
				75 – 90 HB	> 240 ≤ 270			
				90 – 140 HB	> 270 ≤ 440			
	N3	N2.1	Cast aluminium alloys	Annealed	< 75 HB	≤ 240		
					75 – 90 HB	> 240 ≤ 270		
					90 – 140 HB	> 270 ≤ 440		
	N4	N3.1	Free-cutting copper-alloys materials with excellent machining properties	Annealed	–	–		
N3.2					Short-chip copper-alloys with good to moderate machining properties	–	–	
						N3.3	Electrolytic copper and long-chip copper-alloys with moderate to poor machining properties	–
N5	N4.1	Thermoplastic polymers	Annealed	–	–			
				N4.2	Thermosetting polymers	–	–	
						N4.3	Reinforced polymers or composites	–
S	S1	Graphite	Annealed	–	–			
				S2	Titanium or titanium alloys	Annealed	< 200 HB	≤ 660
							200 – 280 HB	> 660 ≤ 950
	280 – 360 HB	> 950 ≤ 1200						
	S3	S2.1	Fe-based high-temperature alloys	Annealed	< 200 HB	≤ 690		
					200 – 280 HB	> 690 ≤ 970		
					280 – 360 HB	> 940 ≤ 1200		
	S4	S3.1	Ni-based high-temperature alloys	Annealed	< 240 HB	≤ 800		
					240 – 320 HB	> 800 ≤ 1070		
					320 – 360 HB	> 1070 ≤ 1200		
H	H1	S4.1	Co-based high-temperature alloys	Annealed	< 240 HB	≤ 800		
					240 – 320 HB	> 800 ≤ 1070		
	H2	H1.1	Chilled cast iron	Annealed	< 440 HB	–		
					< 55 HRC	–		
	H3	H2.1	Hardened cast iron	Annealed	> 55 HRC	–		
					< 51 HRC	–		
	H4	H3.1	Hardened steel <55 HRC	Annealed	51 – 55 HRC	–		
					55 – 59 HRC	–		
H4.2	H3.2	Hardened steel >55 HRC	Annealed	> 59 HRC	–			
				> 59 HRC	–			