

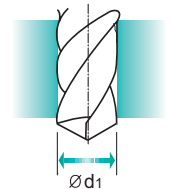
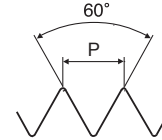
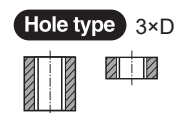
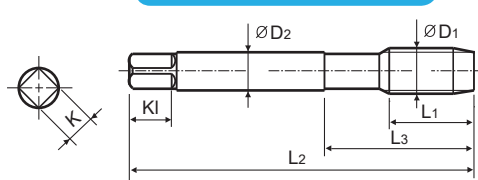
MF X-COATED HSS-PM SPIRAL POINT TAPS for MULTI-PURPOSE ISO Metric Fine Threads DIN 13

NEW SERIES
TRJ25

- ▶ High performance on various ductile materials
- ▶ Specially designed to prevent oversized threads and reduce gauging problems



with Internal Coolant



Machine Taps

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M6	x 0.75	TRJ25326GSP	13	80	30	4.5	3.4	5.8	3	5.25
M6	x 0.5	TRJ25336GSP	13	80	30	4.5	3.4	5.8	3	5.5
M8	x 1.0	TRJ25376GSP	17	90	36	6	4.9	7.8	3	7
M8	x 0.75	TRJ25386GSP	14	80	30	6	4.9	7.8	3	7.25
M10	x 1.25	TRJ25436GSP	22	100	40	7	5.5	7.8	3	8.75
M10	x 1.0	TRJ25446GSP	18	90	36	7	5.5	7.8	3	9
M10	x 0.75	TRJ25456GSP	18	90	36	7	5.5	7.8	3	9.25
M12	x 1.5	TRJ25516GSP	22	100	40	9	7	9.8	3	10.5
M12	x 1.25	TRJ25526GSP	22	100	40	9	7	9.8	3	10.75
M12	x 1.0	TRJ25536GSP	18	100	40	9	7	9.8	3	11
M14	x 1.5	TRJ25556GSP	22	100	47	11	9	11.8	3	12.5
M14	x 1.25	TRJ25566GSP	22	100	47	11	9	11.8	3	12.75
M14	x 1.0	TRJ25576GSP	18	100	47	11	9	11.8	3	13
M16	x 1.5	TRJ25616GSP	22	100	49	12	9	11.8	3	14.5
M16	x 1.0	TRJ25626GSP	18	100	49	12	9	11.8	3	15
M18	x 2.0	TRJ25666GSP	26	125	66	14	11	13.8	3	16
M18	x 1.5	TRJ25676GSP	25	110	55	14	11	13.8	3	16.5
M18	x 1.0	TRJ25686GSP	20	110	55	14	11	13.8	3	17
M20	x 2.0	TRJ25716GSP	27	140	72	16	12	14.8	3	18
M20	x 1.5	TRJ25726GSP	25	125	60	16	12	14.8	3	18.5
M20	x 1.0	TRJ25736GSP	20	125	60	16	12	14.8	3	19
M22	x 2.0	TRJ25756GSP	27	140	78	18	14.5	16.8	3	20
M22	x 1.5	TRJ25766GSP	25	125	65	18	14.5	16.8	3	20.5
M22	x 1.0	TRJ25776GSP	20	125	65	18	14.5	16.8	3	21
M24	x 2.0	TRJ25796GSP	27	140	70	18	14.5	17	3	22
M24	x 1.5	TRJ25806GSP	27	140	70	18	14.5	17	3	22.5
M24	x 1.0	TRJ25816GSP	20	140	70	18	14.5	17	3	23

◎ : Excellent ○ : Good

ISO	P											M			K						
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎	◎	◎	◎			

ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

HSS-PM PRIME TAP



Please visit
globalyg1.com/mat
for material search

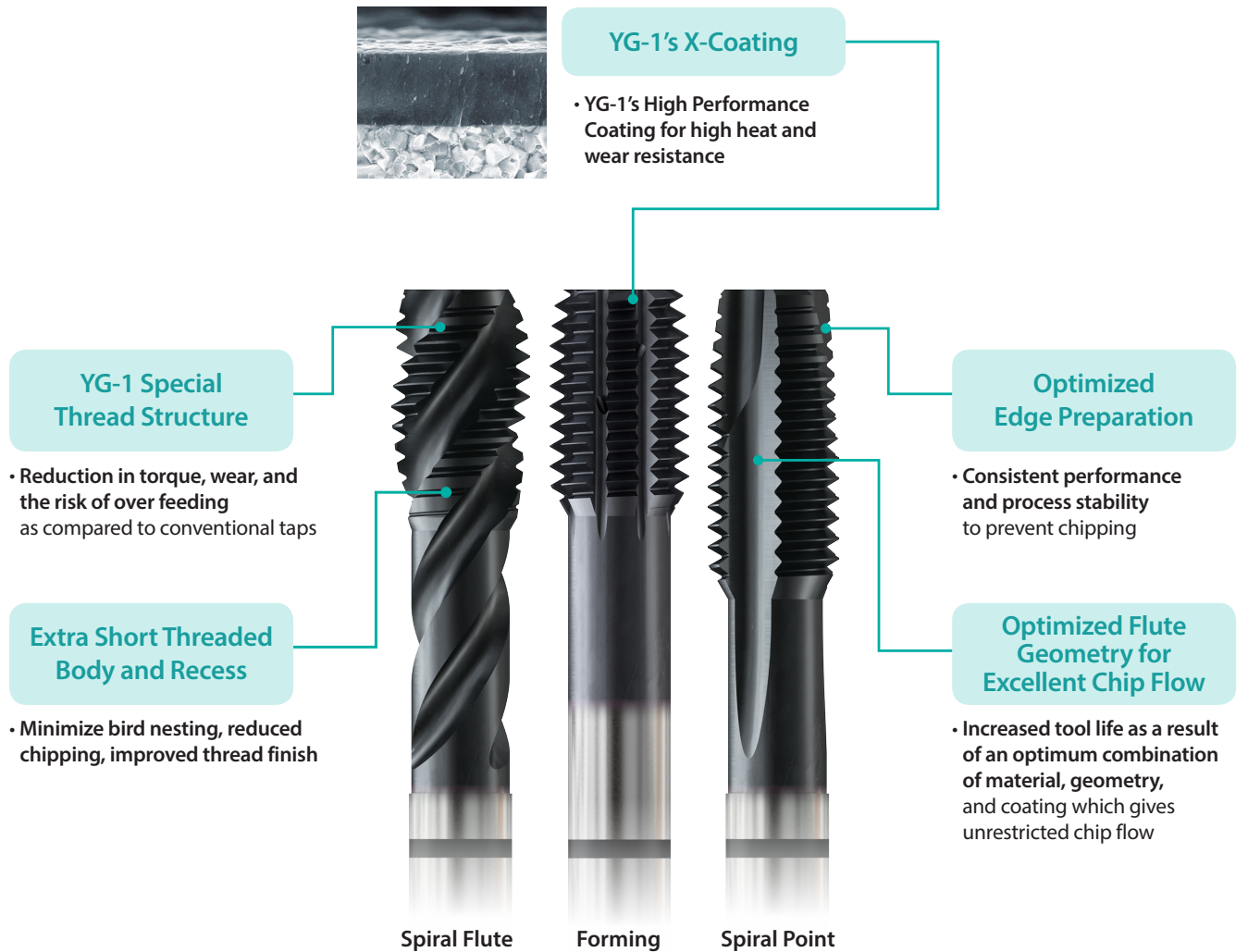
◎ : Excellent ○ : Good

HOLE TYPE			 Max. 2.5xD Blind Hole	 Max. 3.0xD Through Hole	 Max. 3.0xD Blind / Through Hole			
TOOL MATERIAL			HSS-PM					
CHAMFER LEAD ACC. TO DIN2197			E	C	B	C	C	E
FLUTE TYPE			Spiral Flute		Spiral Point	Forming		
SPIRAL FLUTE ANGLE			R45		-	-	-	-
CLASS OF THREAD			6HX	-	6HX	6HX	6GX	6HX
SERIES	M	DIN371/376	TRE41 (p.37)		TRJ24 (p.40)	TRQ20 (p.42)	TRQ24 (p.43)	TRQ22 (p.44)
	MF	DIN374			TRJ25 (p.41)	TRQ21 (p.45)	TRQ25 (p.46)	TRQ23 (p.47)
	UNC	DIN371/376						
	UNF	DIN371/374						
	G(BSP)	DIN5156		TRE42 (p.39)				
SURFACE TREATMENT / COATING			X-Coating					
MODEL								

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	Recommended cutting conditions Vc (m/min.)					
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○ (5-25)	○ (5-25)	◎ (15-50)	◎ (15-45)	◎ (15-45)	◎ (15-45)
	2		About 0.45% C	Annealed	190	13	◎ (10-55)	◎ (10-55)	◎ (10-60)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	3		About 0.45% C	Quenched & tempered	250	25	◎ (10-55)	◎ (10-55)	◎ (10-60)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	4		About 0.75% C	Annealed	270	28	◎ (15-45)	◎ (15-45)	◎ (15-55)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	5		About 0.75% C	Quenched & tempered	300	32	◎ (15-45)	◎ (15-45)	◎ (15-55)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	6	Low alloy steel		Annealed	180	10	◎ (8-35)	◎ (8-35)	◎ (8-35)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	7			Quenched & tempered	275	29	◎ (8-35)	◎ (8-35)	◎ (8-35)	◎ (15-35)	◎ (15-35)	◎ (15-35)
	8			Quenched & tempered	300	32	◎ (8-35)	◎ (8-35)	◎ (8-35)	◎ (5-22)	◎ (5-22)	◎ (5-22)
	9			Quenched & tempered	350	38	○ (8-35)	○ (8-35)	◎ (8-35)	◎ (5-22)	◎ (5-22)	◎ (5-22)
	10	High alloyed steel, and tool steel		Annealed	200	15	○ (8-35)	○ (8-35)	○ (8-35)	◎ (5-17)	◎ (5-17)	◎ (5-17)
	11			Quenched & Tempered	325	35	○ (8-35)	○ (8-35)	○ (8-35)	◎ (5-17)	◎ (5-17)	◎ (5-17)
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎ (5-17)	◎ (5-17)	◎ (8-25)	◎ (5-17)	◎ (5-17)	◎ (5-17)
	13		Martensitic	Quenched & Tempered	240	23	◎ (5-17)	◎ (5-17)	◎ (8-25)	◎ (5-17)	◎ (5-17)	◎ (5-17)
	14		Austenitic		180	10	◎ (5-17)	◎ (5-17)	◎ (8-25)	◎ (3-10)	◎ (3-10)	◎ (3-10)
K	15	Grey cast iron	Pearlitic / ferritic		180	10	○ (15-40)	○ (15-40)	◎ (15-40)			
	16		Pearlitic (Martensitic)		260	26	○ (15-40)	○ (15-40)	◎ (15-40)			
	17	Nodular cast iron	Ferritic		160	3	◎ (15-40)	◎ (15-40)	◎ (15-40)			
	18		Pearlitic		250	25	◎ (15-40)	◎ (15-40)	◎ (15-40)			
	19	Malleable cast iron	Ferritic		130							
	20		Pearlitic		230	21						
N	21	Aluminum- wrought alloy	Not Curable		60		○ (15-40)	○ (15-40)	○ (15-40)	◎ (20-55)	◎ (20-55)	◎ (20-55)
	22		Curable	Hardened	100		○ (15-40)	○ (15-40)	○ (15-40)	◎ (20-55)	◎ (20-55)	◎ (20-55)
	23	Aluminum- cast, alloyed	≤ 12% Si, Not Curable		75		◎ (15-40)	◎ (15-40)	◎ (15-40)	◎ (20-45)	◎ (20-45)	◎ (20-45)
	24		≤ 12% Si, Curable	Hardened	90		◎ (15-40)	◎ (15-40)	◎ (15-40)	◎ (20-45)	◎ (20-45)	◎ (20-45)
	25		> 12% Si, Not Curable		130		○ (15-40)	○ (15-40)	○ (15-40)	◎ (20-45)	◎ (20-45)	◎ (20-45)
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎ (15-40)	◎ (15-40)	◎ (15-40)	◎ (10-35)	◎ (10-35)	◎ (10-35)
	27		CuZn, CuSnZn (Brass)		90		◎ (15-40)	◎ (15-40)	◎ (15-40)	◎ (10-35)	◎ (10-35)	◎ (10-35)
	28		CuSn, lead-free copper and electrolytic copper		100		◎ (15-40)	◎ (15-40)	◎ (15-40)	◎ (10-35)	◎ (10-35)	◎ (10-35)
	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic									
	30		Rubber, Wood, etc.									
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15						
	32			Cured	280	30						
	33			Annealed	250	25						
	34		Ni or Co Based	Cured	350	38						
	35			Cast	320	34						
	36	Titanium Alloys	Pure Titanium		400 Rm							
	37		Alpha + Beta Alloys	Hardened	1050 Rm							
H	38	Hardened steel		Hardened	550	55						
	39			Hardened	630	60						
	40	Chilled Cast Iron		Cast	400	42						
	41	Hardened Cast Iron		Hardened	550	55						

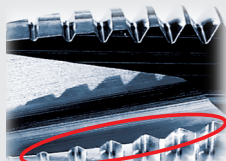
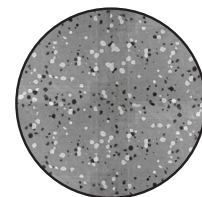
FEATURES & BENEFITS

High and Reliable Performance on Various Ductile Materials



HSS-PM(Powder Metallurgy) Premium Taps

Powdered Metal Technology for a tough-chipping resistant cutting edge for long tool life and reliable thread finish



Premium Cutting Edge Strength

- More controlled structure with high wear resistance
- Consistent performance and process stability with chipping resistance