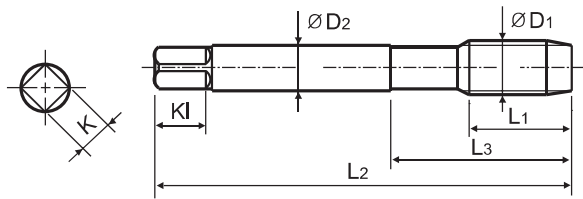


### M ISO metric coarse threads DIN 13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

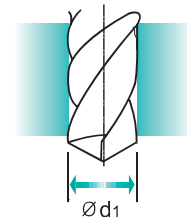
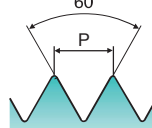
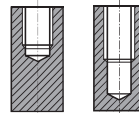
- ▶ Coated HSS-PM(Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision threads

- ▶ Beschichtete HSS-PM-Gewindebohrer zum Hochgeschwindigkeitsgewindebohren auf starren CNC-Maschinen oder gleichwertige Maschinen
- ▶ Bis zu dreimal schnelleres Gewindeschneiden als bei herkömmlichen Gewindebohrern
- ▶ Beim Hochgeschwindigkeits-Gewindebohren wird die Verwendung eines Synchrofutters zur Erhöhung der Werkzeugstandzeit und der Gewindequalität empfohlen
- ▶ Hoch präzise Gewinde



Hole type

2.5×D



Machine taps  
Maschinengewindebohrer

Recommended Cutting Page : P.69

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M3	× 0.5	TTS31206	6	56	18	3.5	2.7	6	3	2.5
M4	× 0.7	TTS31246	7	63	21	4.5	3.4	6	3	3.3
M5	× 0.8	TTS31286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TTS31316	10	80	30	6	4.9	8	3	5
M8	× 1.25	TTS31366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TTS31426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TTS31506	18	110	44	9	7	10	3	10.2
M14	× 2	TTS31546	20	110	44	11	9	12	3	12
M16	× 2	TTS31606	20	110	44	12	9	12	3	14
M18	× 2.5	TTS31656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TTS31706	25	140	54	16	12	15	4	17.5

- ▶ DIN 371(M3~M10) and DIN 376(M11~M20)
- ▶ Coating(TiAlN) is available on your request.

◎ : Excellent ○ : Good

ISO Material Description	P										M					K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel			Grey cast iron		Nodular 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	10	23	10	10	26	3	25	21	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommended	◎	◎	◎	◎	◎	◎	◎					◎	◎	○	○		◎					

ISO Material Description	N										S						H				
	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	400Rm	1050Rm	550	630	400	550
Recommended			◎	◎	◎	◎			○												



# SYNCHRO TAPS

## RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRC	TTS31	TTS33	TKS35	TTS37
					Vc (m/min)			
P	1	Non-alloy steel	125		41-46	41-46	41-46	41-46
	2		190	13	41-46	41-46	41-46	41-46
	3		250	25	35-40	35-40	35-40	35-40
	4		270	28	28-33	28-33	28-33	28-33
	5		300	32				
	6	Low alloy steel	180	10	28-33	28-33	28-33	28-33
	7		275	29	28-33	28-33	28-33	28-33
	8		300	32				
	9		350	38				
	10		High alloyed steel, and tool steel	200	15			
	11	325		35				
M	12	Stainless steel	200	15	18-23	18-23		18-23
	13		240	23	13-18	13-18		13-18
	14		180	10	10-14	10-14		10-14
K	15	Grey cast iron	180	10	28-33	28-33	28-33	
	16		260	26			13-18	
	17	Nodular cast iron	160	3	28-33	28-33	28-33	
	18		250	25			13-18	
	19	Malleable cast iron	130				28-33	
	20		230	21			13-18	
N	21	Aluminum-wrought alloy	60					28-33
	22		100					28-33
	23	Aluminum-cast, alloyed	75		41-46	41-46	41-46	41-46
	24		90		41-46	41-46	41-46	41-46
	25		130		30-35	30-35	30-35	30-35
	26		110		45-50	45-50		
	27	Copper and Copper Alloys (Bronze / Brass)	90					
	28		100		25-30	25-30		25-30
	29							
	30	Non Metallic Materials						
S	31	Heat Resistant Super Alloys	200	15				
	32		280	30				
	33		250	25				
	34		350	38				
	35		320	34				
	36	Titanium Alloys	400 Rm					
	37		1050 Rm					
H	38	Hardened steel	550	55				
	39		630	60				
	40	Chilled Cast Iron	400	42				
	41	Hardened Cast Iron	550	55				

CARBIDE

HSS

THREAD MILLS

SYNCHRO TAPS

COMBO TAPS

YG TAP GENERAL

YG TAP STEEL

YG TAP HARDENED

YG TAP INOX

YG TAP CAST IRON

YG TAP ALU

YG TAP Ti Ni

YG TAP FORMING

NUT TAPS

STI TAPS

PIPE TAPS

TECHNICAL DATA