



COLD FORMING TAPS

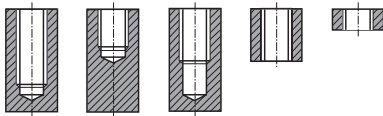
TTS37 SERIES

M ISO metric coarse threads DIN 13 Metrisches ISO-Gewinde DIN 13

► Suitable for high speed machining and high precision threads

► Geeignet für die High-Speed-Bearbeitung (HSC) und hoher Gewinde-Präzision

Hole type



DIN 371/376

Synchro Type

Applicable to 2-3 times faster cutting speed than minimum general GS Taps cutting speeds

Material groups

GS

HSS-PM

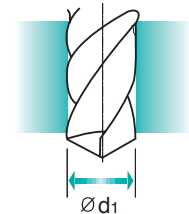
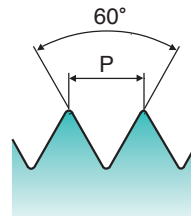
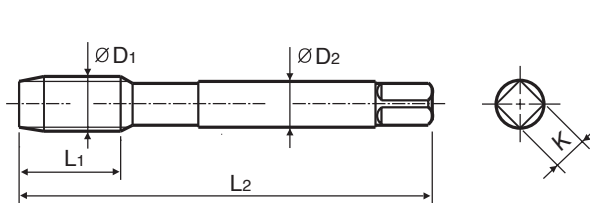
DIN 371/376

6HX



TiN

Machine taps
Maschinengewindebohrer



Unit : mm

SIZE ØD1	Pitch P	EDP No.	Thread Length L1	Overall Length L2	Shank Diameter ØD2	Square Size K	Tapping Drill Diameter Ød1
M3	× 0.5	TTS37206	6	56	3.5	2.7	2.5
M4	× 0.7	TTS37246	7	63	4.5	3.4	3.3
M5	× 0.8	TTS37286	8	70	6	4.9	4.2
M6	× 1.0	TTS37316	10	80	6	4.9	5
M8	× 1.25	TTS37366	13	90	8	6.2	6.8
M10	× 1.5	TTS37426	15	100	10	8	8.5
M12	× 1.75	TTS37506	18	110	9	7	10.2

► DIN371 (M3~M10) and DIN376 (M11~M12)

Unit : N/mm²

◎ : Excellent ○ : Good

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

HSS

CARBIDE

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAPS

COLD FORMING TAPS

NUT TAPS

STI TAPS

HAND TAPS

PIPE TAPS

CARBIDE TAPS

THREAD MILLS

TECHNICAL DATA



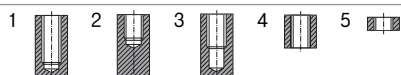
MACHINE TAPS

RECOMMENDATION TABLE

USE

◎ = EXCELLENT

○ = GOOD



COOLANT

A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion
S = Dry
Z = Dry/Oil Emulsion

MATERIAL GROUPS			MU	MU	MU
DIN 371/376	M	EDP No. (Page)	TC804 (p.375)	TD804 (p.375)	TC804-IC (p.378)
DIN 371/376	EG-M	EDP No. (Page)			
DIN 352	M	EDP No. (Page)			
DIN 374	MF	EDP No. (Page)	TC844 (p.376)	TD844 (p.376)	
DIN 371/376	UNC	EDP No. (Page)	TC824 (p.384)	TD824 (p.384)	
DIN 371/376	EG-UNC	EDP No. (Page)			
DIN 371/374	UNF	EDP No. (Page)	TC864 (p.385)	TD864 (p.385)	
DIN 371/376	EG-UNF	EDP No. (Page)			
DIN 2182/2183	BSW	EDP No. (Page)			
DIN 357/5156	M/G(BSP)	EDP No. (Page)			
LONG	M	EDP No. (Page)			
SURFACE TREATMENT / COATING			Bright	TiN	Bright
SPIRAL FLUTE ANGLE			R40	R40	R40
CHAMFER LEAD ACC. DIN 2197			C	C	C
HOLE TYPE			1-2-3	1-2-3	1-2-3

HARDNESS	TENSILE STRENGTH	CHIP	CUTTING SPEED	COOLANT			
HB	Rm N/mm ²		Vc m/min				
					◎	◎	◎

MATERIAL GROUPS		LIST OF MATERIALS					
10. STEELS	11	Steel < 400	Magnetic soft steels	< 120	< 400	Extra long	15-20
	12	Steel < 700	Structure steels	< 200	< 700	Medium/long	15-20
	13	Steel < 850	Plain carbon steels	< 250	< 850	Long	12-18
	14	St. Alloy < 850	Alloy steels	< 250	< 850	Long	10-15
	15	St. Alloy ≤ 1,200	Alloy steels, Hardened steels	< 350	≤ 1,200	Long	6-10
	16	St. Alloy > 1,200	Alloy steels, Hardened steels	> 350	> 1,200	Long	3-5
20. STAINLESS STEELS	21	INOX Free < 850	Free machining	< 250	< 850	Medium	7-10
	22	INOX Aust.< 850	Austenitic	< 250	< 850	Long	5-8
	23	INOX < 1,100	Ferritic, Ferritic+Austenitic, Martensitic	< 300	< 1,100	Long	4-6
30. CAST IRON	31	GG Cast < 500	Grey cast iron	< 150	< 500	Extra short	10-15
	32	GG Cast < 1,000	Grey cast iron	< 300	< 1,000	Extra short	5-8
	33	GGG Cast < 700	Nodular graphite, Malleable cast iron	< 200	< 700	Short	10-15
	34	GGG Cast < 1,000	Nodular graphite, Malleable cast iron	< 300	< 1,000	Short	5-8
40. TITANIUM	41	Ti < 700	Titanium, Unalloyed	< 200	< 700	Extra long	10-15
	42	Ti Alloy < 900	Titanium, Alloyed	< 270	< 900	Medium/Short	8-12
	43	Ti Alloy ≤ 1,300	Titanium, Alloyed	< 350	≤ 1,300	Medium/Short	4-6
50. NICKEL	51	Ni < 500	Nickel, Unalloyed	< 150	< 500	Extra long	8-12
	52	Ni Alloy < 900	Nickel, Alloyed	< 270	< 900	Long	10-15
	53	Ni Alloy ≤ 1,400	Nickel, Alloyed	< 410	≤ 1,400	Long	2-4
60. COPPER, BRASS, BRONZE	61	Cu < 350	Copper, Unalloyed	< 100	< 350	Extra long	8-12
	62	Cu Alloy (Short)	Short chip Brass, Bronze, Copper	< 200	< 700	Medium/Short	25-35
	63	Cu Alloy (Long)	Long chip Brass, Bronze, Copper	< 200	< 700	Long	15-20
	64	Cu-Al-Fe < 1,500	Cu-Al-Fe alloys	< 470	< 1,500	Short	3-5
70. ALUMINUM	71	Al/Mg < 350	Aluminum, Magnesium, Unalloyed	< 100	< 350	Extra long	10-15
	72	Al Wrought	Aluminum, Alloyed Si < 0.5%	< 150	< 500	Medium	25-35
	73	Al (Si ≤ 10%)	Aluminum, Alloyed, Si ≤ 10%	< 120	< 400	Medium/Short	15-20
	74	Al (Si > 10%)	Aluminum, Alloyed, Si > 10%	< 120	< 400	Short	10-15
80. PLASTICS	81	Thermosoft.	Thermoplastics			Extra long	20-30
	82	Thermoset.	Fiber Reinforced Plastics			Short	8-12
	83	FRP	Fiber Reinforced Plastics			Extra short	5-7

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