THREADING TOOLS

SOLID CARBIDE THREAD MILLS (with & without Coolant Holes)

HSS-PM SYNCHRO TAPS (Spiral Flute, Spiral Point, Straight Flute & Cold Forming)

HSS-PM PRIME TAPS (Spiral Flute & Spiral Point Tap)

HSS-E & HSS-PM COMBO TAPS (Spiral Flute & Spiral Point Tap)

HSS & HSS-E YG TAP GENERAL

HSS-E & HSS-PM YG TAP STEEL

SOLID CARBIDE & HSS-E YG TAP HARDENED

HSS-E & HSS-PM YG TAP INOX

SOLID CARBIDE & HSS-E YG TAP CAST IRON

HSS-E YG TAP ALU

HSS-PM YG TAP Ti Ni

HSS-E & HSS-PM YG TAP FORMING

HSS-E NUT TAPS

HSS-E SCREW THREAD INSERT TAPS

HSS & HSS-E PIPE TAPS

YG-1 CO., LTD.

CONTENTS

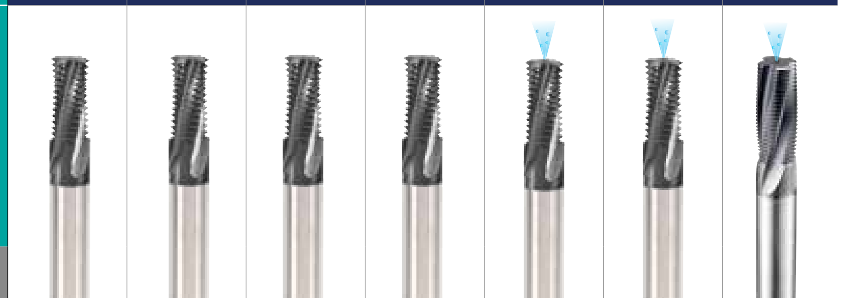
SELECTION GUIDE

YG THREADING TOOLS

THREAD MILLS

	L1211	L1212	L1213	L1214	L4211	L4212	L6215
TYPE	Thread Mill without Coolant Hole				Thread Mill with Coolant Hole		
THREAD FORM	M	MF	UNC	UNF	M	MF	BSP(G)
HOLE TYPE	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	-
TOOL MATERIAL	CARBIDE						
FLUTE TYPE	Helix						
HELIX ANGLE	R15						
SERIES NO.	L1211 (p.B34)	L1212 (p.B35)	L1213 (p.B36)	L1214 (p.B37)	L4211 (p.B38)	L4212 (p.B39)	L6215 (p.B40)
SURFACE TREATMENT	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN

MODEL



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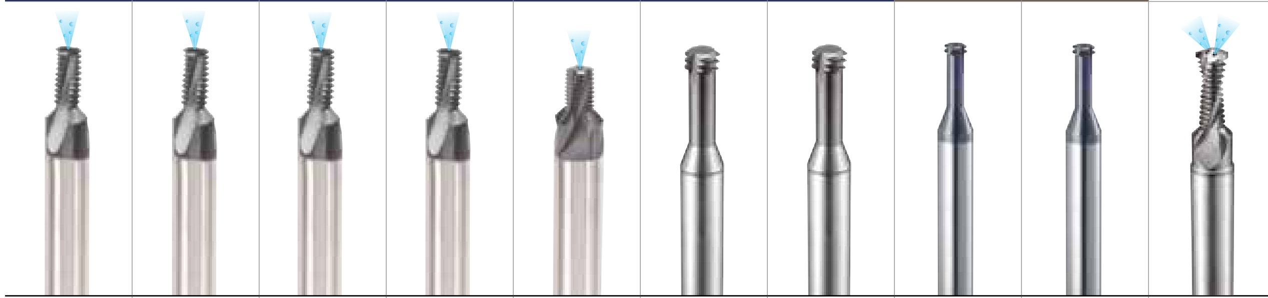
◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRc	L1211	L1212	L1213	L1214	L4211	L4212	L6215
P	1	Non-alloy steel	125		◎	◎	◎	◎	◎	◎	◎
	2		190	13	◎	◎	◎	◎	◎	◎	◎
	3		250	25	◎	◎	◎	◎	◎	◎	◎
	4		270	28	◎	◎	◎	◎	◎	◎	◎
	5		300	32	◎	◎	◎	◎	◎	◎	◎
	6	Low alloy steel	180	10	◎	◎	◎	◎	◎	◎	◎
	7		275	29	◎	◎	◎	◎	◎	◎	◎
	8		300	32	◎	◎	◎	◎	◎	◎	◎
	9		350	38	◎	◎	◎	◎	◎	◎	◎
	10	High alloyed steel, and tool steel	200	15	◎	◎	◎	◎	◎	◎	◎
	11		325	35	◎	◎	◎	◎	◎	◎	◎
M	12	Stainless steel	200	15	○	○	○	○	○	○	○
	13		240	23	○	○	○	○	○	○	○
	14		180	10	○	○	○	○	○	○	○
K	15	Grey cast iron	180	10	◎	◎	◎	◎	◎	◎	◎
	16		260	26	◎	◎	◎	◎	◎	◎	◎
	17	Nodular Cast Iron	160	3	◎	◎	◎	◎	◎	◎	◎
	18		250	25	◎	◎	◎	◎	◎	◎	◎
	19	Malleable cast iron	130		◎	◎	◎	◎	◎	◎	◎
	20		230	21	◎	◎	◎	◎	◎	◎	◎
N	21	Aluminum-wrought alloy	60		◎	◎	◎	◎	◎	◎	◎
	22		100		◎	◎	◎	◎	◎	◎	◎
	23	Aluminum-cast, alloyed	75		◎	◎	◎	◎	◎	◎	◎
	24		90		◎	◎	◎	◎	◎	◎	◎
	25	Copper and Copper Alloys (Bronze / Brass)	130		◎	◎	◎	◎	◎	◎	◎
	26		110		◎	◎	◎	◎	◎	◎	◎
	27		90		◎	◎	◎	◎	◎	◎	◎
	28		100		◎	◎	◎	◎	◎	◎	◎
	29	Non Metallic Materials			◎	◎	◎	◎	◎	◎	◎
	30				◎	◎	◎	◎	◎	◎	◎
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							

THREAD MILLS

	L4271	L4272	L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 / L42A1
TYPE	Thread Mill with Coolant Hole & Chamfer					Miniature Thread Mill		Miniature Thread Mill for Hard Materials		Drill & Thread Mill with Chamfer
THREAD FORM	M	MF	UNC	UNF	NPT	M	UNC	M	UNC	M
HOLE TYPE	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	-	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole
TOOL MATERIAL	CARBIDE									
FLUTE TYPE	Helix					Helix		Straight		Helix
HELIX ANGLE	R15					R15		—		R25
SERIES NO.	L4271 (p.B41)	L4272 (p.B42)	L4273 (p.B43)	L4274 (p.B44)	L4276 (p.B45)	L12D1 (p.B46)	L12D3 (p.B47)	L19E1 (p.B48)	L19E3 (p.B49)	L41A1 / L42A1 (p.B50)
SURFACE TREATMENT	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	AlTiN	AlTiN	Bright / TiAlN



VDI 3323	ISO	L4271	L4272	L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 / L42A1
1	P	◎	◎	◎	◎	◎	◎	◎			
2		◎	◎	◎	◎	◎	◎	◎			
3		◎	◎	◎	◎	◎	◎	◎			
4		◎	◎	◎	◎	◎	◎	◎			
5		◎	◎	◎	◎	◎	◎	◎			
6		◎	◎	◎	◎	◎	◎	◎	○	○	
7		◎	◎	◎	◎	◎	◎	◎	○	○	
8		◎	◎	◎	◎	◎	◎	◎	○	○	
9		◎	◎	◎	◎	◎	◎	◎	○	○	
10		◎	◎	◎	◎	◎	◎	◎	○	○	
11		◎	◎	◎	◎	◎	◎	◎	○	○	
12	M	○	○	○	○	○	○	○	○	○	
13		○	○	○	○	○	○	○	○	○	
14		○	○	○	○	○	○	○	○	○	
15	K	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
16		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
17		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
18		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
19		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
20		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
21	N	◎	◎	◎	◎	◎	◎	◎			◎
22		◎	◎	◎	◎	◎	◎	◎			◎
23		◎	◎	◎	◎	◎	◎	◎			◎
24		◎	◎	◎	◎	◎	◎	◎			◎
25		◎	◎	◎	◎	◎	◎	◎			◎
26		◎	◎	◎	◎	◎	◎	◎			◎
27		◎	◎	◎	◎	◎	◎	◎			◎
28		◎	◎	◎	◎	◎	◎	◎			◎
29		◎	◎	◎	◎	◎	◎	◎			◎
30		◎	◎	◎	◎	◎	◎	◎			◎
31	S	○	○	○	○	○	○	○	◎	◎	
32		○	○	○	○	○	○	○	◎	◎	
33		○	○	○	○	○	○	○	◎	◎	
34		○	○	○	○	○	○	○	◎	◎	
35		○	○	○	○	○	○	○	◎	◎	
36		○	○	○	○	○	○	○	○	○	
37		○	○	○	○	○	○	○	○	○	
38	H								◎	◎	
39									◎	◎	
40									◎	◎	
41									◎	◎	

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

SELECTION GUIDE

YG THREADING TOOLS

		SYNCHRO TAPS				PRIME TAP			COMBO TAPS			
HOLE TYPE		Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 2.0xD Blind Through Hole	Max. 3.0xD Through Hole	Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole	Max. 2.5xD Blind Hole			
TOOL MATERIAL		HSS-PM				HSS-PM			HSS-E			
CHAMFER LEAD ACC. TO DIN2197		C	B	C	C	C	E	B	C	C	C	C
FLUTE TYPE		Spiral Flute	Spiral Point	Straight Flute	Cold Forming	Spiral Flute	Spiral Flute	Spiral Point	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute
SPIRAL FLUTE ANGLE		R45	-	-	-	R45	R45	–	R40	R40	R40	R40
SERIES M	DIN371/376	TTS31 (p.B57)	TTS33 (p.B58)	TKS35 (p.B59)	TTS37 (p.B60)	TRE30 (p.B65)	TRE34 (p.B66)	TRJ15 (p.B71)	TC804 (p.B82)	TD804 (p.B82)	TB804 (p.B82)	TCE05 (p.B84)
M	DIN352											
M	DIN357/LONG											
MF	DIN374					TRE31 (p.B67)		TRJ16 (p.B72)	TC844 (p.B89)	TD844 (p.B89)	TB844 (p.B89)	TCE09 (p.B91)
MF	DIN2181											
UNC	DIN371/376					TRE32 (p.B69)		TRJ17 (p.B74)	TC824 (p.B99)	TD824 (p.B99)	TB824 (p.B99)	TCE01 (p.B100)
UNC	DIN351											
UNF	DIN371/374					TRE33 (p.B70)		TRJ18 (p.B75)	TC864 (p.B101)	TD864 (p.B101)	TB864 (p.B101)	TCE02 (p.B102)
UNF	DIN2181											
BSW	DIN2182/2183											
BSW	DIN351											
G(BSP)	DIN5156/5157											
EG-M	DIN371/376											
EG-UNC	DIN371/376											
EG-UNF	DIN371/374											
SURFACE TREATMENT		TiN	TiN	TiCN	TiN	X-coating			Bright	TiN	VAP	Bright

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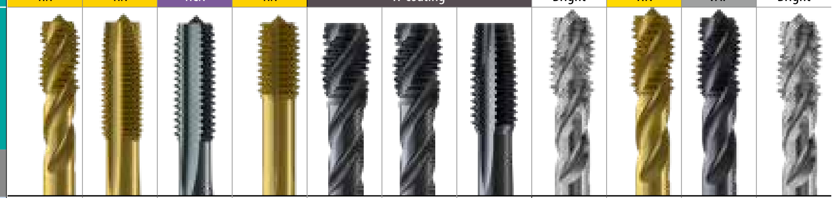
MODEL

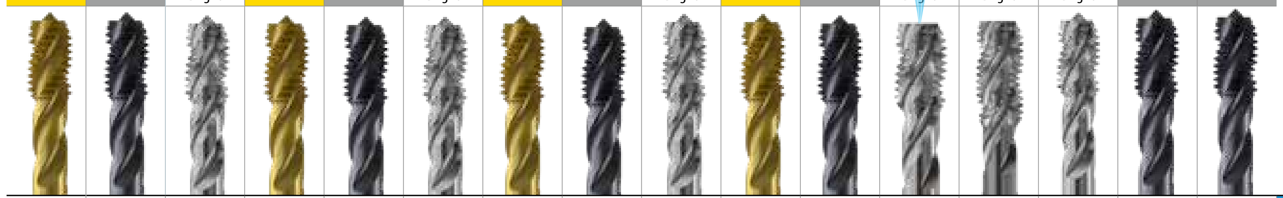


◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRc	TTS31	TTS33	TKS35	TTS37	TRE30	TRE34	TRJ15	TC804	TD804	TB804	TCE05
P	1	Non-alloy steel	125		◎	◎	○	◎	○	○	○	○	○	○	○
P	2	Non-alloy steel	190	13	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
P	3	Non-alloy steel	250	25	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
P	4	Non-alloy steel	270	28	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
P	5	Non-alloy steel	300	32					◎	◎	◎	◎	◎	◎	◎
P	6	Low alloy steel	180	10	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel	275	29	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
P	8	Low alloy steel	300	32					◎	◎	◎	◎	◎	◎	◎
P	9	Low alloy steel	350	38					○	○	○	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel	200	15					○	○	○	○	○	○	○
P	11	High alloyed steel, and tool steel	325	35					○	○	○				
M	12	Stainless steel	200	15	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎
M	13	Stainless steel	240	23	◎	◎		◎	◎	◎	◎	◎	◎	◎	◎
M	14	Stainless steel	180	10	○	○		◎	◎	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	180	10	○	○	◎		○	○	○	◎	◎	◎	◎
K	16	Grey cast iron	260	26			◎		○	○	○	◎	◎	◎	◎
K	17	Nodular cast iron	160	3	◎	◎	◎		◎	◎	◎	◎	◎	◎	◎
K	18	Nodular cast iron	250	25			◎		◎	◎	◎	◎	◎	◎	◎
K	19	Malleable cast iron	130				○								
K	20	Malleable cast iron	230	21			○								
N	21	Aluminum-wrought alloy	60					◎	○	○	○				
N	22	Aluminum-wrought alloy	100					◎	○	○	○				
N	23	Aluminum-cast, alloyed	75		◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎
N	24	Aluminum-cast, alloyed	90		◎	◎	○	◎	◎	◎	◎				
N	25	Aluminum-cast, alloyed	130		◎	◎	○	○	○	○	○				
N	26	Copper and Copper Alloys (Bronze / Brass)	110		◎	◎			◎	◎	◎	◎	◎	◎	◎
N	27	Copper and Copper Alloys (Bronze / Brass)	90						◎	◎	◎	◎	◎	◎	◎
N	28	Copper and Copper Alloys (Bronze / Brass)	100		○	○		◎	◎	◎	◎	◎	◎	◎	◎
N	29	Non Metallic Materials													
N	30	Non Metallic Materials													
S	31	Heat Resistant Super Alloys	200	15											
S	32	Heat Resistant Super Alloys	280	30											
S	33	Heat Resistant Super Alloys	250	25											
S	34	Heat Resistant Super Alloys	350	38											
S	35	Heat Resistant Super Alloys	320	34											
S	36	Titanium Alloys	400 Rm												
S	37	Titanium Alloys	1050 Rm												
H	38	Hardened steel	550	55											
H	39	Hardened steel	630	60											
H	40	Chilled Cast Iron	400	42											
H	41	Hardened Cast Iron	550	55											

COMBO TAPS

HOLE TYPE		Max. 2.5xD Blind Hole															
TOOL MATERIAL		HSS-E														HSS-PM	
CHAMFER		C	C	C	C	C	C	C	C	C	C	C	C	C	E	C	C
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute
SPIRAL FLUTE ANGLE		R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R45	R45
M	DIN371/376	TDE05 (p.B84)	TBE05 (p.B84)	TCE06 (p.B85)	TDE06 (p.B85)	TBE06 (p.B85)	TCE07 (p.B86)	TDE07 (p.B86)	TBE07 (p.B86)	TCE08 (p.B87)	TDE08 (p.B87)	TBE08 (p.B87)	TC804-IC (p.B93)		TC807 (p.B94)	TB744 (p.B96)	TQ744 (p.B96)
M	DIN352																
M	DIN357/LONG													TC633 (p.B95)			
MF	DIN374	TDE09 (p.B91)														TB754 (p.B98)	TQ754 (p.B83)
MF	DIN2181																
UNC	DIN371/376	TDE01 (p.B100)															
UNC	DIN351																
UNF	DIN371/374	TDE02 (p.B102)															
UNF	DIN2181																
BSW	DIN2182/2183																
BSW	DIN351																
G(BSP)	DIN5156/5157																
EG-M	DIN371/376																
EG-UNC	DIN371/376																
EG-UNF	DIN371/374																
SURFACE TREATMENT		TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	Bright	Bright	VAP	VAP



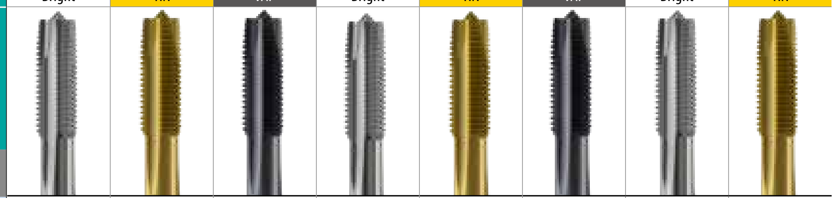
ISO	VDI 3323	TDE05	TBE05	TCE06	TDE06	TBE06	TCE07	TDE07	TBE07	TCE08	TDE08	TBE08	TC804-IC	TC633	TC807	TB744 / TB754	TQ744 / TQ754
P	1	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
P	2	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	3	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	4	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	5	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	6	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	7	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	8	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	9	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	10	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
P	11																
M	12	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	14	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	15	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	16	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	17	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	18	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	19																
K	20																
N	21																
N	22																
N	23	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	24																
N	25																
N	26	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	27	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	28	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
N	29																
N	30																
S	31																
S	32																
S	33																
S	34																
S	35																
S	36																
S	37																
H	38																
H	39																
H	40																
H	41																

SELECTION GUIDE

YG THREADING TOOLS

COMBO TAPS

HOLE TYPE		Max. 3.0xD Through Hole							
TOOL MATERIAL		HSS-E							
CHAMFER LEAD ACC. TO DIN2197		B	B	B	B	B	B	B	B
FLUTE TYPE		Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		–	–	–	–	–	–	–	–
SERIES M	DIN371/376	TC814 (p.B104)	TD814 (p.B104)	TB814 (p.B104)	TCJ05 (p.B105)	TDJ05 (p.B105)	TBJ05 (p.B105)	TCJ06 (p.B106)	TDJ06 (p.B106)
M	DIN352								
M	DIN357/LONG								
MF	DIN374	TC854 (p.B109)	TD854 (p.B109)	TB854 (p.B109)	TCJ09 (p.B112)	TDJ09 (p.B112)			
MF	DIN2181								
UNC	DIN371/376	TC834 (p.B119)	TD834 (p.B119)	TB834 (p.B119)	TCJ01 (p.B120)	TDJ01 (p.B120)			
UNC	DIN351								
UNF	DIN371/374	TC874 (p.B121)	TD874 (p.B121)	TB874 (p.B121)	TCJ02 (p.B122)	TDJ02 (p.B122)			
UNF	DIN2181								
BSW	DIN2182/2183								
BSW	DIN351								
G(BSP)	DIN5156/5157								
EG-M	DIN371/376								
EG-UNC	DIN371/376								
EG-UNF	DIN371/374								
SURFACE TREATMENT		Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN
MODEL									



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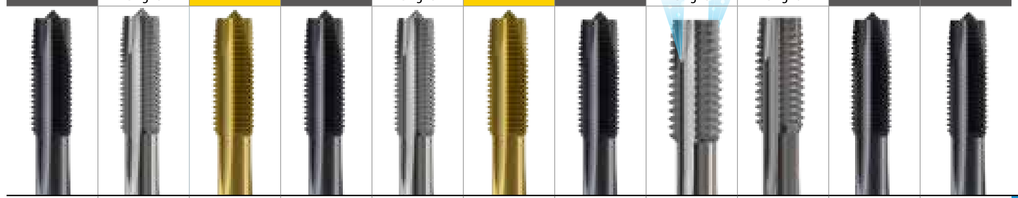
◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRc	TC814	TD814	TB814	TCJ05	TDJ05	TBJ05	TCJ06	TDJ06
P	1	Non-alloy steel	125		○	○	○	○	○	○	○	○
P	2	Non-alloy steel	190	13	◎	◎	◎	◎	◎	◎	◎	◎
P	3	Non-alloy steel	250	25	◎	◎	◎	◎	◎	◎	◎	◎
P	4	Non-alloy steel	270	28	◎	◎	◎	◎	◎	◎	◎	◎
P	5	Non-alloy steel	300	32	◎	◎	◎	◎	◎	◎	◎	◎
P	6	Low alloy steel	180	10	◎	◎	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel	275	29	◎	◎	◎	◎	◎	◎	◎	◎
P	8	Low alloy steel	300	32	◎	◎	◎	◎	◎	◎	◎	◎
P	9	Low alloy steel	350	38	◎	◎	◎	◎	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel	200	15	○	○	○	○	○	○	○	○
P	11	High alloyed steel, and tool steel	325	35								
M	12	Stainless steel	200	15	◎	◎	◎	◎	◎	◎	◎	◎
M	13	Stainless steel	240	23	◎	◎	◎	◎	◎	◎	◎	◎
M	14	Stainless steel	180	10	◎	◎	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	180	10	◎	◎	◎	◎	◎	◎	◎	◎
K	16	Grey cast iron	260	26	◎	◎	◎	◎	◎	◎	◎	◎
K	17	Nodular cast iron	160	3	◎	◎	◎	◎	◎	◎	◎	◎
K	18	Nodular cast iron	250	25	◎	◎	◎	◎	◎	◎	◎	◎
K	19	Malleable cast iron	130									
K	20	Malleable cast iron	230	21								
N	21	Aluminum-wrought alloy	60									
N	22	Aluminum-wrought alloy	100									
N	23	Aluminum-cast, alloyed	75		◎	◎	◎	◎	◎	◎	◎	◎
N	24	Aluminum-cast, alloyed	90									
N	25	Aluminum-cast, alloyed	130									
N	26	Copper and Copper Alloys (Bronze / Brass)	110		◎	◎	◎	◎	◎	◎	◎	◎
N	27	Copper and Copper Alloys (Bronze / Brass)	90		◎	◎	◎	◎	◎	◎	◎	◎
N	28	Copper and Copper Alloys (Bronze / Brass)	100		◎	◎	◎	◎	◎	◎	◎	◎
N	29	Non Metallic Materials										
N	30	Non Metallic Materials										
S	31	Heat Resistant Super Alloys	200	15								
S	32	Heat Resistant Super Alloys	280	30								
S	33	Heat Resistant Super Alloys	250	25								
S	34	Heat Resistant Super Alloys	350	38								
S	35	Heat Resistant Super Alloys	320	34								
S	36	Titanium Alloys	400 Rm									
S	37	Titanium Alloys	1050 Rm									
H	38	Hardened steel	550	55								
H	39	Hardened steel	630	60								
H	40	Chilled Cast Iron	400	42								
H	41	Hardened Cast Iron	550	55								

COMBO TAPS

HOLE TYPE	Max. 3.0xD Through Hole											
TOOL MATERIAL	HSS-E									HSS-PM		
CHAMFER LEAD	B	B	B	B	B	B	B	B	B	B	B	
FLUTE TYPE	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	
SPIRAL FLUTE ANGLE	–	–	–	–	–	–	–	–	–	–	–	
M DIN371/376	TBJ06 (p.B106)	TCJ07 (p.B107)	TDJ07 (p.B107)	TBJ07 (p.B107)	TCJ08 (p.B108)	TDJ08 (p.B108)	TBJ08 (p.B108)	TC814-IC (p.B114)		TB428 (p.B116)	TQ428 (p.B114)	M
M DIN352												M
M DIN357/LONG									TC445 (p.B115)			M
MF DIN374										TB438 (p.B118)	TQ438 (p.B117)	MF
MF DIN2181												MF
UNC DIN371/376												UNC
UNC DIN351												UNC
UNF DIN371/374												UNF
UNF DIN2181												UNF
BSW DIN2182/2183												BSW
BSW DIN351												BSW
G(BSP) DIN5156/5157												G(BSP)
EG-M DIN371/376												EG-M
EG-UNC DIN371/376												EG-UNC
EG-UNF DIN371/374												EG-UNF
SURFACE TREATMENT	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	Bright	VAP	VAP	



VDI	TBJ06	TCJ07	TDJ07	TBJ07	TCJ08	TDJ08	TBJ08	TC814-IC	TC445	TB428 / TB438	TQ428 / TQ438	ISO
1	○	○	○	○	○	○	○	○	○			P
2	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	P
3	◎	◎	◎	◎	◎	◎	◎	◎	◎			P
4	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	P
5	◎	◎	◎	◎	◎	◎	◎	◎	◎			P
6	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	P
7	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	P
8	◎	◎	◎	◎	◎	◎	◎	◎	◎			P
9	◎	◎	◎	◎	◎	◎	◎	◎	◎			P
10	○	○	○	○	○	○	○	○	○			P
11												P
12	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	M
13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	M
14	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	M
15	◎	◎	◎	◎	◎	◎	◎	◎	◎			K
16	◎	◎	◎	◎	◎	◎	◎	◎	◎			K
17	◎	◎	◎	◎	◎	◎	◎	◎	◎			K
18	◎	◎	◎	◎	◎	◎	◎	◎	◎			K
19												K
20												K
21												N
22												N
23	◎	◎	◎	◎	◎	◎	◎	◎	◎			N
24												N
25												N
26	◎	◎	◎	◎	◎	◎	◎	◎	◎			N
27	◎	◎	◎	◎	◎	◎	◎	◎	◎			N
28	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	N
29												N
30												N
31												S
32												S
33												S
34												S
35												S
36												S
37												S
38												H
39												H
40												H
41												H

COMBO TAP SETS

Combo Spiral Flute Taps	
TB804SET5	TC804SET7
VAP	Bright
5pcs	7pcs

Combo Spiral Flute Taps + Gold-P Drill
TD804SET7-GLP195
TiN
14pcs

P.113

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

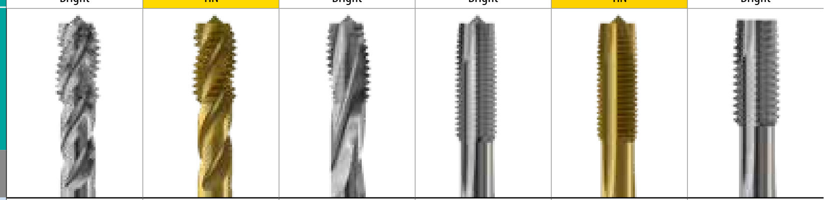
SELECTION GUIDE

YG THREADING TOOLS

YG TAP GENERAL

		Blind Hole (Max. 2.5xD)			Through Hole (Max. 3.0xD)		
TOOL MATERIAL		HSS-E					
CHAMFER LEAD ACC. TO DIN2197		C	C	C	B	B	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		R40	R40	R20	–	–	–
SERIES: M	DIN371/376	TC711 (p.B132)	TD711 (p.B133)	TC517 (p.B141)	TC127 (p.B143)	TD127 (p.B144)	TC227 (p.B153)
M	DIN352			TC612 (p.B142)	TC122 (p.B145)		
M	DIN357/LONG						
MF	DIN374	TC411 (p.B134)	TD411 (p.B136)		TC222 (p.B146)	TD222 (p.B148)	
MF	DIN2181						
UNC	DIN371/376	TC144 (p.B138)			TC214 (p.B150)		
UNC	DIN351						
UNF	DIN371/374	TC124 (p.B139)			TC234 (p.B151)		
UNF	DIN2181						
BSW	DIN2182/2183	TC134 (p.B140)			TC224 (p.B152)		
BSW	DIN351						
G(BSP)	DIN5156/5157						
EG-M	DIN371/376						
EG-UNC	DIN371/376						
EG-UNF	DIN371/374						
SURFACE TREATMENT		Bright	TiN	Bright	Bright	TiN	Bright

MODEL



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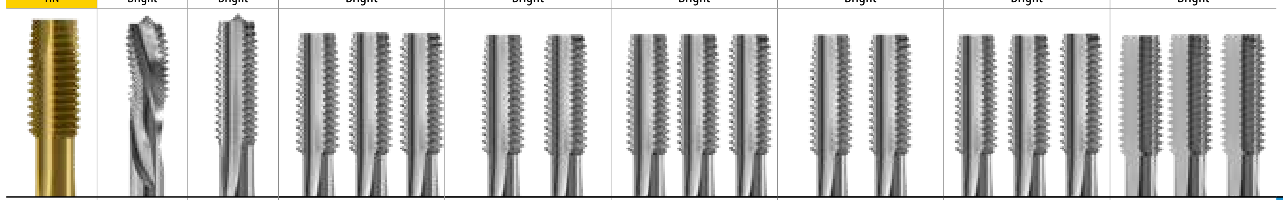
◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRc	TC711	TD711	TC517 / TC612	TC127 / TC122	TD127	TC227
P	1	Non-alloy steel	125		○	○	○	○	○	○
P	2	Non-alloy steel	190	13	◎	◎	◎	◎	◎	◎
P	3	Non-alloy steel	250	25	◎	◎	◎	◎	◎	◎
P	4	Non-alloy steel	270	28	◎	◎	◎	◎	◎	◎
P	5	Non-alloy steel	300	32	○	○	○	○	○	○
P	6	Low alloy steel	180	10	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel	275	29	◎	◎	◎	◎	◎	◎
P	8	Low alloy steel	300	32	○	○	○	○	○	○
P	9	Low alloy steel	350	38						
P	10	High alloyed steel, and tool steel	200	15						
P	11	High alloyed steel, and tool steel	325	35						
M	12	Stainless steel	200	15	○	○	○	○	○	○
M	13	Stainless steel	240	23	○	○	○	○	○	○
M	14	Stainless steel	180	10						
K	15	Grey cast iron	180	10						
K	16	Grey cast iron	260	26						
K	17	Nodular cast iron	160	3	◎	◎	◎	◎	◎	◎
K	18	Nodular cast iron	250	25	◎	◎	◎	◎	◎	◎
K	19	Malleable cast iron	130							
K	20	Malleable cast iron	230	21						
N	21	Aluminum-wrought alloy	60		○	○	○	○	○	○
N	22	Aluminum-wrought alloy	100							
N	23	Aluminum-cast, alloyed	75		○	○	○	○	○	○
N	24	Aluminum-cast, alloyed	90		○	○	○	○	○	○
N	25	Aluminum-cast, alloyed	130		◎	◎	◎	◎	◎	◎
N	26	Copper and Copper Alloys (Bronze / Brass)	110		○	○	○	○	○	○
N	27	Copper and Copper Alloys (Bronze / Brass)	90							
N	28	Copper and Copper Alloys (Bronze / Brass)	100		◎	◎	◎	◎	◎	◎
N	29	Non Metallic Materials								
N	30	Non Metallic Materials								
S	31	Heat Resistant Super Alloys	200	15						
S	32	Heat Resistant Super Alloys	280	30						
S	33	Heat Resistant Super Alloys	250	25						
S	34	Heat Resistant Super Alloys	350	38						
S	35	Heat Resistant Super Alloys	320	34						
S	36	Titanium Alloys	400 Rm							
S	37	Titanium Alloys	1050 Rm							
H	38	Hardened steel	550	55						
H	39	Hardened steel	630	60						
H	40	Chilled Cast Iron	400	42						
H	41	Hardened Cast Iron	550	55						

YG TAP GENERAL

	Through Hole (Max. 3.0xD)		Blind/Through Hole (Max. 2.0xD)	Blind/Through Hole (Max. 2.0xD)					
TOOL MATERIAL				HSS					
CHAMFER LEAD	B	C	C	I / II / III	I / III	I / II / III	I / III	I / II / III	I / II / III
FLUTE TYPE	Spiral Point	Spiral Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute
SPIRAL FLUTE ANGLE	–	L20	–	–	–	–	–	–	Left Hand Cut
M (DIN371/376)	TD227 (p.B154)	TC211 (p.B155)	TC463 (p.B156)						
M (DIN352)				T7109 (p.B159)					T7343 (p.B166)
M (DIN357/LONG)									
MF (DIN374)			TC473 (p.B157)						
MF (DIN2181)					T7309 (p.B161)				
UNC (DIN371/376)			TC424 (p.B158)						
UNC (DIN351)						T7363 (p.B163)			
UNF (DIN371/374)									
UNF (DIN2181)							T7509 (p.B164)		
BSW (DIN2182/2183)									
BSW (DIN351)								T7609 (p.B165)	
G(BSP)									
EG-M									
EG-UNC									
EG-UNF									
SURFACE TREATMENT	TiN	Bright	Bright	Bright	Bright	Bright	Bright	Bright	Bright

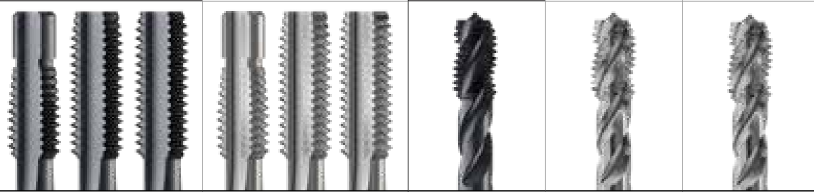


VDI	ISO	TD227	TC211	TC463 / TC473 / TC424	T7109	T7309	T7363	T7509	T7609	T7343
1	P	○	○	○	○	○	○	○	○	○
2	P	◎	◎	○	○	○	○	○	○	○
3	P	◎	◎	○	○	○	○	○	○	○
4	P	◎	◎	○	○	○	○	○	○	○
5	P	○	○	○						
6	P	◎	◎	○	○	○	○	○	○	○
7	P	◎	◎	○	○	○	○	○	○	○
8	P	○	○	○						
9	P									
10	P									
11	P									
12	M	○	○	○						
13	M	○	○	○						
14	M									
15	K			○						
16	K			○						
17	K	◎	◎	○	○	○	○	○	○	○
18	K	◎	◎	○	○	○	○	○	○	○
19	K									
20	K									
21	N	○	○							
22	N									
23	N	○	○							
24	N	○	○							
25	N	◎	◎	○	○	○	○	○	○	○
26	N	○	○	○	○	○	○	○	○	○
27	N			○	○	○	○	○	○	○
28	N	◎	◎							
29	N									
30	N									
31	S									
32	S									
33	S									
34	S									
35	S									
36	S									
37	S									
38	H									
39	H									
40	H									
41	H									

SELECTION GUIDE

YG THREADING TOOLS

		YG TAP GENERAL		YG TAP STEEL		
HOLE TYPE		Max. 2.0xD Blind/Through Hole		Max. 2.5xD Blind Hole		
TOOL MATERIAL		HSS	HSS-E	HSS-PM		HSS-E
CHAMFER LEAD ACC. TO DIN2197		I / II / III	I / II / III	C	C	C
FLUTE TYPE		Straight Flute	Straight Flute	Spiral Flute	Spiral Flute	Spiral Flute
SPIRAL FLUTE ANGLE		–	–	R40	R40	R40
SERIES M	DIN371/376			TQ823 (p.B174)	TR823 (p.B175)	TC312 (p.B176)
M	DIN352	TB373 (p.B167)	TC353 (p.B168)			
M	DIN357/LONG					
MF	DIN374					TC413 (p.B180)
MF	DIN2181					
UNC	DIN371/376					TC174 (p.B182)
UNC	DIN351					
UNF	DIN371/374					TC184 (p.B184)
UNF	DIN2181					
BSW	DIN2182/2183					
BSW	DIN351					
G(BSP)	DIN5156/5157					
EG-M	DIN371/376					
EG-UNC	DIN371/376					
EG-UNF	DIN371/374					
SURFACE TREATMENT		VAP	Bright	VAP	Bright	Bright
MODEL						



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ISO	VDI 3323	Material Description	HB	HRc	TB373	TC353	TQ823	TR823	TC312
P	1	Non-alloy steel	125		○	○			
P	2		190	13	○	○	○	○	○
P	3		250	25	○	○	○	○	○
P	4		270	28	○	○	○	○	○
P	5		300	32			◎	◎	◎
P	6	Low alloy steel	180	10	○	○	○	○	○
P	7		275	29	○	○	○	○	○
P	8		300	32			◎	◎	◎
P	9		350	38			◎	◎	◎
P	10	High alloyed steel, and tool steel	200	15			○	○	○
P	11		325	35					
M	12	Stainless steel	200	15	○				
M	13		240	23	○				
M	14		180	10	○		○	○	○
K	15	Grey cast iron	180	10					
K	16		260	26					
K	17	Nodular cast iron	160	3					
K	18		250	25					
K	19	Malleable cast iron	130						
K	20		230	21					
N	21	Aluminum-wrought alloy	60						
N	22		100						
N	23	Aluminum-cast, alloyed	75						
N	24		90						
N	25		130						
N	26	Copper and Copper Alloys (Bronze / Brass)	110						
N	27		90						
N	28		100						
N	29	Non Metallic Materials							
N	30								
S	31	Heat Resistant Super Alloys	200	15			○	○	○
S	32		280	30					
S	33		250	25					
S	34		350	38					
S	35		320	34					
S	36	Titanium Alloys	400 Rm				○	○	○
S	37		1050 Rm						
H	38	Hardened steel	550	55					
H	39		630	60					
H	40	Chilled Cast Iron	400	42					
H	41	Hardened Cast Iron	550	55					

YG TAP STEEL

HOLE TYPE		Max. 2.5xD Blind Hole				Max. 3.0xD Through Hole					
TOOL MATERIAL		HSS-E				HSS-PM		HSS-E			
CHAMFER LEAD		C	C	C	C	B	B	B	B	B	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		R40	R40	R40	R40	-	-	-	-	-	-
M	DIN371/376	TD312 (p.B177)	TB312 (p.B178)	TY312 (p.B179)	TB913 (p.B185)	TQ863 (p.B186)	TR863 (p.B187)	TC422 (p.B188)	TD422 (p.B189)	TE422 (p.B190)	TY422 (p.B191)
M	DIN352										
M	DIN357/LONG										
MF	DIN374	TD413 (p.B181)						TC263 (p.B192)	TD263 (p.B193)		
MF	DIN2181										
UNC	DIN371/376	TD174 (p.B183)						TC244 (p.B194)	TD244 (p.B195)		
UNC	DIN351										
UNF	DIN371/374							TC254 (p.B196)			
UNF	DIN2181										
BSW	DIN2182/2183										
BSW	DIN351										
G(BSP)	DIN5156/5157										
EG-M	DIN371/376										
EG-UNC	DIN371/376										
EG-UNF	DIN371/374										
SURFACE TREATMENT		TiN	VAP	TiAlN	VAP	VAP	Bright	Bright	TiN	Ni	TiAlN

ISO	VDI 3323	TD312	TB312	TY312	TB913	TQ863	TR863	TC422	TD422	TE422	TY422
P	1										
P	2	○	○	○	○	○	○	○	○	○	○
P	3	○	○	○	○	○	○	○	○	○	○
P	4	○	○	○	○	○	○	○	○	○	○
P	5	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	6	○	○	○	○	○	○	○	○	○	○
P	7	○	○	○	○	○	○	○	○	○	○
P	8	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	9	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	10	○	○	○	○	○	○	○	○	○	○
P	11										
M	12					○	○	○	○	○	○
M	13					○	○	○	○	○	○
M	14	○	○	○	○	○	○	○	○	○	○
K	15										
K	16										
K	17										
K	18										
K	19										
K	20										
N	21										
N	22										
N	23										
N	24										
N	25										
N	26										
N	27										
N	28										
N	29										
N	30										
S	31	○	○	○	○	○	○	○	○	○	○
S	32										
S	33										
S	34										
S	35										
S	36	○	○	○	○	○	○	○	○	○	○
S	37										
H	38										
H	39										
H	40										
H	41										

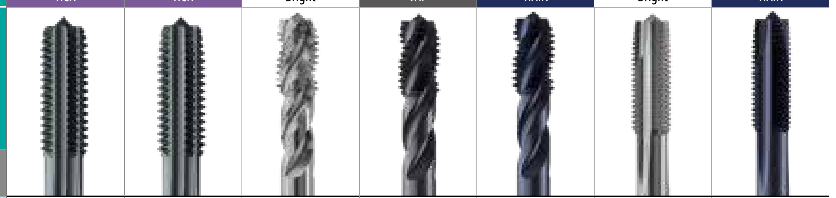
CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP Ti Ni
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

SELECTION GUIDE

YG THREADING TOOLS

YG TAP HARDENED

	T0997-TIC	T0999-TIC	TC313	TB313	TY313	TC283	TY283
HOLE TYPE	Max. 2.0xD Blind / Through Hole		Max. 2.5xD Blind Hole			Max. 3.0xD Through Hole	
TOOL MATERIAL	CARBIDE	CARBIDE	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
CHAMFER LEAD ACC. TO DIN2197	C	D	C	C	C	B	B
FLUTE TYPE	Straight Flute	Straight Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE	-	-	R40	R40	R40	-	-
SERIES M DIN371/376	T0997-TIC (p.B202)	T0999-TIC (p.B203)	TC313 (p.B204)	TB313 (p.B205)	TY313 (p.B206)	TC283 (p.B207)	TY283 (p.B208)
M DIN352							
M DIN357/LONG							
MF DIN374							
MF DIN2181							
UNC DIN371/376							
UNC DIN351							
UNF DIN371/374							
UNF DIN2181							
BSW DIN2182/2183							
BSW DIN351							
G(BSP) DIN5156/5157							
EG-M DIN371/376							
EG-UNC DIN371/376							
EG-UNF DIN371/374							
SURFACE TREATMENT	TiCN	TiCN	Bright	VAP	TiAlN	Bright	TiAlN
MODEL							



YG TAP INOX

	TB711	TQ813	TR813	TB914	TI914	TBE15	TBE16	TBE17	TBE18	TCH14	TQ853	TR853
HOLE TYPE	Max. 2.0xD Blind Hole	Max. 2.5xD Blind Hole										
TOOL MATERIAL	HSS-E	HSS-PM	HSS-PM	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-PM	HSS-PM
CHAMFER LEAD ACC. TO DIN2197	C	C	C	C	C	C	C	C	C	C	B	B
FLUTE TYPE	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	–	–
SERIES M DIN371/376	TB711 (p.B214)	TQ813 (p.B215)	TR813 (p.B216)	TB914 (p.B217)	TI914 (p.B217)	TBE15 (p.B218)	TBE16 (p.B219)	TBE17 (p.B220)	TBE18 (p.B221)	TCH14 (p.B222)	TQ853 (p.B223)	TR853 (p.B224)
M DIN352												
M DIN357/LONG												
MF DIN374				TB183 (p.B227)								
MF DIN2181												
UNC DIN371/376				TB904 (p.B228)								
UNC DIN351												
UNF DIN371/374				TB924 (p.B229)								
UNF DIN2181												
BSW DIN2182/2183												
BSW DIN351												
G(BSP) DIN5156/5157												
EG-M DIN371/376												
EG-UNC DIN371/376												
EG-UNF DIN371/374												
SURFACE TREATMENT	VAP	VAP	Bright	VAP	TiCN	VAP	VAP	VAP	VAP	HardSlick	VAP	Bright
MODEL												

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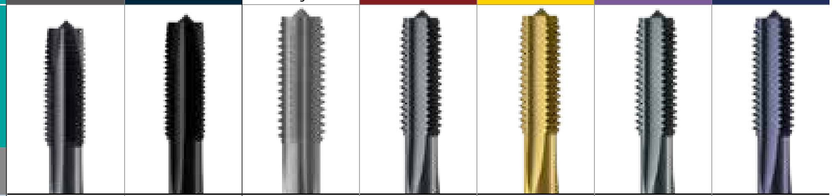
ISO	VDI 3323	Material Description	HB	HRc	T0997-TIC	T0999-TIC	TC313	TB313	TY313	TC283	TY283	TB711	TQ813	TR813	TB914	TI914	TBE15	TBE16	TBE17	TBE18	TCH14	TQ853	TR853
P	1	Non-alloy steel	125									◎	○	○	◎	◎	◎	◎	◎	◎	◎	○	○
	2		190	13								◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	3		250	25									○	○	○	○	○	○	○	○	○	○	○
	4		270	28									○	○	○	○	○	○	○	○	○	○	○
	5		300	32																			
	6	Low alloy steel	180	10									○	○	○	○	○	○	○	○	○	○	○
	7		275	29			○	○	○	○	○												
	8		300	32			○	○	○	○	○												
	9		350	38	○	○	◎	◎	◎	◎	◎												
	10	High alloyed steel, and tool steel	200	15																			
	11		325	35																			
M	12	Stainless steel	200	15								○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	13		240	23								○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	14		180	10			○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	180	10																			
	16		260	26																			
	17	Nodular cast iron	160	3																			
	18		250	25																			
	19	Malleable cast iron	130																				
	20		230	21																			
N	21	Aluminum-wrought alloy	60									○											
	22		100																				
	23	Aluminum-cast, alloyed	75																				
	24		90																				
	25		130																				
	26	Copper and Copper Alloys (Bronze / Brass)	110				○	○	○	○	○												
	27		90																				
	28		100									○											
	29	Non Metallic Materials																					
	30																						
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	◎	◎																	

SELECTION GUIDE

THREADING TOOLS

			YG TAP INOX		YG TAP CAST IRON				
HOLE TYPE			Max. 2.5xD Blind Hole		Max. 2.0xD Blind / Through Hole				
TOOL MATERIAL			HSS-E		CARBIDE	HSS-E			
CHAMFER LEAD ACC. TO DIN2197			B	B	C	C	C	C	C
FLUTE TYPE			Spiral Point	Spiral Point	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute
SPIRAL FLUTE ANGLE			–	–	-	-	-	-	-
SERIES	M	DIN371/376	TB623 (p.B225)	TCH23 (p.B226)	T0993 (p.B237)	TE821 (p.B238)	TD821 (p.B239)	TI821 (p.B240)	TY821 (p.B241)
		DIN352							
		DIN357/LONG							
	MF	DIN374	TB123 (p.B230)			TE403 (p.B242)			
		DIN2181							
	UNC	DIN371/376	TB264 (p.B231)			TE434 (p.B243)			
		DIN351							
	UNF	DIN371/374	TB274 (p.B232)			TE454 (p.B244)			
		DIN2181							
	BSW	DIN2182/2183							
		DIN351							
	G(BSP)	DIN5156/5157							
	EG-M	DIN371/376							
	EG-UNC	DIN371/376							
	EG-UNF	DIN371/374							
SURFACE TREATMENT			VAP	HardSlick	Bright	NI	TiN	TiCN	TiAlN
MODEL									

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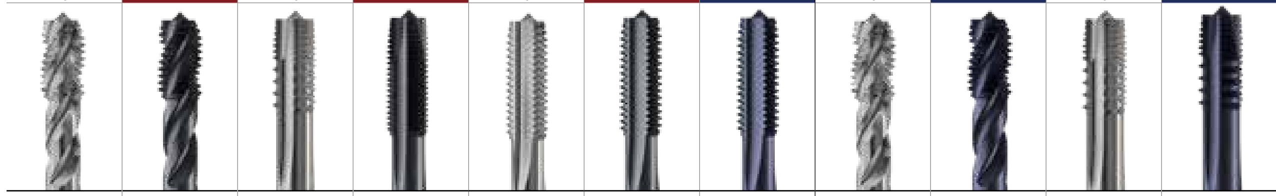
ISO	VDI 3323	Material Description	HB	HRc	TB623	TCH23	T0993	TE821	TD821	TI821	TY821
P	1	Non-alloy steel	125		◎	◎					
	2		190	13	◎	◎					
	3		250	25	○	○					
	4		270	28	○	○					
	5		300	32							
	6	Low alloy steel	180	10	○	○					
	7		275	29							
	8		300	32							
	9		350	38							
	10	High alloyed steel, and tool steel	200	15							
	11		325	35							
M	12	Stainless steel	200	15	◎	◎					
	13		240	23	◎	◎					
	14		180	10	◎	◎					
K	15	Grey cast iron	180	10			◎	◎	◎	◎	◎
	16		260	26			◎	◎	◎	◎	◎
	17	Nodular cast iron	160	3			◎	◎	◎	◎	◎
	18		250	25			◎	◎	◎	◎	◎
	19	Malleable cast iron	130				○	○	○	○	○
	20		230	21			○	○	○	○	○
N	21	Aluminum-wrought alloy	60								
	22		100				◎				
	23	Aluminum-cast, alloyed	75								
	24		90				◎				
	25		130								
	26	Copper and Copper Alloys (Bronze / Brass)	110								
	27		90					○	◎	◎	◎
	28		100								
	29	Non Metallic Materials									
	30										
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							

		YG TAP ALU							YG TAP Ti Ni			
HOLE TYPE		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Max. 2.0xD Blind/Through Hole			Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole	
TOOL MATERIAL		HSS-E							HSS-PM			
CHAMFER LEAD ACC. TO DIN2197		C	C	B	B	C	C	C	C	C	B	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Straight Flute	Straight Flute	Straight Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		R45	R40	-	-	-	-	-	R25	R25	-	-
M	DIN371/376	TC163 (p.B250)	TE953 (p.B251)	TC622 (p.B255)	TE943 (p.B256)	TC433 (p.B257)	TE443 (p.B258)	TY433 (p.B259)	TM903 (p.B264)	TZ903 (p.B265)	TM293 (p.B266)	TZ293 (p.B267)
	DIN352											
	DIN357/LONG											
MF	DIN374	TC963 (p.B252)										
	DIN2181											
UNC	DIN371/376	TC169 (p.B253)										
	DIN351											
UNF	DIN371/374	TC170 (p.B254)										
	DIN2181											
BSW	DIN2182/2183											
	DIN351											
G(BSP)	DIN5156/5157											
EG-M	DIN371/376											
EG-UNC	DIN371/376											
EG-UNF	DIN371/374											
SURFACE TREATMENT		Bright	NI	Bright	NI	Bright	NI	TiAlN	Bright	TiAlN	Bright	TiAlN
MODEL												

ISO	VDI 3323	TC163	TE953	TC622	TE943	TC433	TE443	TY433	TM903	TZ903	TM293	TZ293
P	1	○		○								
	2	○		○								
	3	○	○	○	○							
	4											
	5											
	6											
	7								○	○	○	○
	8								○	○	○	○
	9								○	○	○	○
	10											
	11											
M	12											
	13											
	14											
K	15											
	16											
	17											
	18											
	19											
	20											
N	21	◎	○	◎	○							
	22	◎	○	◎	○							
	23	◎	○	◎	○							
	24	◎	○	◎	○							
	25		◎		◎							
	26					◎	◎	◎				
	27	○		○		○	○	○				
	28					○		○				
	29											
	30											
S	31								○	○	○	○
	32										○	○
	33										○	○
	34										○	○
	35										○	○
	36								○	○	○	○
	37								◎	◎	◎	◎
H	38											
	39											
	40										○	○
	41											

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

SELECTION GUIDE

THREADING TOOLS

YG TAP Ti Ni

	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
HOLE TYPE	Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole	
TOOL MATERIAL	HSS-PM							
CHAMFER LEAD ACC. TO DIN2197	C	C	B	B	C	C	B	B
FLUTE TYPE	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE	R40	R40	-	-	R40	R40	-	-
SERIES M DIN371/376	TM933 (p.B268)	TZ933 (p.B269)	TM923 (p.B270)	TZ923 (p.B271)	TQ833 (p.B272)	TR833 (p.B273)	TQ873 (p.B274)	TR873 (p.B275)
M DIN352								
M DIN357/LONG								
MF DIN374								
MF DIN2181								
UNC DIN371/376								
UNC DIN351								
UNF DIN371/374								
UNF DIN2181								
BSW DIN2182/2183								
BSW DIN351								
G(BSP) DIN5156/5157								
EG-M DIN371/376								
EG-UNC DIN371/376								
EG-UNF DIN371/374								
SURFACE TREATMENT	Bright	TiAlN	Bright	TiAlN	VAP	Bright	VAP	Bright

MODEL

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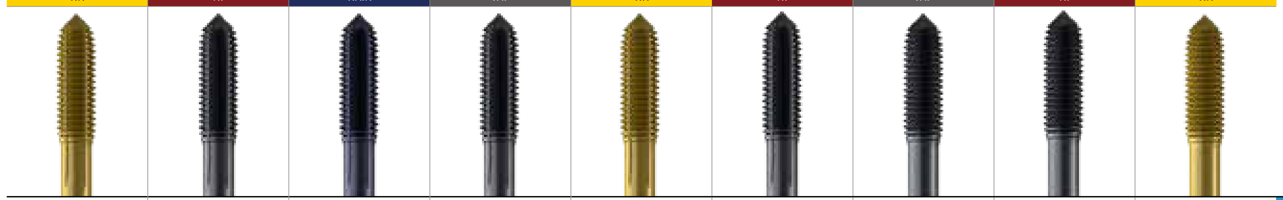
ISO	VDI 3323	Material Description	HB	HRc	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
P	1	Non-alloy steel	125									
P	2	Non-alloy steel	190	13								
P	3	Non-alloy steel	250	25								
P	4	Non-alloy steel	270	28								
P	5	Non-alloy steel	300	32								
P	6	Low alloy steel	180	10	◎	◎	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel	275	29	◎	◎	◎	◎	◎	◎	◎	◎
P	8	Low alloy steel	300	32	◎	◎	◎	◎	◎	◎	◎	◎
P	9	Low alloy steel	350	38	◎	◎	◎	◎	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel	200	15								
P	11	High alloyed steel, and tool steel	325	35								
M	12	Stainless steel	200	15								
M	13	Stainless steel	240	23								
M	14	Stainless steel	180	10								
K	15	Grey cast iron	180	10								
K	16	Grey cast iron	260	26								
K	17	Nodular cast iron	160	3								
K	18	Nodular cast iron	250	25								
K	19	Malleable cast iron	130									
K	20	Malleable cast iron	230	21								
N	21	Aluminum-wrought alloy	60									
N	22	Aluminum-wrought alloy	100									
N	23	Aluminum-cast, alloyed	75									
N	24	Aluminum-cast, alloyed	90									
N	25	Aluminum-cast, alloyed	130									
N	26	Copper and Copper Alloys (Bronze / Brass)	110									
N	27	Copper and Copper Alloys (Bronze / Brass)	90									
N	28	Copper and Copper Alloys (Bronze / Brass)	100									
N	29	Non Metallic Materials										
N	30	Non Metallic Materials										
S	31	Heat Resistant Super Alloys	200	15	◎	◎	◎	◎	◎	◎	◎	◎
S	32	Heat Resistant Super Alloys	280	30	◎	◎	◎	◎	◎	◎	◎	◎
S	33	Heat Resistant Super Alloys	250	25	◎	◎	◎	◎	◎	◎	◎	◎
S	34	Heat Resistant Super Alloys	350	38	◎	◎	◎	◎	◎	◎	◎	◎
S	35	Heat Resistant Super Alloys	320	34	◎	◎	◎	◎	◎	◎	◎	◎
S	36	Titanium Alloys	400 Rm						○	○	○	○
S	37	Titanium Alloys	1050 Rm		○	○	○	○	◎	◎	◎	◎
H	38	Hardened steel	550	55				○				
H	39	Hardened steel	630	60								
H	40	Chilled Cast Iron	400	42			○	○			○	○
H	41	Hardened Cast Iron	550	55								

YG TAP FORMING

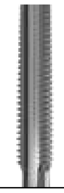
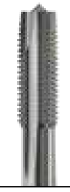
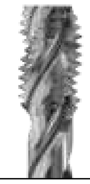
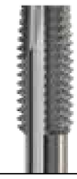
	TD703	TE703	TY703	TQ703	TD713	TE713	TQ723	TE723	TD723
HOLE TYPE	Max. 3.0xD Blind / Through Hole								
TOOL MATERIAL	HSS-E			HSS-PM	HSS-E		HSS-PM	HSS-E	
CHAMFER LEAD	C	C	C	C	C	C	C	C	C
FLUTE TYPE	-	-	-	-	-	-	-	-	-
SPIRAL FLUTE ANGLE	-	-	-	-	-	-	-	-	-
M DIN371/376	TD703 (p.B280)	TE703 (p.B281)	TY703 (p.B282)	TQ703 (p.B283)	TD713 (p.B284)	TE713 (p.B285)	TQ723 (p.B286)	TE723 (p.B287)	TD723 (p.B288)
M DIN352									
M DIN357/LONG									
MF DIN374	TD733 (p.B289)	TE733 (p.B290)							
MF DIN2181									
UNC DIN371/376	TD704 (p.B291)	TE704 (p.B292)							
UNC DIN351									
UNF DIN371/374									
UNF DIN2181									
BSW DIN2182/2183									
BSW DIN351									
G(BSP) DIN5156/5157									
EG-M DIN371/376									
EG-UNC DIN371/376									
EG-UNF DIN371/374									
SURFACE TREATMENT	TiN	Ni	TiAlN	VAP	TiN	Ni	VAP	Ni	TiN



ISO	VDI 3323	TD703	TE703	TY703	TQ703	TD713	TE713	TQ723	TE723	TD723
P	1	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	2	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	3	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	4									
P	5									
P	6	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	7									
P	8									
P	9									
P	10									
P	11									
M	12	○	○	○	○	○	○	○	○	○
M	13	○	○	○	○	○	○	○	○	○
M	14	○	○	○	○	○	○	○	○	○
K	15									
K	16									
K	17									
K	18									
K	19									
K	20									
N	21	◎	◎	◎	◎	◎	◎	◎	◎	◎
N	22	◎	◎	◎	◎	◎	◎	◎	◎	◎
N	23	○	○	○	○	○	○	○	○	○
N	24	○	○	○	○	○	○	○	○	○
N	25									
N	26	○	○	○	○	○	○	○	○	○
N	27									
N	28	○	○	◎	○	◎	○	○	○	◎
N	29									
N	30									
S	31									
S	32									
S	33									
S	34									
S	35									
S	36									
S	37									
H	38									
H	39									
H	40									
H	41									

SELECTION GUIDE

THREADING TOOLS

	NUT TAPS	SCREW THREAD INSERT TAPS		PIPE TAPS		PIPE TAPS		
HOLE TYPE	Max. 2.0xD Through Hole	Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 2.0xD Blind/Through Hole	Max. 2.5xD Blind Hole	Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole
TOOL MATERIAL	HSS-E	HSS-E		HSS	HSS-E	HSS-E		
CHAMFER LEAD ACC. TO DIN2197	Long	C	B	I/III	C	C	C	B
FLUTE TYPE	Straight Flute	Spiral Flute	Spiral Point	Straight Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point
SPIRAL FLUTE ANGLE	–	R40	–	–	R40	R40	R40	-
SERIES M DIN371/376								
SERIES M DIN352								
SERIES M DIN357/LONG	TC803 (p.B297)							
SERIES MF DIN374								
SERIES MF DIN2181								
SERIES UNC DIN371/376								
SERIES UNC DIN351								
SERIES UNF DIN371/374								
SERIES UNF DIN2181								
SERIES BSW DIN2182/2183								
SERIES BSW DIN351								
SERIES G(BSP) DIN5156/5157				T7709 (p.B309)	TC728 (p.B310)	TC729 (p.B311)	TB514 (p.B312)	TC727 (p.B313)
SERIES EG-M DIN371/376		TC909 (p.B301)	TC973 (p.B302)					
SERIES EG-UNC DIN371/376		TC944 (p.B303)	TC934 (p.B304)					
SERIES EG-UNF DIN371/374			TC954 (p.B305)					
SURFACE TREATMENT	Bright	Bright	Bright	Bright	Bright	Bright	VAP	Bright
MODEL								

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRc	TC803	TC909 / TC944	TC973 / TC934 / TC954	T7709	TC728	TC729	TB514	TC727
P	1	Non-alloy steel	125		○	○	○	○			◎	
P	2	Non-alloy steel	190	13	○	○	○	○	◎		◎	◎
P	3	Non-alloy steel	250	25	○	○	○	○	◎			◎
P	4	Non-alloy steel	270	28	○				◎			◎
P	5	Non-alloy steel	300	32								
P	6	Low alloy steel	180	10	○			○	◎	○		◎
P	7	Low alloy steel	275	29	○				◎	○		◎
P	8	Low alloy steel	300	32						◎		
P	9	Low alloy steel	350	38						◎		
P	10	High alloyed steel, and tool steel	200	15								
P	11	High alloyed steel, and tool steel	325	35								
M	12	Stainless steel	200	15							◎	
M	13	Stainless steel	240	23							◎	
M	14	Stainless steel	180	10						○	◎	
K	15	Grey cast iron	180	10				○				
K	16	Grey cast iron	260	26				○				
K	17	Nodular cast iron	160	3	○				◎			◎
K	18	Nodular cast iron	250	25	○				◎			◎
K	19	Malleable cast iron	130									
K	20	Malleable cast iron	230	21								
N	21	Aluminum-wrought alloy	60			◎	◎	○	○			○
N	22	Aluminum-wrought alloy	100			◎	◎	○	○			○
N	23	Aluminum-cast, alloyed	75			◎	◎	○	○			○
N	24	Aluminum-cast, alloyed	90			◎	◎		○			○
N	25	Aluminum-cast, alloyed	130		○				◎			◎
N	26	Copper and Copper Alloys (Bronze / Brass)	110		○				◎			◎
N	27	Copper and Copper Alloys (Bronze / Brass)	90		○	◎	◎		○			○
N	28	Copper and Copper Alloys (Bronze / Brass)	100									
N	29	Non Metallic Materials										
N	30	Non Metallic Materials										
S	31	Heat Resistant Super Alloys	200	15								
S	32	Heat Resistant Super Alloys	280	30								
S	33	Heat Resistant Super Alloys	250	25								
S	34	Heat Resistant Super Alloys	350	38								
S	35	Heat Resistant Super Alloys	320	34								
S	36	Titanium Alloys	400 Rm									
S	37	Titanium Alloys	1050 Rm									
H	38	Hardened steel	550	55								
H	39	Hardened steel	630	60								
H	40	Chilled Cast Iron	400	42								
H	41	Hardened Cast Iron	550	55								

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

CUTTING SPEED TABLE

CUTTING SPEED TABLE **SCHNITTGESCHWINDIGKEITSTABELLE**
Cutting Speeds m/min. into revolutions per minute

TOOL R.P.M. (rev/min)																
Tool Dia.	Cutting Speed (m/min)															
	1	2	3	4	5	6	8	10	12	15	20	25	30	40	50	60
1	318	637	955	1274	1592	1910	2548	3185	3822	4777	6396	7962	9554	12739	15924	19108
2	159	318	478	637	796	955	1274	1592	1911	2388	3185	3981	4777	6369	7962	9554
3	106	212	318	425	531	637	849	1062	1274	1592	2123	2654	3185	4246	5308	6369
4	80	159	239	318	398	478	637	796	955	1194	1592	1990	2389	3185	3981	4777
5	64	127	191	255	318	382	510	637	764	955	1274	1592	1911	2548	3185	3822
6	53	106	159	212	265	318	425	531	637	796	1062	1327	1592	2123	2653	3185
8	40	80	119	159	199	239	318	398	478	597	796	955	1194	1592	1990	2388
10	31	64	96	127	159	191	255	318	382	478	637	796	955	1274	1592	1911
12	26	53	80	106	133	159	212	265	318	398	531	663	796	1062	1327	1592
14	23	45	68	91	114	136	182	227	273	341	455	569	682	910	1137	1365
16	20	40	60	80	100	119	159	199	239	299	398	498	597	796	995	1194
18	18	35	53	71	88	106	142	177	212	265	354	442	531	708	885	1062
20	16	32	48	64	80	96	127	159	191	239	318	398	478	637	796	955
25	13	25	38	51	64	76	102	127	153	191	255	318	382	510	637	764
30	11	21	32	42	53	64	85	106	127	159	212	265	318	425	531	637
35	9	18	27	36	45	55	73	91	109	136	182	227	273	364	455	546
40	8	16	24	32	40	48	64	80	96	119	159	199	239	118	398	478

RPM = rev/min
V = m/min
D = Dia.(mm)

$$V = \frac{RPM \cdot \pi \cdot D}{1000}$$

$$RPM = \frac{1000 \cdot V}{\pi \cdot D}$$

SURFACE TREATMENT AND COATING

The applied High Speed Steels holds a grant of good wear resistance and toughness. Therefore YG-1 normally delivers taps with bright and unfinished surface. For certain materials, various surface treatments provide higher advantage in machining.

STEAM TEMPERED - Vap

Steam Tempered is a Fe3O4-oxyd-coating which reduces friction between the tool and workpiece, also preventing cold welding.

NITRIDING - NI

Recommend surface treatment for machining materials that affect wear abrasion, such as grey cast iron, alu-alloys with high Si-percentages (more than 10%).

Below are the various surface treatments for excellent finish surfaces suitable for many applications. The surface treatments are produced and developed within the company.

TiN-COATING

TiN-coating yields a hardness of approx. 2,300 HV and also a heat resistant up to approx. 600°C. The current coating is an excellent all-round coating for normal applications.
Colour : Golden Coefficient of friction against steel : 0.4

TiCN-COATING

TiCN takes place of TiN when the conditions require the coating to have a different hardness and toughness.
The TiCN brings advantages for machining very difficult steels or cutting interrupted bores.
The TiCN-coating has a hardness of approx. 3,000 HV, but is heat resistance only holds up to approx. 400°C, meaning that the TiCN needs an excellent cooling system for a long service life.
Colour : Blue-Grey Coefficient of friction against steel : 0.4

TiAIN-COATING

A special coating for machining abrasive materials such as grey cast iron, alu-alloys with silicon, fiber reinforced plastics, etc., or machining at high temperatures with insufficient cooling, or at high speeds ≥ 600m/min. TiAIN has a hardness of approx. 3,000 HV and is heat resistant up to approx. 800°C.
Colour : Violet-Grey Coefficient of friction against steel : 0.4

Hardslick-COATING

Hardslick combines the advantages of an extremely hard, thermally stable TiAIN-coating with the sliding and lubricating properties of an outer WC/C(Tungsten carbide/carbon)-coating in a novel way. The Hardslick coating has a hardness of approx. 3,000 HV and is temperature-resistant up to approx. 800°C.
Colour : Violet-Grey Coefficient of friction against steel : 0.2

EXAMPLES FOR APPLICATION MATERIAL GROUPS

11 Magnetic Soft Steels < 400 N/mm^2

1.1013	RFe 100
1.1014	RFe 80
1.1015	RFe 60
1.0718	9 S MnPb 28

12 Structure/Case Carburizing Steels < 700 N/mm^2

1.0037	St 37-2
1.0050	St 50-2
1.0060	St 60-2
1.0070	St 70-2
1.0401	C 15
1.1141	Ck 15

13 Plain Carbon Steels < 850 N/mm^2

1.0501	C 35
1.0503	C 45
1.0535	C 55
1.0601	C 60
1.1181	Ck 35
1.1191	Ck 45

14 Alloy Steels < 850 N/mm^2

1.2080	X210Cr12
1.2363	X100CrMoV5-1
1.3243	S 6-5-2-5
1.3343	S 6-5-2
1.7218	25CrMo4
1.7220	34CrMo4

15 Alloy, Hardened & Tempered Steels < 1,200 N/mm^2

1.2581	X30WCrV9 3
1.2622	X60WCrMoV9
1.2550	60WCrV7
1.6580	30CrNiMo8
1.7361	32CrMo12
1.8515	31CrMo12

16 Alloy, Hardened & Tempered Steels > 1,200 N/mm^2

To this group belong most of the materials of group 15, but present a higher tensile strength.

21 Free machining stainless Steels < 850 N/mm^2

1.4005	X12CrS13
1.4006	X10Cr13
1.4016	X6Cr17
1.4104	X12CrMoS17
1.4305	X10CrNiS18 9

22 Austenitic stainless Steels < 850 N/mm^2

1.4301	X5CrNi18 10
1.4406	X2CrNiMoN17 12 2
1.4435	X2CrNiMo18 14 3
1.4541	X6CrNiTi18 10
1.4571	X6CrNiMoTi17 12 2
1.4828	X15CrNiSi20 12

23 Matensitic/Ferritic/Fer.-Aus. Stainless Steels < 1,000 N/mm^2

1.4112	X90CrMoV18
1.4125	X105CrMo17
1.4002	X6CrAl13
1.4512	X6CrTi12
1.4582	X4CrNiMoNb25 7
1.4821	X20CrNiSi25 4

31 Grey graphite cast irons < 500 N/mm^2

0.6015	GG-15
0.6020	GG-20
0.6025	GG-25
0.6030	GG-30
0.6035	GG-35
0.6040	GG-40

32 Grey graphite cast irons < 1,000 N/mm^2

0.6020	GG-20
0.6025	GG-25
0.6030	GG-30
0.6035	GG-35
0.6040	GG-40

33 Nodular graphite, Malleable cast irons < 700 N/mm^2

0.7040	GGG-40
0.7043	GGG-40.3
0.7050	GGG-50
0.7060	GGG-60
0.8040	GTW-40
0.8065	GTW-65

34 Nodular graphite, Malleable cast irons < 1,000 N/mm^2

0.7040	GGG-40
0.7043	GGG-40.3
0.7050	GGG-50
0.7060	GGG-60
0.7070	GGG-70
0.7080	GGG-80

41 Titanium unalloys < 700 N/mm^2

3.7024	Ti99.5
3.7034	Ti99.7
3.7035	Ti2
3.7055	Ti99.4
3.7064	Ti99.2
3.7065	Ti4

42 Titanium alloys < 900 N/mm^2

	TiA14Mn4
3.7114	TiA15Sn2
3.7124	TiCu2
3.7164	TiA16V4
3.7174	TiA16V6Sn2

43 Titanium alloys < 1,300 N/mm^2

3.7124	TiCu2
3.7144	TiA16Sn2Zr4Mo2
3.7154	TiAl6Zr5
3.7164	TiA16V4
3.7174	TiA16V6Sn2
3.7184	TiAl4Mo4Sn2

51 Nickel unalloys < 500 N/mm^2

2.1504	NiAlBz
2.4042	Ni99CSi
2.4060	Ni99.6
2.4062	Ni99.4Fe

52 Heat resisting Nickel alloys < 900 N/mm^2

2.4360	Monel 400
2.4374	Monel 500
2.4665	Hastelloy X
2.4812	Hastelloy C
2.4816	Inconel 600
1.4876	Incoloy 800

53 Heat resisting Nickel alloys < 1,400 N/mm^2

2.4631	Nimonic80A
2.4632	Nimonic90
2.4634	Nimonic105
2.4662	Nimonic901
2.4668	Inconel 718
2.4669	Inconel X-750

61 Copper unalloys < 350 N/mm^2

2.0060	E-Cu57
2.0070	SE-Cu
2.0090	SF-Cu
2.1356	CuMn3
2.1522	CuSi2Mn

62 Short chip Brass, Bronze copper alloys < 700 N/mm^2

2.0360	CuZn40 (Ms60)
2.0380	CuZn39Pb2 (Ms58)
2.0410	CuZn44Pb2
2.0580	CuZn40Mn1Pb
2.1086	G-CuSn10Zn
2.1096	G-CuSn5ZnPb

63 Long chip Brass, Bronze copper alloys < 700 N/mm^2

2.0250	CuZn20
2.0321	CuZn37
2.1020	CuSn6
2.1080	CuSn6Zn6
2.1245	CuBel.7
2.1293	CuCrZr

64 Cu-Al-Fe alloys < 1,500 N/mm^2

71 Aluminum-Magnesium unalloys < 350 N/mm^2

3.0250	Al99.5H
3.0280	Al99.8H
3.0305	Al99.9
3.3308	Al99.9Mg0.5

72 Aluminum alloys, Si < 1.5% < 600 N/mm^2

3.0515	AlMn1
3.0525	AlMn1Mg0.5
3.1325	AlCuMg1
3.3315	AlMg1
3.3241	G-AlMg3Si
3.3292	GD-AlMg9

73 Aluminum alloys, 0.5-10% Si < 600 N/mm^2

3.2134	G-AlSi5Cu1Mg
3.2152	GD-AlSi6Cu4
3.2162	GD-AlSi8Cu3
3.2373	G-AlSi9Mg

74 Aluminum alloys, Si > 10% < 600 N/mm^2

3.2381	G-AlSi10Mg
3.2383	G-AlSi10Mg(Cu)
3.2581	G-AlSi12
3.2583	G-AlSi12(Cu)
3.5662	G-MgA16
3.5812	G-MgA18Zn1

81 Thermoplastics

Delrin(POM)
Teflon
Nylon

82 Thermosseting plastics

Bakelit
Novopan

83 Reinforced plastics materials

Glass fiber reinforced
Thermo and Duroplastics

Referance:DIN

MATERIAL GROUP

STANDARDS

GERMANY W.Nr	GERMANY DIN	FRANCE AFNOR	GREAT BRITAIN B.S.	EN & OTHER CLASSIFICATIONS	U.S.A. AISI
10 - STEEL					
11 - Magnetic soft steels - Hardness < 120 HB 30 - Tensile strength < 400 N/mm^2					
1.1013	RFe 100		OSOA12	EN2	
1.1014	RFe 80				
1.1015	RFe 60		230Mo7	EN1	
1.0718	9 S MnPb 28				
12 - Structural steels - Hardness < 200 HB 30 - Tensile strength < 700 N/mm^2					
12.1 - Structural steels					
1.0034	RSt 34-2	A34-2 EN	1449 34/20 HR		
1.0035	St 33	A33	Fe 310-0		
1.0036	St 37-2		060A35	EN3A,4,5,6,7,8	
1.0037	RSt 37-2				
1.0044	St 44-2				
1.0050	St 50-2		4360-50B	EN 207	
1.0060	St 60-2				
1.0070	St 70-2				
1.0116	St 37-3				
1.0144	St 44-3				
12.2 - Case carburizing steels					
1.0301	C 10	AF 34 C 10	040 A 10		M 1010
1.0401	C 15	AF 37 C 12	080 A 15		M 1015
1.1121	Ck 10	XC 10	040 A 10		1010
1.1141	Ck 15	XC 12	040 A 15		1015
1.5732	14 Ni Cr 10	14 NC 11			3415
1.7015	15 Cr 3	12 C 3	523 M 15		5015
1.7131	16 Mn Cr 5	16 MC 4	527 M 17	EN 32	5115
1.7147	20 Mn Cr 5	20 MC 5			5120
12.3 - Free machining steels					
1.0710	15 S 10				
1.0715	9 S Mn 28	S 250	230 M 07		1213
1.0718	9 S Mn Pb 28	S 250 Pb			12 L 13
1.0721	10 S 20	10 F1	210 M 15		1108 1109
1.0722	10 S Pb 20	10 Pb F 2			11 L 08
1.0723	15 S 20	......	210 A 15		
1.0726	35 S 20	35 MF 6	212 M 36		1140
1.0727	45 S 20	45 MF 4			1146
1.0736	9 S Mn 36	S 300			1215
1.0737	9 S Mn Pb 36	S 300 Pb			12 L 14
12.4 - Cast structural steels					
1.0416	GS - 38				
1.0446	GS - 45				
1.0552	GS - 52				
1.0553	GS - 60	E 36 - 3			
1.0554	GS - 70				
13 - Plain carbon steels - tempered					
13.1 - Steels, tempered - Hardness < 250 HB 30 - Tensile strength < 850 N/mm^2					
1.0402	C 22	1 C 22	070 M 20		M 1023
1.0501	C 35	1 C 35	080 A 32		1035
1.0503	C 45	1 C 45	060 A 47		1045
1.0535	C 55	1 C 55	070 M 55		1055
1.0601	C 60	1 C 60	060 A 62	EN 43	1060
1.1157	40 Mn 4	35 M 5	150 M 36		1035 1041
1.1151	Ck 22	2 C 22	055 M 15		1020 1023
1.1181	Ck 35	2 C 35	080 A 35		1035 1038
1.1191	Ck 45	2 C 45	080 M 46	EN 9, 10	1045
1.1203	Ck 55	2 C 55	060 A 57		1055
1.1221	Ck 60	2 C 60	060 A 62		1060 1064

MATERIAL GROUP

STANDARDS

GERMANY		FRANCE	GREAT BRITAIN	EN & OTHER	U.S.A.
W.Nr	DIN	AFNOR	B.S.	CLASSIFICATIONS	AISI
14 - **Alloy steels - Hardness < 250 HB 30, < 25 HRC - Tensile strength < 850 N/mm²**					
14.1 - Cold work tool steels					
1.2056	90 Cr 3				
1.2067	100 Cr 6	Y 100 C 6	BL 3		L 1 L 3
1.2080	X 210 Cr 12	Z 200 C 12	BD 3		D3
1.2083	X 42 Cr 13	Z 40 C 14			420
1.2363	X 100 CrMoV5 1	Z 100 CDV 5	BA 2		A 2
1.2379	X 155 CrVMo 12 1	Z 160 CDV 12	BD 2		D 2
1.2510	100 MnCrW 4	90 MWCV 5	BO 1		O1
1.2550	60 WCrV 7	55WC 20	BS 1		S1
1.2823	70 Si 7				
1.2826	60 Mn Si Cr 4				
1.2842	90 MnCrV 8	90 MV 8	BO 2		O 2
14.2 - High speed steels					
1.3202	S 12-4-4-5	Z 130 WKCV 12-05-04-04	BT 15		T 15
1.3207	S 10-4-3-10	Z130 WKCDV10-10-04-04-03	BT 42		T 42
1.3243	S 6-5-2-5	Z85 WDKCV 06-05-05-04-02	BM 35		M 35
1.3247	S 2-10-1-8	Z110 DKCWV 09-08-04-02-01	BM 42		M 42
1.3343	S 6-5-2	Z 85 WDCV 06-05-04-02	BM 2		M 2
1.3344	S 6-5-3	Z 120 WDCV 06-05-04-03			M 3 / 2
1.3348	S 2-9-2	Z 100 DCWV 09-04-02-02			M 7
ASP 23	(S 6-5-3)				
ASP 30					
ASP 60					
14.3 - Alloy steels					
1.5919	GS-15Cr Ni 6	16 NC 6			3115
1.7218	GS-25Cr Mo 4	25 C D 4	70 8A 25		4130
1.7220	GS-34Cr Mo 4	35 C D 4	70 8A 37		4135 4137
1.7379	GS-18 Cr Mo 9 10				
14.4 - Tempered steels					
1.0503	C 45	1 C 45	060 A 47		1045
1.7220	34 Cr Mo 4	34 Cr Mo 4	708 A 37		4135, 4137
1.7225	42 Cr Mo 4	42 CD 4	708 A 42	EN 16, 17, 19	4140, 4142
1.7228	50 Cr Mo 4	50 Cr Mo 4	708 A 47		4150
14.5 - Nitriding steels					
1.7779	20 Cr Mo V 13.5				
1.8504	34 Cr Al 6				
1.8506	34 Cr Al S 5				
1.8507	34 Cr Al Mo 5	30 CAD 6.12			A 355 Cl.D
1.8509	41 Cr Al Mo 7	40 CAD 6.12	905 M 39		A 355 Cl.A
1.8515	31 Cr Mo 12	30 CD 12	722 M 24		
15 - **Alloy steels / Tempered steels - Hardness 250-350 HB 30, 25-38 HRC - Tensile strength 850-1,200 N/mm²**					
15.1 - Alloy steels for tools					
1.2311	40 Cr Mn Mo 7				
1.2312	40 Cr Mn Mo S 86				
1.2436	X 210 Cr W 12	Z 200 CW 12			
1.2711	54 Ni Cr Mo V 6				
1.2713	55 Ni Cr Mo V 6	55 NCDV 7	826 M 40	S 95, S 97, S 98	L 6
1.2714	56 Ni Cr Mo V 7				
1.2743	60 Ni Cr Mo V 12 4				
1.2766	35 Ni Cr Mo 16				
15.2 - Alloy steels for hot work					
1.2343	X 38 Cr Mo V 5 1	Z 38 CDV 5	BH 11		H 11
1.2344	X 40 Cr Mo V 5 1	Z 40 CDV 5	BH 13		H 13
1.2365	X 32 Cr Mo V 3 3	32 DCV 28	BH 10		H 10
1.2367	X 40 Cr Mo V 5 3	Z 38 CDV 5.3			
1.2581	X 30 W Cr V 9 3	Z 30 WCV 9.3	BH 21		H 21
1.2622	X 60 W Cr Mo V 9				
1.2678	X 45 CoCrWV 5 5 5				
1.2550	60 WCr V 7	55 WC 20	BS 1		S 1
1.2567	X 30 W Cr V 5 3	Z 32 WCV 5			

MATERIAL GROUP

STANDARDS

GERMANY		FRANCE	GREAT BRITAIN	EN & OTHER	U.S.A.
W.Nr	DIN	AFNOR	B.S.	CLASSIFICATIONS	AISI
15.3 - Hardened tempered steels - Hardness may be different according to presentation and dimensions of material					
1.5864	35 Ni Cr 18				
1.6580	30 Cr Ni Mo 8	30 Cr Ni Mo 8			
1.7361	32 Cr Mo 12	30 CD 12	722 M 24		
1.7707	30 Cr Mo V 9				
1.8161	58 Cr V 4				
15.4 - Nitriding steels					
1.8515	31 Cr Mo 12	30 CD 12	722 M 24		
1.8519	31 Cr Mo V 9		830 M 31		
1.8523	39 Cr Mo V 13 9		897 M 39		
1.8550	34 Cr Al Ni 7		826 M 40		
16 - **Alloy steels / Hardened tempered steels - Hardness > 38 HRC - Tensile strength > 1,200 N/mm²**					
To this group belong most of the materials of group 15, but present a higher tensile strength					
20 - **STAINLESS STEELS**					
21 - **Free machining stainless steels - Hardness < 250 HB 30 - Tensile strength < 850 N/mm²**					
1.4104	X 12 Cr Mo S 17	Z 13 CF 17	416 S 37	EN 56	430 F
1.4305	X 10 Cr Ni S 18 09	Z 8 CNF 18-09	303 S 21	EN 60	303
22 - **Austenitic stainless steels - Hardness < 250 HB 30 - Tensile strength < 850 N/mm²**					
1.4300	X 12 Cr Ni 18 8		320 S 12		
1.4301	X 5 Cr Ni 18 10	Z 6 CN 18-09	304 S 15	EN 80, EN 58 + C	304
1.4311	X 2 CrNiN 18 10	Z 3 CN 18-07 Az	304 S 61		304 LN
1.4406	X 2 CrNiMoN 17 12 2	Z 3 CND 17 11 02	316 S 61		316 LN
1.4433	X 2 CrNiMo 18 15		316 S		
1.4435	X 2 CrNiMo 18 14 3	Z3 CND 17-12-03	316 S 11		316 L
1.4539	X 1 CrNiMoCu 25 20 5	Z 1 NCDU 25-20	321 S 17		UNS N08904
1.4541	X 6 CrNiTi 18 10	Z 6 CNT 18 10	321 S 18	EN 58 J, 316	321
1.4571	X 6 CrNiMoTi 17 12 2	Z 6 CNDT 17 12	320 S 18		316 Ti
1.4573	X 10 CrNiMoTi 18 12		320 S 33		
1.4828	X 15 CrNiSi 20 12	Z 15 CNS 20-12	309 S 24		309
22.1 - Cast austenitic stainless steels					
1.4308	G-X 6 CrNi 18 9	Z 6 CN 18.10 M	304 C 15(LT196)		CF-8
1.4313	G-X 5 CrNi 13 4	Z 8 CD 17-01	425 C 12		CA 6 -NM
1.4408	G-X 6 CrNiMo 18 10		316 C 16(LT196)		CF-8M
1.4581	G-X 5 CrNiMoNb 18 10	Z 4 CNDNb 18.12M	318 C 17		
23 - **Martensitic stainless steels - Hardness < 320 HB 30 - Tensile strength < 1,000 N/mm²**					
1.4021	X 20 Cr 13	Z 20 C 13	420 S 37		420
1.4034	X 46 Cr 13	Z 44 C 14	(420 S 45)		
1.4057	X 20 CrNi 17 2	Z 15 CN 16-02	431 S 29		431
1.4112	X 90 CrMoV 18				
1.4116	X 45 CrMoV 15			EN 58, b.e.j.t	
1.4125	X 105 CrMo 17	Z 100 CD 17		Duplex alloys	440 C
1.4718	X 45 CrSi 9 3	Z 45 CS 9	401 S 45		HNV 3
1.4747	X 80 CrNiSi 20	Z 80 CSN 20-02	443 S 65		HNV 6
1.4086	G-X 120 Cr 29				
1.4106	G-X 10 CrMo 13				
1.4138	G-X 120 CrMo 29 2				
24 - **Ferritic stainless steels - Hardness < 320 HB 30 - Tensile strength < 1,100 N/mm²**					
1.4002	X 6 Cr Al 13	Z 8 CA 12	405 S 17		405
1.4006	X 10 Cr 13	Z 10 C 13	410 C 21		410
1.4016	X 6 Cr 17	Z 8 C 17	430 S 17		430
1.4510	X 6 Cr Ti 17	Z 8 CT 17			430 Ti
1.4512	X 6 Cr Ti 12	Z 6 CT 12	409 S 19		409
25 - **Ferritic-Austenitic stainless steels - Hardness < 320 HB 30 - Tensile strength < 1,100 N/mm²**					
1.4460	X 8 CrNiMo 27 5	Z 5 CND 27-05 Az			329
1.4582	X 4 CrNiMoNb 25 7				
1.4821	X 20 CrNiSi 25 4				

MATERIAL GROUP

STANDARDS

GERMANY W.Nr	GERMANY DIN	FRANCE AFNOR	GREAT BRITAIN B.S.	EN & OTHER CLASSIFICATIONS	U.S.A. AISI
30 - CAST IRONS					
31 - Grey graphite cast irons - Hardness < 150 HB 30 - Tensile strength < 500 N/mm^2					
0.6010	GG-10	Ft 10 D			A 48-20 B
0.6015	GG-15	Ft 20 D	Grade 150	Grey cast iron soft	A 48-25 B
0.6020	GG-20	Ft 25 D	Grade 220		A 48-30 B
0.6025	GG-25	Ft 30 D	Grade 260		A 48-40 B
0.6030	GG-30	Ft 30 D	Grade 300		A 48-45 B
0.6035	GG-35	Ft 35 D	Grade 350		A 48-50 B
0.6040	GG-40	Ft 40 D	Grade 400		A 48-60 B
31.1 - Meehanite - Hardness < 150 HB 30 - Tensile strength < 500 N/mm^2					
......	GF - 150				
......	GD - 260				
32 - Grey graphite cast irons - Hardness 150 - 300 HB 30 - Tensile strength 500 - 1,000 N/mm^2					
0.6020	GG - 20	Ft 25 D	Grade 220	Grey cast iron hard	A 48-30 B
0.6025	GG - 25	Ft 30 D	Grade 260		A 48-40 B
0.6030	GG - 30	Ft 30 D	Grade 300		A 48-45 B
0.6035	GG - 35	Ft 35 D	Grade 350		A 48-50 B
0.6040	GG - 40	Ft 40 D	Grade 400		A 48-60 B
32.1 - Meehanite - Hardness 150-300 HB 30 - Tensile strength 500-1,000 N/mm^2					
......	GF - 150				
......	GD - 260				
15 - Alloy steels / Tempered steels - Hardness 250-350 HB 30, 25-38 HRC - Tensile strength 850-1,200 N/mm^2					
0.7033	GGG-35.3				
0.7040	GGG-40	FGS 400-12	420 / 12		60-40-18
0.7043	GGG-40.3	FGS 370-17	370 / 17		
0.7050	GGG-50	FGS 500-7	500 / 7		65-45-12
0.7060	GGG-60	FGS 600-3	600 / 3	S.G.iron, Meehanite	80-55-06
0.8035	GTW-35		700/2,30g/72	Black & White Heart	
0.8040	GTW-40				
0.8045	GTW-45				
0.8065	GTW-65				
0.8135	GTS-35				
0.8145	GTS-45				
0.8155	GTS-55				
0.8165	GTS-65				
33.1 - Meehanite - Hardness < 200 HB 30 -Tensile strength < 700 N/mm^2					
SF 400					
SPF 600					
34 - Nodular graphite, tempered malleable cast irons - Hardness 200-300 HB 30 - Tensile strength 700-1,000 N/mm^2					
0.7070	GGG-70	FGS 700-2	700 / 2	S.G.iron,Meehanite	100-70-03
0.7080	GGG-80	FGS 800-2	800 / 2	Black & White Heart	120-90-02
And materials from group 33 tempered					
34.1 - Meehanite - Hardness 200-300 HB 30 - Tensile strength 700-1,000 N/mm^2					
	SH 800		420/12, P 440/7		
	SH 1000				
40 - TITANIUM					
41 - Titanium, unalloys - Hardness < 200 HB 30 - Tensile strength < 700 N/mm^2					
3.7024.1LN	Ti 99.5				
3.7034.1LN	Ti 99.7				
3.7035	Ti 2				
3.7055	Ti 99.4		TA 1-9	Ti 99.0	
3.7064.1LN	Ti 99.2				
3.7065	Ti 4				
3.7255	Ti 3 Pd				

MATERIAL GROUP

STANDARDS

GERMANY W.Nr	GERMANY DIN	FRANCE AFNOR	GREAT BRITAIN B.S.	EN & OTHER CLASSIFICATIONS	U.S.A. AISI
42 - Titanium, alloys - Hardness < 270 HB 30 - Tensile strength < 900 N/mm^2					
	Ti Al 4 Mn 4				
3.7144 LN	Ti Al 5 Sn 2				
3.7124 LN	Ti Cu 2		TA 10-14, TA 17	Ti - 2AL	
3.7164 LN	Ti Al 6 V 4		TA 18		
3.7174 LN	Ti Al 6 V 6 Sn 2				
43 - Titanium, alloys - Hardness 270-300 HB 30 - Tensile strength 900-1,300 N/mm^2					
3.7124 LN	Ti Cu 2				
3.7144 LN	Ti Al 6 Sn 2 Zr4 Mo2			Ti AL	
3.7154 LN	Ti Al 6 Zr 5		TA 10-13, TA 28	3.7174LN, 3.7148LN	
3.7164 LN	Ti Al 6 V 4				
3.7174 LN	Ti Al 6 V Sn 2				
3.7184 LN	Ti Al 4 Mo 4 Sn 2				
50 - NICKEL					
51 - Nickel, unalloys - Hardness < 150 HB 30 - Tensile strength < 500 N/mm^2					
2.1504 LN	Ni Al Bz				
2.4042	Ni 99 CSi		NA 11, NA 12	Nickel 200	
2.4060	Ni 99.6			Nickel 270	
2.4062	Ni 99.4 Fe				
52 - Heat resisting nickel alloys - Hardness < 270 HB 30 - Tensile strength < 900 N/mm^2					
2.4360 LN	Monel 400				
2.4374 LN	Monel 500				
2.4617	Hastelloy B 2			Nimonic 75	
2.4665	Hastelloy X		HR 203		
2.4812	Hastelloy C		3027-76	Hastelloy C	
2.4816	Inconel 600			Haynes Alloys 263	
1.4876	Incoloy 800				
2.4983	Udimet 500				
53 - Heat resisting nickel alloys - Hardness 270-410 HB 30 - Tensile strength 900-1,400 N/mm^2					
2.4631	Nimonic 80 A			Nimonic 80	
2.4632	Nimonic 90				
2.4634	Nimonic 105				
2.4662	Nimonic 901		HR 8		
2.4668	Inconel 718		HR 401, 601	Rene 41	
2.4669	Inconel X-750				
2.4670 LN	Nimocast 713				
2.4674 LN	Nimocast PK 24				
2.4856	Inconel 625				
2.6554 LN	Waspaloy				
60 - COPPER					
61 - Copper, unalloys - Hardness < 100 HB 30 - Tensile strength < 350 N/mm^2					
2.0060	E - Cu 57				
2.0070	SE - Cu			Commercially Pure	
2.0090	SF - Cu		C 101		
2.1356	Cu Mn 3				
2.1522	Cu Si 2 Mn				
62 - Short chip copper alloys - Hardness < 200 HB 30 - Tensile strength < 700 N/mm^2					
62.1 - Brass					
2.0360	Cu Zn 40(MS 60)				
2.0380	Cu Zn 39 Pb 2 (MS 58)		CZ120, CZ109		
2.0410	Cu Zn 44 Pb 2		PB104		
2.0561	Cu Zn 40 Al 1			2.1030, 2.1080	
2.0580	Cu Zn 40 Mn 1 Pb				
2.0771	Cu Ni 7 Zn 39 Mn 5 Pb3				
62.2 - Bronzes					
2.1086	G-Cu Sn 10 Zn				
2.1093	G-Cu Sn 6 Zn Ni				
2.1096	G-Cu Sn 5 Zn Pb				

MATERIAL GROUP

STANDARDS

GERMANY		FRANCE AFNOR	GREAT BRITAIN B.S.	EN & OTHER CLASSIFICATIONS	U.S.A. AISI
W.Nr	DIN				
63 - **Long chip copper alloys - Hardness < 200 HB 30 - Tensile strength < 700 N/mm^2**					
63.1 - Brass					
2.0250	Cu Zn 20				
2.0265	Cu Zn 30				
2.0321	Cu Zn 37		CZ108, CZ106		
2.0335	Cu Zn 36 (Ms 63)				
63.2 - Bronzes					
2.1020	Cu Sn 6				
2.1030	Cu Sn 8				
2.1080	Cu Sn 6 Zn 6				
63.3 - Copper alloys tempered by forging					
2.1245	Cu Be 1.7				
2.1247	Cu Be 2				
2.1293	Cu Cr Zr				
64 - **Cu - Al - Fe alloys Hardness < 440 HB 30 - Tensile strength < 1,500 N/mm^2**					
70 - **ALUMINIUM - MAGNESIUM**					
71 - **Aluminum - Magnesium, unalloys - Hardness < 100 HB 30 - Tensile strength < 350 N/mm^2**					
3.0250	Al 99.5 H				
3.0280	Al 99.8 H				
3.0305	Al 99.9				
3.3308	Al 99.9 Mg 0.5				
72 - **Aluminum alloys, Si < 1.5% - Hardness < 180 HB 30 - Tensile strength < 600 N/mm^2**					
72.1 - Forging aluminum alloys					
3.0515	Al Mn 1				
3.0516	S-Al Mn				
3.0525	Al Mn 1 Mg 0.5				
3.0615	Al Mg Si Pb				
3.1325	Al Cu Mg 1				
3.1355	Al Cu Mg 2				
3.3315	Al Mg 1				
3.3535	Al Mg 3				
3.4365	Al Zn Mg Cu 1.5				
72.2 - Cast aluminum alloys					
3.1841	G - Al Cu 4 Ti				
3.3241	G - Al Mg 3 Si				
3.3292	GD - Al Mg 9				
73 - **Aluminum alloys, 0.5-10% Si - Hardness < 180 HB 30 - Tensile strength < 600 N/mm^2**					
73.1 - Cast aluminum alloys					
3.2134	G - Al Si 5 Cu 1 Mg				
3.2152	GD - Al Si 6 Cu 4				
3.2162	GD - Al Si 8 Cu 3				
3.2373	G - Al Si 9 Mg				
74 - **Aluminum alloys, Si > 10% - Hardnes < 180 HB 30 - Tensile strength < 600 N/mm^2**					
74.1 - Cast aluminum alloys					
3.2381	G - Al Si 10 Mg				
3.2383	G - Al Si 10 Mg (Cu)				
3.2581	G - Al Si 12				
3.2583	G - Al Si 12 (Cu)				
3.2982	GD - Al Si 12 (Cu)				
74.2 - Cast aluminum - magnesium alloys					
3.5106	G - Mg Ag 3 SE 2 Zr 1				
3.5662	G - Mg Al 6				
3.5812	G - Mg Al 8 Zn 1				
3.5912	G - Mg Al 9 Zn 1				

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THREAD MILLS

GEWINDEFRÄSER

- **Threading Large Diameter in High Quality**
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SELECTION GUIDE

YG THREADING TOOLS

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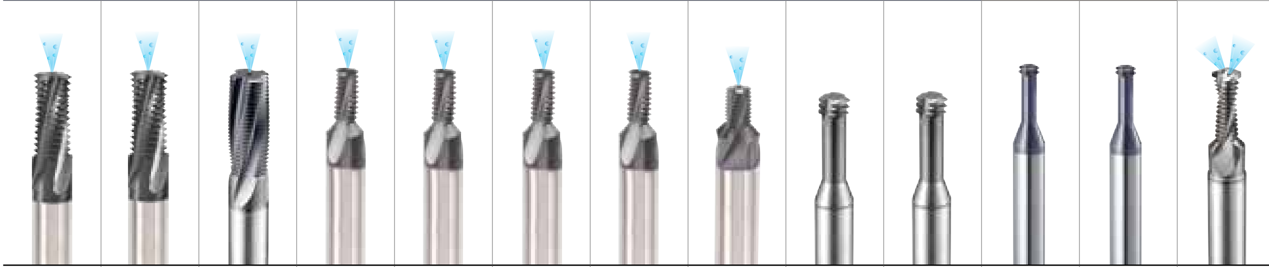
◎ : Excellent ○ : Good

Recommended cutting conditions : p.B52

TYPE	Thread Mill without Coolant Hole				Thread Mill with Coolant Hole			Thread Mill with Coolant Hole & Chamfer					Miniature Thread Mill		Miniature Thread Mill for Hard Materials		Drill & Thread Mill with Chamfer
THREAD FORM	M	MF	UNC	UNF	M	MF	BSP(G)	M	MF	UNC	UNF	NPT	M	UNC	M	UNC	M
HOLE TYPE	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	-	Max. 2.0xD Blind / Through Hole	Max. 1.5xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	-	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole	Max. 2.0xD Blind / Through Hole
TOOL MATERIAL	CARBIDE				CARBIDE												
FLUTE TYPE	Helix				Helix			Helix					Helix		Straight		Helix
HELIX ANGLE	R15				R15			R15					R15		-		R25
SERIES NO.	L1211 (p.B34)	L1212 (p.B35)	L1213 (p.B36)	L1214 (p.B37)	L4211 (p.B38)	L4212 (p.B39)	L6215 (p.B40)	L4271 (p.B41)	L4272 (p.B42)	L4273 (p.B43)	L4274 (p.B44)	L4276 (p.B45)	L12D1 (p.B46)	L12D3 (p.B47)	L19E1 (p.B48)	L19E3 (p.B49)	L41A1 / L42A1 (p.B50)
SURFACE TREATMENT	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	AlTiN	AlTiN	Bright / TiAlN
MODEL																	

ISO	VDI 3323	Material Description	Composition / Structure	Heat Treatment	HB	HRc	L1211	L1212	L1213	L1214	L4211	L4212	L6215	L4271	L4272	L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 / L42A1
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
P	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
P	7	Low alloy steel		Quenched & Tempered	275	29	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
P	8	Low alloy steel		Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
P	9	Low alloy steel		Quenched & Tempered	350	38	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
P	10	High alloyed steel, and tool steel		Annealed	200	15	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
M	14	Stainless steel	Austenitic		180	10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
K	15	Grey cast iron	Pearlitic / ferritic		180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	17	Nodular Cast Iron	Ferritic		160	3	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	18	Nodular Cast Iron	Pearlitic		250	25	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	19	Malleable cast iron	Ferritic		130		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	20	Malleable cast iron	Pearlitic		230	21	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
N	21	Aluminum-wrought alloy	Not Curable		60		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	22	Aluminum-wrought alloy	Curable	Hardened	100		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic				◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
N	30	Non Metallic Materials	Rubber, Wood, etc.				◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			◎
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30	○	○	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25	○	○	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38	○	○	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34	○	○	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	
S	36	Titanium Alloys	Pure Titanium		400 Rm		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
H	38	Hardened steel		Hardened	550	55															◎	◎	
H	39	Hardened steel		Hardened	630	60															◎	◎	
H	40	Chilled Cast Iron		Cast	400	42															◎	◎	
H	41	Hardened Cast Iron		Hardened	550	55															◎	◎	

YG THREAD MILLS

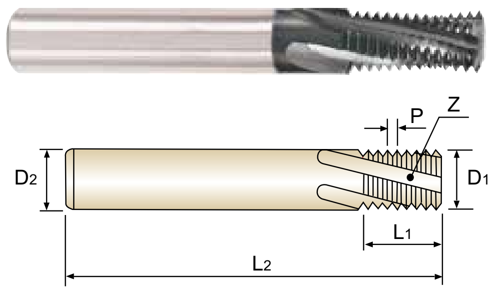
L1211 SERIES

M — Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13

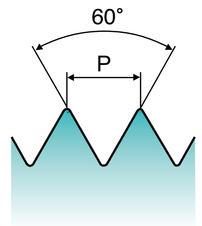
VOLLHARTMETALL GEWINDEFRÄSER für ISO METRISCHES INNENGEWINDE - DIN 13
FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
Filettature interne, ISO metriche, passo grosso - DIN 13

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	Z
L1211200	M3	0.5	**2.2**	6	5	57	3
L1211240	M4	0.7	**2.9**	6	7	57	3
L1211280	M5	0.8	**3.8**	6	8	57	3
L1211310	M6	1.0	**4.5**	6	13	57	3
L1211360	M8	1.25	**6.0**	6	17.5	65	3
L1211420	M10	1.5	**7.5**	8	21	72	4
L1211500	M12	1.75	**9.5**	10	26.25	80	4
L1211540	M14	2.0	**10.0**	10	30	83	4
L1211600	M16	2.0	**12.0**	12	34	92	4
L1211650	M18	2.5	**14.0**	14	37.5	92	5
L1211700	M20	2.5	**16.0**	16	42.5	105	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

YG THREAD MILLS

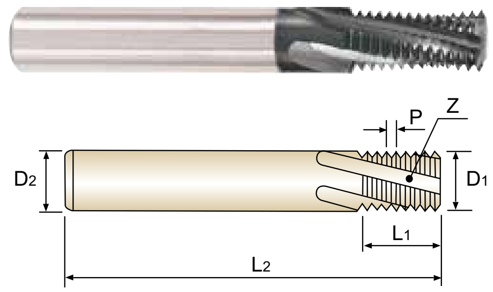
L1212 SERIES

MF — Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13

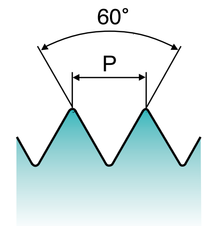
VOLLHARTMETALL GEWINDEFRÄSER für ISO METRISCH - FEIN INNENGEWINDE - DIN 13
FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
Filettature interne, ISO metriche, passo grosso - DIN 13

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
1.5×D



Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	Z
L1212370	M8	1.0	**6.0**	6	13	57	3
L1212380	M8	0.75	**6.0**	6	12.75	57	3
L1212440	M10	1.0	**8.0**	8	16	63	4
L1212510	M12	1.5	**9.5**	10	19.5	72	4
L1212520	M12	1.25	**9.5**	10	18.75	72	4
L1212530	M12	1.0	**9.5**	10	19	72	4
L1212550	M14	1.5	**10.0**	10	22.5	83	4
L1212570	M14	1.0	**10.0**	10	22	83	4
L1212610	M16	1.5	**12.0**	12	25.5	83	4
L1212620	M16	1.0	**12.0**	12	25	83	4
L1212670	M18	1.5	**14.0**	14	28.5	92	5
L1212680	M18	1.0	**14.0**	14	28	92	5
L1212720	M20	1.5	**16.0**	16	31.5	92	5
L1212730	M20	1.0	**16.0**	16	31	92	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG THREAD MILLS

L1213 SERIES

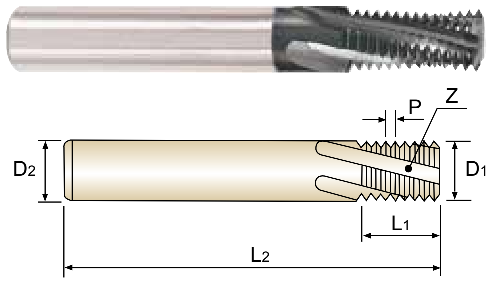
UNC

Solid Carbide Thread Mill for UNC Internal Thread - ANSI B 1.1

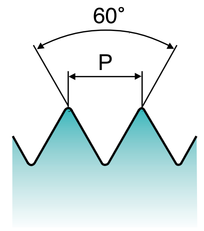
VOLLHARTMETALL GEWINDEFRÄSER für UNC INNENGEWINDE, ANSI B 1.1
FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE INTER UNC - ANSI B 1.1
Filettature interne, unificato, passo grosso - ANSI B 1.1

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L1213400	1/4	20	4.5	6	14	57	3
L1213440	5/16	18	5.8	6	16.9	65	3
L1213480	3/8	16	7.0	8	20.6	72	4
L1213520	7/16	14	8.0	8	23.6	72	4
L1213560	1/2	13	9.5	10	27.4	80	4
L1213600	9/16	12	10.0	10	31.8	83	4
L1213640	5/8	11	12.0	12	34.6	92	4
L1213700	3/4	10	14.0	14	40.6	104	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

YG THREAD MILLS

L1214 SERIES

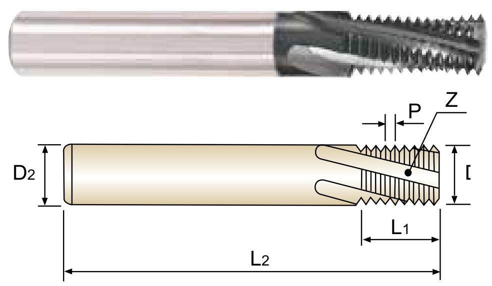
UNF

Solid Carbide Thread Mill for UNF Internal Thread - ANSI B 1.1

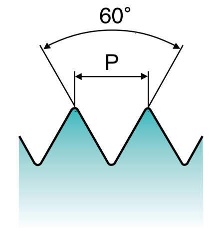
VOLLHARTMETALL GEWINDEFRÄSER für UNF INNENGEWINDE, ANSI B 1.1
FRAISES A FILETER CARBURE MONOBLOC POUR FILETAGE INTER UNC - ANSI B 1.1
Filettature interne, unificato, passo grosso - ANSI B 1.1

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L1214420	1/4	28	5.0	6	13.6	57	3
L1214460	5/16	24	6.0	6	16.9	65	3
L1214500	3/8	24	8.0	8	20.1	72	4
L1214540	7/16	20	8.0	8	24.1	72	4
L1214580	1/2	20	10.0	10	26.7	80	4
L1214620	9/16	18	12.0	12	29.6	83	4
L1214660	5/8	18	12.0	12	33.9	92	4
L1214720	3/4	16	14.0	14	39.7	104	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

THREAD MILLS

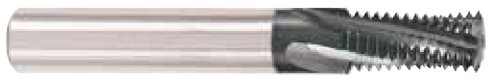
L4211 SERIES

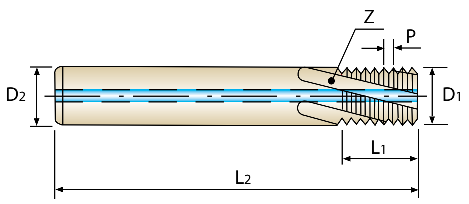
M Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13

VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL für ISO METRISCHES INNENGEWINDE - DIN 13
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
Con fori di lubrificazione, Filettature interne, ISO metriche, passo grosso - DIN 13

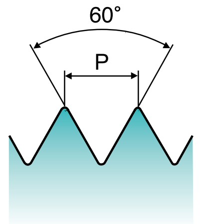
▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.





Thread Depth
2×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	Z
L4211310	M6	1.0	4.5	6	13.0	57	3
L4211360	M8	1.25	6.0	6	17.5	65	3
L4211420	M10	1.5	7.5	8	21.0	72	4
L4211500	M12	1.75	9.5	10	26.25	80	4
L4211540	M14	2.0	10.0	10	30.0	83	4
L4211600	M16	2.0	12.0	12	34.0	92	4
L4211700	M20	2.5	16.0	16	42.5	105	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

THREAD MILLS

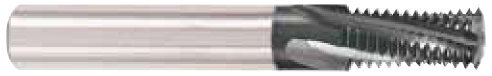
L4212 SERIES

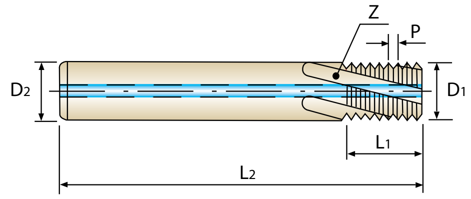
MF Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13

VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL für ISO METRISCH - FEIN INNENGEWINDE - DIN 13
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
Con fori di lubrificazione, Filettature interne, ISO metriche, passo grosso - DIN 13

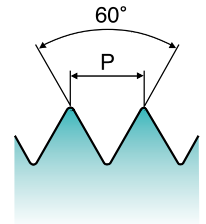
▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.





Thread Depth
1.5×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	Z
L4212370	M8	1.0	6.0	6	13.0	57	3
L4212380	M8	0.75	6.0	6	12.75	57	3
L4212440	M10	1.0	8.0	8	16.0	63	4
L4212510	M12	1.5	9.5	10	19.5	72	4
L4212520	M12	1.25	9.5	10	18.75	72	4
L4212530	M12	1.0	9.5	10	19.0	72	4
L4212550	M14	1.5	10.0	10	22.5	83	4
L4212570	M14	1.0	10.0	10	22.0	83	4
L4212610	M16	1.5	12.0	12	25.5	83	4
L4212620	M16	1.0	12.0	12	25.0	83	4
L4212670	M18	1.5	14.0	14	28.5	92	5
L4212680	M18	1.0	14.0	14	28.0	92	5
L4212720	M20	1.5	16.0	16	31.5	92	5
L4212730	M20	1.0	16.0	16	31.0	92	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

THREAD MILLS

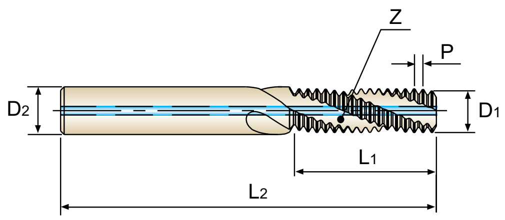
L6215 SERIES

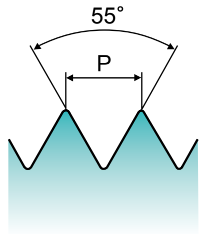
BSP(G) Solid Carbide Thread Mill with Coolant Hole for BSP(G) Internal/External Thread

VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL für BSP (G) INNEN- /AUSSENGEWINDE
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL POUR FILETAGE INTERNE/EXTERNE BSP(G)
Fresa con fori di lubrificazione, filettature interne ed esterne, BSP(G)

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.





Material groups MU · CARBIDE · DIN 6535HA · 55° · R15 · TiAlN · p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D_1	D_2	L_1	L_2	Z
L6215020	1/16	28	**5.9**	6	16.3	65	3
L6215200	1/8	28	**7.9**	8	20.0	70	4
L6215400	1/4	19	**9.9**	10	26.7	80	4
L6215480	3/8	19	**13.9**	14	33.4	92	4
L6215560	1/2	14	**15.9**	16	43.5	104	5
L6215700	3/4	14	**17.9**	18	34.5	100	5
L6215780	1	11	**19.9**	20	34.6	100	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

THREAD MILLS

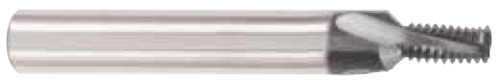
L4271 SERIES

M Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13

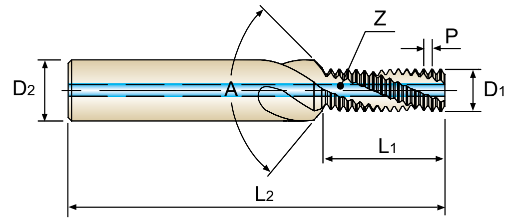
VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL & FASE für METRISCHES INNENGEWINDE - DIN 13
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE ISO INTER MÉTRIQUE DIN13
Con fori di lubrificazione e taglienti per smussi, filettature interne, ISO metriche - DIN 13

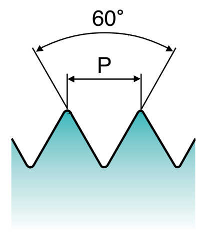
▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D





Material groups MU · CARBIDE · DIN 6535HA · 60° · R15 · TiAlN · p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	A	Z
L4271310	M6	1.0	**4.8**	8	12.4	62	90°	3
L4271360	M8	1.25	**6.5**	10	16.8	74	90°	3
L4271420	M10	1.5	**8.2**	12	20.15	80	90°	4
L4271500	M12	1.75	**9.9**	14	25.25	90	90°	4
L4271540	M14	2.0	**11.6**	16	28.85	100	90°	4
L4271600	M16	2.0	**13.6**	18	32.85	102	90°	4

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG THREAD MILLS

L4272 SERIES

MF

Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13

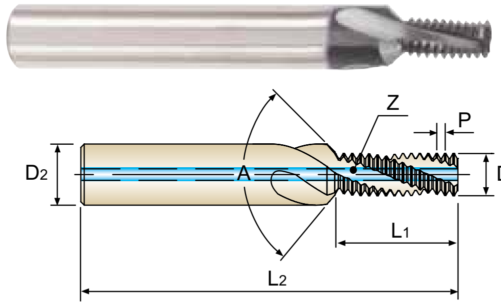
VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL & FASE für METRISCH - FEIN INNENGEWINDE - DIN 13

FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE ISO INTER MÉTRIQUE DIN13

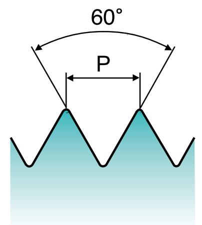
Con fori di lubrificazione e taglienti per smussi, filettature interne, ISO metriche, passo fine - DIN 13

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
1.5×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B52

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN	[D]	P	D_1	D_2	L_1	L_2	A	Z
L4272370	M8	1.0	**6.7**	10	12.4	74	90°	3
L4272430	M10	1.25	**8.3**	12	15.9	80	90°	4
L4272440	M10	1.0	**8.7**	12	15.4	80	90°	4
L4272510	M12	1.5	**10.0**	14	18.65	90	90°	4
L4272520	M12	1.25	**10.3**	14	18.3	80	90°	4
L4272530	M12	1.0	**10.7**	14	18.4	90	90°	4
L4272550	M14	1.5	**12.0**	16	21.65	100	90°	4
L4272610	M16	1.5	**14.0**	18	24.65	102	90°	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

YG THREAD MILLS

L4273 SERIES

UNC

Solid Carbide Thread Mill with Coolant Hole & Chamfer for UNC Internal Thread - ANSI B 1.1

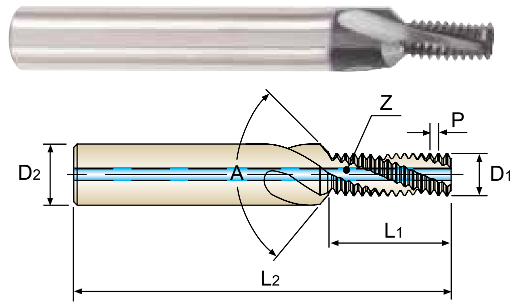
VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL & FASE für UNC INNENGEWINDE - ANSI B 1.1

FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER UNC - ANSI B 1.1

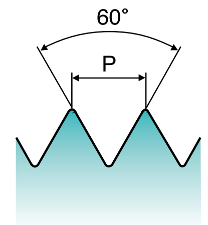
Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo grosso - ANSI B 1.1

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN	[D]		D_1	D_2	L_1	L_2	A	Z
L4273400	1/4	20	**4.8**	8	13.3	62	90°	3
L4273440	5/16	18	**6.2**	10	16.18	74	90°	3
L4273480	3/8	16	**7.6**	12	19.8	80	90°	4
L4273520	7/16	14	**8.9**	12	22.62	80	90°	4
L4273560	1/2	13	**10.3**	14	26.32	90	90°	4
L4273600	9/16	12	**11.7**	16	30.63	100	90°	4
L4273640	5/8	11	**13.1**	18	33.41	102	90°	4
L4273700	3/4	10	**16.0**	20	39.29	110	90°	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG THREAD MILLS

L4274 SERIES

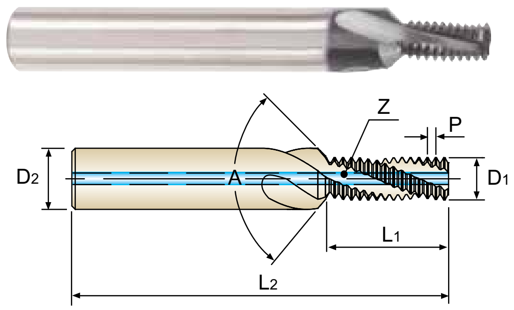
UNF

Solid Carbide Thread Mill with Coolant Hole & Chamfer for UNF Internal Thread - ANSI B 1.1

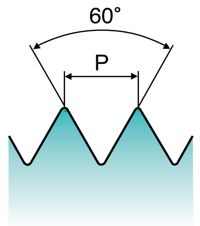
VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL & FASE für UNF INNENGEWINDE - ANSI B 1.1
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER UNC - ANSI B 1.1
Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo fine - ANSI B 1.1

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.



Thread Depth
2×D



Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D_1	D_2	L_1	L_2	A	Z
L4274420	1/4	28	**5.1**	8	13.21	62	90°	3
L4274460	5/16	24	**6.5**	10	16.37	74	90°	3
L4274500	3/8	24	**8.1**	12	19.54	80	90°	4
L4274540	7/16	20	**9.4**	12	22.19	80	90°	4
L4274580	1/2	20	**11.0**	14	26	90	90°	4
L4274620	9/16	18	**12.4**	16	28.88	100	90°	4
L4274660	5/8	18	**14.0**	18	33.12	102	90°	5
L4274720	3/4	16	**17.0**	20	38.86	110	90°	5

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

YG THREAD MILLS

L4276 SERIES

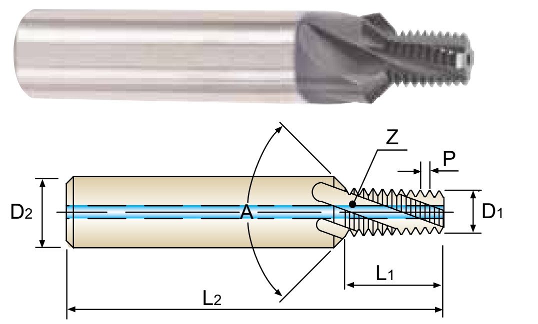
NPT

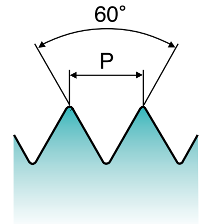
Solid Carbide Thread Mill with Coolant Hole & Chamfer for NPT Thread - ANSI B 1.20.1

VOLLHARTMETALL GEWINDEFRÄSER mit KÜHLKANAL & FASE für NPT INNENGEWINDE - ANSI B 1.20.1
FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER NPT - ANSI B 1.20.1
Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo fine - ANSI B 1.1

▶ Easy to cut threads even for exotic materials like Nickel, Titanium and their alloys.

▶ Problemloses Gewindeschneiden sogar in exotischen Werkstoffen, wie Nickel, Titan und ihre Legierungen.





Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D_1	D_2	L_1	L_2	A	Z
L4276020	NPT1/16	27	**5.9**	10	8.9	64	90°	3
L4276200	NPT1/8	27	**7.8**	12	8.9	70	90°	4
L4276400	NPT1/4	18	**10.05**	16	13.4	81	90°	4
L4276480	NPT3/8	18	**13.45**	18	13.4	81	90°	4

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

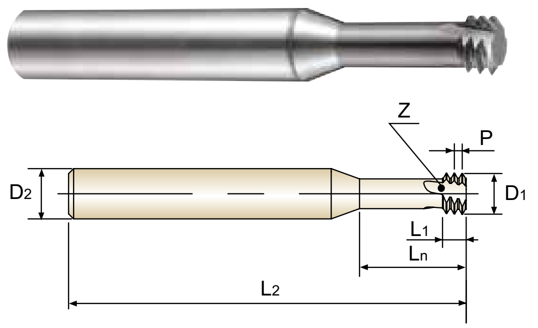
YG THREAD MILLS

L12D1 SERIES

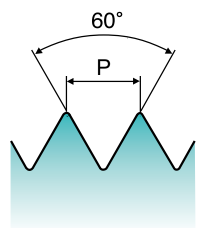
M Solid Carbide Miniature Thread Mill for ISO Metric Internal Thread - DIN13

VOLLHARTMETALL MINI-GEWINDEFRÄSER für ISO METRISCHE INNENGEWINDE - DIN13
FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13
Mini frese per filettatura interne ISO metriche passo grosso - DIN 13

▶ Short thread length ▶ Kurze Gewindelänge



Thread Depth
2×D



Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	Ln	L2	Z
L12D1010	M1	0.25	**0.70**	3	0.75	2.1	30	3
L12D1050	M1.2	0.25	**0.90**	3	0.75	2.5	30	3
L12D1070	M1.4	0.3	**1.04**	3	0.90	2.9	30	3
L12D1090	M1.6	0.35	**1.18**	3	1.05	3.4	30	3
L12D1130	M2	0.4	**1.52**	6	1.2	4.2	57	3
L12D1150	M2.2	0.45	**1.66**	6	1.35	4.6	57	3
L12D1170	M2.5	0.45	**1.96**	6	1.35	5.3	57	3
L12D1200	M3	0.5	**2.4**	6	1.5	6.3	57	3
L12D1240	M4	0.7	**3.16**	6	2.1	8.4	57	3
L12D1280	M5	0.8	**4.04**	6	2.4	10.5	57	3
L12D1310	M6	1.0	**4.8**	6	3.0	12.6	57	3
L12D1360	M8	1.25	**6.5**	8	3.75	16.8	63	3
L12D1420	M10	1.5	**8.2**	10	4.5	21.0	73	3
L12D1500	M12	1.75	**9.9**	10	5.25	25.2	73	3

∗ Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

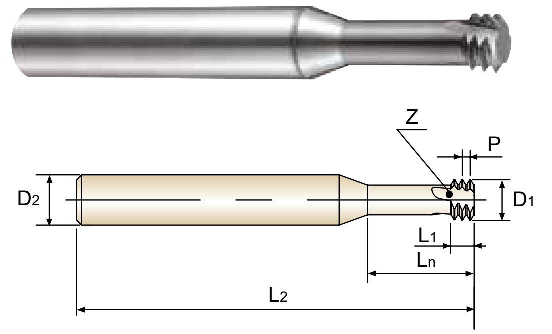
YG THREAD MILLS

L12D3 SERIES

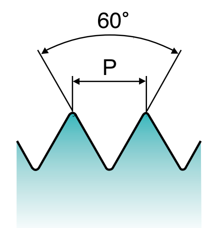
UNC Solid Carbide Miniature Thread Mill for UNC Internal Thread - ANSI B 1.1

VOLLHARTMETALL MINI-GEWINDEFRÄSER für UNC INNENGEWINDE - ANSI B 1.1
FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE INTER UNC- ANSI B 1.1
Mini frese per filettature interne unificato passo grosso - ANSI B 1.1

▶ Short thread length ▶ Kurze Gewindelänge



Thread Depth
2×D



Material groups: MU | CARBIDE | DIN 6535HA | 60° | R15 | TiAlN | p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	Ln	L2	Z
L12D3040	#1	64	**1.38**	6	1.19	3.9	57	3
L12D3080	#2	56	**1.64**	6	1.36	4.6	57	3
L12D3160	#4	40	**2.08**	6	1.91	6.0	57	3
L12D3240	#6	32	**2.55**	6	2.38	7.4	57	3
L12D3280	#8	32	**3.21**	6	2.38	8.7	57	3
L12D3320	#10	24	**3.56**	6	3.18	10.1	57	3
L12D3360	#12	24	**4.22**	6	3.18	11.5	57	3
L12D3400	1/4	20	**4.83**	6	3.81	13.3	57	3
L12D3440	5/16	18	**6.24**	8	4.23	16.7	63	3
L12D3480	3/8	16	**7.62**	8	4.76	20.0	63	3
L12D3520	7/16	14	**8.94**	10	5.44	23.3	73	3

∗ Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG THREAD MILLS

L19E1 SERIES

M — Solid Carbide Miniature Thread Mill for Hard Materials, ISO Metric Internal Thread - DIN13

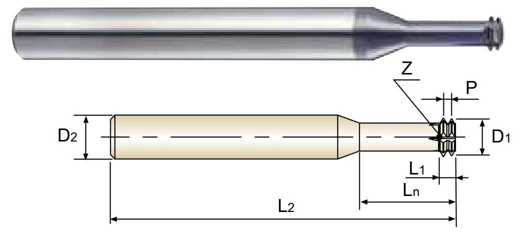
VOLLHARTMETALL MINI-GEWINDEFRÄSER für GEHÄRTETE MATERIALIEN, ISO METRISCHE INNENGEWINDE - DIN13

FRAISES À TOURBILLONNER CARBURE MONOBLOC POUR MATÉRIAUX DURS, FILETAGE ISO INTER MÉTRIQUE - DIN13

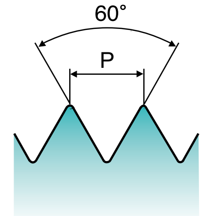
Mini frese per acciai temprati ISO metriche passo grosso - DIN 13

- ▶ Short thread length
- ▶ Straight Flute
- ▶ Left hand Cut (CNC code : M04)
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRc62

- ▶ Kurze Gewindelänge
- ▶ Linksschneidend, geradegenutet
- ▶ Linksschneidend (CNC Befehl : M04)
- ▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
- ▶ Für gehärtete Materialien bis zu HRc62



Thread Depth
2×D



p.B53

Recommended ToolHolder

	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AlTiN		P	D_1	D_2	L_1	L_n	L_2	Z
L19E1130	M2	0.4	**1.52**	6	0.8	4.2	57	4
L19E1150	M2.2	0.45	**1.66**	6	0.9	4.6	57	4
L19E1170	M2.5	0.45	**1.96**	6	0.9	5.3	57	4
L19E1200	M3	0.5	**2.4**	6	1.0	6.3	57	4
L19E1240	M4	0.7	**3.16**	6	1.4	8.4	57	4
L19E1280	M5	0.8	**4.04**	6	1.6	10.5	57	4
L19E1310	M6	1.0	**4.8**	6	2.0	12.6	57	5
L19E1360	M8	1.25	**6.5**	8	2.5	16.8	63	5
L19E1420	M10	1.5	**8.2**	10	3.0	21.0	73	6
L19E1500	M12	1.75	**9.9**	10	3.5	25.2	73	6

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG THREAD MILLS

L19E3 SERIES

UNC — Solid Carbide Miniature Thread Mill for Hard Materials, UNC Internal Thread - ANSI B 1.1

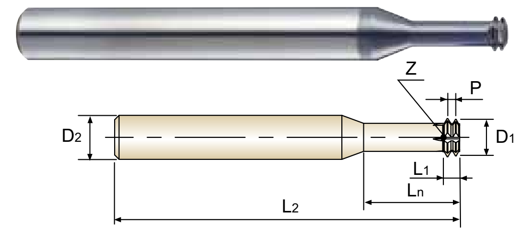
VOLLHARTMETALL MINI-GEWINDEFRÄSER für GEHÄRTETE MATERIALIEN, UNC INNENGEWINDE - ANSI B 1.1

FRAISES À TOURBILLONNER CARBURE MONOBLOC POUR MATÉRIAUX DURS POUR FILETAGE INTER UNC - ANSI B 1.1

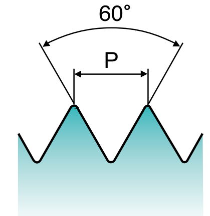
Mini frese per acciai temprati unificato passo grosso - ANSI B 1.1

- ▶ Short thread length
- ▶ Straight Flute
- ▶ Left hand Cut (CNC code : M04)
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRc62

- ▶ Kurze Gewindelänge
- ▶ Linksschneidend, geradegenutet
- ▶ Linksschneidend (CNC Befehl : M04)
- ▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
- ▶ Für gehärtete Materialien bis zu HRc62



Thread Depth
2×D



p.B53

Recommended ToolHolder

	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AlTiN			D_1	D_2	L_1	L_n	L_2	Z
L19E3080	#2	56	**1.64**	6	0.91	4.6	57	4
L19E3160	#4	40	**2.08**	6	1.27	6.0	57	4
L19E3240	#6	32	**2.55**	6	1.59	7.4	57	4
L19E3280	#8	32	**3.21**	6	1.59	8.7	57	4
L19E3320	#10	24	**3.56**	6	2.12	10.1	57	4
L19E3360	#12	24	**4.22**	6	2.12	11.5	57	4
L19E3400	1/4	20	**4.83**	6	2.54	13.3	57	5
L19E3440	5/16	18	**6.24**	8	2.82	16.7	63	5
L19E3480	3/8	16	**7.62**	8	3.18	20.0	63	6
L19E3520	7/16	14	**8.94**	10	3.63	23.3	73	6

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎

YG THREAD MILLS

UNCOATED **L41A1** SERIES
TiAlN **L42A1** SERIES

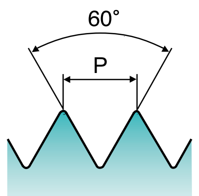
M Solid Carbide Drill and Thread Mill with Chamfer for ISO Metric Internal Thread - DIN 13

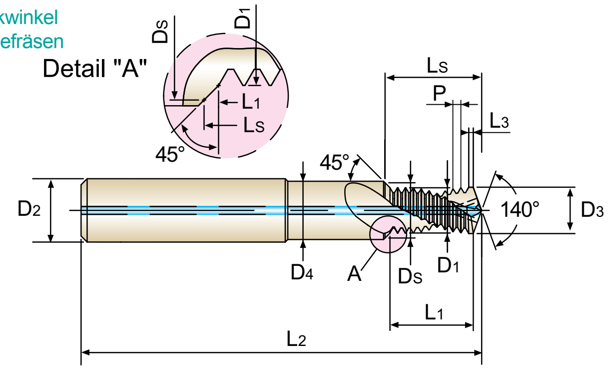
VOLLHARTMETALL BOHRGEWINDEFRÄSER MIT SENKFASE für ISO METRISCHE INNENGEWINDE - DIN 13
FRAISES À FILETER ET À PERCER CARBURE MONOBLOC AVEC CHANFREIN POUR FILETAGE INTER - DIN13
Fresa fora, filetta e smussa , filettature interne, ISO metriche passo grosso - DIN 13

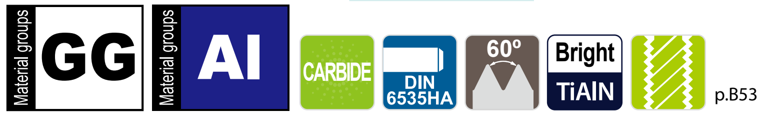
- No. of Flute : 2
- Drill Point : 140° / Countersink : 90°
- Drilling, Chamfering and Thread milling

- Anz. der Nuten : 2
- 140° Spitzenwinkel, 90° Senkwinkel
- Bohren, Senken und Gewindefräsen

Thread Depth
2×D







p.B53

Recommended ToolHolder	Flat Shank	Page	Plain Shank	Page
◎	END MILL HOLDER	D117 - 137	HYDRAULIC CHUCK SHRINK FIT HOLDER	D15 - 46 D47 - 72
◎	POWER MILLING CHUCK			D161 - 176
○	ER COLLET CHUCK SK SLIM CHUCK			D73 - 115 D183 - 201

Unit : mm

EDP No. Bright	EDP No. TiAlN	Nominal Diameter [D]	Pitch P	Cutter Diameter D_1	Shank Diameter D_2	Effect. Diameter D_S	Drill Diameter D_3	Max. C'sink D_4	Thread Length L_1	Effect. Length L_S	Drill Length L_3	Overall Length L_2
L41A1310	L42A1310	M6	1.0	4.75	8	6.3	5.00	6.6	13.00	14.68	1.00	62
L41A1360	L42A1360	M8	1.25	6.35	10	8.3	6.75	9.0	16.27	18.48	1.25	74
L41A1420	L42A1420	M10	1.5	7.95	12	10.3	8.50	11.0	21.05	23.77	1.50	79
L41A1500	L42A1500	M12	1.75	9.95	14	12.3	10.25	13.5	24.21	27.25	1.50	89
L41A1540	L42A1540	M14	2.0	11.20	16	14.3	12.00	15.5	29.58	33.32	1.50	102

* Other coatings are available on your request

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎											

phone:+82-32-526-0909, www.yg1.kr, E-mail:yg1@yg1.kr
YG YG-1 CO., LTD.

YG THREAD MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

For Thread Mills

unit : mm

Materials	Hardness (HB)	Strength (N/mm²)	Feed per Tooth (fz) Cutter Diameter ≤Ø8.0	Feed per Tooth (fz) Cutter Diameter >Ø8.0
Low Carbon Steels	≤ 200	≤ 700	0.02 - 0.04	0.04 - 0.10
Medium Carbon Steels High Carbon Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Alloy Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Heat Treated Steels	≤ 400	≤ 1400	0.02 - 0.04	0.04 - 0.10
Stainless Steels	≤ 300	≤ 1000	0.01 - 0.02	0.02 - 0.06
Cast Iron	≤ 300	≤ 1000	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys Titanium Alloys	≤ 350	≤ 1200	0.01 - 0.02	0.02 - 0.06
Non Ferrous Materials	≤ 200	≤ 700	0.03 - 0.07	0.05 - 0.10

For Drill and Thread Mills

unit : mm

Material	Hardness (HB)	Strength (N/mm²)	Fz(Thread Milling) -Feed per Tooth Cutter Diameter ≤Ø8.0	Fz(Thread Milling) -Feed per Tooth Cutter Diameter >Ø8.0	Fdr(Drilling) - Feed per revolution Cutter Diameter ≤Ø8.0	Fdr(Drilling) - Feed per revolution Cutter Diameter >Ø8.0
Cast Iron	≤ 200	≤ 700	0.03-0.08	0.08-0.12	0.10-0.20	0.20-0.25
Aluminium Aluminium-alloy Magnesium	≤ 180	≤ 600	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30
Plastics	-	-	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30

For Hard Material Miniature Thread Mills

unit : mm

Material	Hardness	Strength (N/mm²)	Feed(mm/tooth) Cutter Diameter ≤Ø6.0	Feed(mm/tooth) Cutter Diameter >Ø6.0
Alloy Steel	295-415HB	1000-1400	0.02-0.04	0.04-0.06
Stainless Steel	280-415HB	950-1250	0.02-0.04	0.04-0.06
Cast Iron	≤ HB300	≤ 1000	0.03-0.05	0.05-0.07
Chrome-Nickel Alloys Titanium Alloys	≤ HB445	≤ 1500	0.02-0.03	0.03-0.05
Hardened Material	45-50HRc		0.03-0.05	0.05-0.07
	51-55HRc		0.02-0.04	0.04-0.06
	56-62HRc		0.01-0.03	0.03-0.05

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YG THREAD MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	L1211	L1212	L1213	L1214	L4211	L4212	L6215	L4271	L4272
					Vc (m/min)								
P	1	Non-alloy steel	125		80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	2		190	13	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	3		250	25	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	4		270	28	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	5		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	6	Low alloy steel	180	10	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	7		275	29	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	8		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	9		350	38	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	10	High alloyed steel, and tool steel	200	15	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
	11		325	35	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
M	12	Stainless steel	200	15	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80
	13		240	23	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80
	14		180	10	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80	40-80
K	15	Grey cast iron	180	10	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
	16		260	26	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
	17	Nodular cast iron	160	3	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
	18		250	25	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
	19	Malleable cast iron	130		50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
	20		230	21	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
N	21	Aluminum-wrought alloy	60		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	22		100		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	23	Aluminum-cast, alloyed	75		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	24		90		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	25		130		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	26	Copper and Copper Alloys (Bronze / Brass)	110		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	27		90		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	28		100		100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	29	Non Metallic Materials			100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
	30				100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300	100-300
S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	32		280	30	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	33		250	25	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	34		350	38	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	35		320	34	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	36	Titanium Alloys	400 Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
	37		1050 Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60
H	38	Hardened steel	550	55						25-60	25-60		
	39		630	60						25-50	25-50		
	40	Chilled Cast Iron	400	42						25-70	25-70		
	41	Hardened Cast Iron	550	55						25-60	25-60		

YG THREAD MILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	L4273	L4274	L4276	L12D1	L12D3	L19E1	L19E3	L41A1 L42A1
					Vc (m/min)							
P	1	Non-alloy steel	125		80-120	80-120	80-120	80-120	80-120			
	2		190	13	80-120	80-120	80-120	80-120	80-120			
	3		250	25	80-120	80-120	80-120	80-120	80-120			
	4		270	28	80-120	80-120	80-120	80-120	80-120			
	5		300	32	80-120	80-120	80-120	80-120	80-120			
	6	Low alloy steel	180	10	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	7		275	29	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	8		300	32	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	9		350	38	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	10	High alloyed steel, and tool steel	200	15	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
	11		325	35	80-120	80-120	80-120	80-120	80-120	80-120	80-120	
M	12	Stainless steel	200	15	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	13		240	23	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
	14		180	10	40-80	40-80	40-80	40-80	40-80	40-80	40-80	
K	15	Grey cast iron	180	10	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	16		260	26	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	17	Nodular cast iron	160	3	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	18		250	25	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	19	Malleable cast iron	130		50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
	20		230	21	50-100	50-100	50-100	50-100	50-100	50-100	50-100	80-150
N	21	Aluminum-wrought alloy	60		100-300	100-300	100-300	100-300	100-300			100-300
	22		100		100-300	100-300	100-300	100-300	100-300			100-300
	23	Aluminum-cast, alloyed	75		100-300	100-300	100-300	100-300	100-300			100-300
	24		90		100-300	100-300	100-300	100-300	100-300			100-300
	25		130		100-300	100-300	100-300	100-300	100-300			100-300
	26	Copper and Copper Alloys (Bronze / Brass)	110		100-300	100-300	100-300	100-300	100-300			100-300
	27		90		100-300	100-300	100-300	100-300	100-300			100-300
	28		100		100-300	100-300	100-300	100-300	100-300			100-300
	29	Non Metallic Materials			100-300	100-300	100-300	100-300	100-300			80-150
	30				100-300	100-300	100-300	100-300	100-300			80-150
S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	32		280	30	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	33		250	25	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	34		350	38	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	35		320	34	20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	36	Titanium Alloys	400 Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	
	37		1050 Rm		20-60	20-60	20-60	20-60	20-60	20-60	20-60	
H	38	Hardened steel	550	55						25-60	25-60	
	39		630	60						25-50	25-50	
	40	Chilled Cast Iron	400	42						25-70	25-70	
	41	Hardened Cast Iron	550	55						25-60	25-60	

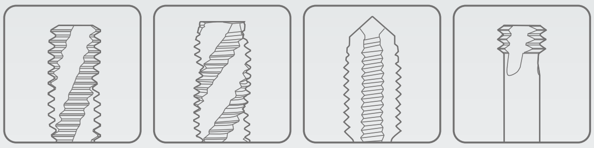
TO CALCULATE SPEED & FEED RATES
SCHNITTGESCHWINDIGKEIT & VORSCHUB KALKULIEREN

Calculate R.P.M of Cutter	Calculate Feed per Revolution	Finally Calculate Feed at Tool Center Line
$n = \dfrac{1000 \times V}{d \times \pi}$	$F_1 = Fz \times Z \times N$	$F_2 = \dfrac{F_1 \times (D - d)}{D}$

N	RPM
V	Recommended Cutting Speed
d	Diameter of Cutter
Fz	Recommended Feed per Tooth
Z	Number of Teeth
F2	Feed at Center Line of Cutting
F1	Feed at Cutting Edge
D	Major Diameter of Component

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

Global Cutting Tool Leader YG-1



THREADING

Leading Through Innovation

HSS-PM

SYNCHRO TAPS
Synchro Gewindebohrer

- For High Speed Tapping on Rigid CNC Machine
- Für Hochgeschwindigkeits-Gewindebohren auf starren CNC-Maschinen

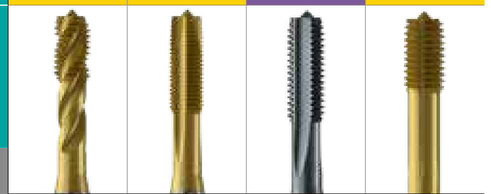
SELECTION GUIDE

YG THREADING TOOLS

HSS-PM SYNCHRO TAPS

For High Speed Tapping on Rigid CNC Machine

HOLE TYPE			Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 2.0xD Blind/Through Hole	Max. 3.0xD Blind/Through Hole
TOOL MATERIAL			HSS-PM			
CHAMFER LEAD ACC. TO DIN2197			C	B	C	C
FLUTE TYPE			Spiral Flute	Spiral Point	Straight Flute	Cold Forming
SPIRAL FLUTE ANGLE			R45	-	-	-
SERIES	M	DIN371/376	TTS31 (p.B57)	TTS33 (p.B58)	TKS35 (p.B59)	TTS37 (p.B60)
		DIN352				
		DIN357/LONG				
	MF	DIN374				
		DIN2181				
	UNC	DIN371/376				
		DIN351				
	UNF	DIN371/374				
		DIN2181				
	BSW	DIN2182/2183				
		DIN351				
	G(BSP)	DIN5156/5157				
	EG-M	DIN371/376				
	EG-UNC	DIN371/376				
	EG-UNF	DIN371/374				
SURFACE TREATMENT			TiN	TiN	TiCN	TiN
MODEL						



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B61

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TTS31	TTS33	TKS35	TTS37
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	◎	○	◎
	2		About 0.45% C	Annealed	190	13	◎	◎	○	◎
	3		About 0.45% C	Quenched & Tempered	250	25	◎	◎	○	◎
	4		About 0.75% C	Annealed	270	28	◎	◎	○	◎
	5		About 0.75% C	Quenched & Tempered	300	32				
	6	Low alloy steel		Annealed	180	10	◎	◎	○	◎
	7			Quenched & Tempered	275	29	◎	◎	○	◎
	8			Quenched & Tempered	300	32				
	9			Quenched & Tempered	350	38				
	10	High alloyed steel, and tool steel		Annealed	200	15				
	11			Quenched & Tempered	325	35				
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎	◎		◎
	13		Martensitic	Quenched & Tempered	240	23	◎	◎		◎
	14		Austenitic		180	10	○	○		◎
K	15	Grey cast iron	Pearlitic / ferritic		180	10	○	○	◎	
	16		Pearlitic (Martensitic)		260	26			◎	
	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎	
	18		Pearlitic		250	25			◎	
	19	Malleable cast iron	Ferritic		130				○	
	20		Pearlitic		230	21			○	
N	21	Aluminum-wrought alloy	Not Curable		60					◎
	22		Curable	Hardened	100					◎
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎	○	◎
	24		≤ 12% Si, Curable	Hardened	90		◎	◎	○	◎
	25		> 12% Si, Not Curable		130		◎	◎	○	○
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎	◎		
	27		CuZn, CuSnZn (Brass)		90					
	28		CuSn, lead-free copper and electrolytic copper		100		○	○		◎
	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		Ni or Co Based	Annealed	250	25				
	34			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				

YG SYNCHRO TAPS

TTS31 SERIES

M ISO metric coarse threads DIN 13

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

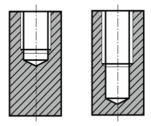
Machine taps
Maschinengewindebohrer

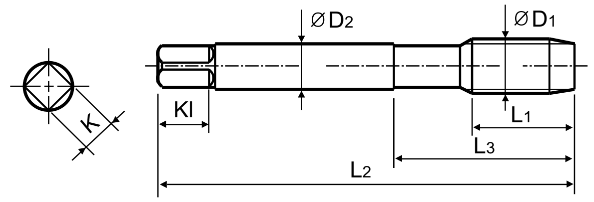
- Coated HSS-PM(Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- Up to 3 times faster in tapping compared to conventional taps
- For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- High precision threads

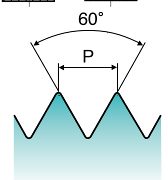
- Beschichtete HSS-PM-Gewindebohrer zum Hochgeschwindigkeitsgewindebohren auf starren CNC-Maschinen oder gleichwertige Maschinen
- Bis zu dreimal schnelleres Gewindeschneiden als bei herkömmlichen Gewindebohrern
- Beim Hochgeschwindigkeits-Gewindebohren wird die Verwendung eines Synchrofutters zur Erhöhung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

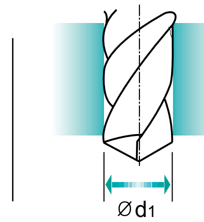
DIN 371
DIN 376

Hole type
2.5×D









Material groups GS | HSS PM | DIN 371/376 | 6H | 60° | C | R45 | TiN | p.B61

Recommended ToolHolder: Plain Shank — ◎ SYNCHRO TAPPING CHUCK — Page D203-210

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	Kl	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	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	400Rm	1050Rm	550	630	400	550
Recommended			◎	◎	◎	◎		○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

SYNCHRO TAPS

TTS33 SERIES

M ISO metric coarse threads DIN 13

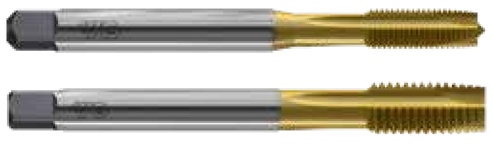
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

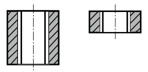
- ▶ Coated HSS-PM(Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision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

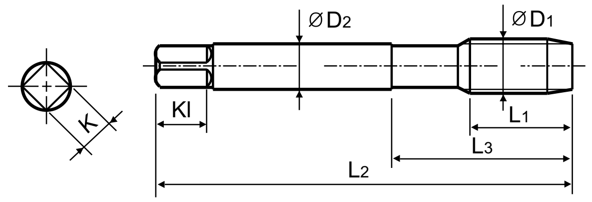
- ▶ Beschichtete HSS-PM-Gewindebohrer zum Hochgeschwindigkeitsgewindebohren auf starren CNC-Maschinen oder gleichwertige Maschinen
- ▶ Bis zu dreimal schnelleres Gewindeschneiden als bei herkömmlichen Gewindebohrern
- ▶ Beim Hochgeschwindigkeits-Gewindebohren wird die Verwendung eines Synchrofutters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

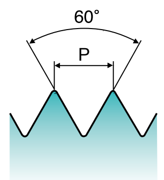
DIN 371
DIN 376

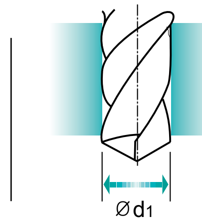


Hole type
3.0×D









Material groups: GS | HSS PM | DIN 371/376 | 6HX | 60° | B | TiN | p.B61

Recommended ToolHolder: Plain Shank – SYNCHRO TAPPING CHUCK – Page D203-210

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	Kl	Z	Ød1
M3	× 0.5	TTS33206	5	56	18	3.5	2.7	6	3	2.5
M4	× 0.7	TTS33246	7	63	21	4.5	3.4	6	3	3.3
M5	× 0.8	TTS33286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TTS33316	10	80	30	6	4.9	8	3	5
M8	× 1.25	TTS33366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TTS33426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TTS33506	18	110	44	9	7	10	4	10.2
M14	× 2	TTS33546	20	110	44	11	9	12	4	12
M16	× 2	TTS33606	20	110	44	12	9	12	4	14
M18	× 2.5	TTS33656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TTS33706	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	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	400Rm	1050Rm	550	630	400	550
Recommended			◎	◎	◎	◎		○													

SYNCHRO TAPS

TKS35 SERIES

M ISO metric coarse threads DIN 13

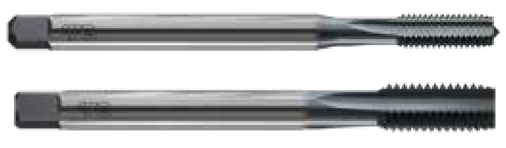
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

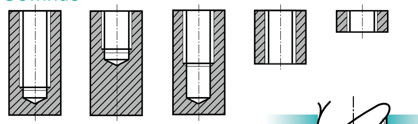
- ▶ Coated HSS-PM(Powder Metallurgy) Taps for high-speed tapping on rigid CNC machines or equivalent machines
- ▶ Up to 3 times faster in tapping compared to conventional taps
- ▶ For high-speed synchro tapping, synchro holder for increasing tool life and thread quality is recommended
- ▶ High precision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

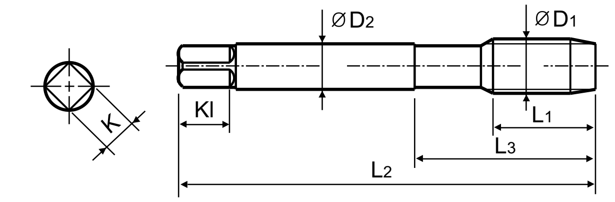
- ▶ Beschichtete HSS-PM-Gewindebohrer zum Hochgeschwindigkeitsgewindebohren auf starren CNC-Maschinen oder gleichwertige Maschinen
- ▶ Bis zu dreimal schnelleres Gewindeschneiden als bei herkömmlichen Gewindebohrern
- ▶ Beim Hochgeschwindigkeits-Gewindebohren wird die Verwendung eines Synchrofutters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

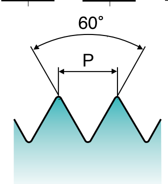
DIN 371
DIN 376

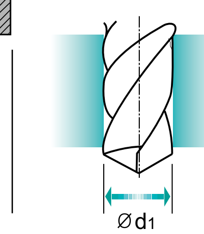


Hole type
2.0×D









Material groups: GS | HSS PM | DIN 371/376 | 6HX | 60° | C | TiCN | p.B61

Recommended ToolHolder: Plain Shank – SYNCHRO TAPPING CHUCK – Page D203-210

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	TiCN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TKS35206	5	56	18	3.5	2.7	6	3	2.5
M4	× 0.7	TKS35246	7	63	21	4.5	3.4	6	3	3.3
M5	× 0.8	TKS35286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TKS35316	10	80	30	6	4.9	8	3	5
M8	× 1.25	TKS35366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TKS35426	15	100	39	10	8	11	4	8.5
M12	× 1.75	TKS35506	18	110	44	9	7	10	4	10.2
M14	× 2	TKS35546	20	110	44	11	9	12	4	12
M16	× 2	TKS35606	20	110	44	12	9	12	4	14
M18	× 2.5	TKS35656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TKS35706	25	140	54	16	12	15	4	17.5

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

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			○	○	○																

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG SYNCHRO TAPS

TTS37 SERIES

M ISO metric coarse threads DIN 13

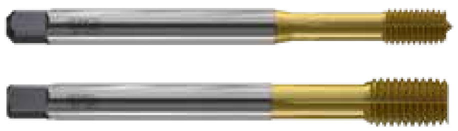
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

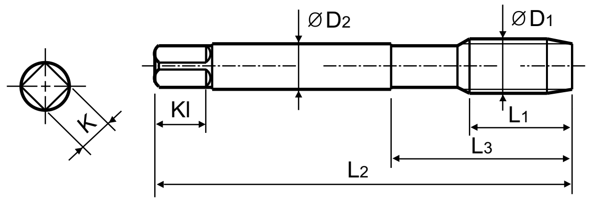
Cold forming taps
Gewindeformer

- 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

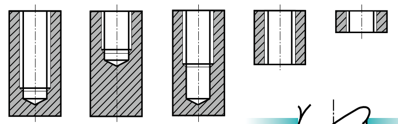
- Beschichtete HSS-PM-Gewindebohrer zum Hochgeschwindigkeitsgewindebohren auf starren CNC-Maschinen oder gleichwertige Maschinen
- Bis zu dreimal schnelleres Gewindeschneiden als bei herkömmlichen Gewindebohren
- Beim Hochgeschwindigkeits-Gewindebohren wird die Verwendung eines Synchrofutters zur Erhöhung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

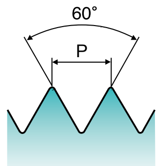
DIN 371
DIN 376

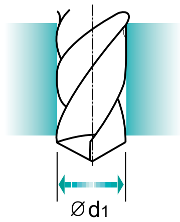




Hole type
3.0×D







Material groups GV | HSS PM | DIN 371/376 | 6HX | 60° | C | TiN

p.B61

Recommended ToolHolder: Plain Shank – SYNCHRO TAPPING CHUCK – Page D203-210

Recommended cutting : P.69

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
$ØD_1$	P	TiN	L_1	L_2	L_3	$ØD_2$	K	Kl	$Ød_1$
M3	× 0.5	TTS37206	5	56	18	3.5	2.7	6	2.8
M4	× 0.7	TTS37246	7	63	21	4.5	3.4	6	3.7
M5	× 0.8	TTS37286	8	70	25	6	4.9	8	4.65
M6	× 1	TTS37316	10	80	30	6	4.9	8	5.55
M8	× 1.25	TTS37366	13	90	35	8	6.2	9	7.4
M10	× 1.5	TTS37426	15	100	39	10	8	11	9.3
M12	× 1.75	TTS37506	18	110	44	9	7	10	11.2

▶DIN 371(M3~M10) and DIN 376(M11~M12)

◎ : 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	◎	◎	◎	◎		◎	◎					◎	◎	◎						

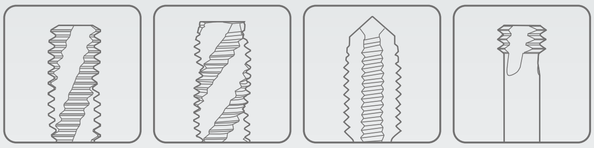
ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	○			◎													

YG 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
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	Copper and Copper Alloys (Bronze / Brass)	110		45-50	45-50		
	27		90					
	28		100		25-30	25-30		25-30

Global Cutting Tool Leader **YG-1**



THREADING

Leading Through Innovation

HSS-PM

PRIME TAPS

PRIME GEWINDEBOHRER

- **Premium Spiral Point and Spiral Flute Taps for CNC Machines**
- **High and Reliable Performance on Various Ductile Materials**
- Premium Gerade- und Spiralgenutete Gewindebohrer
- Ausgezeichnete und zuverlässige Leistung in verschiedenen Werkstoffen

SELECTION GUIDE

YG THREADING TOOLS

HSS-PM PRIME TAPS

Premium Spiral Point and Spiral Flute Taps for CNC Machines
High and Reliable Performance on Various Ductile Materials

HOLE TYPE		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole
TOOL MATERIAL		HSS-PM		
CHAMFER LEAD ACC. TO DIN2197		C	E	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Point
SPIRAL FLUTE ANGLE		R45	R45	-
SERIES M	DIN371/376	TRE30 (p.B65)	TRE34 (p.B66)	TRJ15 (p.B71)
M	DIN352			
M	DIN357/LONG			
MF	DIN374	TRE31 (p.B67)		TRJ16 (p.B72)
MF	DIN2181			
UNC	DIN371/376	TRE32 (p.B69)		TRJ17 (p.B74)
UNC	DIN351			
UNF	DIN371/374	TRE33 (p.B70)		TRJ18 (p.B75)
UNF	DIN2181			
BSW	DIN2182/2183			
BSW	DIN351			
G(BSP)	DIN5156/5157			
EG-M	DIN371/376			
EG-UNC	DIN371/376			
EG-UNF	DIN371/374			
SURFACE TREATMENT		X-coating		
MODEL				

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B76

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC	TRE30	TRE34	TRJ15
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	◎
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28	◎	◎	◎
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32	◎	◎	◎
P	6	Low alloy steel		Annealed	180	10	◎	◎	◎
P	7	Low alloy steel		Quenched & Tempered	275	29	◎	◎	◎
P	8	Low alloy steel		Quenched & Tempered	300	32	◎	◎	◎
P	9	Low alloy steel		Quenched & Tempered	350	38	○	○	◎
P	10	High alloyed steel, and tool steel		Annealed	200	15	○	○	○
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35	○	○	○
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎	◎	◎
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	◎	◎	◎
M	14	Stainless steel	Austenitic		180	10	◎	◎	◎
K	15	Grey cast iron	Pearlitic / ferritic		180	10	○	○	◎
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26	○	○	◎
K	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎
K	18	Nodular cast iron	Pearlitic		250	25	◎	◎	◎
K	19	Malleable cast iron	Ferritic		130				
K	20	Malleable cast iron	Pearlitic		230	21			
N	21	Aluminum-wrought alloy	Not Curable		60		○	○	○
N	22	Aluminum-wrought alloy	Curable	Hardened	100		○	○	○
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎	◎
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90		◎	◎	◎
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130		○	○	○
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎	◎	◎
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90		◎	◎	◎
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic						
N	30	Non Metallic Materials	Rubber, Wood, etc.						
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15			
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30			
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25			
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38			
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34			
S	36	Titanium Alloys	Pure Titanium		400 Rm				
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm				
H	38	Hardened steel		Hardened	550	55			
H	39	Hardened steel		Hardened	630	60			
H	40	Chilled Cast Iron		Cast	400	42			
H	41	Hardened Cast Iron		Hardened	550	55			

YG PRIME TAPS

TRE30 SERIES

M ISO Metric Coarse Threads DIN13

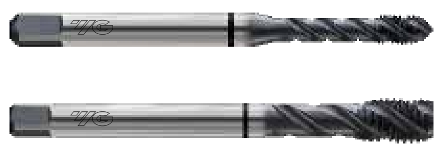
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

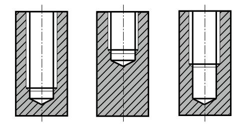
- High performance on various ductile materials
- Specially designed to prevent oversized threads and reduce gauging problems

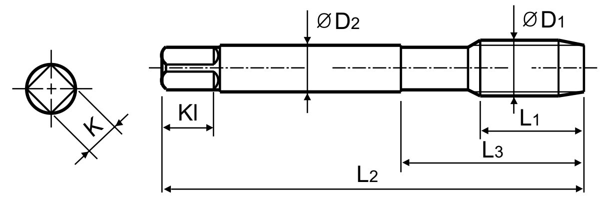
- Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

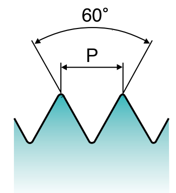
DIN 371
DIN 376

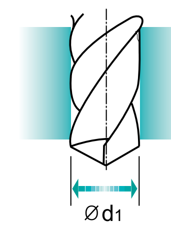


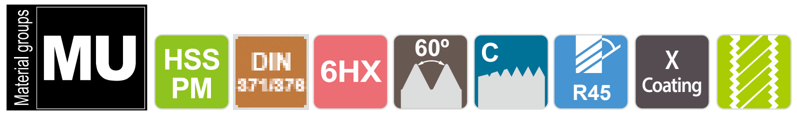
Hole type 2.5×D











p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203-210
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	x	0.4	TRE30136GS	3.2	45.0	13.0	2.8	2.1	5.0	2	1.6
M2.5	x	0.45	TRE30176GS	3.6	50.0	15.0	2.8	2.1	5.0	2	2.1
M3	x	0.5	TRE30206GS	4.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M3.5	x	0.6	TRE30226GS	4.8	56.0	20.0	4.0	3.0	6.0	3	2.9
M4	x	0.7	TRE30246GS	5.6	63.0	21.0	4.5	3.4	6.0	3	3.3
M5	x	0.8	TRE30286GS	6.4	70.0	25.0	6.0	4.9	8.0	3	4.2
M6	x	1.0	TRE30316GS	8.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M7	x	1.0	TRE30346GS	10.0	80.0	30.0	7.0	5.5	8.0	3	6.0
M8	x	1.25	TRE30366GS	13.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M9	x	1.25	TRE30396GS	13.0	90.0	35.0	9.0	7.0	10.0	3	7.8
M10	x	1.5	TRE30426GS	15.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12	x	1.75	TRE30506GS	18.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14	x	2.0	TRE30546GS	20.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16	x	2.0	TRE30606GS	20.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M18	x	2.5	TRE30656GS	25.0	125.0	50.0	14.0	11.0	14.0	4	15.5
M20	x	2.5	TRE30706GS	25.0	140.0	54.0	16.0	12.0	15.0	4	17.5
M22	x	2.5	TRE30746GS	25.0	140.0	54.0	18.0	14.5	17.0	4	19.5
M24	x	3.0	TRE30786GS	30.0	160.0	60.0	18.0	14.5	17.0	4	21.0

▶DIN 371(M2~M10) and DIN 376(M12~M24)

◎ : 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	○	○	◎	◎	○	◎	◎	◎													

PRIME TAPS

TRE34 SERIES

M ISO Metric Coarse Threads DIN13

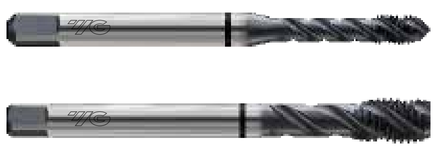
- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

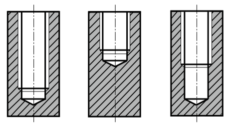
▶ High performance on various ductile materials
▶ Specially designed to prevent oversized threads and reduce gauging problems

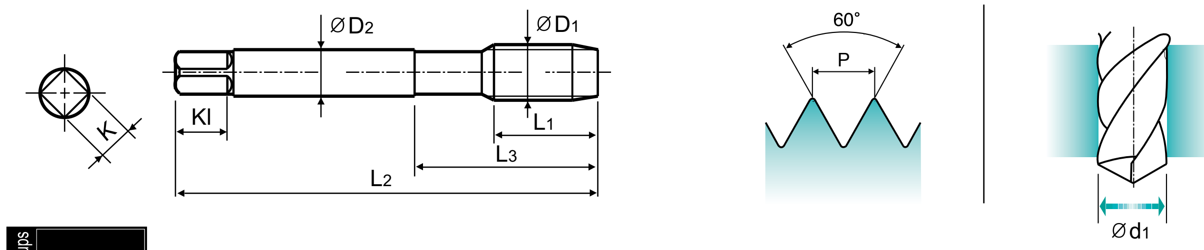
▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371
DIN 376



Hole type
2.5×D





Material groups: MU | HSS PM | DIN 371/376 | 6HX | 60° | E | R45 | X Coating | p.B76

Recommended ToolHolder

Plain Shank	Page
SYNCHRO TAPPING CHUCK	D203-210
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	x	0.4	TRE34136GS	3.2	45.0	13.0	2.8	2.1	5.0	2	1.6
M3	x	0.5	TRE34206GS	4.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M4	x	0.7	TRE34246GS	5.6	63.0	21.0	4.5	3.4	6.0	3	3.3
M5	x	0.8	TRE34286GS	6.4	70.0	25.0	6.0	4.9	8.0	3	4.2
M6	x	1.0	TRE34316GS	8.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M8	x	1.25	TRE34366GS	13.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M10	x	1.5	TRE34426GS	15.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12	x	1.75	TRE34506GS	18.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14	x	2.0	TRE34546GS	20.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16	x	2.0	TRE34606GS	20.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M20	x	2.5	TRE34706GS	25.0	140.0	54.0	16.0	12.0	15.0	4	17.5

▶DIN 371(M2~M10) and DIN 376(M12~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

PRIME TAPS

TRE31 SERIES

MF ISO Metric Fine Threads DIN13

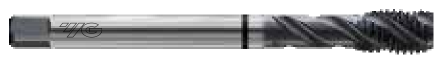
- MMetrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

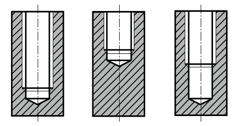
▶ High performance on various ductile materials
▶ Specially designed to prevent oversized threads and reduce gauging problems

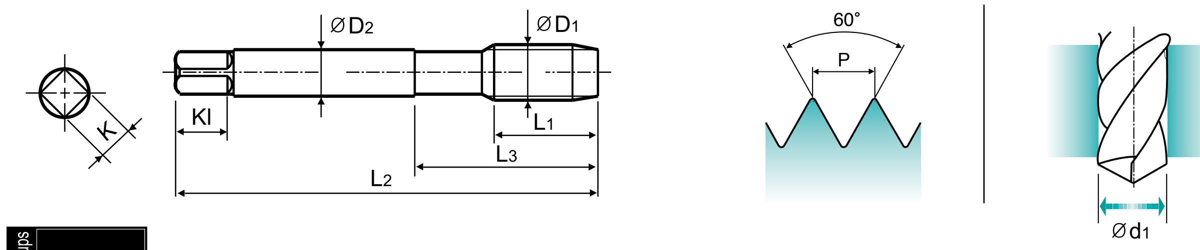
▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374



Hole type
2.5×D





Material groups: MU | HSS PM | DIN 374 | 6HX | 60° | C | R45 | X Coating | p.B76

Recommended ToolHolder

Plain Shank	Page
SYNCHRO TAPPING CHUCK	D203-210
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	x	0.5	TRE31256GS	5.6	63.0	21.0	2.8	2.1	5.0	3	3.5
M4	x	0.35	TRE31696GS	5.6	63.0	21.0	2.8	2.1	5.0	3	3.7
M5	x	0.5	TRE31296GS	6.4	70.0	25.0	3.5	2.7	6.0	3	4.5
M6	x	0.75	TRE31326GS	8.0	80.0	30.0	4.5	3.4	6.0	3	5.3
M6	x	0.5	TRE31336GS	8.0	80.0	30.0	4.5	3.4	6.0	3	5.5
M8	x	1.0	TRE31376GS	10.0	90.0	36.0	6.0	4.9	8.0	3	7.0
M8	x	0.75	TRE31386GS	10.0	80.0	30.0	6.0	4.9	8.0	3	7.3
M9	x	1.0	TRE31406GS	10.0	90.0	36.0	7.0	5.5	8.0	3	8.0
M9	x	0.75	TRE31416GS	10.0	80.0	30.0	7.0	5.5	8.0	3	8.3
M10	x	1.25	TRE31436GS	13.0	100.0	40.0	7.0	5.5	8.0	3	8.8
M10	x	1.0	TRE31446GS	10.0	90.0	36.0	7.0	5.5	8.0	3	9.0
M10	x	0.75	TRE31456GS	10.0	90.0	36.0	7.0	5.5	8.0	3	9.3
M12	x	1.5	TRE31516GS	15.0	100.0	40.0	9.0	7.0	10.0	3	10.5
M12	x	1.25	TRE31526GS	15.0	100.0	40.0	9.0	7.0	10.0	3	10.8
M12	x	1.0	TRE31536GS	15.0	100.0	40.0	9.0	7.0	10.0	3	11.0
M14	x	1.5	TRE31556GS	15.0	100.0	40.0	11.0	9.0	12.0	3	12.5
M14	x	1.25	TRE31566GS	15.0	100.0	40.0	11.0	9.0	12.0	3	12.8
M14	x	1.0	TRE31576GS	15.0	100.0	40.0	11.0	9.0	12.0	3	13.0
M16	x	1.5	TRE31616GS	15.0	100.0	40.0	12.0	9.0	12.0	3	14.5
M16	x	1.0	TRE31626GS	15.0	100.0	40.0	12.0	9.0	12.0	3	15.0

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG PRIME TAPS

TRE31 SERIES

MF ISO Metric Fine Threads DIN13

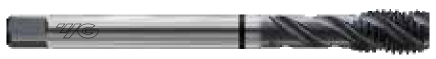
MMetrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

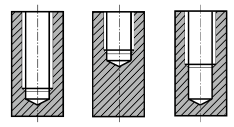
- ▶ High performance on various ductile materials
- ▶ Specially designed to prevent oversized threads and reduce gauging problems

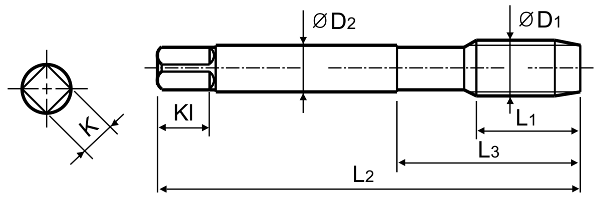
- ▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- ▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

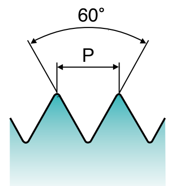
DIN 374

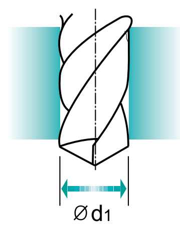


Hole type
2.5×D









Material groups: MU | HSS PM | DIN 374 | 6HX | 60° | C | R45 | X Coating | p.B76

Recommended ToolHolder

Plain Shank	Page
SYNCHRO TAPPING CHUCK	D203-210
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M18	x	2.0	**TRE31666GS**	20.0	125.0	50.0	14.0	11.0	14.0	4	16.0
M18	x	1.5	**TRE31676GS**	15.0	110.0	44.0	14.0	11.0	14.0	4	16.5
M18	x	1.0	**TRE31686GS**	15.0	110.0	44.0	14.0	11.0	14.0	4	17.0
M20	x	2.0	**TRE31716GS**	20.0	140.0	54.0	16.0	12.0	15.0	4	18.0
M20	x	1.5	**TRE31726GS**	15.0	125.0	50.0	16.0	12.0	15.0	4	18.5
M20	x	1.0	**TRE31736GS**	15.0	125.0	50.0	16.0	12.0	15.0	4	19.0
M22	x	2.0	**TRE31756GS**	20.0	140.0	54.0	18.0	14.5	17.0	4	20.0
M22	x	1.5	**TRE31766GS**	15.0	125.0	50.0	18.0	14.5	17.0	4	20.5
M22	x	1.0	**TRE31776GS**	15.0	125.0	50.0	18.0	14.5	17.0	4	21.0
M24	x	2.0	**TRE31796GS**	20.0	140.0	54.0	18.0	14.5	17.0	4	22.0
M24	x	1.5	**TRE31806GS**	15.0	140.0	54.0	18.0	14.5	17.0	4	22.5
M24	x	1.0	**TRE31816GS**	15.0	140.0	54.0	18.0	14.5	17.0	4	23.0

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

YG PRIME TAPS

TRE32 SERIES

UNC Unified Coarse Threads

Unified Grobgewinde
UNC
Unificato passo fine

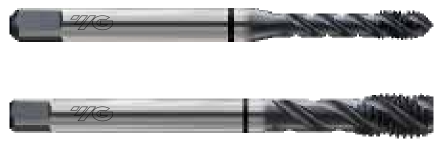
Machine taps
Maschinengewindebohrer

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

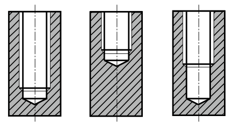
- ▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- ▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

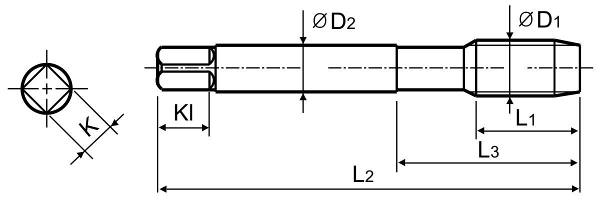
DIN 371

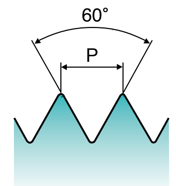
DIN 376

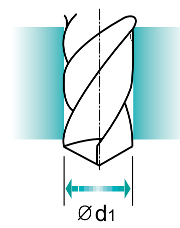


Hole type
2.5×D









Material groups: MU | HSS PM | DIN 371/376 | 2BX | 60° | C | R45 | X Coating | p.B76

Recommended ToolHolder

Plain Shank	Page
SYNCHRO TAPPING CHUCK	D203-210
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE		TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1			X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	-	40 UNC	**TRE32162GS**	5.1	56.0	18.0	3.5	2.7	6.0	2	2.30
#5	-	40 UNC	**TRE32202GS**	5.1	56.0	18.0	3.5	2.7	6.0	3	2.60
#6	-	32 UNC	**TRE32242GS**	6.4	56.0	20.0	4.0	3.0	6.0	3	2.80
#8	-	32 UNC	**TRE32282GS**	6.4	63.0	21.0	4.5	3.4	6.0	3	3.40
#10	-	24 UNC	**TRE32322GS**	8.5	70.0	25.0	6.0	4.9	8.0	3	3.90
#12	-	24 UNC	**TRE32362GS**	8.5	80.0	30.0	6.0	4.9	8.0	3	4.50
1/4	-	20 UNC	**TRE32402GS**	10.2	80.0	30.0	7.0	5.5	8.0	3	5.10
5/16	-	18 UNC	**TRE32442GS**	14.2	90.0	35.0	8.0	6.2	9.0	3	6.60
3/8	-	16 UNC	**TRE32482GS**	15.9	100.0	39.0	9.0	7.0	10.0	3	8.00
7/16	-	14 UNC	**TRE32522GS**	18.2	100.0	40.0	8.0	6.2	9.0	3	9.40
1/2	-	13 UNC	**TRE32562GS**	19.6	110.0	44.0	9.0	7.0	10.0	3	10.80
9/16	-	12 UNC	**TRE32602GS**	21.2	110.0	44.0	11.0	9.0	12.0	3	12.20
5/8	-	11 UNC	**TRE32642GS**	23.1	110.0	44.0	12.0	9.0	12.0	3	13.60
3/4	-	10 UNC	**TRE32702GS**	25.4	125.0	50.0	14.0	11.0	14.0	4	16.50
7/8	-	9 UNC	**TRE32742GS**	28.3	140.0	54.0	18.0	14.5	17.0	4	19.50
1	-	8 UNC	**TRE32782GS**	31.8	160.0	60.0	20.0	16.0	19.0	4	22.20

▶ DIN 371(#4~3/8) and DIN 376(7/16~1)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

PRIME TAPS

TRE33 SERIES

UNF

Unified Fine Threads

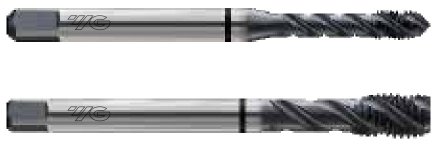
- Unified Grobgewinde
- UNF
- Unificato passo fine

Machine taps
Maschinengewindebohrer

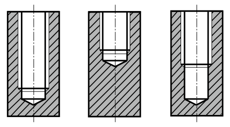
▶ High performance on various ductile materials
▶ Specially designed to prevent oversized threads and reduce gauging problems

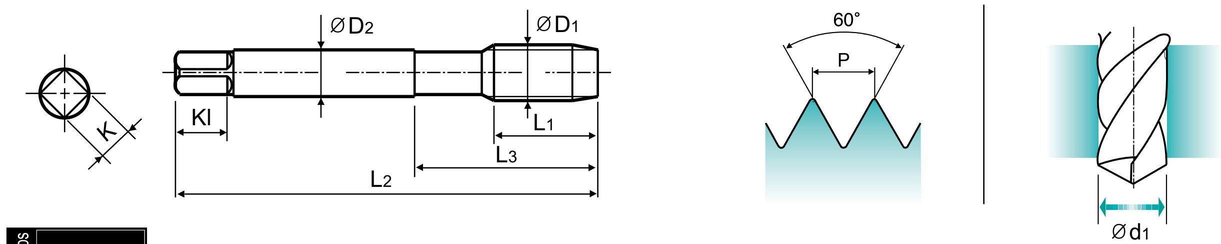
▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371
DIN 374



Hole type
2.5×D





Material groups: MU | HSS PM | DIN 371/374 | 2BX | 60° | C | R45 | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203-210
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48 UNF	TRE33182GS	5.1	56.0	18.0	3.5	2.7	6.0	2	2.40
#5	- 44 UNF	TRE33222GS	5.1	56.0	18.0	3.5	2.7	6.0	3	2.70
#6	- 40 UNF	TRE33262GS	6.4	56.0	20.0	4.0	3.0	6.0	3	2.90
#8	- 36 UNF	TRE33302GS	6.4	63.0	21.0	4.5	3.4	6.0	3	3.50
#10	- 32 UNF	TRE33342GS	8.5	70.0	25.0	6.0	4.9	8.0	3	4.10
#12	- 28 UNF	TRE33382GS	8.5	80.0	30.0	6.0	4.9	8.0	3	4.60
1/4	- 28 UNF	TRE33422GS	10.2	80.0	30.0	7.0	5.5	8.0	3	5.50
5/16	- 24 UNF	TRE33462GS	10.6	90.0	35.0	8.0	6.2	9.0	3	6.90
3/8	- 24 UNF	TRE33502GS	10.6	100.0	39.0	9.0	7.0	10.0	3	8.50
7/16	- 20 UNF	TRE33542GS	12.7	100.0	40.0	8.0	6.2	9.0	3	9.90
1/2	- 20 UNF	TRE33582GS	12.7	100.0	40.0	9.0	7.0	10.0	3	11.50
9/16	- 18 UNF	TRE33622GS	14.2	100.0	40.0	11.0	9.0	12.0	3	12.90
5/8	- 18 UNF	TRE33662GS	14.2	100.0	40.0	12.0	9.0	12.0	3	14.50
3/4	- 16 UNF	TRE33722GS	15.9	110.0	44.0	14.0	11.0	14.0	4	17.50
7/8	- 14 UNF	TRE33762GS	18.2	125.0	50.0	18.0	14.5	17.0	4	20.50
1	- 12 UNF	TRE33802GS	21.2	140.0	54.0	20.0	16.0	19.0	4	23.20

▶ DIN 371(#4~3/8) and DIN 374(7/16~1)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

PRIME TAPS

TRJ15 SERIES

M

ISO Metric Coarse Threads DIN 13

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

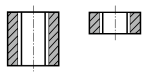
Machine taps
Maschinengewindebohrer

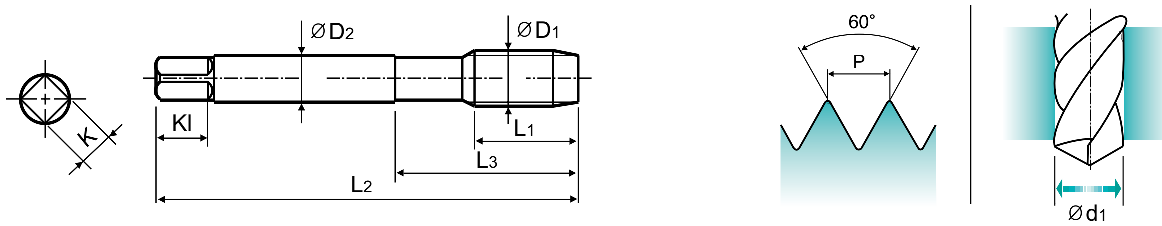
▶ High performance on various ductile materials
▶ Specially designed to prevent oversized threads and reduce gauging problems

▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371
DIN 376

Hole type
3.0×D





Material groups: MU | HSS PM | DIN 371/376 | 6HX | 60° | B | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203-210
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	x 0.4	TRJ15136GS	8.0	45.0	13.0	2.8	2.1	5.0	2	1.6
M2.5	x 0.45	TRJ15176GS	9.0	50.0	15.0	2.8	2.1	5.0	2	2.1
M3	x 0.5	TRJ15206GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M3.5	x 0.6	TRJ15226GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.9
M4	x 0.7	TRJ15246GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.3
M5	x 0.8	TRJ15286GS	15.0	70.0	25.0	6.0	4.9	8.0	3	4.2
M6	x 1.0	TRJ15316GS	17.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M7	x 1.0	TRJ15346GS	17.0	80.0	30.0	7.0	5.5	8.0	3	6.0
M8	x 1.25	TRJ15366GS	20.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M9	x 1.25	TRJ15396GS	20.0	90.0	35.0	9.0	7.0	10.0	3	7.8
M10	x 1.5	TRJ15426GS	22.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12	x 1.75	TRJ15506GS	24.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14	x 2.0	TRJ15546GS	26.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16	x 2.0	TRJ15606GS	27.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M18	x 2.5	TRJ15656GS	30.0	125.0	50.0	14.0	11.0	14.0	3	15.5
M20	x 2.5	TRJ15706GS	32.0	140.0	54.0	16.0	12.0	15.0	3	17.5
M22	x 2.5	TRJ15746GS	32.0	140.0	54.0	18.0	14.5	17.0	3	19.5
M24	x 3.0	TRJ15786GS	34.0	160.0	60.0	18.0	14.5	17.0	3	21.0

▶DIN 371(M2~M10) and DIN 376(M12~M24)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

YG PRIME TAPS

TRJ16 SERIES

MF ISO Metric Fine Threads DIN 13

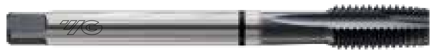
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

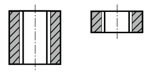
- High performance on various ductile materials
- Specially designed to prevent oversized threads and reduce gauging problems

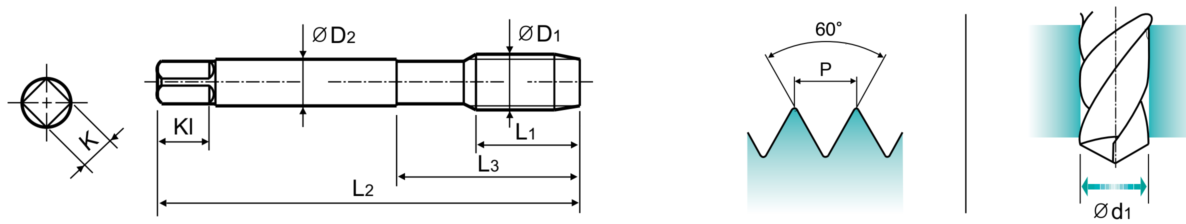
- Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- Speziell entwickelt, um zu gro β e Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374



Hole type
3.0×D





Material groups: MU | HSS PM | DIN 374 | 6HX | 60° | B | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203 -210
	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	x	0.5	TRJ16256GS	10.0	63.0	21.0	2.8	2.1	5.0	3	3.5
M4	x	0.35	TRJ16696GS	10.0	63.0	21.0	2.8	2.1	5.0	3	3.7
M5	x	0.5	TRJ16296GS	11.0	70.0	25.0	3.5	2.7	6.0	3	4.5
M6	x	0.75	TRJ16326GS	13.0	80.0	30.0	4.5	3.4	6.0	3	5.3
M6	x	0.5	TRJ16336GS	13.0	80.0	30.0	4.5	3.4	6.0	3	5.5
M8	x	1.0	TRJ16376GS	17.0	90.0	36.0	6.0	4.9	8.0	3	7.0
M8	x	0.75	TRJ16386GS	14.0	80.0	30.0	6.0	4.9	8.0	3	7.3
M9	x	1.0	TRJ16406GS	20.0	90.0	36.0	7.0	5.5	8.0	3	8.0
M9	x	0.75	TRJ16416GS	17.0	80.0	36.0	7.0	5.5	8.0	3	8.3
M10	x	1.25	TRJ16436GS	22.0	100.0	40.0	7.0	5.5	8.0	3	8.8
M10	x	1.0	TRJ16446GS	18.0	90.0	36.0	7.0	5.5	8.0	3	9.0
M10	x	0.75	TRJ16456GS	18.0	90.0	36.0	7.0	5.5	8.0	3	9.3
M12	x	1.5	TRJ16516GS	22.0	100.0	40.0	9.0	7.0	10.0	3	10.5
M12	x	1.25	TRJ16526GS	22.0	100.0	40.0	9.0	7.0	10.0	3	10.8
M12	x	1.0	TRJ16536GS	18.0	100.0	40.0	9.0	7.0	10.0	3	11.0
M14	x	1.5	TRJ16556GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.5
M14	x	1.25	TRJ16566GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.8
M14	x	1.0	TRJ16576GS	18.0	100.0	40.0	11.0	9.0	12.0	3	13.0
M16	x	1.5	TRJ16616GS	22.0	100.0	40.0	12.0	9.0	12.0	3	14.5
M16	x	1.0	TRJ16626GS	18.0	100.0	40.0	12.0	9.0	12.0	3	15.0

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

YG PRIME TAPS

TRJ16 SERIES

MF ISO Metric Fine Threads DIN 13

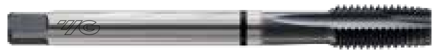
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

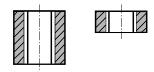
- High performance on various ductile materials
- Specially designed to prevent oversized threads and reduce gauging problems

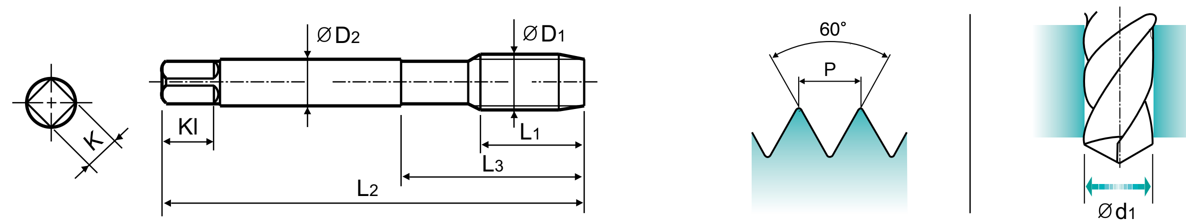
- Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- Speziell entwickelt, um zu gro β e Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374



Hole type
3.0×D





Material groups: MU | HSS PM | DIN 374 | 6HX | 60° | B | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203 -210
	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	X-coating	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M18	x	2.0	TRJ16666GS	26.0	125.0	50.0	14.0	11.0	14.0	3	16.0
M18	x	1.5	TRJ16676GS	25.0	110.0	44.0	14.0	11.0	14.0	3	16.5
M18	x	1.0	TRJ16686GS	20.0	110.0	44.0	14.0	11.0	14.0	3	17.0
M20	x	2.0	TRJ16716GS	27.0	140.0	54.0	16.0	12.0	15.0	3	18.0
M20	x	1.5	TRJ16726GS	25.0	125.0	50.0	16.0	12.0	15.0	3	18.5
M20	x	1.0	TRJ16736GS	20.0	125.0	50.0	16.0	12.0	15.0	3	19.0
M22	x	2.0	TRJ16756GS	27.0	140.0	54.0	18.0	14.5	17.0	3	20.0
M22	x	1.5	TRJ16766GS	25.0	125.0	50.0	18.0	14.5	17.0	3	20.5
M22	x	1.0	TRJ16776GS	20.0	125.0	50.0	18.0	14.5	17.0	3	21.0
M24	x	2.0	TRJ16796GS	27.0	140.0	54.0	18.0	14.5	17.0	3	22.0
M24	x	1.5	TRJ16806GS	27.0	140.0	54.0	18.0	14.5	17.0	3	22.5
M24	x	1.0	TRJ16816GS	20.0	140.0	54.0	18.0	14.5	17.0	3	23.0

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

PRIME TAPS

TRJ17 SERIES

UNC

Unified Coarse Threads

Unified Grobgewinde
UNC
Unificato passo fine

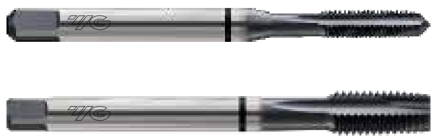
Machine taps
Maschinengewindebohrer

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

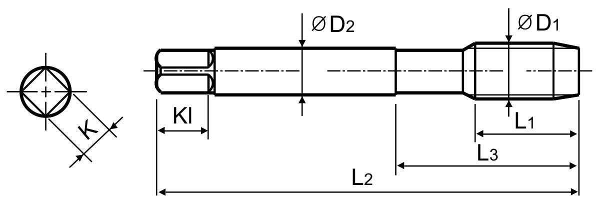
- ▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- ▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

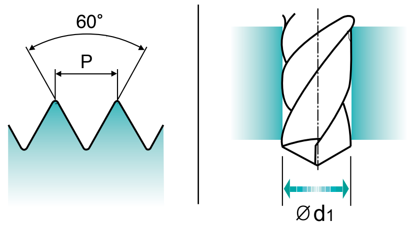
DIN 371

DIN 376



Hole type
3.0×D





Material groups **MU** | HSS PM | DIN 371/376 | 2BX | 60° | B | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203-210
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE ØD1		TPI	EDP No. X-coating	Thread Length L1	Overall Length L2	Neck Length L3	Shank Diameter ØD2	Square Size K	Square Length Kl	No. of Flute Z	Tapping Drill Diameter Ød1
#4	-	40 UNC	TRJ17162GS	11.0	56.0	18.0	3.5	2.7	6.0	2	2.30
#5	-	40 UNC	TRJ17202GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.60
#6	-	32 UNC	TRJ17242GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.80
#8	-	32 UNC	TRJ17282GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.40
#10	-	24 UNC	TRJ17322GS	15.0	70.0	25.0	6.0	4.9	8.0	3	3.90
#12	-	24 UNC	TRJ17362GS	16.0	80.0	30.0	6.0	4.9	8.0	3	4.50
1/4	-	20 UNC	TRJ17402GS	17.0	80.0	30.0	7.0	5.5	8.0	3	5.10
5/16	-	18 UNC	TRJ17442GS	20.0	90.0	35.0	8.0	6.2	9.0	3	6.60
3/8	-	16 UNC	TRJ17482GS	22.0	100.0	39.0	9.0	7.0	10.0	3	8.00
7/16	-	14 UNC	TRJ17522GS	22.0	100.0	40.0	8.0	6.2	9.0	3	9.40
1/2	-	13 UNC	TRJ17562GS	25.0	110.0	44.0	9.0	7.0	10.0	3	10.80
9/16	-	12 UNC	TRJ17602GS	26.0	110.0	44.0	11.0	9.0	12.0	3	12.20
5/8	-	11 UNC	TRJ17642GS	27.0	110.0	44.0	12.0	9.0	12.0	3	13.60
3/4	-	10 UNC	TRJ17702GS	30.0	125.0	50.0	14.0	11.0	14.0	3	16.50
7/8	-	9 UNC	TRJ17742GS	32.0	140.0	54.0	18.0	14.5	17.0	3	19.50
1	-	8 UNC	TRJ17782GS	36.0	160.0	60.0	20.0	16.0	19.0	3	22.20

▶DIN371 (#4~3/8) and DIN376 (7/16~1)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

PRIME TAPS

TRJ18 SERIES

UNF

Unified Fine Threads

Unified Grobgewinde
UNF
Unificato passo fine

Machine taps
Maschinengewindebohrer

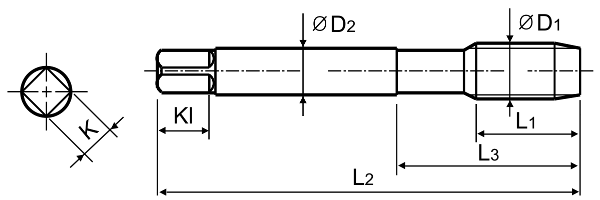
- ▶ High performance on various ductile materials
- ▶ Specially designed to prevent oversized threads and reduce gauging problems

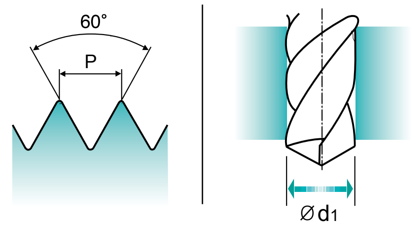
- ▶ Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- ▶ Speziell entwickelt, um zu groβe Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 374

Hole type
3.0×D





Material groups **MU** | HSS PM | DIN 371/374 | 2BX | 60° | B | X Coating | p.B76

Recommended ToolHolder	Plain Shank	Page
◎	SYNCHRO TAPPING CHUCK	D203-210
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE ØD1		TPI	EDP No. X-coating	Thread Length L1	Overall Length L2	Neck Length L3	Shank Diameter ØD2	Square Size K	Square Length Kl	No. of Flute Z	Tapping Drill Diameter Ød1
#4	-	48 UNF	TRJ18182GS	11.0	56.0	18.0	3.5	2.7	6.0	2	2.40
#5	-	44 UNF	TRJ18222GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.70
#6	-	40 UNF	TRJ18262GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.90
#8	-	36 UNF	TRJ18302GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.50
#10	-	32 UNF	TRJ18342GS	15.0	70.0	25.0	6.0	4.9	8.0	3	4.10
#12	-	28 UNF	TRJ18382GS	16.0	80.0	30.0	6.0	4.9	8.0	3	4.60
1/4	-	28 UNF	TRJ18422GS	17.0	80.0	30.0	7.0	5.5	8.0	3	5.50
5/16	-	24 UNF	TRJ18462GS	17.0	90.0	35.0	8.0	6.2	9.0	3	6.90
3/8	-	24 UNF	TRJ18502GS	18.0	100.0	39.0	9.0	7.0	10.0	3	8.50
7/16	-	20 UNF	TRJ18542GS	22.0	100.0	40.0	8.0	6.2	9.0	3	9.90
1/2	-	20 UNF	TRJ18582GS	22.0	100.0	40.0	9.0	7.0	10.0	3	11.50
9/16	-	18 UNF	TRJ18622GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.90
5/8	-	18 UNF	TRJ18662GS	22.0	100.0	40.0	12.0	9.0	12.0	3	14.50
3/4	-	16 UNF	TRJ18722GS	25.0	110.0	44.0	14.0	11.0	14.0	3	17.50
7/8	-	14 UNF	TRJ18762GS	26.0	125.0	50.0	18.0	14.5	17.0	3	20.50
1"	-	12 UNF	TRJ18802GS	28.0	140.0	54.0	20.0	16.0	19.0	3	23.20

▶DIN371 (#4~3/8) and DIN374 (7/16~1)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

PRIME TAPS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TRE30, TRE31, TRE32 TRE33, TRE34	TRJ15, TRJ16 TRJ17, TRJ18
					Vc (m/min)	
P	1	Non-alloy steel	125		5-20	15-45
	2		190	13	10-50	10-55
	3		250	25	10-50	10-55
	4		270	28	15-40	15-50
	5		300	32	15-40	15-50
	6	Low alloy steel	180	10	8-30	8-30
	7		275	29	8-30	8-30
	8		300	32	8-30	8-30
	9		350	38	8-30	8-30
	10	High alloyed steel, and tool steel	200	15	8-30	8-30
	11		325	35	8-30	8-30
M	12	Stainless steel	200	15	5-15	8-20
	13		240	23	5-15	8-20
	14		180	10	5-15	8-20
K	15	Grey cast iron	180	10	15-35	15-35
	16		260	26	15-35	15-35
	17	Nodular cast iron	160	3	15-35	15-35
	18		250	25	15-35	15-35
N	21	Aluminum-wrought alloy	60		15-35	15-35
	22		100		15-35	15-35
	23	Aluminum-cast, alloyed	75		15-35	15-35
	24		90		15-35	15-35
	25		130		15-35	15-35
	26	Copper and Copper Alloys (Bronze / Brass)	110		15-35	15-35
	27		90		15-35	15-35
	28		100		15-35	15-35

COMBO TAPS
COMBO GEWINDEBOHRER

- For Multi Purpose Tapping
- Für Mehrbereichs-Gewindebohren

SELECTION GUIDE

YG THREADING TOOLS

HSS-E & HSS-PM COMBO TAPS

For Multi Purpose Tapping

HOLE TYPE		Max. 2.5xD Blind Hole																			
TOOL MATERIAL		HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-PM	HSS-PM
CHAMFER LEAD ACC. TO DIN2197		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	E	C	C
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute
SPIRAL FLUTE ANGLE		R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	R45	R45
SERIES M	DIN371/376	TC804 (p.B82)	TD804 (p.B82)	TB804 (p.B82)	TCE05 (p.B84)	TDE05 (p.B84)	TBE05 (p.B84)	TCE06 (p.B85)	TDE06 (p.B85)	TBE06 (p.B85)	TCE07 (p.B86)	TDE07 (p.B86)	TBE07 (p.B86)	TCE08 (p.B87)	TDE08 (p.B87)	TBE08 (p.B87)	TC804-IC (p.B93)		TC807 (p.B94)	TB744 (p.B96)	TQ744 (p.B96)
M	DIN352																				
M	DIN357/LONG																	TC633 (p.B95)			
MF	DIN374	TC844 (p.B89)	TD844 (p.B89)	TB844 (p.B89)	TCE09 (p.B91)	TDE09 (p.B91)														TB754 (p.B98)	TQ754 (p.B83)
MF	DIN2181																				
UNC	DIN371/376	TC824 (p.B99)	TD824 (p.B99)	TB824 (p.B99)	TCE01 (p.B100)	TDE01 (p.B100)															
UNC	DIN351																				
UNF	DIN371/374	TC864 (p.B101)	TD864 (p.B101)	TB864 (p.B101)	TCE02 (p.B102)	TDE02 (p.B102)															
UNF	DIN2181																				
BSW	DIN2182/2183																				
BSW	DIN351																				
G(BSP)	DIN5156/5157																				
EG-M	DIN371/376																				
EG-UNC	DIN371/376																				
EG-UNF	DIN371/374																				
SURFACE TREATMENT		Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	Bright	Bright	VAP	VAP
MODEL																					

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B110

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC	TC804	TD804	TB804	TCE05	TDE05	TBE05	TCE06	TDE06	TBE06	TCE07	TDE07	TBE07	TCE08	TDE08	TBE08	TC804-IC	TC633	TC807	TB744	TQ744
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	7	Low alloy steel		Quenched & Tempered	275	29	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
P	8	Low alloy steel		Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	9	Low alloy steel		Quenched & Tempered	350	38	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
P	10	High alloyed steel, and tool steel		Annealed	200	15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35																				
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	14	Stainless steel	Austenitic		180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	Pearlitic / ferritic		180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	18	Nodular cast iron	Pearlitic		250	25	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
K	19	Malleable cast iron	Ferritic		130																					
K	20	Malleable cast iron	Pearlitic		230	21																				
N	21	Aluminum-wrought alloy	Not Curable		60																					
N	22	Aluminum-wrought alloy	Curable	Hardened	100																					
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90																					
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130																					
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic																							
N	30	Non Metallic Materials	Rubber, Wood, etc.																							
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15																				
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30																				
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25																				
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38																				
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34																				
S	36	Titanium Alloys	Pure Titanium		400 Rm																					
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm																					
H	38	Hardened steel		Hardened	550	55																				
H	39	Hardened steel		Hardened	630	60																				
H	40	Chilled Cast Iron		Cast	400	42																				
H	41	Hardened Cast Iron		Hardened	550	55																				

SELECTION GUIDE

THREADING TOOLS

HSS-E & HSS-PM COMBO TAPS

For Multi Purpose Tapping

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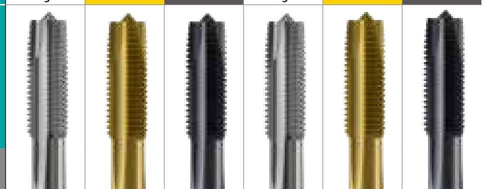
◎ : Excellent ○ : Good

Recommended cutting conditions : p.B110

HOLE TYPE		Max. 3.0xD Through Hole					
TOOL MATERIAL		HSS-E					
CHAMFER LEAD ACC. TO DIN2197		B	B	B	B	B	B
FLUTE TYPE		Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		-	-	-	-	-	-
SERIES M	DIN371/376	TC814 (p.B104)	TD814 (p.B104)	TB814 (p.B104)	TCJ05 (p.B105)	TDJ05 (p.B105)	TBJ05 (p.B105)
	DIN352						
	DIN357/LONG						
MF	DIN374	TC854 (p.B109)	TD854 (p.B109)	TB854 (p.B109)	TCJ09 (p.B112)	TDJ09 (p.B112)	
	DIN2181						
UNC	DIN371/376	TC834 (p.B119)	TD834 (p.B119)	TB834 (p.B119)	TCJ01 (p.B120)	TDJ01 (p.B120)	
	DIN351						
UNF	DIN371/374	TC874 (p.B121)	TD874 (p.B121)	TB874 (p.B121)	TCJ02 (p.B122)	TDJ02 (p.B122)	
	DIN2181						
BSW	DIN2182/2183						
	DIN351						
G(BSP)	DIN5156/5157						
EG-M	DIN371/376						
EG-UNC	DIN371/376						
EG-UNF	DIN371/374						
SURFACE TREATMENT		Bright	TiN	VAP	Bright	TiN	VAP
MODEL							



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC	TC814	TD814	TB814	TCJ05	TDJ05	TBJ05
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	○	○	○	○
	2		About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎
	3		About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎	◎
	4		About 0.75% C	Annealed	270	28	◎	◎	◎	◎	◎	◎
	5		About 0.75% C	Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎
	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎	◎
	7			Quenched & Tempered	275	29	◎	◎	◎	◎	◎	◎
	8			Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎
	9			Quenched & Tempered	350	38	◎	◎	◎	◎	◎	◎
	10	High alloyed steel, and tool steel		Annealed	200	15	○	○	○	○	○	○
	11			Quenched & Tempered	325	35						
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎	◎	◎	◎	◎	◎
	13		Martensitic	Quenched & Tempered	240	23	◎	◎	◎	◎	◎	◎
	14		Austenitic		180	10	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	Pearlitic / ferritic		180	10	◎	◎	◎	◎	◎	◎
	16		Pearlitic (Martensitic)		260	26	◎	◎	◎	◎	◎	◎
	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎	◎	◎	◎
	18		Pearlitic		250	25	◎	◎	◎	◎	◎	◎
	19	Malleable cast iron	Ferritic		130							
	20		Pearlitic		230	21						
N	21	Aluminum-wrought alloy	Not Curable		60							
	22		Curable	Hardened	100							
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎	◎	◎	◎	◎
	24		≤ 12% Si, Curable	Hardened	90							
	25		> 12% Si, Not Curable		130							
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		◎	◎	◎	◎	◎	◎
	27		CuZn, CuSnZn (Brass)		90		◎	◎	◎	◎	◎	◎
	28		CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎	◎	◎	◎
	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		Ni or Co Based	Annealed	250	25						
	34			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						

HOLE TYPE	Max. 3.0xD Through Hole													
TOOL MATERIAL	HSS-E											HSS-PM		
CHAMFER LEAD	B	B	B	B	B	B	B	B	B	B	B	B	B	
FLUTE TYPE	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	
SPIRAL FLUTE ANGLE	-	-	-	-	-	-	-	-	-	-	-	-	-	
DIN371/376	TCJ06 (p.B106)	TDJ06 (p.B106)	TBJ06 (p.B106)	TCJ07 (p.B107)	TDJ07 (p.B107)	TBJ07 (p.B107)	TCJ08 (p.B108)	TDJ08 (p.B108)	TBJ08 (p.B108)	TC814-IC (p.B114)		TB428 (p.B116)	TQ428 (p.B116)	M
DIN352														
DIN357/LONG											TC445 (p.B115)			
DIN374												TB438 (p.B118)	TQ438 (p.B117)	MF
DIN2181														
DIN371/376														UNC
DIN351														
DIN371/374														UNF
DIN2181														
DIN2182/2183														BSW
DIN351														
DIN5156/5157														G(BSP)
DIN371/376														EG-M
DIN371/376														EG-UNC
DIN371/374														EG-UNF
SURFACE TREATMENT	Bright	TiN	VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	Bright	VAP	VAP	

No.	TCJ06	TDJ06	TBJ06	TCJ07	TDJ07	TBJ07	TCJ08	TDJ08	TBJ08	TC814-IC	TC445	TB428	TQ428	ISO
1	○	○	○	○	○	○	○	○	○	○	○			P
2	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
3	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
4	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
5	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
6	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
7	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
8	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
9	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
10	○	○	○	○	○	○	○	○	○	○	○			
11														
12	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	M
13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
14	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
15	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			K
16	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
17	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
18	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
19														
20														
21														N
22														
23	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
24														
25														
26	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
27	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎			
28	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	
29														
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31														S
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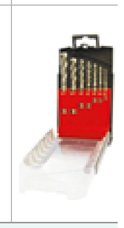
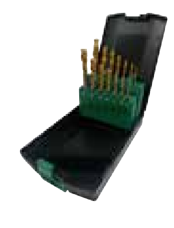
41														

COMBO TAP SETS

Combo Spiral Flute Taps	
TB804SET5	TC804SET7
VAP	Bright
5pcs	7pcs



Combo Spiral Flute Taps + Gold-P Drill
TD804SET7-GLP195
TiN
14pcs



P.493

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap TB804 SERIES
Bright TC804 SERIES
TiN TD804 SERIES

M ISO Metric coarse threads DIN 13

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

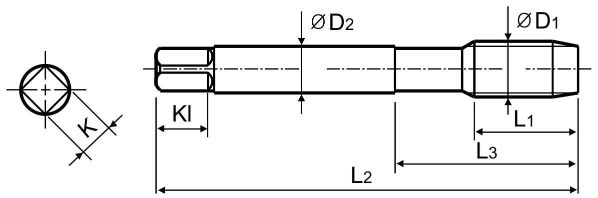
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

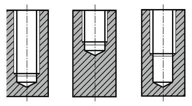
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

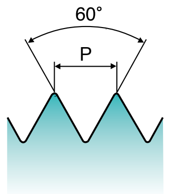
DIN 371

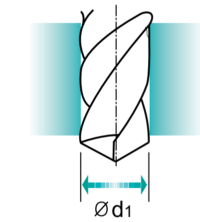
DIN 376



Hole type
2.5×D







Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB804136	TC804136	TD804136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB804156	TC804156	TD804156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TB804196	TC804196	TD804196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB804176	TC804176	TD804176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TB804496	TC804496	TD804496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB804206	TC804206	TD804206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB804226	TC804226	TD804226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB804246	TC804246	TD804246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB804266	TC804266	TD804266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB804286	TC804286	TD804286	8	70	25	6	4.9	8	3	4.2
M6	× 1.0	TB804316	TC804316	TD804316	10	80	30	6	4.9	8	3	5
M7	× 1.0	TB804346	TC804346	TD804346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB804366	TC804366	TD804366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB804396	TC804396	TD804396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB804426	TC804426	TD804426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB804466	TC804466	TD804466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB804506	TC804506	TD804506	18	110	44	9	7	10	3	10.2
M14	× 2.0	TB804546	TC804546	TD804546	20	110	44	11	9	12	3	12
M16	× 2.0	TB804606	TC804606	TD804606	20	110	44	12	9	12	3	14
M18	× 2.5	TB804656	TC804656	TD804656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB804706	TC804706	TD804706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB804746	TC804746	TD804746	25	140	54	18	14.5	17	4	19.5
M24	× 3.0	TB804786	TC804786	TD804786	30	160	60	18	14.5	17	4	21
M27	× 3.0	TB804866	TC804866	TD804866	30	160	60	20	16	19	4	24

▶ NEXT PAGE

▶DIN 371(M2~M10) and DIN 376(M11~M52)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap TB804 SERIES
Bright TC804 SERIES
TiN TD804 SERIES

M ISO Metric coarse threads DIN 13

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

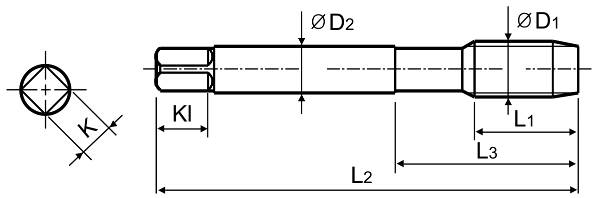
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

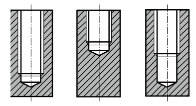
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

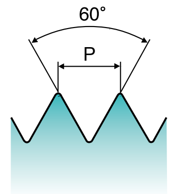
DIN 371

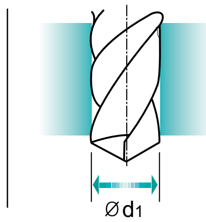
DIN 376



Hole type
2.5×D







Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M30	× 3.5	TB804946	TC804946	TD804946	35	180	70	22	18	21	4	26.5
M33	x 3.5	-	TC804A46	TD804A46	35	180	70	25	20	23	4	29.5
M36	x 4.0	-	TC804B36	TD804B36	40	200	80	28	22	25	4	32.0
M39	x 4.0	-	TC804C06	TD804C06	40	200	80	32	24	27	4	35.0
M42	x 4.5	-	TC804C86	TD804C86	45	200	85	32	24	27	4	37.5
M45	x 4.5	-	TC804D56	TD804D56	45	220	85	36	29	32	4	40.5
M48	x 5.0	-	TC804E26	TD804E26	50	250	90	36	29	32	4	43.0
M52	x 5.0	-	TC804F36	TD804F36	50	250	90	40	32	35	4	47.0

▶DIN 371(M2~M10) and DIN 376(M11~M52)
* The other coating(TiCN or TiAlN) is available on your request.

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap **TBE05** SERIES
Bright **TCE05** SERIES
TiN **TDE05** SERIES

M — ISO Metric coarse threads DIN 13

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

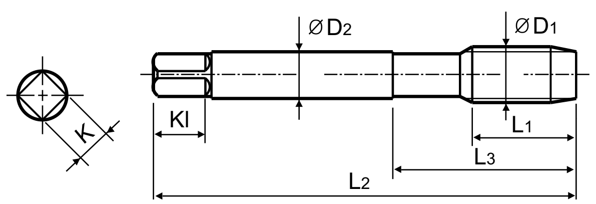
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

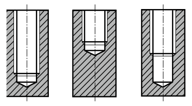
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

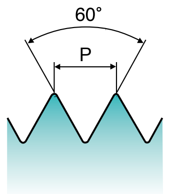
DIN 371

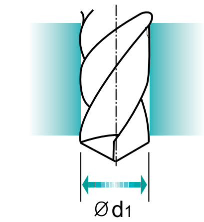
DIN 376



Hole type
2.5×D







Material groups **MU** | HSS-E | DIN 371/376 | 4H | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE05136	TCE05136	TDE05136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE05156	TCE05156	TDE05156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBE05196	TCE05196	TDE05196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE05176	TCE05176	TDE05176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBE05496	TCE05496	TDE05496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE05206	TCE05206	TDE05206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE05226	TCE05226	TDE05226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE05246	TCE05246	TDE05246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE05266	TCE05266	TDE05266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE05286	TCE05286	TDE05286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE05316	TCE05316	TDE05316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE05346	TCE05346	TDE05346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE05366	TCE05366	TDE05366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE05396	TCE05396	TDE05396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE05426	TCE05426	TDE05426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE05466	TCE05466	TDE05466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE05506	TCE05506	TDE05506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE05546	TCE05546	TDE05546	20	110	44	11	9	12	3	12
M16	× 2	TBE05606	TCE05606	TDE05606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE05656	TCE05656	TDE05656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE05706	TCE05706	TDE05706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE05746	TCE05746	TDE05746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE05786	TCE05786	TDE05786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE05866	TCE05866	TDE05866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE05946	TCE05946	TDE05946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TBE06** SERIES
Bright **TCE06** SERIES
TiN **TDE06** SERIES

M — ISO Metric coarse threads DIN 13

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

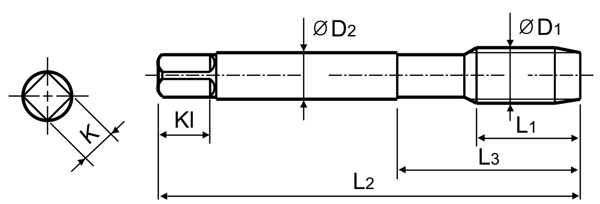
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

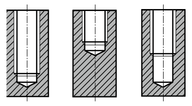
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

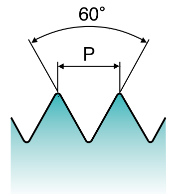
DIN 371

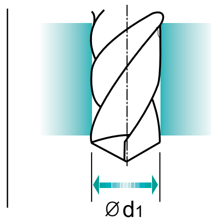
DIN 376



Hole type
2.5×D







Material groups **MU** | HSS-E | DIN 371/376 | 6H+0.1 | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE06136	TCE06136	TDE06136	8	45	13	2.8	2.1	5	3	1.7
M2.2	× 0.45	TBE06156	TCE06156	TDE06156	8	45	13	2.8	2.1	5	3	1.85
M2.3	× 0.4	TBE06196	TCE06196	TDE06196	8	45	13	2.8	2.1	5	3	2
M2.5	× 0.45	TBE06176	TCE06176	TDE06176	9	50	15	2.8	2.1	5	3	2.15
M2.6	× 0.45	TBE06496	TCE06496	TDE06496	9	50	15	2.8	2.1	5	3	2.2
M3	× 0.5	TBE06206	TCE06206	TDE06206	6	56	18	3.5	2.7	6	3	2.6
M3.5	× 0.6	TBE06226	TCE06226	TDE06226	7	56	20	4	3	6	3	3
M4	× 0.7	TBE06246	TCE06246	TDE06246	7	63	21	4.5	3.4	6	3	3.4
M4.5	× 0.75	TBE06266	TCE06266	TDE06266	8	70	25	6	4.9	8	3	3.8
M5	× 0.8	TBE06286	TCE06286	TDE06286	8	70	25	6	4.9	8	3	4.3
M6	× 1	TBE06316	TCE06316	TDE06316	10	80	30	6	4.9	8	3	5.1
M7	× 1	TBE06346	TCE06346	TDE06346	10	80	30	7	5.5	8	3	6.1
M8	× 1.25	TBE06366	TCE06366	TDE06366	13	90	35	8	6.2	9	3	6.9
M9	× 1.25	TBE06396	TCE06396	TDE06396	13	90	35	9	7	10	3	7.9
M10	× 1.5	TBE06426	TCE06426	TDE06426	15	100	39	10	8	11	3	8.6
M11	× 1.5	TBE06466	TCE06466	TDE06466	17	100	40	8	6.2	9	3	9.6
M12	× 1.75	TBE06506	TCE06506	TDE06506	18	110	44	9	7	10	3	10.3
M14	× 2	TBE06546	TCE06546	TDE06546	20	110	44	11	9	12	3	12.1
M16	× 2	TBE06606	TCE06606	TDE06606	20	110	44	12	9	12	3	14.1
M18	× 2.5	TBE06656	TCE06656	TDE06656	25	125	50	14	11	14	4	15.6
M20	× 2.5	TBE06706	TCE06706	TDE06706	25	140	54	16	12	15	4	17.6
M22	× 2.5	TBE06746	TCE06746	TDE06746	25	140	54	18	14.5	17	4	19.6
M24	× 3	TBE06786	TCE06786	TDE06786	30	160	60	18	14.5	17	4	21.1
M27	× 3	TBE06866	TCE06866	TDE06866	30	160	60	20	16	19	4	24.1
M30	× 3.5	TBE06946	TCE06946	TDE06946	35	180	70	22	18	21	4	26.6

▶DIN 371(M2~M10) and DIN 376(M11~M30)

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TBE07** SERIES
Bright **TCE07** SERIES
TiN **TDE07** SERIES

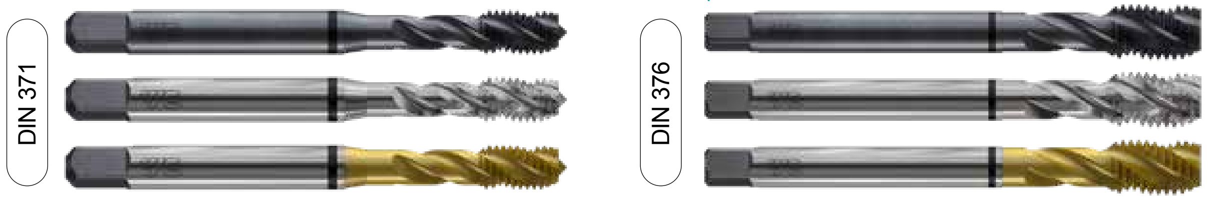
M ISO Metric coarse threads DIN 13

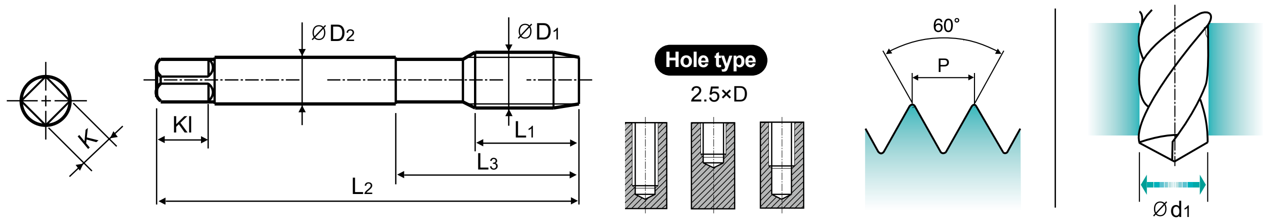
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups **MU** | HSS-E | DIN 371/376 | 6G | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE07136	TCE07136	TDE07136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE07156	TCE07156	TDE07156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBE07196	TCE07196	TDE07196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE07176	TCE07176	TDE07176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBE07496	TCE07496	TDE07496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE07206	TCE07206	TDE07206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE07226	TCE07226	TDE07226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE07246	TCE07246	TDE07246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE07266	TCE07266	TDE07266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE07286	TCE07286	TDE07286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE07316	TCE07316	TDE07316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE07346	TCE07346	TDE07346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE07366	TCE07366	TDE07366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE07396	TCE07396	TDE07396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE07426	TCE07426	TDE07426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE07466	TCE07466	TDE07466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE07506	TCE07506	TDE07506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE07546	TCE07546	TDE07546	20	110	44	11	9	12	3	12
M16	× 2	TBE07606	TCE07606	TDE07606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE07656	TCE07656	TDE07656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE07706	TCE07706	TDE07706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE07746	TCE07746	TDE07746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE07786	TCE07786	TDE07786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE07866	TCE07866	TDE07866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE07946	TCE07946	TDE07946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAIN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap **TBE08** SERIES
Bright **TCE08** SERIES
TiN **TDE08** SERIES

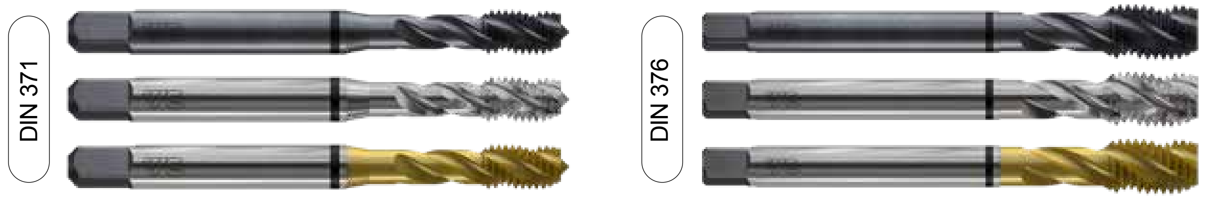
M ISO Metric coarse threads DIN 13

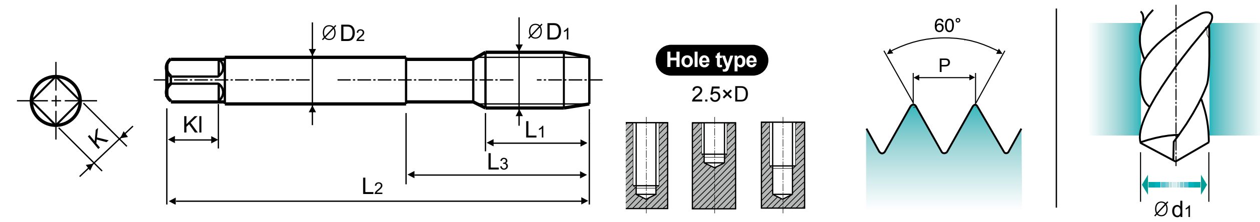
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups **MU** | HSS-E | DIN 371/376 | 7G | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE08136	TCE08136	TDE08136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE08156	TCE08156	TDE08156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBE08196	TCE08196	TDE08196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE08176	TCE08176	TDE08176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBE08496	TCE08496	TDE08496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE08206	TCE08206	TDE08206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE08226	TCE08226	TDE08226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE08246	TCE08246	TDE08246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE08266	TCE08266	TDE08266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE08286	TCE08286	TDE08286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE08316	TCE08316	TDE08316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE08346	TCE08346	TDE08346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE08366	TCE08366	TDE08366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE08396	TCE08396	TDE08396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE08426	TCE08426	TDE08426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE08466	TCE08466	TDE08466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE08506	TCE08506	TDE08506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE08546	TCE08546	TDE08546	20	110	44	11	9	12	3	12
M16	× 2	TBE08606	TCE08606	TDE08606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE08656	TCE08656	TDE08656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE08706	TCE08706	TDE08706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE08746	TCE08746	TDE08746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE08786	TCE08786	TDE08786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE08866	TCE08866	TDE08866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE08946	TCE08946	TDE08946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAIN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB844** SERIES
Bright **TC844** SERIES
TiN **TD844** SERIES

MF ISO Metric fine threads DIN 13

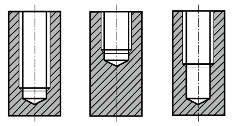
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

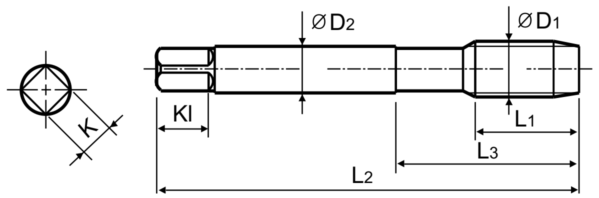
Machine taps
Maschinengewindebohrer

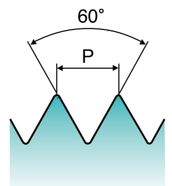
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

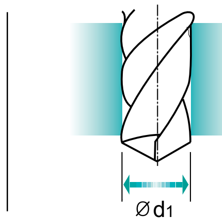
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

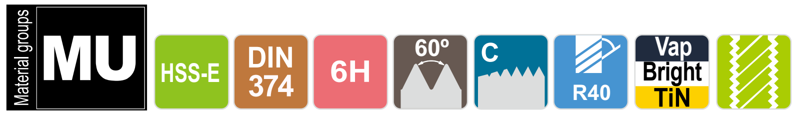
Hole type
2.5×D











p.B124

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TB844256	TC844256	TD844256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TB844296	TC844296	TD844296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TB844326	TC844326	TD844326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TB844336	TC844336	TD844336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TB844356	TC844356	TD844356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1.0	TB844376	TC844376	TD844376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TB844386	TC844386	TD844386	8	80	30	6	4.9	8	3	7.2
M10	× 1.25	TB844436	TC844436	TD844436	16	100	40	7	5.5	8	3	8.8
M10	× 1.0	TB844446	TC844446	TD844446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TB844456	TC844456	TD844456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TB844516	TC844516	TD844516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TB844526	TC844526	TD844526	15	100	40	9	7	10	3	10.8
M12	× 1.0	TB844536	TC844536	TD844536	11	100	40	9	7	10	3	11
M14	× 1.5	TB844556	TC844556	TD844556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TB844566	TC844566	TD844566	15	100	40	11	9	12	3	12.8
M14	× 1.0	TB844576	TC844576	TD844576	11	100	40	11	9	12	3	13
M16	× 1.5	TB844616	TC844616	TD844616	15	100	40	12	9	12	3	14.5
M16	× 1.0	TB844626	TC844626	TD844626	12	100	40	12	9	12	3	15
M18	× 1.5	TB844676	TC844676	TD844676	17	110	44	14	11	14	4	16.5
M18	× 1.0	TB844686	TC844686	TD844686	13	110	44	14	11	14	4	17
M20	× 1.5	TB844726	TC844726	TD844726	17	125	50	16	12	15	4	18.5
M20	× 1.0	TB844736	TC844736	TD844736	14	125	50	16	12	15	4	19
M22	× 1.5	TB844766	TC844766	TD844766	17	125	50	18	14.5	17	4	20.5
M22	× 1.0	TB844776	TC844776	TD844776	14	125	50	18	14.5	17	4	21

* The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap TB844 SERIES
Bright TC844 SERIES
TiN TD844 SERIES

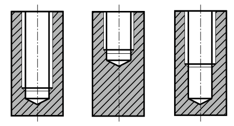
MF ISO Metric fine threads DIN 13
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

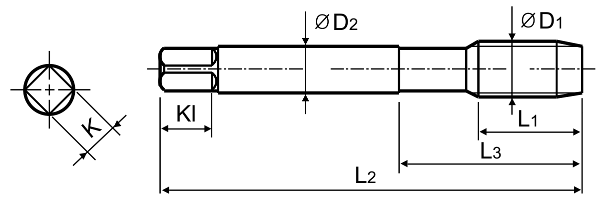
Machine taps
Maschinengewindebohrer

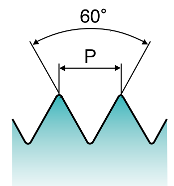
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

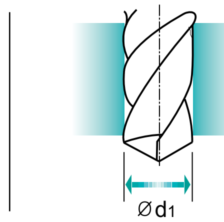
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

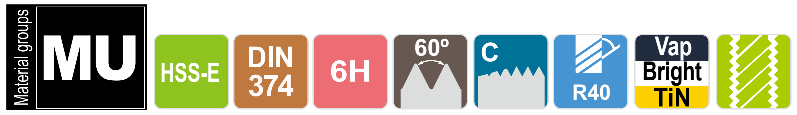
Hole type
2.5×D











p.B124

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M24	× 2.0	TB844796	TC844796	TD844796	20	140	54	18	14.5	17	4	22
M24	× 1.5	TB844806	TC844806	TD844806	20	140	54	18	14.5	17	4	22.5
M26	× 1.5	TB844856	TC844856	TD844856	20	140	54	18	14.5	17	4	24.5
M27	× 2.0	TB844876	TC844876	TD844876	20	140	54	20	16	19	4	25
M27	× 1.5	TB844886	TC844886	TD844886	20	140	54	20	16	19	4	25.5
M28	× 1.5	TB844916	TC844916	TD844916	20	140	54	20	16	19	4	26.5
M30	× 2	TB844966	TC844966	TD844966	22	150	57	22	18	21	4	28
M30	× 1.5	TB844976	TC844976	TD844976	22	150	57	22	18	21	4	28.5
M32	x 2.0	-	TC844A16	TD844A16	22	150	57	22	18	21	4	30.0
M32	x 1.5	-	TC844A26	TD844A26	22	150	57	22	18	21	4	30.5
M33	x 2.0	-	TC844A66	TD844A66	24	160	60	25	20	23	4	31.0
M33	x 1.5	-	TC844A76	TD844A76	24	160	60	25	20	23	4	31.5
M34	x 1.5	-	TC844A96	TD844A96	24	170	70	28	22	25	4	32.5
M35	x 1.5	-	TC844B16	TD844B16	24	170	70	28	22	25	4	33.5
M36	x 3.0	-	TC844B46	TD844B46	30	200	80	28	22	25	4	33.0
M36	x 2.0	-	TC844B56	TD844B56	24	170	70	28	22	25	4	34.0
M36	x 1.5	-	TC844B66	TD844B66	24	170	70	28	22	25	4	34.5
M38	x 1.5	-	TC844B86	TD844B86	24	170	70	28	22	25	4	36.5
M39	x 1.5	-	TC844C36	TD844C36	25	170	70	32	24	27	4	37.5
M40	x 1.5	-	TC844C66	TD844C66	25	170	70	32	24	27	4	38.5
M42	x 3.0	-	TC844D06	TD844D06	30	200	80	32	24	27	4	39.0
M42	x 2.0	-	TC844D16	TD844D16	25	170	70	32	24	27	4	40.0
M42	x 1.5	-	TC844D26	TD844D26	25	170	70	32	24	27	4	40.5
M45	x 1.5	-	TC844D96	TD844D96	26	180	80	36	29	32	4	43.5

* The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

COMBO TAPS

Vap **TB844** SERIES
Bright **TC844** SERIES
TiN **TD844** SERIES

MF ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

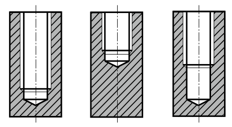
Machine taps
Maschinengewindebohrer

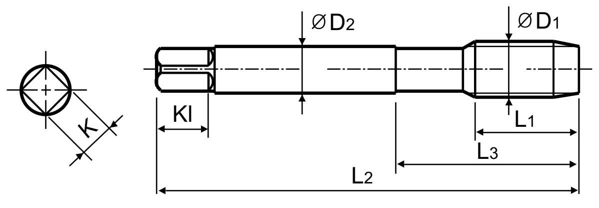
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

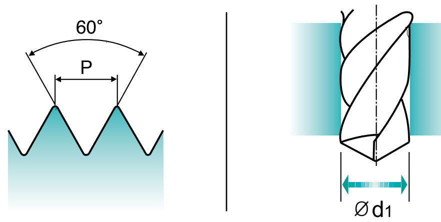
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374

Hole type
2.5×D







Material groups MU | HSS-E | DIN 374 | 6H | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M48	x 3.0	-	TC844E56	TD844E56	36	225	90	36	29	32	4	45.0
M48	x 2.0	-	TC844E66	TD844E66	28	190	80	36	29	32	4	46.0
M48	x 1.5	-	TC844E76	TD844E76	28	190	80	36	29	32	4	46.5
M50	x 1.5	-	TC844F16	TD844F16	28	190	80	36	29	32	4	48.5
M52	x 3.0	-	TC844F56	TD844F56	36	225	90	40	32	35	4	49.0
M52	x 2.0	-	TC844F66	TD844F66	28	190	80	40	32	35	4	50.0
M52	x 1.5	-	TC844F76	TD844F76	28	190	80	40	32	35	4	50.5

* The other coating(TiCN or TiAlN) is available on your request.

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

COMBO TAPS

Bright **TCE09** SERIES
TiN **TDE09** SERIES

MF ISO Metric fine threads DIN 13

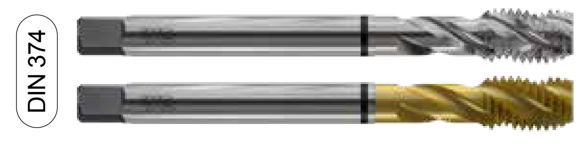
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

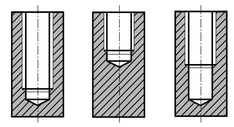
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

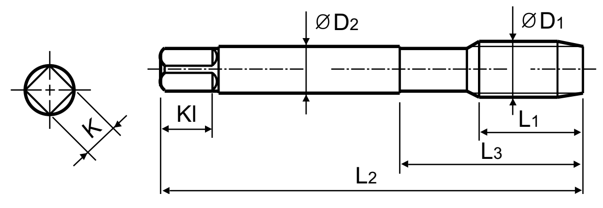
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

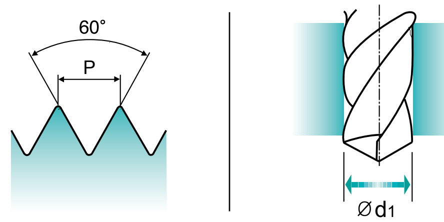
DIN 374



Hole type
2.5×D







Material groups MU | HSS-E | DIN 374 | 6G | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TCE09256	TDE09256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TCE09296	TDE09296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TCE09326	TDE09326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TCE09336	TDE09336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TCE09356	TDE09356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TCE09376	TDE09376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TCE09386	TDE09386	8	80	30	6	4.9	8	3	7.2
M10	× 1.25	TCE09436	TDE09436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TCE09446	TDE09446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TCE09456	TDE09456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TCE09516	TDE09516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TCE09526	TDE09526	15	100	40	9	7	10	3	10.8
M12	× 1	TCE09536	TDE09536	11	100	40	9	7	10	3	11
M14	× 1.5	TCE09556	TDE09556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TCE09566	TDE09566	15	100	40	11	9	12	3	12.8
M14	× 1	TCE09576	TDE09576	11	100	40	11	9	12	3	13
M16	× 1.5	TCE09616	TDE09616	15	100	40	12	9	12	3	14.5
M16	× 1	TCE09626	TDE09626	12	100	40	12	9	12	3	15
M18	× 1.5	TCE09676	TDE09676	17	110	44	14	11	14	4	16.5
M18	× 1	TCE09686	TDE09686	13	110	44	14	11	14	4	17
M20	× 1.5	TCE09726	TDE09726	17	125	50	16	12	15	4	18.5
M20	× 1	TCE09736	TDE09736	14	125	50	16	12	15	4	19
M22	× 1.5	TCE09766	TDE09766	17	125	50	18	14.5	17	4	20.5
M22	× 1	TCE09776	TDE09776	14	125	50	18	14.5	17	4	21

* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Bright **TCE09** SERIES
TiN **TDE09** SERIES

MF ISO Metric fine threads DIN 13

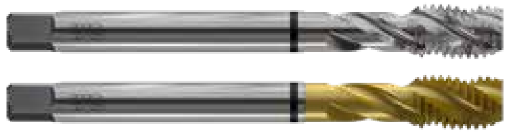
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

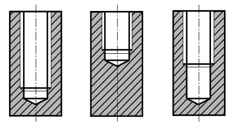
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

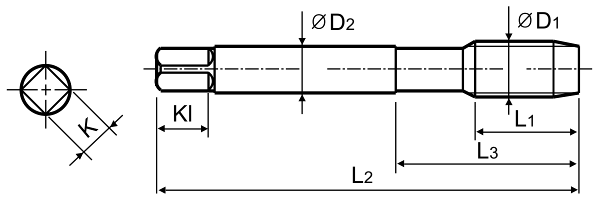
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

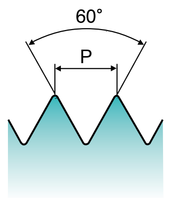
DIN 374

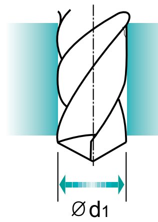


Hole type
2.5×D









Material groups MU | HSS-E | DIN 374 | 6G | 60° | C | R40 | Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M24	× 2	TCE09796	TDE09796	20	140	54	18	14.5	17	4	22
M24	× 1.5	TCE09806	TDE09806	20	140	54	18	14.5	17	4	22.5
M26	× 1.5	TCE09856	TDE09856	20	140	54	18	14.5	17	4	24.5
M27	× 2	TCE09876	TDE09876	20	140	54	20	16	19	4	25
M27	× 1.5	TCE09886	TDE09886	20	140	54	20	16	19	4	25.5
M28	× 1.5	TCE09916	TDE09916	20	140	54	20	16	19	4	26.5
M30	× 2	TCE09966	TDE09966	22	150	57	22	18	21	4	28
M30	× 1.5	TCE09976	TDE09976	22	150	57	22	18	21	4	28.5

* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

TC804-IC SERIES

M ISO Metric coarse threads DIN 13

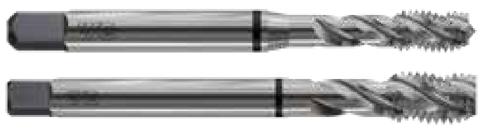
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

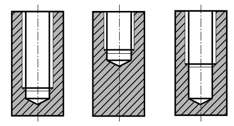
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

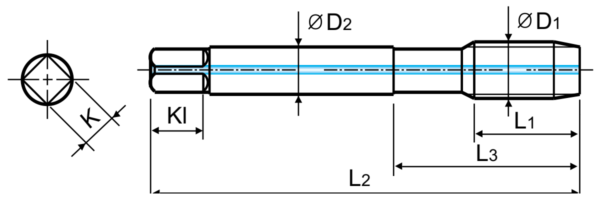
DIN 371
DIN 376

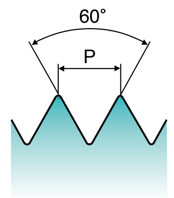


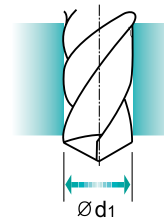
with Internal Coolant

Hole type
2.5×D









Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Bright | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M6	× 1	TC804316IC	10	80	30	6	4.9	8	3	5
M8	× 1.25	TC804366IC	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TC804426IC	15	100	39	10	8	11	3	8.5
M12	× 1.75	TC804506IC	18	110	44	9	7	10	3	10.2
M14	× 2	TC804546IC	20	110	44	11	9	12	3	12
M16	× 2	TC804606IC	20	110	44	12	9	12	3	14
M18	× 2.5	TC804656IC	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC804706IC	25	140	54	16	12	15	4	17.5

▶DIN 371(M6~M10) and DIN 376(M12~M20)
* Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

COMBO TAPS

TC807 SERIES

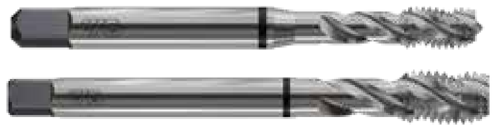
M ISO Metric coarse threads DIN 13

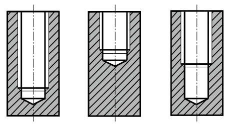
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

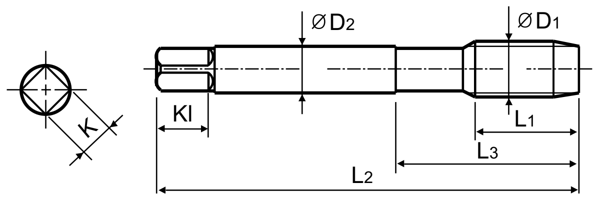
Machine taps
Maschinengewindebohrer

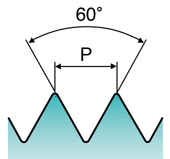
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

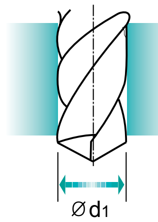
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371
DIN 376

Short Chamfer

Hole type
2.5×D








Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | E | R40 | Bright

p.B124

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC807136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC807156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TC807196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC807176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TC807496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC807206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC807226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TC807246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC807266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC807286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TC807316	10	80	30	6	4.9	8	3	5
M7	× 1	TC807346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TC807366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC807396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TC807426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TC807466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC807506	18	110	44	9	7	10	3	10.2
M14	× 2	TC807546	20	110	44	11	9	12	3	12
M16	× 2	TC807606	20	110	44	12	9	12	3	14
M18	× 2.5	TC807656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC807706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TC807746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TC807786	30	160	60	18	14.5	17	4	21
M27	× 3	TC807866	30	160	60	20	16	19	4	24
M30	× 3.5	TC807946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)

* Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

COMBO TAPS

TC633 SERIES

M ISO Metric coarse threads DIN 13

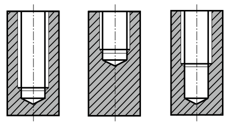
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

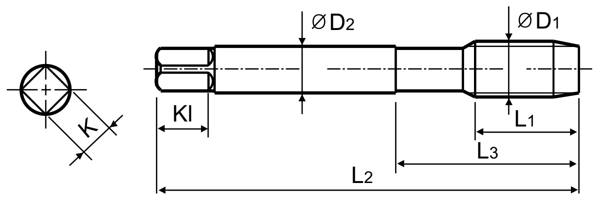
Machine taps
Maschinengewindebohrer

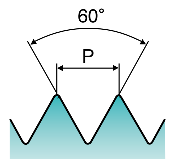
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

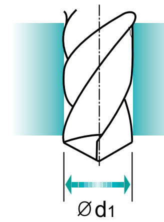
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.


Long Shank

Hole type
2.5×D








Material groups MU | HSS-E | LONG | 6H | 60° | C | R40 | Bright

p.B124

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TC633206	11	100	18	3.5	2.7	6	3	2.5
M4	× 0.7	TC633246	13	125	21	4.5	3.4	6	3	3.3
M5	× 0.8	TC633286	15	140	25	6	4.9	8	3	4.2
M6	× 1	TC633316	17	160	30	6	4.9	8	3	5
M8	× 1.25	TC633366	20	180	35	6	4.9	8	3	6.8
M10	× 1.5	TC633426	22	200	39	7	5.5	8	3	8.5
M12	× 1.75	TC633506	24	220	44	9	7	10	3	10.2
M14	× 2	TC633546	26	220	44	11	9	12	3	12
M16	× 2	TC633606	27	220	44	12	9	12	3	14
M20	× 2.5	TC633706	32	280	54	16	12	15	4	17.5

* Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

TQ744 SERIES
TB744 SERIES

M ISO Metric coarse threads DIN 13

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

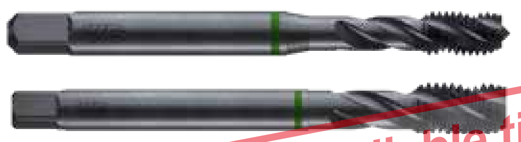
Machine taps
Maschinengewindebohrer

▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

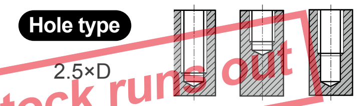
▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371

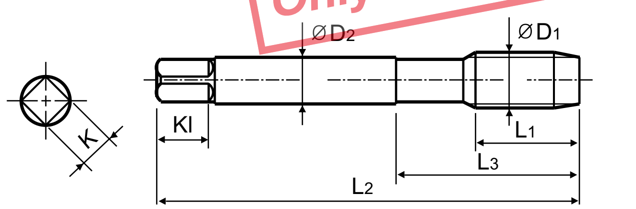
DIN 376

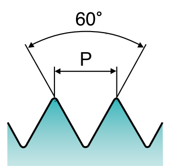


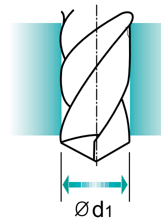
Hole type



Only available till stock runs out







Material groups **VA**

up to M12 over M12

HSS PM | HSS-E | DIN 371/376 | 6H | 60° | E | R45 | Vap | p.B125

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲ M2	× 0.4	TQ744136	8	45	13	2.8	2.1	5	2	1.6
▲ M2.2	× 0.45	TQ744156	8	45	13	2.8	2.1	5	2	1.75
▲ M2.3	× 0.4	TQ744196	8	45	13	2.8	2.1	5	2	1.9
▲ M2.5	× 0.45	TQ744176	9	50	15	2.8	2.1	5	2	2.05
▲ M2.6	× 0.45	TQ744496	9	50	15	2.8	2.1	5	2	2.1
▲ M3	× 0.5	TQ744206	6	56	18	3.5	2.7	6	3	2.5
▲ M3.5	× 0.6	TQ744226	7	56	20	4	3	6	3	2.9
▲ M4	× 0.7	TQ744246	7	63	21	4.5	3.4	6	3	3.3
▲ M4.5	× 0.75	TQ744266	8	70	25	6	4.9	8	3	3.7
▲ M5	× 0.8	TQ744286	8	70	25	6	4.9	8	3	4.2
▲ M6	× 1	TQ744316	10	80	30	6	4.9	8	3	5
▲ M7	× 1	TQ744346	10	80	30	7	5.5	8	3	6
▲ M8	× 1.25	TQ744366	13	90	35	8	6.2	9	3	6.8
▲ M9	× 1.25	TQ744396	13	90	35	9	7	10	3	7.8
▲ M10	× 1.5	TQ744426	15	100	39	10	8	11	3	8.5
▲ M11	× 1.5	TQ744466	17	100	40	8	6.2	9	3	9.5
▲ M12	× 1.75	TQ744506	18	110	44	9	7	10	3	10.2
▲ M14	× 2	TB744546	20	110	44	11	9	12	3	12
▲ M16	× 2	TB744606	20	110	44	12	9	12	3	14
▲ M18	× 2.5	TB744656	25	125	50	14	11	14	4	15.5
▲ M20	× 2.5	TB744706	25	140	54	16	12	15	4	17.5
▲ M22	× 2.5	TB744746	25	140	54	18	14.5	17	4	19.5
▲ M24	× 3	TB744786	30	160	60	18	14.5	17	4	21
▲ M27	× 3	TB744866	30	160	60	20	16	19	4	24
▲ M30	× 3.5	TB744946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶HSS-PM(M2~M12/TQ744) and HSS-E(M14~M30/TB744)
* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

YG COMBO TAPS

TQ754 SERIES

MF ISO Metric fine threads DIN 13

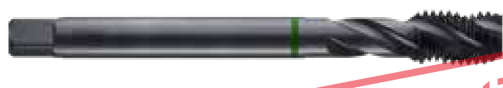
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374



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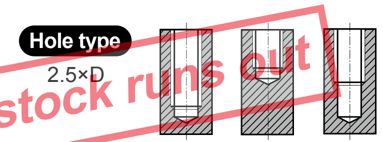
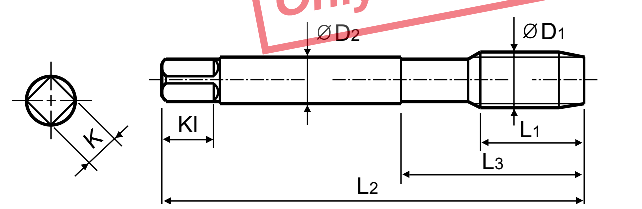
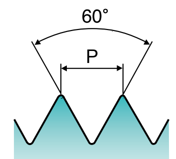
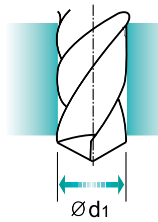


Only available till stock runs out







Material groups **VA**

HSS PM | DIN 374 | 6H | 60° | C | R45 | Vap | p.B125

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲ M4	× 0.5	TQ754256	5	63	21	2.8	2.1	5	3	3.5
▲ M5	× 0.5	TQ754296	5	70	25	3.5	2.7	6	3	4.5
▲ M6	× 0.75	TQ754326	8	80	30	4.5	3.4	6	3	5.2
▲ M6	× 0.5	TQ754336	5	80	30	4.5	3.4	6	3	5.5
▲ M7	× 0.75	TQ754356	10	80	30	5.5	4.3	7	3	6.2
▲ M8	× 1	TQ754376	10	90	36	6	4.9	8	3	7
▲ M8	× 0.75	TQ754386	8	80	30	6	4.9	8	3	7.2
▲ M10	× 1.25	TQ754436	16	100	40	7	5.5	8	3	8.8
▲ M10	× 1	TQ754446	10	90	36	7	5.5	8	3	9
▲ M10	× 0.75	TQ754456	10	90	36	7	5.5	8	3	9.2
▲ M12	× 1.5	TQ754516	15	100	40	9	7	10	3	10.5
▲ M12	× 1.25	TQ754526	15	100	40	9	7	10	3	10.8
▲ M12	× 1	TQ754536	11	100	40	9	7	10	3	11

* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

YG COMBO TAPS

TB754 SERIES

MF ISO Metric fine threads DIN 13

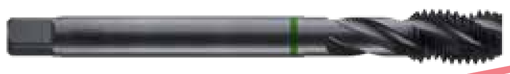
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

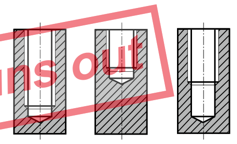
▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

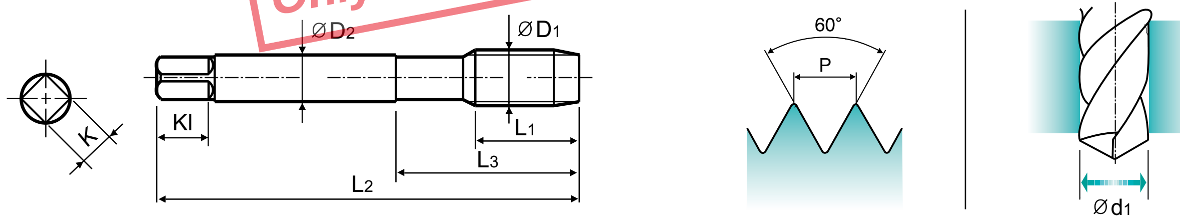
DIN 374



Hole type
2.5×D



Only available till stock runs out



Material groups VA | HSS-E | DIN 374 | 6H | 60° | C | R45 | Vap | p.B125

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲	M14	× 1.5	TB754556	15	100	40	11	9	12	3	12.5
▲	M14	× 1.25	TB754566	15	100	40	11	9	12	3	12.8
▲	M14	× 1	TB754576	11	100	40	11	9	12	3	13
▲	M16	× 1.5	TB754616	15	100	40	12	9	12	3	14.5
▲	M16	× 1	TB754626	12	100	40	12	9	12	3	15
▲	M18	× 1.5	TB754676	17	110	44	14	11	14	4	16.5
▲	M18	× 1	TB754686	13	110	44	14	11	14	4	17
▲	M20	× 1.5	TB754726	17	125	50	16	12	15	4	18.5
▲	M20	× 1	TB754736	14	125	50	16	12	15	4	19
▲	M22	× 1.5	TB754766	17	125	50	18	14.5	17	4	20.5
▲	M22	× 1	TB754776	14	125	50	18	14.5	17	4	21
▲	M24	× 2	TB754796	20	140	54	18	14.5	17	4	22
▲	M24	× 1.5	TB754806	20	140	54	18	14.5	17	4	22.5
▲	M26	× 1.5	TB754856	20	140	54	18	14.5	17	4	24.5
▲	M27	× 2	TB754876	20	140	54	20	16	19	4	25
▲	M27	× 1.5	TB754886	20	140	54	20	16	19	4	25.5
▲	M28	× 1.5	TB754916	20	140	54	20	16	19	4	26.5
▲	M30	× 2	TB754966	22	150	57	22	18	21	4	28
▲	M30	× 1.5	TB754976	22	150	57	22	18	21	4	28.5

* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP TiNi
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

YG COMBO TAPS

Vap TB824 SERIES
Bright TC824 SERIES
TiN TD824 SERIES

UNC Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo fine

Machine taps
Maschinengewindebohrer

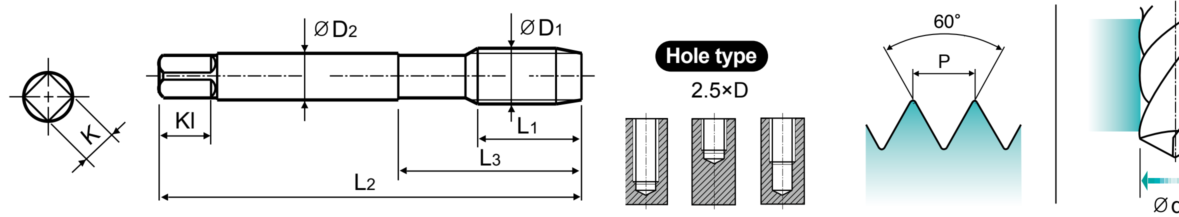
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371

DIN 376

Hole type
2.5×D



Material groups MU | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Vap Bright TiN | p.B124

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	– 40 UNC	TB824162	TC824162	TD824162	6	56	18	3.5	2.7	6	3	2.3
#5	– 40 UNC	TB824202	TC824202	TD824202	7	56	18	3.5	2.7	6	3	2.6
#6	– 32 UNC	TB824242	TC824242	TD824242	7	56	20	4	3	6	3	2.85
#8	– 32 UNC	TB824282	TC824282	TD824282	8	63	21	4.5	3.4	6	3	3.5
#10	– 24 UNC	TB824322	TC824322	TD824322	10	70	25	6	4.9	8	3	3.9
#12	– 24 UNC	TB824362	TC824362	TD824362	10	80	30	6	4.9	8	3	4.5
1/4	– 20 UNC	TB824402	TC824402	TD824402	13	80	30	7	5.5	8	3	5.2
5/16	– 18 UNC	TB824442	TC824442	TD824442	14	90	35	8	6.2	9	3	6.6
3/8	– 16 UNC	TB824482	TC824482	TD824482	16	100	39	9	7	10	3	8
7/16	– 14 UNC	TB824522	TC824522	TD824522	17	100	40	8	6.2	9	3	9.4
1/2	– 13 UNC	TB824562	TC824562	TD824562	20	110	44	9	7	10	3	10.75
9/16	– 12 UNC	TB824602	TC824602	TD824602	20	110	44	11	9	12	3	12.25
5/8	– 11 UNC	TB824642	TC824642	TD824642	22	110	44	12	9	12	3	13.5
3/4	– 10 UNC	TB824702	TC824702	TD824702	25	125	50	14	11	14	4	16.5
7/8	– 9 UNC	TB824742	TC824742	TD824742	27	140	54	18	14.5	17	4	19.5
1	– 8 UNC	TB824782	TC824782	TD824782	30	160	60	20	16	19	4	22.25

▶DIN 371(#4~3/8) and DIN 376(7/16~1)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Bright **TCE01** SERIES
TiN **TDE01** SERIES

UNC

Unified coarse threads

- Unified Grobgewinde
- UNC
- Unificato passo fine

Machine taps
Maschinengewindebohrer

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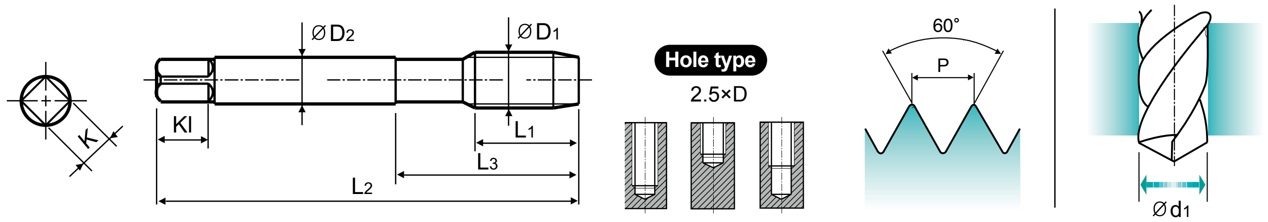
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Material groups **MU** | HSS-E | DIN 371/376 | 3B | 60° | C | R40 | Bright / TiN | p.B124

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	– 40 UNC	TCE01162	TDE01162	6	56	18	3.5	2.7	6	3	2.3
#5	– 40 UNC	TCE01202	TDE01202	7	56	18	3.5	2.7	6	3	2.6
#6	– 32 UNC	TCE01242	TDE01242	7	56	20	4	3	6	3	2.85
#8	– 32 UNC	TCE01282	TDE01282	8	63	21	4.5	3.4	6	3	3.5
#10	– 24 UNC	TCE01322	TDE01322	10	70	25	6	4.9	8	3	3.9
#12	– 24 UNC	TCE01362	TDE01362	10	80	30	6	4.9	8	3	4.5
1/4	– 20 UNC	TCE01402	TDE01402	13	80	30	7	5.5	8	3	5.2
5/16	– 18 UNC	TCE01442	TDE01442	14	90	35	8	6.2	9	3	6.6
3/8	– 16 UNC	TCE01482	TDE01482	16	100	39	9	7	10	3	8
7/16	– 14 UNC	TCE01522	TDE01522	17	100	40	8	6.2	9	3	9.4
1/2	– 13 UNC	TCE01562	TDE01562	20	110	44	9	7	10	3	10.75
9/16	– 12 UNC	TCE01602	TDE01602	20	110	44	11	9	12	3	12.25
5/8	– 11 UNC	TCE01642	TDE01642	22	110	44	12	9	12	3	13.5
3/4	– 10 UNC	TCE01702	TDE01702	25	125	50	14	11	14	4	16.5
7/8	– 9 UNC	TCE01742	TDE01742	27	140	54	18	14.5	17	4	19.5
1	– 8 UNC	TCE01782	TDE01782	30	160	60	20	16	19	4	22.25

▶DIN 371(#4~3/8) and DIN 376(7/16~1)

* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB864** SERIES
Bright **TC864** SERIES
TiN **TD864** SERIES

UNF

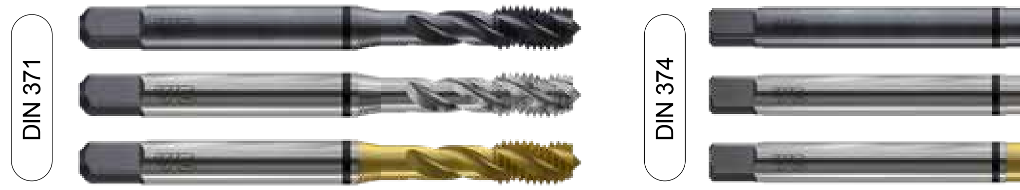
Unified fine threads

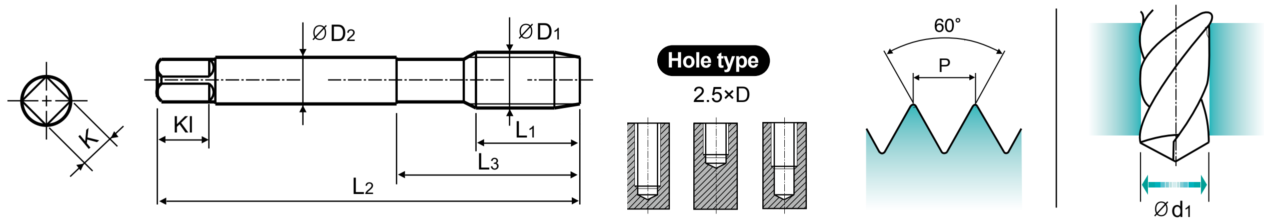
- Unified Grobgewinde
- UNF
- Unificato passo fine

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups **MU** | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Vap / Bright / TiN | p.B124

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	–48UNF	TB864182	TC864182	TD864182	6	56	18	3.5	2.7	6	3	2.4
#5	–44UNF	TB864222	TC864222	TD864222	7	56	18	3.5	2.7	6	3	2.7
#6	–40UNF	TB864262	TC864262	TD864262	7	56	20	4	3	6	3	3
#8	–36UNF	TB864302	TC864302	TD864302	8	63	21	4.5	3.4	6	3	3.5
#10	–32UNF	TB864342	TC864342	TD864342	10	70	25	6	4.9	8	3	4.1
#12	–28UNF	TB864382	TC864382	TD864382	10	80	30	6	4.9	8	3	4.7
1/4	–28UNF	TB864422	TC864422	TD864422	10	80	30	7	5.5	8	3	5.5
5/16	–24UNF	TB864462	TC864462	TD864462	10	90	35	8	6.2	9	3	6.9
3/8	–24UNF	TB864502	TC864502	TD864502	10	100	39	9	7	10	3	8.5
7/16	–20UNF	TB864542	TC864542	TD864542	13	100	40	8	6.2	9	3	9.9
1/2	–20UNF	TB864582	TC864582	TD864582	13	100	40	9	7	10	3	11.5
9/16	–18UNF	TB864622	TC864622	TD864622	15	100	40	11	9	12	3	12.9
5/8	–18UNF	TB864662	TC864662	TD864662	15	100	40	12	9	12	3	14.5
3/4	–16UNF	TB864722	TC864722	TD864722	17	110	44	14	11	14	4	17.5
7/8	–14UNF	TB864762	TC864762	TD864762	17	125	50	18	14.5	17	4	20.5
1	–12UNF	TB864802	TC864802	TD864802	20	140	54	20	16	19	4	23.25

▶DIN 371(#4~3/8) and DIN 374(7/16~1)

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Bright **TCE02** SERIES
TiN **TDE02** SERIES

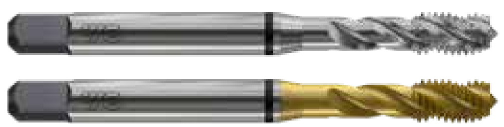
UNF Unified fine threads

Unified Grobgewinde
UNF
Unificato passo fine

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371


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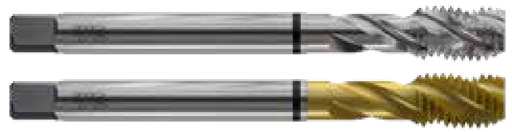

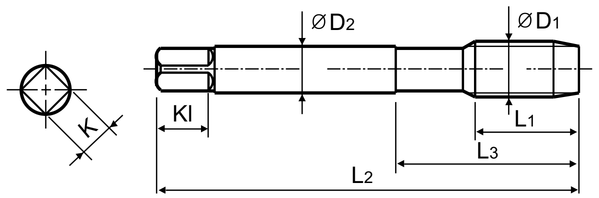

Hole type
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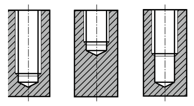
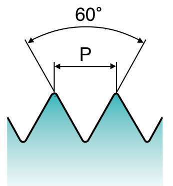
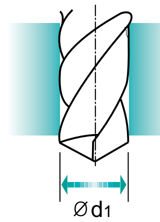






Material groups MU | HSS-E | DIN 371/376 | 3B | 60° | C | R40 | Bright TiN | p.B124

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4 –	48UNF	TCE02182	TDE02182	6	56	18	3.5	2.7	6	3	2.4
#5 –	44UNF	TCE02222	TDE02222	7	56	18	3.5	2.7	6	3	2.7
#6 –	40UNF	TCE02262	TDE02262	7	56	20	4	3	6	3	3
#8 –	36UNF	TCE02302	TDE02302	8	63	21	4.5	3.4	6	3	3.5
#10 –	32UNF	TCE02342	TDE02342	10	70	25	6	4.9	8	3	4.1
#12 –	28UNF	TCE02382	TDE02382	10	80	30	6	4.9	8	3	4.7
1/4 –	28UNF	TCE02422	TDE02422	10	80	30	7	5.5	8	3	5.5
5/16 –	24UNF	TCE02462	TDE02462	10	90	35	8	6.2	9	3	6.9
3/8 –	24UNF	TCE02502	TDE02502	10	100	39	9	7	10	3	8.5
7/16 –	20UNF	TCE02542	TDE02542	13	100	40	8	6.2	9	3	9.9
1/2 –	20UNF	TCE02582	TDE02582	13	100	40	9	7	10	3	11.5
9/16 –	18UNF	TCE02622	TDE02622	15	100	40	11	9	12	3	12.9
5/8 –	18UNF	TCE02662	TDE02662	15	100	40	12	9	12	3	14.5
3/4 –	16UNF	TCE02722	TDE02722	17	110	44	14	11	14	4	17.5
7/8 –	14UNF	TCE02762	TDE02762	17	125	50	18	14.5	17	4	20.5
1 –	12UNF	TCE02802	TDE02802	20	140	54	20	16	19	4	23.25

▶DIN 371(#4~3/8) and DIN 374(7/16~1)
* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB814** SERIES
Bright **TC814** SERIES
TiN **TD814** SERIES

M ISO Metric coarse threads DIN 13

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

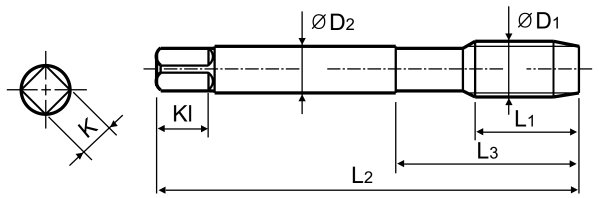
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371


DIN 376

Hole type
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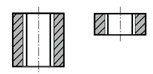
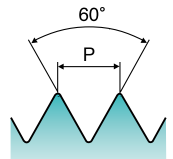
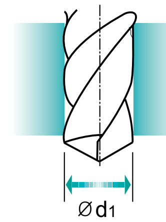






Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB814136	TC814136	TD814136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB814156	TC814156	TD814156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TB814196	TC814196	TD814196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB814176	TC814176	TD814176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TB814496	TC814496	TD814496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB814206	TC814206	TD814206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB814226	TC814226	TD814226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TB814246	TC814246	TD814246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB814266	TC814266	TD814266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB814286	TC814286	TD814286	15	70	25	6	4.9	8	3	4.2
M6	× 1.0	TB814316	TC814316	TD814316	17	80	30	6	4.9	8	3	5
M7	× 1.0	TB814346	TC814346	TD814346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TB814366	TC814366	TD814366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB814396	TC814396	TD814396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TB814426	TC814426	TD814426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TB814466	TC814466	TD814466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB814506	TC814506	TD814506	24	110	44	9	7	10	3	10.2
M14	× 2.0	TB814546	TC814546	TD814546	26	110	44	11	9	12	3	12
M16	× 2.0	TB814606	TC814606	TD814606	27	110	44	12	9	12	3	14
M18	× 2.5	TB814656	TC814656	TD814656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TB814706	TC814706	TD814706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TB814746	TC814746	TD814746	32	140	54	18	14.5	17	4	19.5

▶DIN 371(M2~M10) and DIN 376(M11~M52)
* The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

COMBO TAPS

Vap **TB814** SERIES
Bright **TC814** SERIES
TiN **TD814** SERIES

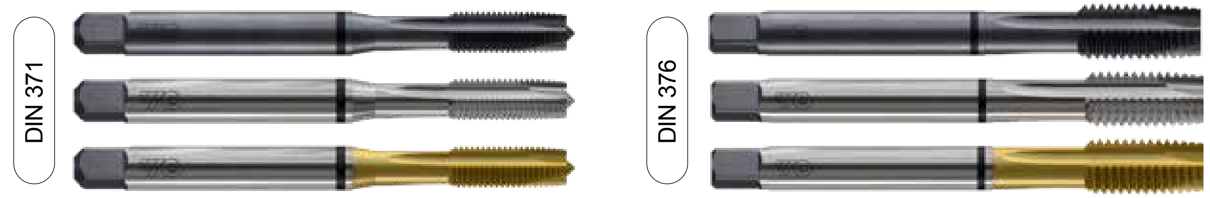
M ISO Metric coarse threads DIN 13

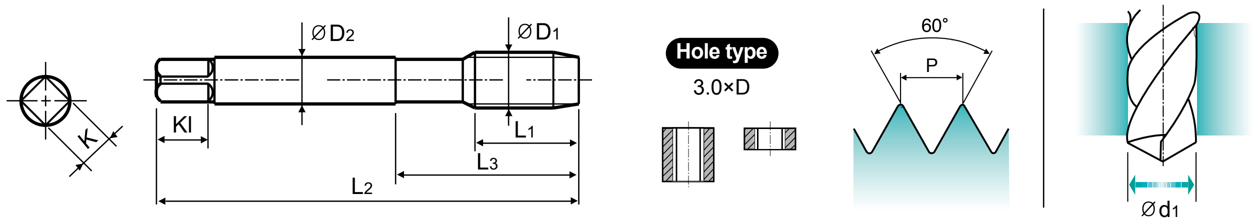
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; ◎ TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M24	× 3.0	TB814786	TC814786	TD814786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TB814866	TC814866	TD814866	36	160	60	20	16	19	4	24
M30	× 3.5	TB814946	TC81 4946	TD814946	40	180	70	22	18	21	4	26.5
M33	× 3.5	-	TC814A46	TD814A46	40	180	70	25	20	23	4	29.5
M36	× 4.0	-	TC814B36	TD814B36	50	200	80	28	22	25	4	32.0
M39	× 4.0	-	TC814C06	TD814C06	50	200	80	32	24	27	4	35.0
M42	× 4.5	-	TC814C86	TD814C86	56	200	85	32	24	27	4	37.5
M45	× 4.5	-	TC814D56	TD814D56	58	220	85	36	29	32	4	40.5
M48	× 5.0	-	TC814E26	TD814E26	65	250	90	36	29	32	4	43.0
M52	× 5.0	-	TC814F36	TD814F36	65	250	90	40	32	35	4	47.0

▶DIN 371(M2~M10) and DIN 376(M11~M52)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

COMBO TAPS

Vap **TBJ05** SERIES
Bright **TCJ05** SERIES
TiN **TDJ05** SERIES

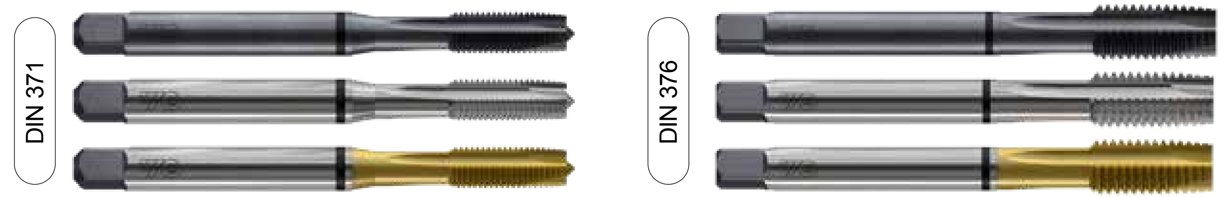
M ISO Metric coarse threads DIN 13

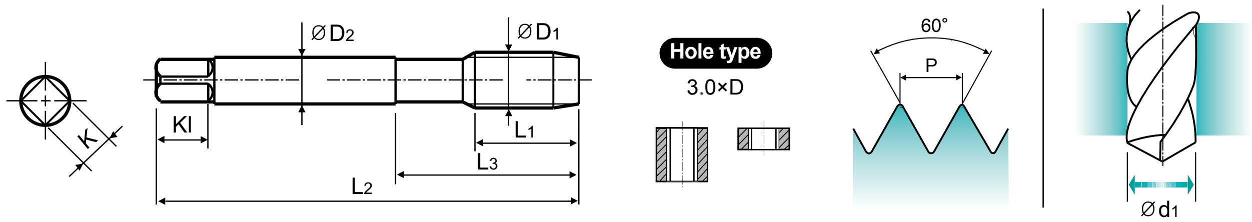
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups MU | HSS-E | DIN 371/376 | 4H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; ◎ TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBJ05136	TCJ05136	TDJ05136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBJ05156	TCJ05156	TDJ05156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBJ05196	TCJ05196	TDJ05196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBJ05176	TCJ05176	TDJ05176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBJ05496	TCJ05496	TDJ05496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBJ05206	TCJ05206	TDJ05206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBJ05226	TCJ05226	TDJ05226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TBJ05246	TCJ05246	TDJ05246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBJ05266	TCJ05266	TDJ05266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBJ05286	TCJ05286	TDJ05286	15	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBJ05316	TCJ05316	TDJ05316	17	80	30	6	4.9	8	3	5
M7	× 1.0	TBJ05346	TCJ05346	TDJ05346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TBJ05366	TCJ05366	TDJ05366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBJ05396	TCJ05396	TDJ05396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TBJ05426	TCJ05426	TDJ05426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TBJ05466	TCJ05466	TDJ05466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBJ05506	TCJ05506	TDJ05506	24	110	44	9	7	10	3	10.2
M14	× 2.0	TBJ05546	TCJ05546	TDJ05546	26	110	44	11	9	12	3	12
M16	× 2.0	TBJ05606	TCJ05606	TDJ05606	27	110	44	12	9	12	3	14
M18	× 2.5	TBJ05656	TCJ05656	TDJ05656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TBJ05706	TCJ05706	TDJ05706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TBJ05746	TCJ05746	TDJ05746	32	140	54	18	14.5	17	4	19.5
M24	× 3.0	TBJ05786	TCJ05786	TDJ05786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TBJ05866	TCJ05866	TDJ05866	36	160	60	20	16	19	4	24
M30	× 3.5	TBJ05946	TCJ05946	TDJ05946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

COMBO TAPS

Vap **TBJ06** SERIES
Bright **TCJ06** SERIES
TiN **TDJ06** SERIES

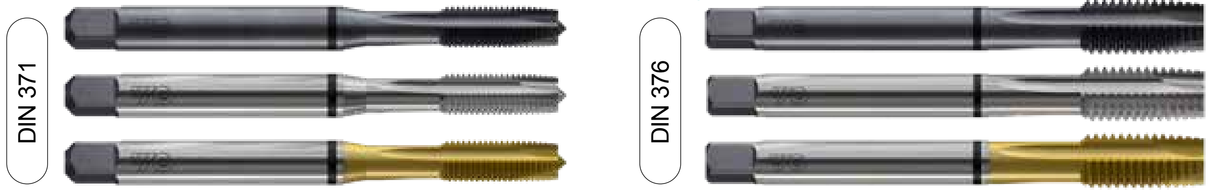
M ISO Metric coarse threads DIN 13

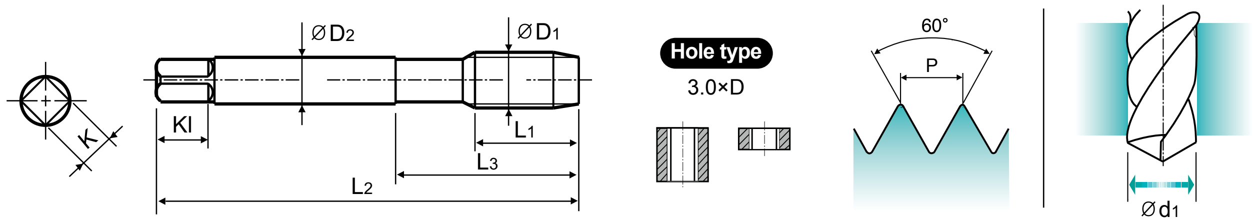
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





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Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBJ06136	TCJ06136	TDJ06136	8	45	13	2.8	2.1	5	3	1.7
M2.2	× 0.45	TBJ06156	TCJ06156	TDJ06156	8	45	13	2.8	2.1	5	3	1.85
M2.3	× 0.4	TBJ06196	TCJ06196	TDJ06196	8	45	13	2.8	2.1	5	3	2
M2.5	× 0.45	TBJ06176	TCJ06176	TDJ06176	9	50	15	2.8	2.1	5	3	2.15
M2.6	× 0.45	TBJ06496	TCJ06496	TDJ06496	9	50	15	2.8	2.1	5	3	2.2
M3	× 0.5	TBJ06206	TCJ06206	TDJ06206	11	56	18	3.5	2.7	6	3	2.6
M3.5	× 0.6	TBJ06226	TCJ06226	TDJ06226	12	56	20	4	3	6	3	3
M4	× 0.7	TBJ06246	TCJ06246	TDJ06246	13	63	21	4.5	3.4	6	3	3.4
M4.5	× 0.75	TBJ06266	TCJ06266	TDJ06266	14	70	25	6	4.9	8	3	3.8
M5	× 0.8	TBJ06286	TCJ06286	TDJ06286	15	70	25	6	4.9	8	3	4.3
M6	× 1.0	TBJ06316	TCJ06316	TDJ06316	17	80	30	6	4.9	8	3	5.1
M7	× 1.0	TBJ06346	TCJ06346	TDJ06346	17	80	30	7	5.5	8	3	6.1
M8	× 1.25	TBJ06366	TCJ06366	TDJ06366	20	90	35	8	6.2	9	3	6.9
M9	× 1.25	TBJ06396	TCJ06396	TDJ06396	20	90	35	9	7	10	3	7.9
M10	× 1.5	TBJ06426	TCJ06426	TDJ06426	22	100	39	10	8	11	3	8.6
M11	× 1.5	TBJ06466	TCJ06466	TDJ06466	22	100	40	8	6.2	9	3	9.6
M12	× 1.75	TBJ06506	TCJ06506	TDJ06506	24	110	44	9	7	10	3	10.3
M14	× 2.0	TBJ06546	TCJ06546	TDJ06546	26	110	44	11	9	12	3	12.1
M16	× 2.0	TBJ06606	TCJ06606	TDJ06606	27	110	44	12	9	12	3	14.1
M18	× 2.5	TBJ06656	TCJ06656	TDJ06656	30	125	50	14	11	14	4	15.6
M20	× 2.5	TBJ06706	TCJ06706	TDJ06706	32	140	54	16	12	15	4	17.6
M22	× 2.5	TBJ06746	TCJ06746	TDJ06746	32	140	54	18	14.5	17	4	19.6
M24	× 3.0	TBJ06786	TCJ06786	TDJ06786	34	160	60	18	14.5	17	4	21.1
M27	× 3.0	TBJ06866	TCJ06866	TDJ06866	36	160	60	20	16	19	4	24.1
M30	× 3.5	TBJ06946	TCJ06946	TDJ06946	40	180	70	22	18	21	4	26.6

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

COMBO TAPS

Vap **TBJ07** SERIES
Bright **TCJ07** SERIES
TiN **TDJ07** SERIES

M ISO Metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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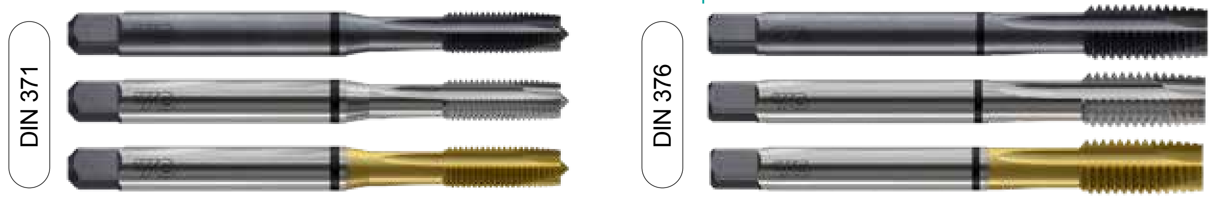
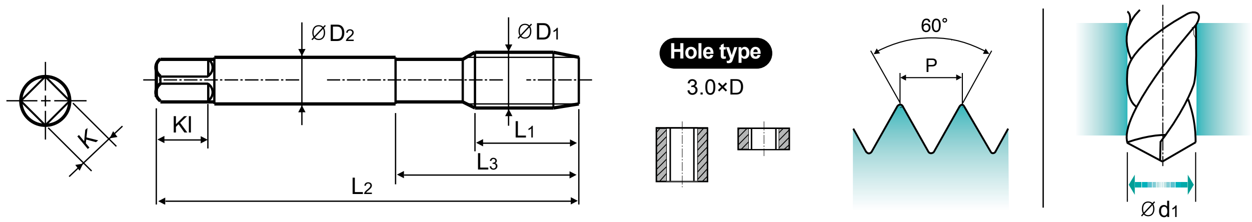
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





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Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBJ07136	TCJ07136	TDJ07136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBJ07156	TCJ07156	TDJ07156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBJ07196	TCJ07196	TDJ07196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBJ07176	TCJ07176	TDJ07176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBJ07496	TCJ07496	TDJ07496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBJ07206	TCJ07206	TDJ07206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBJ07226	TCJ07226	TDJ07226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TBJ07246	TCJ07246	TDJ07246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBJ07266	TCJ07266	TDJ07266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBJ07286	TCJ07286	TDJ07286	15	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBJ07316	TCJ07316	TDJ07316	17	80	30	6	4.9	8	3	5
M7	× 1.0	TBJ07346	TCJ07346	TDJ07346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TBJ07366	TCJ07366	TDJ07366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBJ07396	TCJ07396	TDJ07396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TBJ07426	TCJ07426	TDJ07426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TBJ07466	TCJ07466	TDJ07466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBJ07506	TCJ07506	TDJ07506	24	110	44	9	7	10	3	10.2
M14	× 2.0	TBJ07546	TCJ07546	TDJ07546	26	110	44	11	9	12	3	12
M16	× 2.0	TBJ07606	TCJ07606	TDJ07606	27	110	44	12	9	12	3	14
M18	× 2.5	TBJ07656	TCJ07656	TDJ07656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TBJ07706	TCJ07706	TDJ07706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TBJ07746	TCJ07746	TDJ07746	32	140	54	18	14.5	17	4	19.5
M24	× 3.0	TBJ07786	TCJ07786	TDJ07786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TBJ07866	TCJ07866	TDJ07866	36	160	60	20	16	19	4	24
M30	× 3.5	TBJ07946	TCJ07946	TDJ07946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP TiNi
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap **TBJ08** SERIES
Bright **TCJ08** SERIES
TiN **TDJ08** SERIES

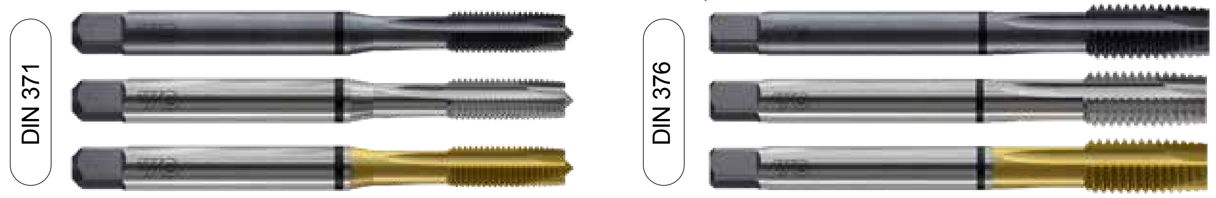
M ISO Metric coarse threads DIN 13

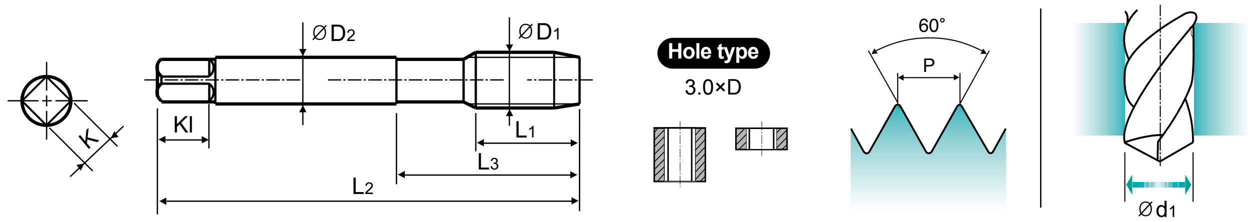
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.





Material groups MU | HSS-E | DIN 371/376 | 7G | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; ◎ TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBJ08136	TCJ08136	TDJ08136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBJ08156	TCJ08156	TDJ08156	8	45	13	2.8	2.1	5	3	1.75
M2.3	× 0.4	TBJ08196	TCJ08196	TDJ08196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBJ08176	TCJ08176	TDJ08176	9	50	15	2.8	2.1	5	3	2.05
M2.6	× 0.45	TBJ08496	TCJ08496	TDJ08496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBJ08206	TCJ08206	TDJ08206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBJ08226	TCJ08226	TDJ08226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TBJ08246	TCJ08246	TDJ08246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBJ08266	TCJ08266	TDJ08266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBJ08286	TCJ08286	TDJ08286	15	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBJ08316	TCJ08316	TDJ08316	17	80	30	6	4.9	8	3	5
M7	× 1.0	TBJ08346	TCJ08346	TDJ08346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TBJ08366	TCJ08366	TDJ08366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBJ08396	TCJ08396	TDJ08396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TBJ08426	TCJ08426	TDJ08426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TBJ08466	TCJ08466	TDJ08466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBJ08506	TCJ08506	TDJ08506	24	110	44	9	7	10	3	10.2
M14	× 2.0	TBJ08546	TCJ08546	TDJ08546	26	110	44	11	9	12	3	12
M16	× 2.0	TBJ08606	TCJ08606	TDJ08606	27	110	44	12	9	12	3	14
M18	× 2.5	TBJ08656	TCJ08656	TDJ08656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TBJ08706	TCJ08706	TDJ08706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TBJ08746	TCJ08746	TDJ08746	32	140	54	18	14.5	17	4	19.5
M24	× 3.0	TBJ08786	TCJ08786	TDJ08786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TBJ08866	TCJ08866	TDJ08866	36	160	60	20	16	19	4	24
M30	× 3.5	TBJ08946	TCJ08946	TDJ08946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

MF ISO Metric fine threads DIN 13

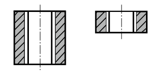
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

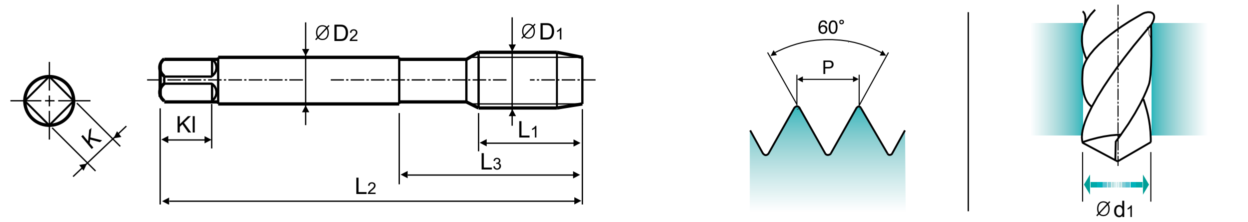
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

Hole type
3.0×D





Material groups MU | HSS-E | DIN 374 | 6H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; ◎ TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TB854256	TC854256	TD854256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TB854296	TC854296	TD854296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TB854326	TC854326	TD854326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TB854336	TC854336	TD854336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TB854356	TC854356	TD854356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1.0	TB854376	TC854376	TD854376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TB854386	TC854386	TD854386	14	80	30	6	4.9	8	3	7.2
M10	× 1.25	TB854436	TC854436	TD854436	22	100	40	7	5.5	8	3	8.8
M10	× 1.0	TB854446	TC854446	TD854446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TB854456	TC854456	TD854456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TB854516	TC854516	TD854516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TB854526	TC854526	TD854526	22	100	40	9	7	10	3	10.8
M12	× 1.0	TB854536	TC854536	TD854536	18	100	40	9	7	10	3	11
M14	× 1.5	TB854556	TC854556	TD854556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TB854566	TC854566	TD854566	22	100	40	11	9	12	3	12.8
M14	× 1.0	TB854576	TC854576	TD854576	22	100	40	11	9	12	3	13
M16	× 1.5	TB854616	TC854616	TD854616	22	100	40	12	9	12	3	14.5
M16	× 1.0	TB854626	TC854626	TD854626	18	100	40	12	9	12	3	15
M18	× 1.5	TB854676	TC854676	TD854676	25	110	44	14	11	14	4	16.5
M18	× 1.0	TB854686	TC854686	TD854686	20	110	44	14	11	14	4	17

* The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

MF ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

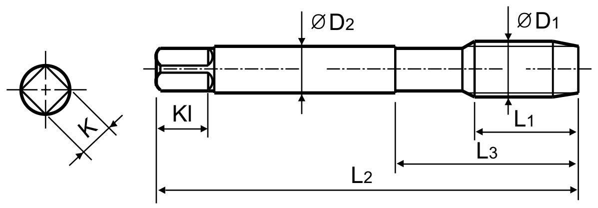
Machine taps
Maschinengewindebohrer

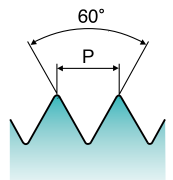
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

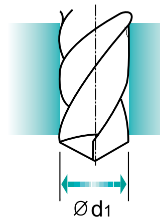
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374

Hole type
3.0×D







Material groups MU | HSS-E | DIN 374 | 6H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M20	× 1.5	TB854726	TC854726	TD854726	25	125	50	16	12	15	4	18.5
M20	× 1.0	TB854736	TC854736	TD854736	20	125	50	16	12	15	4	19
M22	× 1.5	TB854766	TC854766	TD854766	25	125	50	18	14.5	17	4	20.5
M22	× 1.0	TB854776	TC854776	TD854776	20	125	50	18	14.5	17	4	21
M24	× 2.0	TB854796	TC854796	TD854796	27	140	54	18	14.5	17	4	22
M24	× 1.5	TB854806	TC854806	TD854806	27	140	54	18	14.5	17	4	22.5
M26	× 1.5	TB854856	TC854856	TD854856	28	140	54	18	14.5	17	4	24.5
M27	× 2.0	TB854876	TC854876	TD854876	28	140	54	20	16	19	4	25
M27	× 1.5	TB854886	TC854886	TD854886	28	140	54	20	16	19	4	25.5
M28	× 1.5	TB854916	TC854916	TD854916	28	140	54	20	16	19	4	26.5
M30	× 2.0	TB854966	TC854966	TD854966	30	150	57	22	18	21	4	28
M30	× 1.5	TB854976	TC854976	TD854976	30	150	57	22	18	21	4	28.5
M32	x 2.0	-	TC854A16	TD854A16	30	150	57	22	18	21	4	30.0
M32	x 1.5	-	TC854A26	TD854A26	30	150	57	22	18	21	4	30.5
M33	x 2.0	-	TC854A66	TD854A66	33	160	60	25	20	23	4	31.0
M33	x 1.5	-	TC854A76	TD854A76	32	160	60	25	20	23	4	31.5
M34	x 1.5	-	TC854A96	TD854A96	33	170	70	28	22	25	4	32.5
M35	x 1.5	-	TC854B16	TD854B16	33	170	70	28	22	25	4	33.5
M36	x 3.0	-	TC854B46	TD854B46	45	200	80	28	22	25	4	33.0
M36	x 2.0	-	TC854B56	TD854B56	33	170	70	28	22	25	4	34.0
M36	x 1.5	-	TC854B66	TD854B66	33	170	70	28	22	25	4	34.5
M38	x 1.5	-	TC854B86	TD854B86	33	170	70	28	22	25	4	36.5

* The other coating(TiCN or TiAlN) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB854** SERIES
Bright **TC854** SERIES
TiN **TD854** SERIES

MF ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

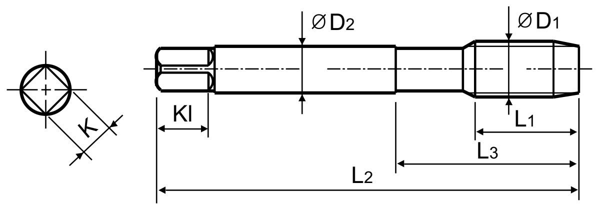
Machine taps
Maschinengewindebohrer

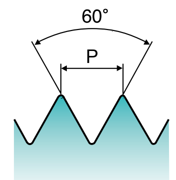
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

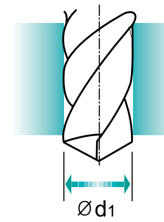
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374

Hole type
3.0×D







Material groups MU | HSS-E | DIN 374 | 6H | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M39	x 1.5	-	TC854C36	TD854C36	33	170	70	32	24	27	4	37.5
M40	x 1.5	-	TC854C66	TD854C66	33	170	70	32	24	27	4	38.5
M42	x 3.0	-	TC854D06	TD854D06	45	200	80	32	24	27	4	39.0
M42	x 2.0	-	TC854D16	TD854D16	33	170	70	32	24	27	4	40.0
M42	x 1.5	-	TC854D26	TD854D26	33	170	70	32	24	27	4	40.5
M45	x 1.5	-	TC854D96	TD854D96	33	180	80	36	29	32	4	43.5
M48	x 3.0	-	TC854E56	TD854E56	45	225	90	36	29	32	4	45.0
M48	x 2.0	-	TC854E66	TD854E66	36	190	80	36	29	32	4	46.0
M48	x 1.5	-	TC854E76	TD854E76	36	190	80	36	29	32	4	46.5
M50	x 1.5	-	TC854F16	TD854F16	36	190	80	36	29	32	4	48.5
M52	x 3.0	-	TC854F56	TD854F56	45	225	90	40	32	35	4	49.0
M52	x 2.0	-	TC854F66	TD854F66	36	190	80	40	32	35	4	50.0
M52	x 1.5	-	TC854F76	TD854F76	36	190	80	40	32	35	4	50.5

* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Bright **TCJ09** SERIES
TiN **TDJ09** SERIES

MF ISO Metric fine threads DIN 13

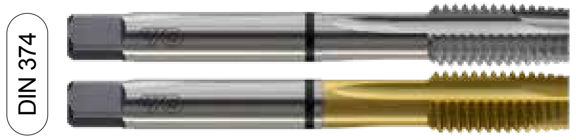
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

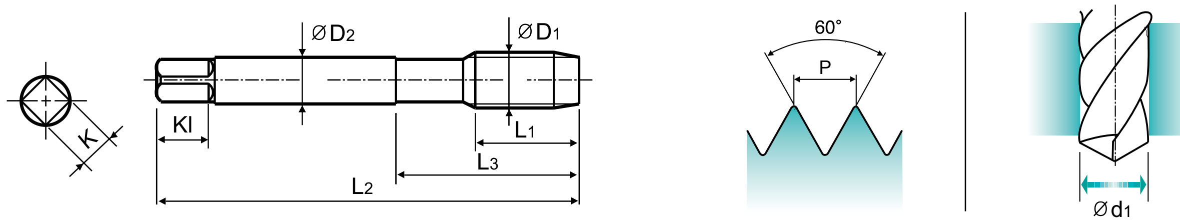
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374



Hole type
3.0×D



Material groups MU | HSS-E | DIN 374 | 6G | 60° | B | Bright | TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	Pitch	EDP No. Bright	EDP No. TiN	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TCJ09256	TDJ09256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TCJ09296	TDJ09296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TCJ09326	TDJ09326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TCJ09336	TDJ09336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TCJ09356	TDJ09356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TCJ09376	TDJ09376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TCJ09386	TDJ09386	14	80	30	6	4.9	8	3	7.2
M10	× 1.25	TCJ09436	TDJ09436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TCJ09446	TDJ09446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TCJ09456	TDJ09456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TCJ09516	TDJ09516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TCJ09526	TDJ09526	22	100	40	9	7	10	3	10.8
M12	× 1	TCJ09536	TDJ09536	18	100	40	9	7	10	3	11
M14	× 1.5	TCJ09556	TDJ09556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TCJ09566	TDJ09566	22	100	40	11	9	12	3	12.8
M14	× 1.0	TCJ09576	TDJ09576	22	100	40	11	9	12	3	13
M16	× 1.5	TCJ09616	TDJ09616	22	100	40	12	9	12	3	14.5
M16	× 1	TCJ09626	TDJ09626	18	100	40	12	9	12	3	15
M18	× 1.5	TCJ09676	TDJ09676	25	110	44	14	11	14	4	16.5
M18	× 1	TCJ09686	TDJ09686	20	110	44	14	11	14	4	17

* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Bright TCJ09 SERIES
TiN TDJ09 SERIES

MF ISO Metric fine threads DIN 13

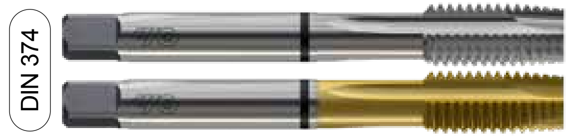
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

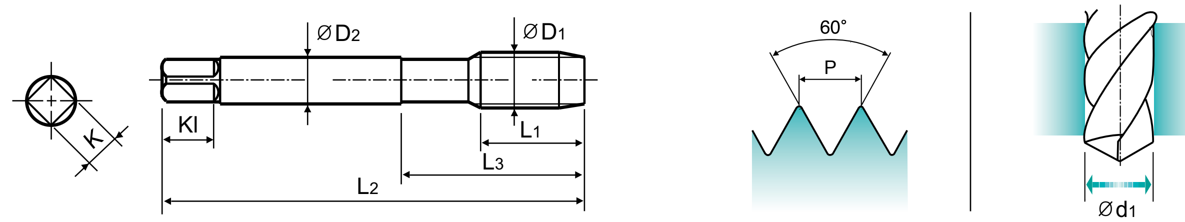
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374



Hole type
3.0×D



Material groups MU | HSS-E | DIN 374 | 6G | 60° | B | Bright | TiN | p.B125

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	Pitch	EDP No. Bright	EDP No. TiN	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M20	× 1.5	TCJ09726	TDJ09726	25	125	50	16	12	15	4	18.5
M20	× 1	TCJ09736	TDJ09736	20	125	50	16	12	15	4	19
M22	× 1.5	TCJ09766	TDJ09766	25	125	50	18	14.5	17	4	20.5
M22	× 1	TCJ09776	TDJ09776	20	125	50	18	14.5	17	4	21
M24	× 2	TCJ09796	TDJ09796	27	140	54	18	14.5	17	4	22
M24	× 1.5	TCJ09806	TDJ09806	27	140	54	18	14.5	17	4	22.5
M26	× 1.5	TCJ09856	TDJ09856	28	140	54	18	14.5	17	4	24.5
M27	× 2	TCJ09876	TDJ09876	28	140	54	20	16	19	4	25
M27	× 1.5	TCJ09886	TDJ09886	28	140	54	20	16	19	4	25.5
M28	× 1.5	TCJ09916	TDJ09916	28	140	54	20	16	19	4	26.5
M30	× 2	TCJ09966	TDJ09966	30	150	57	22	18	21	4	28
M30	× 1.5	TCJ09976	TDJ09976	30	150	57	22	18	21	4	28.5

* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

TC814-IC SERIES

M ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13, AVEC ARROSAGE CENTRAL
ISO Metrico passo grosso DIN 13

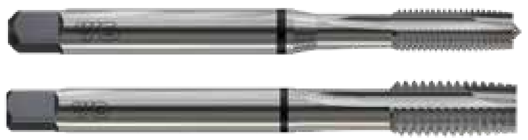
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371

DIN 376



Hole type
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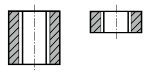
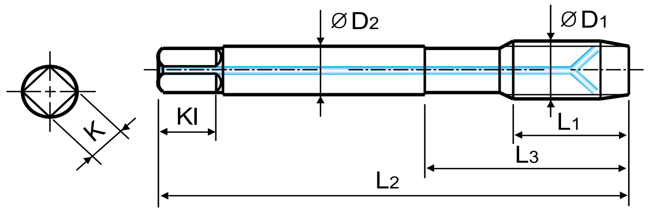
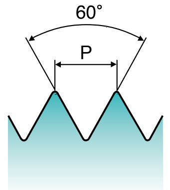
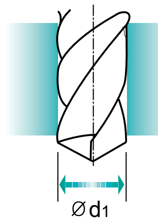


with Internal Coolant







Material groups MU | HSS-E | DIN 371/376 | 6H | 60° | B | Bright | p.B125

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M6	× 1	TC814316IC	17	80	30	6	4.9	8	3	5
M8	× 1.25	TC814366IC	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TC814426IC	22	100	39	10	8	11	3	8.5
M12	× 1.75	TC814506IC	24	110	44	9	7	10	3	10.2
M14	× 2	TC814546IC	26	110	44	11	9	12	3	12
M16	× 2	TC814606IC	27	110	44	12	9	12	3	14
M18	× 2.5	TC814656IC	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC814706IC	32	140	54	16	12	15	4	17.5

▶DIN 371(M6~M10) and DIN 376(M12~M20)
* Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

TC445 SERIES

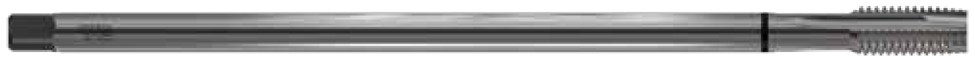
M ISO Metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.



Hole type
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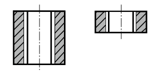
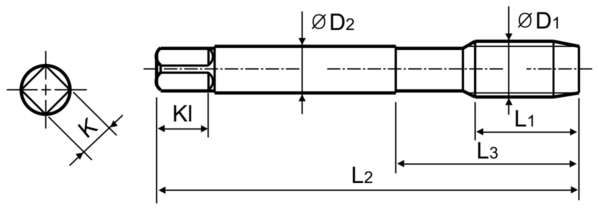
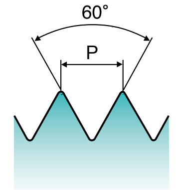
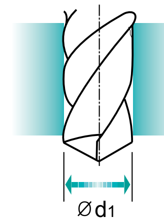


Long Shank







Material groups MU | HSS-E | LONG | 6H | 60° | B | Bright | p.B125

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TC445206	11	100	18	3.5	2.7	6	3	2.5
M4	× 0.7	TC445246	13	125	21	4.5	3.4	6	3	3.3
M5	× 0.8	TC445286	15	140	25	6	4.9	8	3	4.2
M6	× 1	TC445316	17	160	30	6	4.9	8	3	5
M8	× 1.25	TC445366	20	180	35	6	4.9	8	3	6.8
M10	× 1.5	TC445426	22	200	39	7	5.5	8	3	8.5
M12	× 1.75	TC445506	24	220	44	9	7	10	3	10.2
M14	× 2	TC445546	26	220	44	11	9	12	3	12
M16	× 2	TC445606	27	220	44	12	9	12	3	14
M20	× 2.5	TC445706	32	280	54	16	12	15	4	17.5

* Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

TQ428 SERIES
TB428 SERIES

M — ISO Metric coarse threads DIN 13

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

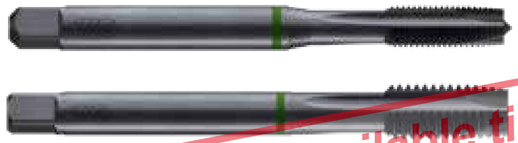
Machine taps
Maschinengewindebohrer

▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

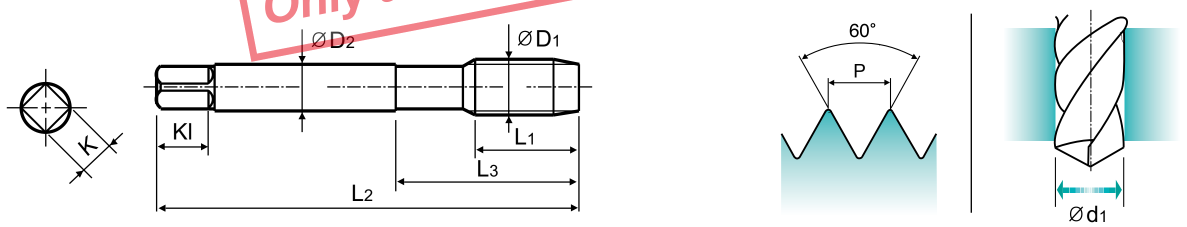
DIN 371

DIN 376



Only available till stock runs out

Hole type 3.0×D



Material groups: VA | HSS PM (up to M12) | HSS-E (over M12) | DIN 371/376 | 6H | 60° | B | Vap | p.B125

Recommended ToolHolder — Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲ M2	× 0.4	TQ428136	8	45	13	2.8	2.1	5	3	1.6
▲ M2.2	× 0.45	TQ428156	8	45	13	2.8	2.1	5	3	1.75
▲ M2.3	× 0.4	TQ428196	8	45	13	2.8	2.1	5	3	1.9
▲ M2.5	× 0.45	TQ428176	9	50	15	2.8	2.1	5	3	2.05
▲ M2.6	× 0.45	TQ428496	9	50	15	2.8	2.1	5	3	2.1
▲ M3	× 0.5	TQ428206	11	56	18	3.5	2.7	6	3	2.5
▲ M3.5	× 0.6	TQ428226	12	56	20	4	3	6	3	2.9
▲ M4	× 0.7	TQ428246	13	63	21	4.5	3.4	6	3	3.3
▲ M4.5	× 0.75	TQ428266	14	70	25	6	4.9	8	3	3.7
▲ M5	× 0.8	TQ428286	15	70	25	6	4.9	8	3	4.2
▲ M6	× 1	TQ428316	17	80	30	6	4.9	8	3	5
▲ M7	× 1	TQ428346	17	80	30	7	5.5	8	3	6
▲ M8	× 1.25	TQ428366	20	90	35	8	6.2	9	3	6.8
▲ M9	× 1.25	TQ428396	20	90	35	9	7	10	3	7.8
▲ M10	× 1.5	TQ428426	22	100	39	10	8	11	3	8.5
▲ M11	× 1.5	TQ428466	22	100	40	8	6.2	9	3	9.5
▲ M12	× 1.75	TQ428506	24	110	44	9	7	10	3	10.2
▲ M14	× 2	TB428546	26	110	44	11	9	12	3	12
▲ M16	× 2	TB428606	27	110	44	12	9	12	3	14
▲ M18	× 2.5	TB428656	30	125	50	14	11	14	4	15.5
▲ M20	× 2.5	TB428706	32	140	54	16	12	15	4	17.5
▲ M22	× 2.5	TB428746	32	140	54	18	14.5	17	4	19.5
▲ M24	× 3	TB428786	34	160	60	18	14.5	17	4	21
▲ M27	× 3	TB428866	36	160	60	20	16	19	4	24
▲ M30	× 3.5	TB428946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶HSS-PM(M2~M12/TQ428) and HSS-E(M14~M30/TB428)
* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

YG COMBO TAPS

TQ438 SERIES

MF — ISO Metric fine threads DIN 13

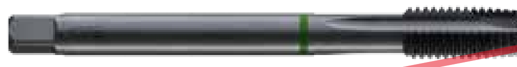
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

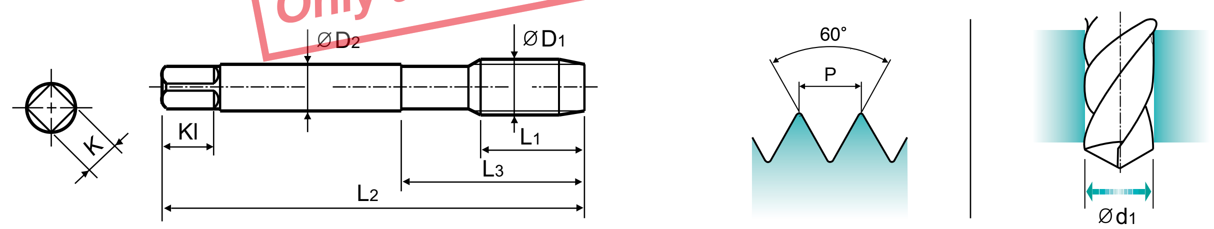
▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 374



Only available till stock runs out

Hole type 3.0×D



Material groups: VA | HSS PM | DIN 374 | 6H | 60° | B | Vap | p.B125

Recommended ToolHolder — Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲ M4	× 0.5	TQ438256	10	63	21	2.8	2.1	5	3	3.5
▲ M5	× 0.5	TQ438296	11	70	25	3.5	2.7	6	3	4.5
▲ M6	× 0.75	TQ438326	13	80	30	4.5	3.4	6	3	5.2
▲ M6	× 0.5	TQ438336	13	80	30	4.5	3.4	6	3	5.5
▲ M7	× 0.75	TQ438356	14	80	30	5.5	4.3	7	3	6.2
▲ M8	× 1	TQ438376	17	90	36	6	4.9	8	3	7
▲ M8	× 0.75	TQ438386	14	80	30	6	4.9	8	3	7.2
▲ M10	× 1.25	TQ438436	22	100	40	7	5.5	8	3	8.8
▲ M10	× 1	TQ438446	18	90	36	7	5.5	8	3	9
▲ M10	× 0.75	TQ438456	18	90	36	7	5.5	8	3	9.2
▲ M12	× 1.5	TQ438516	22	100	40	9	7	10	3	10.5
▲ M12	× 1.25	TQ438526	22	100	40	9	7	10	3	10.8
▲ M12	× 1	TQ438536	18	100	40	9	7	10	3	11

* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

YG COMBO TAPS

TB438 SERIES

MF — ISO Metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

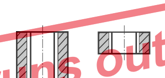
Machine taps
Maschinengewindebohrer

▶ For stainless steels and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

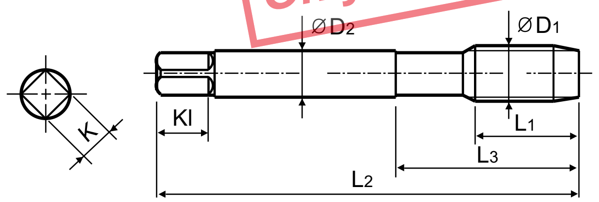
▶ Für rostfreie stähle, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

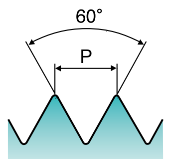
DIN 374

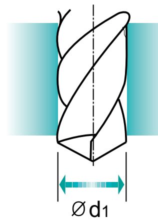
Hole type
3.0×D



Only available till stock runs out







Material groups: VA | HSS-E | DIN 374 | 6H | 60° | B | Vap | p.B125

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
▲ M14	× 1.5	TB438556	22	100	40	11	9	12	3	12.5
▲ M14	× 1.25	TB438566	22	100	40	11	9	12	3	12.8
▲ M14	× 1.0	TB438576	22	100	40	11	9	12	3	13
▲ M16	× 1.5	TB438616	22	100	40	12	9	12	3	14.5
▲ M16	× 1	TB438626	18	100	40	12	9	12	3	15
▲ M18	× 1.5	TB438676	25	110	44	14	11	14	4	16.5
▲ M18	× 1	TB438686	20	110	44	14	11	14	4	17
▲ M20	× 1.5	TB438726	25	125	50	16	12	15	4	18.5
▲ M20	× 1	TB438736	20	125	50	16	12	15	4	19
▲ M22	× 1.5	TB438766	25	125	50	18	14.5	17	4	20.5
▲ M22	× 1	TB438776	20	125	50	18	14.5	17	4	21
▲ M24	× 2	TB438796	27	140	54	18	14.5	17	4	22
▲ M24	× 1.5	TB438806	27	140	54	18	14.5	17	4	22.5
▲ M26	× 1.5	TB438856	28	140	54	18	14.5	17	4	24.5
▲ M27	× 2	TB438876	28	140	54	20	16	19	4	25
▲ M27	× 1.5	TB438886	28	140	54	20	16	19	4	25.5
▲ M28	× 1.5	TB438916	28	140	54	20	16	19	4	26.5
▲ M30	× 2	TB438966	30	150	57	22	18	21	4	28
▲ M30	× 1.5	TB438976	30	150	57	22	18	21	4	28.5

* Coating(TiN, TiCN or TiAlN) is available on your request.

▲ : Only available till stock runs out

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended								○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP TiNi
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

YG COMBO TAPS

Vap TB834 SERIES
Bright TC834 SERIES
TiN TD834 SERIES

UNC — Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

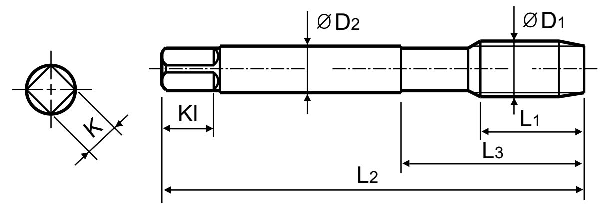
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

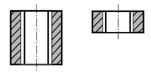
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

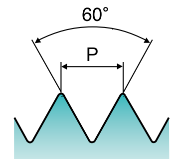
DIN 371

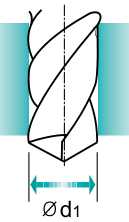
DIN 376



Hole type
3.0×D







Material groups: MU | HSS-E | DIN 371/376 | 2B | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40 UNC	TB834162	TC834162	TD834162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40 UNC	TB834202	TC834202	TD834202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32 UNC	TB834242	TC834242	TD834242	12	56	20	4	3	6	3	2.85
#8	- 32 UNC	TB834282	TC834282	TD834282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24 UNC	TB834322	TC834322	TD834322	15	70	25	6	4.9	8	3	3.9
#12	- 24 UNC	TB834362	TC834362	TD834362	16	80	30	6	4.9	8	3	4.5
1/4	- 20 UNC	TB834402	TC834402	TD834402	17	80	30	7	5.5	8	3	5.2
5/16	- 18 UNC	TB834442	TC834442	TD834442	20	90	35	8	6.2	9	3	6.6
3/8	- 16 UNC	TB834482	TC834482	TD834482	22	100	39	9	7	10	3	8
7/16	- 14 UNC	TB834522	TC834522	TD834522	22	100	40	8	6.2	9	3	9.4
1/2	- 13 UNC	TB834562	TC834562	TD834562	25	110	44	9	7	10	3	10.75
9/16	- 12 UNC	TB834602	TC834602	TD834602	26	110	44	11	9	12	3	12.25
5/8	- 11 UNC	TB834642	TC834642	TD834642	27	110	44	12	9	12	3	13.5
3/4	- 10 UNC	TB834702	TC834702	TD834702	30	125	50	14	11	14	4	16.5
7/8	- 9 UNC	TB834742	TC834742	TD834742	32	140	54	18	14.5	17	4	19.5
1	- 8 UNC	TB834782	TC834782	TD834782	36	160	60	20	16	19	4	22.25

▶DIN 371(#4~3/8) and DIN 376(7/16~1)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Bright **TCJ01** SERIES
TiN **TDJ01** SERIES

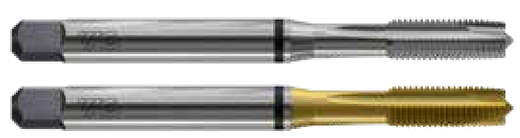
UNC Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371


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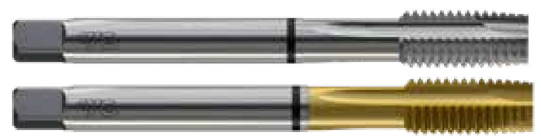

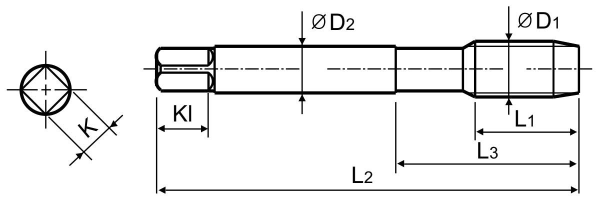

Hole type
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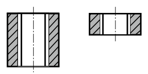
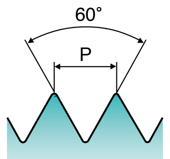
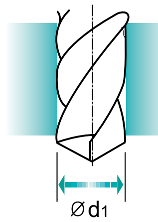






Material groups MU | HSS-E | DIN 371/376 | 3B | 60° | B | Bright TiN | p.B125

Recommended ToolHolder: Plain Shank – Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	– 40 UNC	TCJ01162	TDJ01162	11	56	18	3.5	2.7	6	3	2.3
#5	– 40 UNC	TCJ01202	TDJ01202	11	56	18	3.5	2.7	6	3	2.6
#6	– 32 UNC	TCJ01242	TDJ01242	12	56	20	4	3	6	3	2.85
#8	– 32 UNC	TCJ01282	TDJ01282	13	63	21	4.5	3.4	6	3	3.5
#10	– 24 UNC	TCJ01322	TDJ01322	15	70	25	6	4.9	8	3	3.9
#12	– 24 UNC	TCJ01362	TDJ01362	16	80	30	6	4.9	8	3	4.5
1/4	– 20 UNC	TCJ01402	TDJ01402	17	80	30	7	5.5	8	3	5.2
5/16	– 18 UNC	TCJ01442	TDJ01442	20	90	35	8	6.2	9	3	6.6
3/8	– 16 UNC	TCJ01482	TDJ01482	22	100	39	9	7	10	3	8
7/16	– 14 UNC	TCJ01522	TDJ01522	22	100	40	8	6.2	9	3	9.4
1/2	– 13 UNC	TCJ01562	TDJ01562	25	110	44	9	7	10	3	10.75
9/16	– 12 UNC	TCJ01602	TDJ01602	26	110	44	11	9	12	3	12.25
5/8	– 11 UNC	TCJ01642	TDJ01642	27	110	44	12	9	12	3	13.5
3/4	– 10 UNC	TCJ01702	TDJ01702	30	125	50	14	11	14	4	16.5
7/8	– 9 UNC	TCJ01742	TDJ01742	32	140	54	18	14.5	17	4	19.5
1	– 8 UNC	TCJ01782	TDJ01782	36	160	60	20	16	19	4	22.25

▶DIN 371(#4~3/8) and DIN 376(7/16~1)
* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Vap **TB874** SERIES
Bright **TC874** SERIES
TiN **TD874** SERIES

UNF Unified fine threads

Unified Feingewindea
UNF
Unificato passo grosso

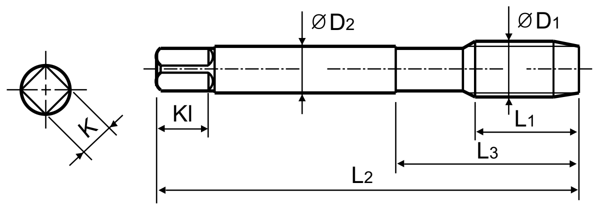
Machine taps
Maschinengewindebohrer

▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371


DIN 374

Hole type
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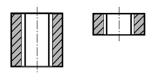
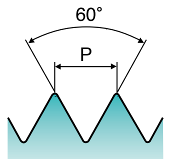
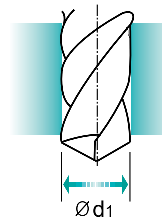






Material groups MU | HSS-E | DIN 371/376 | 2B | 60° | B | Vap Bright TiN | p.B125

Recommended ToolHolder: Plain Shank – Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	– 48 UNF	TB874182	TC874182	TD874182	11	56	18	3.5	2.7	6	3	2.4
#5	– 44 UNF	TB874222	TC874222	TD874222	11	56	18	3.5	2.7	6	3	2.7
#6	– 40 UNF	TB874262	TC874262	TD874262	12	56	20	4	3	6	3	3
#8	– 36 UNF	TB874302	TC874302	TD874302	13	63	21	4.5	3.4	6	3	3.5
#10	– 32 UNF	TB874342	TC874342	TD874342	15	70	25	6	4.9	8	3	4.1
#12	– 28 UNF	TB874382	TC874382	TD874382	16	80	30	6	4.9	8	3	4.7
1/4	– 28 UNF	TB874422	TC874422	TD874422	17	80	30	7	5.5	8	3	5.5
5/16	– 24 UNF	TB874462	TC874462	TD874462	17	90	35	8	6.2	9	3	6.9
3/8	– 24 UNF	TB874502	TC874502	TD874502	18	100	39	9	7	10	3	8.5
7/16	– 20 UNF	TB874542	TC874542	TD874542	22	100	40	8	6.2	9	3	9.9
1/2	– 20 UNF	TB874582	TC874582	TD874582	22	100	40	9	7	10	3	11.5
9/16	– 18 UNF	TB874622	TC874622	TD874622	22	100	40	11	9	12	3	12.9
5/8	– 18 UNF	TB874662	TC874662	TD874662	22	100	40	12	9	12	3	14.5
3/4	– 16 UNF	TB874722	TC874722	TD874722	25	110	44	14	11	14	4	17.5
7/8	– 14 UNF	TB874762	TC874762	TD874762	26	125	50	18	14.5	17	4	20.5
1	– 12 UNF	TB874802	TC874802	TD874802	28	140	54	20	16	19	4	23.25

▶DIN 371(#4~3/8) and DIN 374(7/16~1)
* The other coating(TiCN or TiAlN) is available on your request.

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

Bright **TCJ02** SERIES
TiN **TDJ02** SERIES

UNF

Unified fine threads

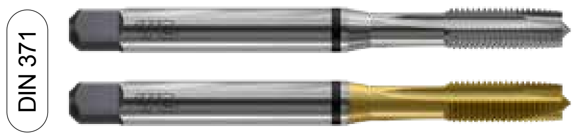
Unified Grobgewinde
UNF
Unificato passo grosso

Machine taps
Maschinengewindebohrer

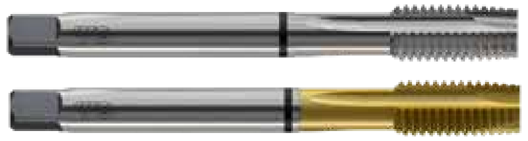
▶ For using multi-purpose and correct thread profiles & long tool life due to special tap geometry. YG-1 company has a patent.

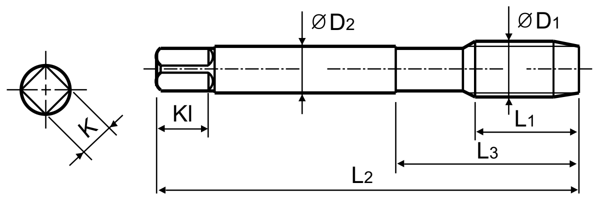
▶ Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie. Von YG-1 patentiert.

DIN 371

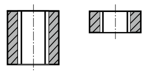


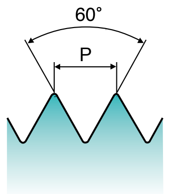
DIN 374

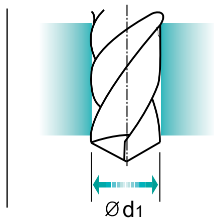




Hole type
3.0×D







Material groups MU | HSS-E | DIN 371/376 | 3B | 60° | B | Bright TiN | p.B125

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48 UNF	TCJ02182	TDJ02182	11	56	18	3.5	2.7	6	3	2.4
#5	- 44 UNF	TCJ02222	TDJ02222	11	56	18	3.5	2.7	6	3	2.7
#6	- 40 UNF	TCJ02262	TDJ02262	12	56	20	4	3	6	3	3
#8	- 36 UNF	TCJ02302	TDJ02302	13	63	21	4.5	3.4	6	3	3.5
#10	- 32 UNF	TCJ02342	TDJ02342	15	70	25	6	4.9	8	3	4.1
#12	- 28 UNF	TCJ02382	TDJ02382	16	80	30	6	4.9	8	3	4.7
1/4	- 28 UNF	TCJ02422	TDJ02422	17	80	30	7	5.5	8	3	5.5
5/16	- 24 UNF	TCJ02462	TDJ02462	17	90	35	8	6.2	9	3	6.9
3/8	- 24 UNF	TCJ02502	TDJ02502	18	100	39	9	7	10	3	8.5
7/16	- 20 UNF	TCJ02542	TDJ02542	22	100	40	8	6.2	9	3	9.9
1/2	- 20 UNF	TCJ02582	TDJ02582	22	100	40	9	7	10	3	11.5
9/16	- 18 UNF	TCJ02622	TDJ02622	22	100	40	11	9	12	3	12.9
5/8	- 18 UNF	TCJ02662	TDJ02662	22	100	40	12	9	12	3	14.5
3/4	- 16 UNF	TCJ02722	TDJ02722	25	110	44	14	11	14	4	17.5
7/8	- 14 UNF	TCJ02762	TDJ02762	26	125	50	18	14.5	17	4	20.5
1	- 12 UNF	TCJ02802	TDJ02802	28	140	54	20	16	19	4	23.25

▶DIN 371(#4~3/8) and DIN 374(7/16~1)
* The other coating(TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

◎ : Excellent ○ : Good

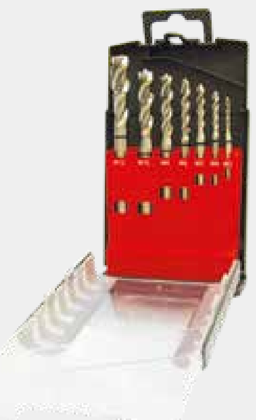
ISO	P											M			K					
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	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	400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎													

YG COMBO TAPS

Combo Spiral Flute Tap Set

TB804SET5



TC804SET7

Set No.	Series	Surface Treatment	Size	Quantity
TB804SET5	TB804	VAP	M5, M6, M8, M10, M12	5 pcs
TC804SET7	TC804	Bright	M3, M4, M5, M6, M8, M10, M12	7 pcs

Combo Spiral Flute Tap + Gold-P Drill (HSS-E, DIN 338, Straight Shank, 135˚ Split Point, Jobber Length) Set

TD804SET7-GLP195

Set No.	Series	Surface Treatment	Size							Quantity
TD804SET7-GLP195	TD804	TiN	M3	M4	M5	M6	M8	M10	M12	14pcs
	DLGP195	TiN	2.5	3.3	4.2	5	6.8	8.5	10.2	

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG COMBO TAPS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC804 TC844 TC824 TC864	TD804 TD844 TD824 TD864	TB804 TB844 TB824 TB864	TCE05 TCE09 TCE01 TCE02	TDE05 TDE09 TDE01 TDE02	TBE05	TCE06	TDE06	TBE06
					Vc (m/min)								
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
P	2	Non-alloy steel	190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
P	3	Non-alloy steel	250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	18-24	12-18
P	4	Non-alloy steel	270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	5	Non-alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10
P	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	7	Low alloy steel	275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	8	Low alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10
P	9	Low alloy steel	350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5
P	10	High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	7-10	10-15	7-10
M	13	Stainless steel	240	23	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
M	14	Stainless steel	180	10	4-6	6-8	4-6	4-6	6-8	4-6	4-6	6-8	4-6
K	15	Grey cast iron	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
K	16	Grey cast iron	260	26	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
K	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
K	18	Nodular cast iron	250	25	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
N	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
N	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	25-35	35-40	25-35
N	27	Copper and Copper Alloys (Bronze / Brass)	90		8-12	12-17	8-12	8-12	12-17	8-12	8-12	12-17	8-12
N	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20

ISO	VDI 3323	Material Description	HB	HRc	TCE07	TDE07	TBE07	TCE08	TDE08	TBE08	TC804-IC	TC633	TC807
					Vc (m/min)								
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
P	2	Non-alloy steel	190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
P	3	Non-alloy steel	250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18	12-18
P	4	Non-alloy steel	270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
P	5	Non-alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
P	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
P	7	Low alloy steel	275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
P	8	Low alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
P	9	Low alloy steel	350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5	3-5
P	10	High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5	3-5
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	7-10	7-10	7-10
M	13	Stainless steel	240	23	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
M	14	Stainless steel	180	10	4-6	6-8	4-6	4-6	6-8	4-6	4-6	4-6	4-6
K	15	Grey cast iron	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
K	16	Grey cast iron	260	26	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
K	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
K	18	Nodular cast iron	250	25	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
N	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
N	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	25-35	25-35	25-35
N	27	Copper and Copper Alloys (Bronze / Brass)	90		8-12	12-17	8-12	8-12	12-17	8-12	8-12	8-12	8-12
N	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

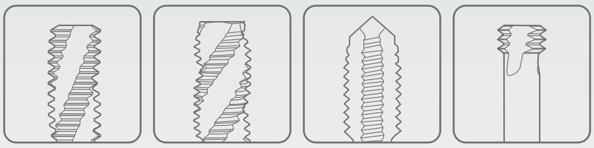
YG COMBO TAPS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TB744 TB754 TQ744 TQ754	TC814 TC854 TC834 TC874	TD814 TD854 TD834 TD874	TB814 TB854 TB834 TB874	TCJ05 TCJ09 TCJ01 TCJ02	TDJ05 TDJ09 TDJ01 TDJ02	TBJ05	TCJ06	TDJ06	TBJ06
					Vc (m/min)									
P	1	Non-alloy steel	125			15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
P	2	Non-alloy steel	190	13	15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
P	3	Non-alloy steel	250	25		12-18	18-24	12-18	12-18	18-24	12-18	12-18	18-24	12-18
P	4	Non-alloy steel	270	28	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	5	Non-alloy steel	300	32		6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10
P	6	Low alloy steel	180	10	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	7	Low alloy steel	275	29	10-15	10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
P	8	Low alloy steel	300	32		6-10	10-14	6-10	6-10	10-14	6-10	6-10	10-14	6-10
P	9	Low alloy steel	350	38		3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5
P	10	High alloyed steel, and tool steel	200	15		3-5	5-7	3-5	3-5	5-7	3-5	3-5	5-7	3-5
M	12	Stainless steel	200	15	7-10	7-10	10-15	7-10	7-10	10-15	7-10	7-10	10-15	7-10
M	13	Stainless steel	240	23	5-8	5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
M	14	Stainless steel	180	10	4-6	4-6	6-8	4-6	4-6	6-8	4-6	4-6	6-8	4-6
K	15	Grey cast iron	180	10		10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
K	16	Grey cast iron	260	26		5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
K	17	Nodular cast iron	160	3		10-15	15-20	10-15	10-15	15-20	10-15	10-15	15-20	10-15
K	18	Nodular cast iron	250	25		5-8	8-11	5-8	5-8	8-11	5-8	5-8	8-11	5-8
N	23	Aluminum-cast, alloyed	75			15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20
N	26	Copper and Copper Alloys (Bronze / Brass)	110			25-35	35-40	25-35	25-35	35-40	25-35	25-35	35-40	25-35
N	27	Copper and Copper Alloys (Bronze / Brass)	90			8-12	12-17	8-12	8-12	12-17	8-12	8-12	12-17	8-12
N	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20	15-20	20-25	15-20	15-20	20-25	15-20	15-20	20-25	15-20

ISO	VDI 3323	Material Description	HB	HRc	TCJ07	TDJ07	TBJ07	TCJ08	TDJ08	TBJ08	TC814-IC	TC445	TB428 TB438	TQ428 TQ438
					Vc (m/min)									
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20		
P	2	Non-alloy steel	190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20	15-20
P	3	Non-alloy steel	250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18		
P	4	Non-alloy steel	270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
P	5	Non-alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
P	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
P	7	Low alloy steel	275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15	10-15
P	8	Low alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
P	9	Low alloy steel	350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5		
P	10	High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5		
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	7-10	7-10	7-10	7-10
M	13	Stainless steel	240	23	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8	5-8
M	14	Stainless steel	180	10	4-6	6-8	4-6	4-6	6-8	4-6	4-6	4-6	4-6	4-6
K	15	Grey cast iron	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
K	16	Grey cast iron	260	26	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8		
K	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
K	18	Nodular cast iron	250	25	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8		
N	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20		
N	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	25-35	25-35		
N	27	Copper and Copper Alloys (Bronze / Brass)	90		8-12	12-17	8-12	8-12	12-17	8-12	8-12	8-12		
N	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20	15-20

Global Cutting Tool Leader **YG-1**



THREADING

Leading Through Innovation

HSS & HSS-E

YG TAP GENERAL

YG Gewindebohrer Universal

- **Suitable for Tapping Blind / Through Holes due to Flute Geometry and Excellent Chip Evacuation**
- **Geeignet für das Gewindeschneiden von Grund- und Durchgangsbohrungen aufgrund der Nutengeometrie und der hervorragenden Spanabfuhr**

SELECTION GUIDE

YG THREADING TOOLS

HSS & HSS-E YG TAP GENERAL

Suitable for Tapping Blind / Through Holes due to Flute Geometry and Excellent Chip Evacuation

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B169

HOLE TYPE	Max. 2.5xD Blind Hole			Max. 3.0xD Through Hole					Max. 2.0xD Blind/Through Hole
TOOL MATERIAL	HSS-E			HSS-E					
CHAMFER LEAD ACC. TO DIN2197	C	C	C	B	B	B	B	C	C
FLUTE TYPE	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Flute	Straight Flute
SPIRAL FLUTE ANGLE	R40	R40	R20	-	-	-	-	L20	-
SERIES M DIN371/376	TC711 (p.B132)	TD711 (p.B133)	TC517 (p.B141)	TC127 (p.B143)	TD127 (p.B144)	TC227 (p.B153)	TD227 (p.B154)	TC211 (p.B155)	TC463 (p.B156)
SERIES M DIN352			TC612 (p.B142)	TC122 (p.B145)					
SERIES M DIN357/LONG									
SERIES MF DIN374	TC411 (p.B134)	TD411 (p.B136)		TC222 (p.B146)	TD222 (p.B148)				TC473 (p.B157)
SERIES MF DIN2181									
SERIES UNC DIN371/376	TC144 (p.B138)			TC214 (p.B150)					TC424 (p.B158)
SERIES UNC DIN351									
SERIES UNF DIN371/374	TC124 (p.B139)			TC234 (p.B151)					
SERIES UNF DIN2181									
SERIES BSW DIN2182/2183	TC134 (p.B140)			TC224 (p.B152)					
SERIES BSW DIN351									
SERIES G(BSP) DIN5156/5157									
SERIES EG-M DIN371/376									
SERIES EG-UNC DIN371/376									
SERIES EG-UNF DIN371/374									
SURFACE TREATMENT	Bright	TiN	Bright	Bright	TiN	Bright	TiN	Bright	Bright
MODEL	TC711	TD711	TC517	TC127	TD127	TC227	TD227	TC211	TC463

ISO	VDI 3323	Material Description	Composition / Structure	Heat Treatment	HB	HRc	TC711	TD711	TC517	TC127	TD127	TC227	TD227	TC211	TC463
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	○	○	○	○	○	○	○
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎	◎	◎	○
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎	◎	◎	◎	○
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28	◎	◎	◎	◎	◎	◎	◎	◎	○
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32	○	○	○	○	○	○	○	○	○
P	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎	◎	◎	◎	○
P	7	Low alloy steel		Quenched & Tempered	275	29	◎	◎	◎	◎	◎	◎	◎	◎	○
P	8	Low alloy steel		Quenched & Tempered	300	32	○	○	○	○	○	○	○	○	○
P	9	Low alloy steel		Quenched & Tempered	350	38									
P	10	High alloyed steel, and tool steel		Annealed	200	15									
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35									
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	○	○	○	○	○	○	○	○	○
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	○	○	○	○	○	○	○	○	○
M	14	Stainless steel	Austenitic		180	10									
K	15	Grey cast iron	Pearlitic / ferritic		180	10									○
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26									○
K	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎	◎	◎	◎	◎	◎	○
K	18	Nodular cast iron	Pearlitic		250	25	◎	◎	◎	◎	◎	◎	◎	◎	○
K	19	Malleable cast iron	Ferritic		130										
K	20	Malleable cast iron	Pearlitic		230	21									
N	21	Aluminum-wrought alloy	Not Curable		60		○	○	○	○	○	○	○	○	
N	22	Aluminum-wrought alloy	Curable	Hardened	100										
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		○	○	○	○	○	○	○	○	
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90		○	○	○	○	○	○	○	○	
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130		◎	◎	◎	◎	◎	◎	◎	◎	○
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		○	○	○	○	○	○	○	○	○
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90										○
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎	◎	◎	◎	◎	◎	
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic												
N	30	Non Metallic Materials	Rubber, Wood, etc.												
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15									
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30									
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25									
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38									
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34									
S	36	Titanium Alloys	Pure Titanium		400 Rm										
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm										
H	38	Hardened steel		Hardened	550	55									
H	39	Hardened steel		Hardened	630	60									
H	40	Chilled Cast Iron		Cast	400	42									
H	41	Hardened Cast Iron		Hardened	550	55									

SELECTION GUIDE

YG THREADING TOOLS

HSS & HSS-E YG TAP GENERAL

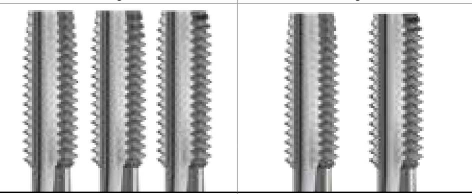
Suitable for Tapping Blind / Through Holes due to Flute Geometry and Excellent Chip Evacuation

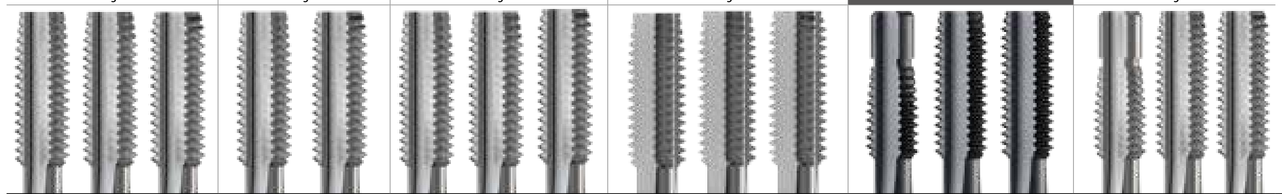
Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B169

HOLE TYPE		Max. 2.0xD Blind/Through Hole							
TOOL MATERIAL		HSS	HSS	HSS	HSS	HSS	HSS	HSS-E	HSS-E
CHAMFER LEAD ACC. TO DIN2197		I / II / III	I / III	I / II / III	I / III	I / II / III	I / II / III	I / II / III	I / II / III
FLUTE TYPE		Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute
SPIRAL FLUTE ANGLE		-	-	-	-	-	Left Hand Cut	-	-
M	DIN371/376								
M	DIN352	T7109 (p.B159)					T7343 (p.B166)	TB373 (p.B167)	TC353 (p.B168)
M	DIN357/LONG								
MF	DIN374								
MF	DIN2181		T7309 (p.B161)						
UNC	DIN371/376								
UNC	DIN351			T7363 (p.B163)					
UNF	DIN371/374								
UNF	DIN2181				T7509 (p.B164)				
BSW	DIN2182/2183								
BSW	DIN351					T7609 (p.B165)			
G(BSP)	DIN5156/5157								
EG-M	DIN371/376								
EG-UNC	DIN371/376								
EG-UNF	DIN371/374								
SURFACE TREATMENT		Bright	Bright	Bright	Bright	Bright	Bright	VAP	Bright
MODEL									





ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	T7109	T7309	T7363	T7509	T7609	T7343	TB373	TC353
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	○	○	○	○	○	○
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	○	○	○	○	○	○	○	○
P	3	Non-alloy steel	About 0.45% C	Quenched & tempered	250	25	○	○	○	○	○	○	○	○
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28	○	○	○	○	○	○	○	○
P	5	Non-alloy steel	About 0.75% C	Quenched & tempered	300	32								
P	6	Low alloy steel		Annealed	180	10	○	○	○	○	○	○	○	○
P	7	Low alloy steel		Quenched & tempered	275	29	○	○	○	○	○	○	○	○
P	8	Low alloy steel		Quenched & tempered	300	32								
P	9	Low alloy steel		Quenched & tempered	350	38								
P	10	High alloyed steel, and tool steel		Annealed	200	15								
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35								
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15							○	
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23							○	
M	14	Stainless steel	Austenitic		180	10							○	
K	15	Grey cast iron	Pearlitic / ferritic		180	10								
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26								
K	17	Nodular cast iron	Ferritic		160	3	○	○	○	○	○	○		
K	18	Nodular cast iron	Pearlitic		250	25	○	○	○	○	○	○		
K	19	Malleable cast iron	Ferritic		130									
K	20	Malleable cast iron	Pearlitic		230	21								
N	21	Aluminum-wrought alloy	Not Curable		60									
N	22	Aluminum-wrought alloy	Curable	Hardened	100									
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75									
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90									
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130		○	○	○	○	○	○		
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		○	○	○	○	○	○		
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90		○	○	○	○	○	○		
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100									
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic											
N	30	Non Metallic Materials	Rubber, Wood, etc.											
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15								
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30								
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25								
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38								
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34								
S	36	Titanium Alloys	Pure Titanium		400 Rm									
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm									
H	38	Hardened steel		Hardened	550	55								
H	39	Hardened steel		Hardened	630	60								
H	40	Chilled Cast Iron		Cast	400	42								
H	41	Hardened Cast Iron		Hardened	550	55								

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC711 SERIES

M ISO metric coarse threads DIN 13

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

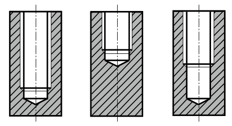
Machine taps
Maschinengewindebohrer

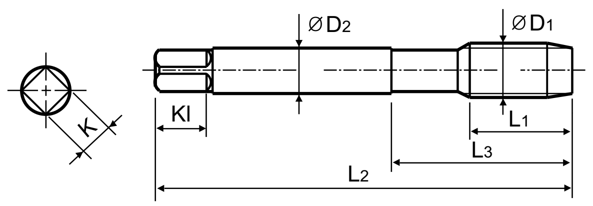
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

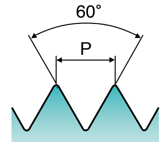
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

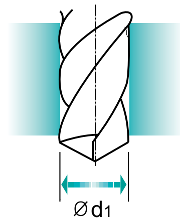
DIN 371
DIN 376

Hole type
2.5×D









Material groups: GS | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC711136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC711156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC711196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC711176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC711496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC711206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC711226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TC711246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC711266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC711286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TC711316	10	80	30	6	4.9	8	3	5
M7	× 1	TC711346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TC711366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC711396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TC711426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TC711466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC711506	18	110	44	9	7	10	3	10.2
M14	× 2	TC711546	20	110	44	11	9	12	3	12
M16	× 2	TC711606	20	110	44	12	9	12	3	14
M18	× 2.5	TC711656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC711706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TC711746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TC711786	30	160	60	18	14.5	17	4	21
M27	× 3	TC711866	30	160	60	20	16	19	4	24
M30	× 3.5	TC711946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TD711 SERIES

M ISO metric coarse threads DIN 13

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

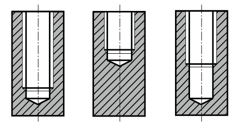
Machine taps
Maschinengewindebohrer

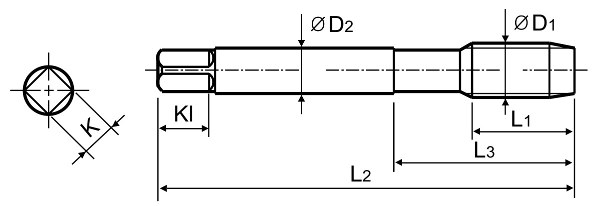
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

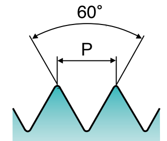
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

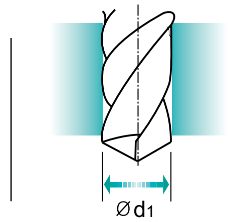
DIN 371
DIN 376

Hole type
2.5×D









Material groups: GS | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | TiN | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M2	× 0.4	TD711136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TD711156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TD711196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TD711176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TD711496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TD711206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TD711226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TD711246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TD711266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TD711286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TD711316	10	80	30	6	4.9	8	3	5
M7	× 1	TD711346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TD711366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TD711396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TD711426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TD711466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TD711506	18	110	44	9	7	10	3	10.2
M14	× 2	TD711546	20	110	44	11	9	12	3	12
M16	× 2	TD711606	20	110	44	12	9	12	3	14
M18	× 2.5	TD711656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TD711706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TD711746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TD711786	30	160	60	18	14.5	17	4	21
M27	× 3	TD711866	30	160	60	20	16	19	4	24
M30	× 3.5	TD711946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG-1 CO., LTD. phone:+82-32-526-0909, www.yg1.kr, E-mail:yg1@yg1.kr B133

YG TAP GENERAL

TC411 SERIES

MF ISO metric fine threads DIN 13

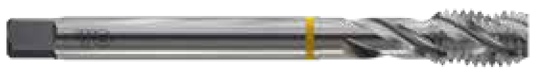
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

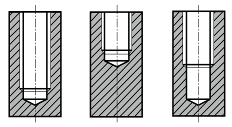
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

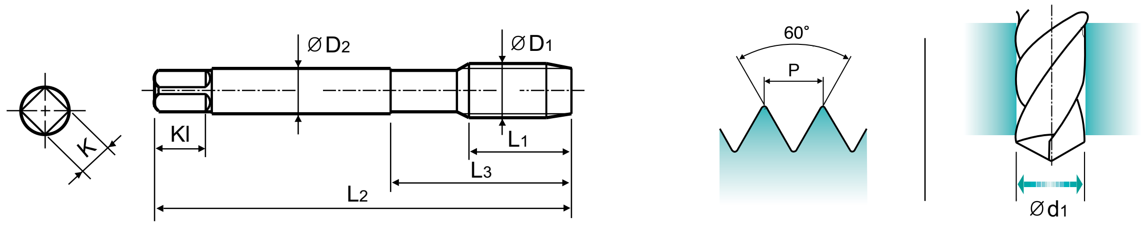
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 374



Hole type
2.5×D





Material groups GS | HSS-E | DIN 374 | 6H | 60° | C | R40 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC411256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TC411296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TC411326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TC411336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TC411356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TC411376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TC411386	8	80	30	6	4.9	8	3	7.2
M8	× 0.5	TC411936	5	80	30	6	4.9	8	3	7.5
M10	× 1.25	TC411436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TC411446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TC411456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TC411516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TC411526	15	100	40	9	7	10	3	10.8
M12	× 1	TC411536	11	100	40	9	7	10	3	11
M14	× 1.5	TC411556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TC411566	15	100	40	11	9	12	3	12.8
M14	× 1	TC411576	11	100	40	11	9	12	3	13
M16	× 1.5	TC411616	15	100	40	12	9	12	3	14.5
M16	× 1	TC411626	12	100	40	12	9	12	3	15
M18	× 1.5	TC411676	17	110	44	14	11	14	4	16.5
M18	× 1	TC411686	13	110	44	14	11	14	4	17

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC411 SERIES

MF ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

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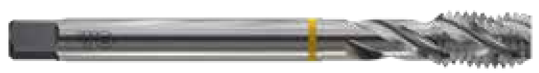
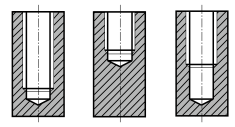
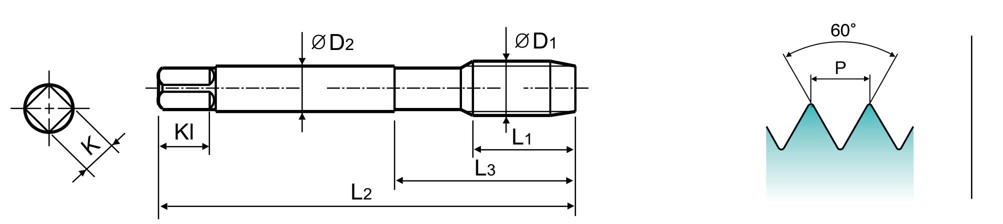
DIN 374



Hole type
2.5×D





Material groups GS | HSS-E | DIN 374 | 6H | 60° | C | R40 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M20	× 1.5	TC411726	17	125	50	16	12	15	4	18.5
M20	× 1	TC411736	14	125	50	16	12	15	4	19
M22	× 1.5	TC411766	17	125	50	18	14.5	17	4	20.5
M22	× 1	TC411776	14	125	50	18	14.5	17	4	21
M24	× 2	TC411796	20	140	54	18	14.5	17	4	22
M24	× 1.5	TC411806	20	140	54	18	14.5	17	4	22.5
M26	× 1.5	TC411856	20	140	54	18	14.5	17	4	24.5
M27	× 2	TC411876	20	140	54	20	16	19	4	25
M27	× 1.5	TC411886	20	140	54	20	16	19	4	25.5
M28	× 1.5	TC411916	20	140	54	20	16	19	4	26.5
M30	× 2	TC411966	22	150	57	22	18	21	4	28
M30	× 1.5	TC411976	22	150	57	22	18	21	4	28.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TD411 SERIES

MF ISO metric fine threads DIN 13

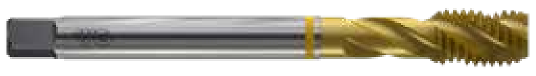
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

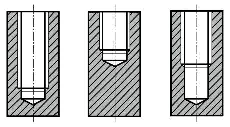
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

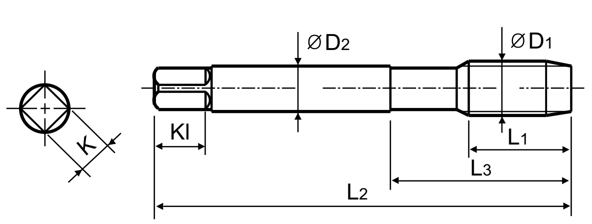
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

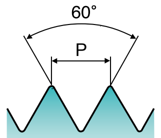
DIN 374

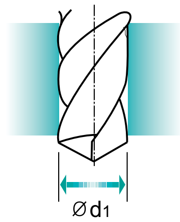


Hole type
2.5×D









Material groups GS | HSS-E | DIN 374 | 6H | 60° | C | R40 | TiN | p.B169

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M4	× 0.5	TD411256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TD411296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TD411326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TD411336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TD411356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TD411376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TD411386	8	80	30	6	4.9	8	3	7.2
M8	× 0.5	TD411936	5	80	30	6	4.9	8	3	7.5
M10	× 1.25	TD411436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TD411446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TD411456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TD411516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TD411526	15	100	40	9	7	10	3	10.8
M12	× 1	TD411536	11	100	40	9	7	10	3	11
M14	× 1.5	TD411556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TD411566	15	100	40	11	9	12	3	12.8
M14	× 1	TD411576	11	100	40	11	9	12	3	13
M16	× 1.5	TD411616	15	100	40	12	9	12	3	14.5

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TD411 SERIES

MF ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

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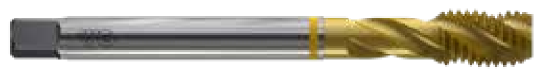
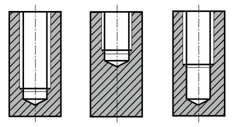
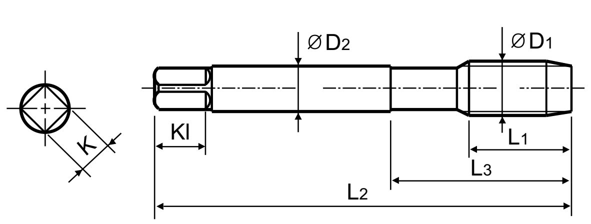
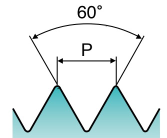
DIN 374

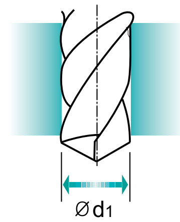


Hole type
2.5×D









Material groups GS | HSS-E | DIN 374 | 6H | 60° | C | R40 | TiN | p.B169

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M16	× 1	TD411626	12	100	40	12	9	12	3	15
M18	× 1.5	TD411676	17	110	44	14	11	14	4	16.5
M18	× 1	TD411686	13	110	44	14	11	14	4	17
M20	× 1.5	TD411726	17	125	50	16	12	15	4	18.5
M20	× 1	TD411736	14	125	50	16	12	15	4	19
M22	× 1.5	TD411766	17	125	50	18	14.5	17	4	20.5
M22	× 1	TD411776	14	125	50	18	14.5	17	4	21
M24	× 2	TD411796	20	140	54	18	14.5	17	4	22
M24	× 1.5	TD411806	20	140	54	18	14.5	17	4	22.5
M26	× 1.5	TD411856	20	140	54	18	14.5	17	4	24.5
M27	× 2	TD411876	20	140	54	20	16	19	4	25
M27	× 1.5	TD411886	20	140	54	20	16	19	4	25.5
M28	× 1.5	TD411916	20	140	54	20	16	19	4	26.5
M30	× 2	TD411966	22	150	57	22	18	21	4	28
M30	× 1.5	TD411976	22	150	57	22	18	21	4	28.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC144 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

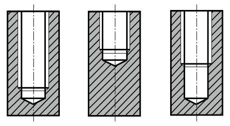
Machine taps
Maschinengewindebohrer

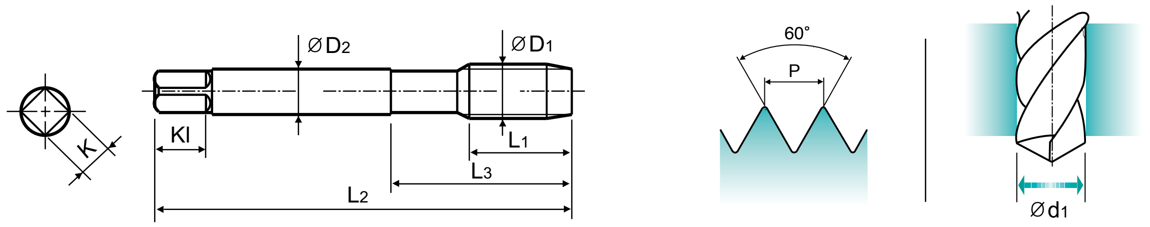
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

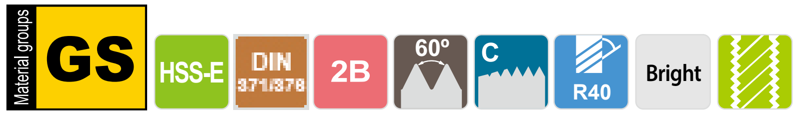
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 371
DIN 376

Hole type
2.5×D







p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	-40UNC	TC144162	6	56	18	3.5	2.7	6	3	2.3
#5	-40UNC	TC144202	7	56	18	3.5	2.7	6	3	2.6
#6	-32UNC	TC144242	7	56	20	4	3	6	3	2.85
#8	-32UNC	TC144282	8	63	21	4.5	3.4	6	3	3.5
#10	-24UNC	TC144322	10	70	25	6	4.9	8	3	3.9
#12	-24UNC	TC144362	10	80	30	6	4.9	8	3	4.5
1/4	-20UNC	TC144402	13	80	30	7	5.5	8	3	5.2
5/16	-18UNC	TC144442	14	90	35	8	6.2	9	3	6.6
3/8	-16UNC	TC144482	16	100	39	9	7	10	3	8
7/16	-14UNC	TC144522	17	100	40	8	6.2	9	3	9.4
1/2	-13UNC	TC144562	20	110	44	9	7	10	3	10.75
9/16	-12UNC	TC144602	20	110	44	11	9	12	3	12.25
5/8	-11UNC	TC144642	22	110	44	12	9	12	3	13.5
3/4	-10UNC	TC144702	25	125	50	14	11	14	4	16.5
7/8	- 9UNC	TC144742	27	140	54	18	14.5	17	4	19.5
1	- 8UNC	TC144782	30	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TC144822	35	180	65	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC124 SERIES

UNF

Unified fine threads

Unified Feingewinde
UNF
Unificato passo grosso

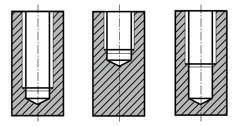
Machine taps
Maschinengewindebohrer

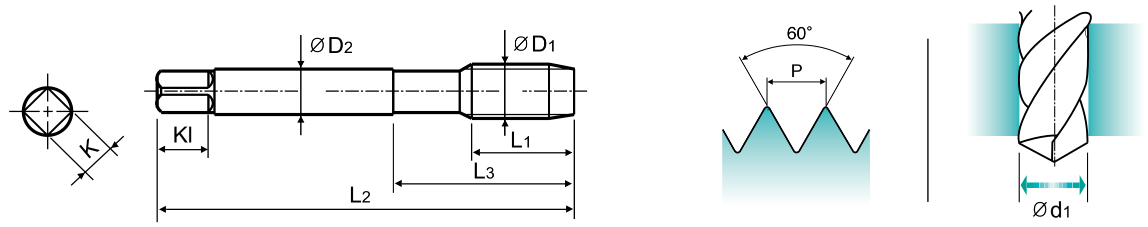
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

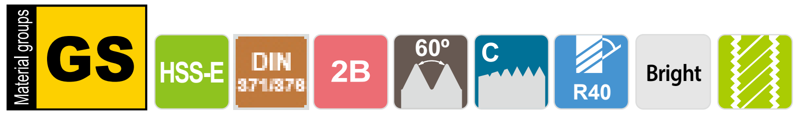
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 371
DIN 374

Hole type
2.5×D







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Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	-48UNF	TC124182	6	56	18	3.5	2.7	6	3	2.4
#5	-44UNF	TC124222	7	56	18	3.5	2.7	6	3	2.7
#6	-40UNF	TC124262	7	56	20	4	3	6	3	3
#8	-36UNF	TC124302	8	63	21	4.5	3.4	6	3	3.5
#10	-32UNF	TC124342	10	70	25	6	4.9	8	3	4.1
#12	-28UNF	TC124382	10	80	30	6	4.9	8	3	4.7
1/4	-28UNF	TC124422	10	80	30	7	5.5	8	3	5.5
5/16	-24UNF	TC124462	10	90	35	8	6.2	9	3	6.9
3/8	-24UNF	TC124502	10	100	39	9	7	10	3	8.5
7/16	-20UNF	TC124542	13	100	40	8	6.2	9	3	9.9
1/2	-20UNF	TC124582	13	100	40	9	7	10	3	11.5
9/16	-18UNF	TC124622	15	100	40	11	9	12	3	12.9
5/8	-18UNF	TC124662	15	100	40	12	9	12	3	14.5
3/4	-16UNF	TC124722	17	110	44	14	11	14	4	17.5
7/8	-14UNF	TC124762	17	125	50	18	14.5	17	4	20.5
1	-12UNF	TC124802	20	140	54	18	14.5	17	4	23.25
1-1/8	-12UNF	TC124842	22	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC134 SERIES

BSW

Whitworth threads

Whitworth Gewinde
BSW
Unificato passo grosso

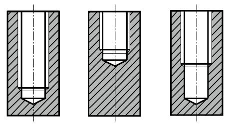
Machine taps
Maschinengewindebohrer

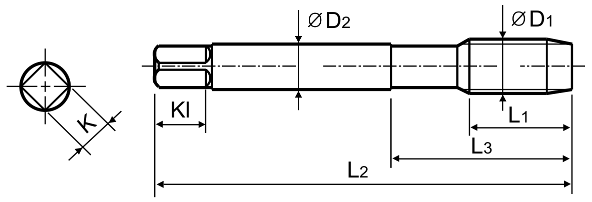
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

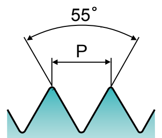
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

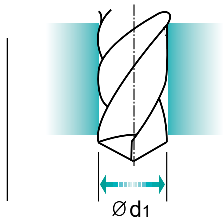
DIN 2182
DIN 2183

Hole type
2.5×D









Material groups GS | HSS-E | DIN 2182/2183 | 55° | C | R40 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
W1/8	- 40	TC134200	7	56	18	3.5	2.7	6	3	2.5
W5/32	- 32	TC134280	7	63	21	4.5	3.4	6	3	3.1
W3/16	- 24	TC134320	10	70	25	6	4.9	8	3	3.6
W7/32	- 24	TC134360	10	80	30	6	4.9	8	3	4.4
W1/4	- 20	TC134400	13	80	30	7	5.5	8	3	5.1
W5/16	- 18	TC134440	14	90	35	8	6.2	9	3	6.5
W3/8	- 16	TC134480	16	100	39	9	7	10	3	7.9
W7/16	- 14	TC134520	17	100	40	8	6.2	9	3	9.3
W1/2	- 12	TC134560	20	110	44	9	7	10	3	10.5
W9/16	- 12	TC134600	20	110	44	11	9	12	3	12
W5/8	- 11	TC134640	22	110	40	12	9	12	3	13.5
W3/4	- 10	TC134700	25	125	50	14	11	14	4	16.5
W7/8	- 9	TC134740	27	140	54	18	14.5	17	4	19.25
W1	- 8	TC134780	30	160	60	20	16	19	4	22
W1-1/8	- 7	TC134820	35	180	65	22	18	21	4	24.75

▶DIN 2182(W1/8~W3/8) and DIN 2183(W7/16~W1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC517 SERIES

M

ISO metric coarse threads DIN 13

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

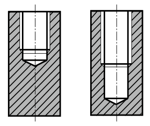
Machine taps
Maschinengewindebohrer

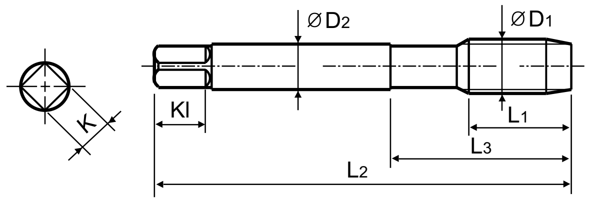
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

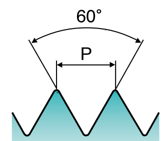
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

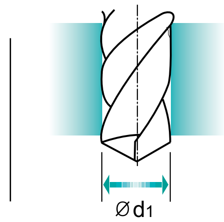
DIN 371
DIN 376

Hole type
2.5×D









Material groups GS | HSS-E | DIN 371/376 | 6H | 60° | C | R20 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC517136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC517156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC517196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC517176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC517496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC517206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC517226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TC517246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC517266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC517286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TC517316	10	80	30	6	4.9	8	3	5
M7	× 1	TC517346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TC517366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC517396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TC517426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TC517466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC517506	18	110	44	9	7	10	3	10.2
M14	× 2	TC517546	20	110	44	11	9	12	3	12
M16	× 2	TC517606	20	110	44	12	9	12	3	14
M18	× 2.5	TC517656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC517706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TC517746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TC517786	30	160	60	18	14.5	17	4	21
M27	× 3	TC517866	30	160	60	20	16	19	4	24
M30	× 3.5	TC517946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS | SYNCHRO TAPS | PRIME 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

YG TAP GENERAL

TC612 SERIES

M ISO metric coarse threads DIN 13

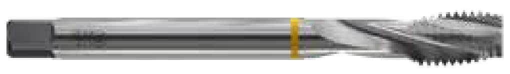
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

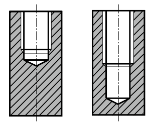
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

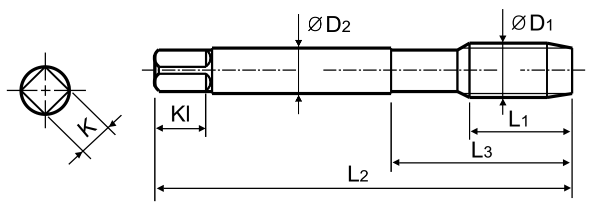
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

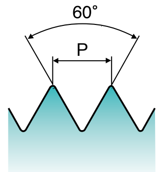
DIN 352

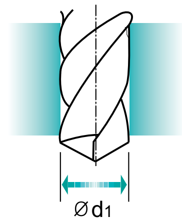


Hole type
2.5×D









Material groups: GS | HSS-E | DIN 352 | 6H | 60° | C | R20 | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TC612206	11	40	18	3.5	2.7	6	3	2.5
M4	× 0.7	TC612246	13	45	21	4.5	3.4	6	3	3.3
M5	× 0.8	TC612286	16	52	26	6	4.9	8	3	4.2
M6	× 1	TC612316	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC612366	20	63	34	6	4.9	8	3	6.8
M10	× 1.5	TC612426	22	70	38	7	5.5	8	3	8.5
M12	× 1.75	TC612506	24	80	45	9	7	10	3	10.2
M14	× 2	TC612546	26	80	45	11	9	12	3	12
M16	× 2	TC612606	27	80	45	12	9	12	3	14
M18	× 2.5	TC612656	30	95	58	14	11	14	4	15.5
M20	× 2.5	TC612706	32	95	58	16	12	15	4	17.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC127 SERIES

M ISO metric coarse threads DIN 13

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

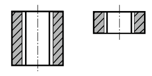
Machine taps
Maschinengewindebohrer

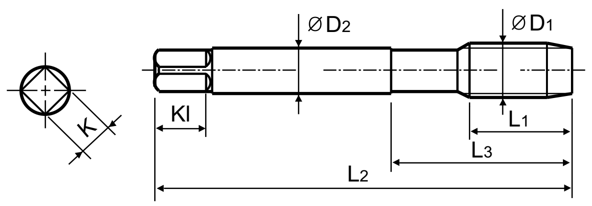
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

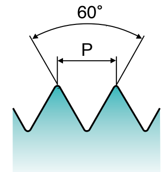
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

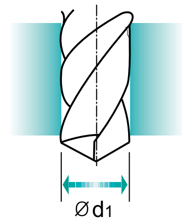
DIN 371

Hole type
3.0×D









Material groups: GS | HSS-E | DIN 371 | 6H | 60° | B | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC127136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC127156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC127196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC127176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC127496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC127206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC127226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC127246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC127266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC127286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC127316	17	80	30	6	4.9	8	3	5
M7	× 1	TC127346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC127366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC127396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC127426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC127466	22	100	39	11	9	12	3	9.5
M12	× 1.75	TC127506	24	110	44	12	9	12	3	10.2

▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TD127 SERIES

M ISO metric coarse threads DIN 13

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

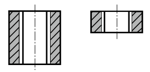
Machine taps
Maschinengewindebohrer

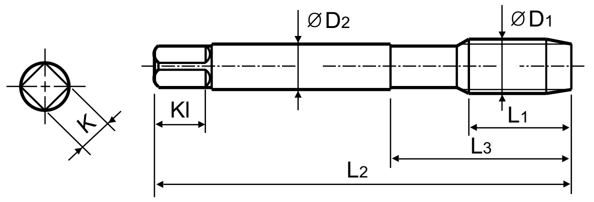
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

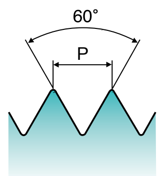
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

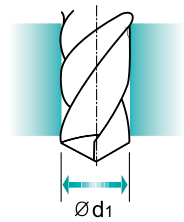
DIN 371

Hole type
3.0×D









Material groups: GS | HSS-E | DIN 371 | 6H | 60° | B | TiN | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M2	× 0.4	TD127136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TD127156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TD127196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TD127176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TD127496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TD127206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TD127226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TD127246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TD127266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TD127286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TD127316	17	80	30	6	4.9	8	3	5
M7	× 1	TD127346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TD127366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TD127396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TD127426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TD127466	22	100	39	11	9	12	3	9.5
M12	× 1.75	TD127506	24	110	44	12	9	12	3	10.2

▶ *DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC122 SERIES

M ISO metric coarse threads DIN 13

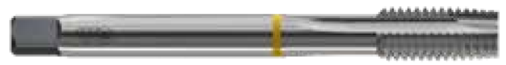
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

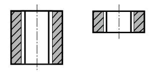
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

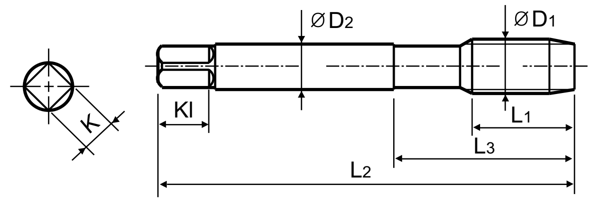
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

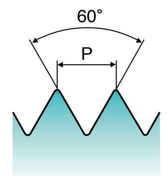
DIN 352

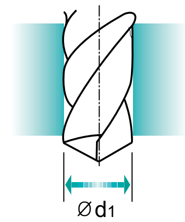


Hole type
3.0×D









Material groups: GS | HSS-E | DIN 352 | 6H | 60° | B | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC122136	8	36	13	2.8	2.1	5	3	1.6
M2.5	× 0.45	TC122176	9	40	15	2.8	2.1	5	3	2.05
M3	× 0.5	TC122206	11	40	18	3.5	2.7	6	3	2.5
M4	× 0.7	TC122246	13	45	21	4.5	3.4	6	3	3.3
M5	× 0.8	TC122286	16	52	26	6	4.9	8	3	4.2
M6	× 1	TC122316	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC122366	20	63	34	6	4.9	8	3	6.8
M10	× 1.5	TC122426	22	70	38	7	5.5	8	3	8.5
M12	× 1.75	TC122506	24	80	45	9	7	10	3	10.2
M14	× 2	TC122546	26	80	45	11	9	12	3	12
M16	× 2	TC122606	27	80	45	12	9	12	3	14

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC222 SERIES

MF

ISO metric fine threads DIN 13

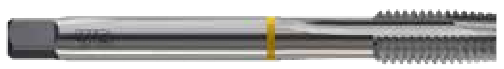
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

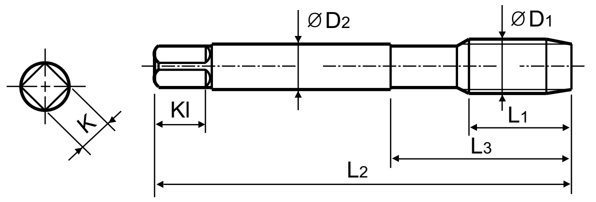
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

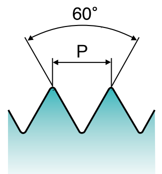
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

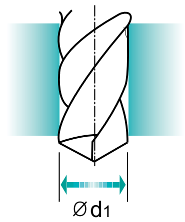
DIN 374



Hole type
3.0×D







Material groups: GS | HSS-E | DIN 374 | 6H | 60° | B | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC222256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TC222296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TC222326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TC222336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TC222356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TC222376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TC222386	14	80	30	6	4.9	8	3	7.2
M8	× 0.5	TC222936	14	80	30	6	4.9	8	3	7.5
M10	× 1.25	TC222436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TC222446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TC222456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TC222516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TC222526	22	100	40	9	7	10	3	10.8
M12	× 1	TC222536	18	100	40	9	7	10	3	11
M14	× 1.5	TC222556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TC222566	22	100	40	11	9	12	3	12.8
M14	× 1	TC222576	18	100	40	11	9	12	3	13

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◯		◯	◯	◎	◯		◎													

YG TAP GENERAL

TC222 SERIES

MF

ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

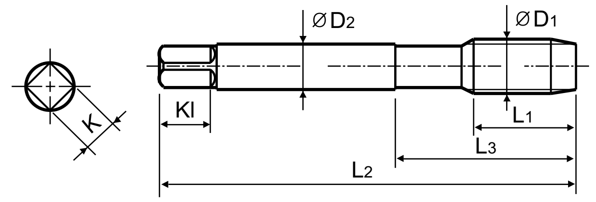
Machine taps
Maschinengewindebohrer

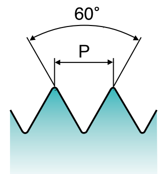
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

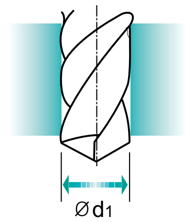
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 374

Hole type
3.0×D







Material groups: GS | HSS-E | DIN 374 | 6H | 60° | B | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M16	× 1.5	TC222616	22	100	40	12	9	12	3	14.5
M16	× 1	TC222626	18	100	40	12	9	12	3	15
M18	× 1.5	TC222676	25	110	44	14	11	14	4	16.5
M18	× 1	TC222686	20	110	44	14	11	14	4	17
M20	× 1.5	TC222726	25	125	50	16	12	15	4	18.5
M20	× 1	TC222736	20	125	50	16	12	15	4	19
M22	× 1.5	TC222766	25	125	50	18	14.5	17	4	20.5
M22	× 1	TC222776	20	125	50	18	14.5	17	4	21
M24	× 2	TC222796	27	140	54	18	14.5	17	4	22
M24	× 1.5	TC222806	27	140	54	18	14.5	17	4	22.5
M26	× 1.5	TC222856	28	140	54	18	14.5	17	4	24.5
M27	× 2	TC222876	28	140	54	20	16	19	4	25
M27	× 1.5	TC222886	28	140	54	20	16	19	4	25.5
M28	× 1.5	TC222916	28	140	54	20	16	19	4	26.5
M30	× 2	TC222966	30	150	57	22	18	21	4	28
M30	× 1.5	TC222976	30	150	57	22	18	21	4	28.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◯		◯	◯	◎	◯		◎													

YG TAP GENERAL

TD222 SERIES

MF

ISO metric fine threads DIN 13

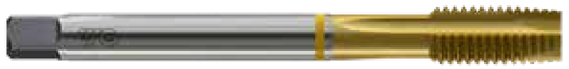
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

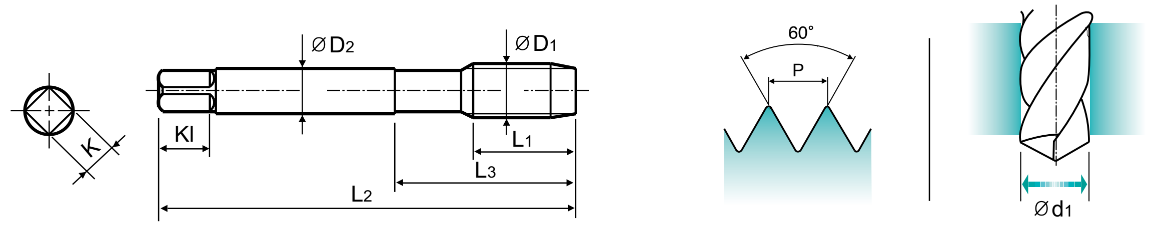
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 374



Hole type
3.0×D



Material groups: GS | HSS-E | DIN 374 | 6H | 60° | B | TiN | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M4	× 0.5	TD222256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TD222296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TD222326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TD222336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TD222356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TD222376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TD222386	14	80	30	6	4.9	8	3	7.2
M8	× 0.5	TD222936	14	80	30	6	4.9	8	3	7.5
M10	× 1.25	TD222436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TD222446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TD222456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TD222516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TD222526	22	100	40	9	7	10	3	10.8
M12	× 1	TD222536	18	100	40	9	7	10	3	11
M14	× 1.5	TD222556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TD222566	22	100	40	11	9	12	3	12.8
M14	× 1	TD222576	18	100	40	11	9	12	3	13
M16	× 1.5	TD222616	22	100	40	12	9	12	3	14.5

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TD222 SERIES

MF

ISO metric fine threads DIN 13

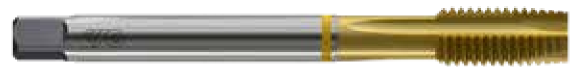
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

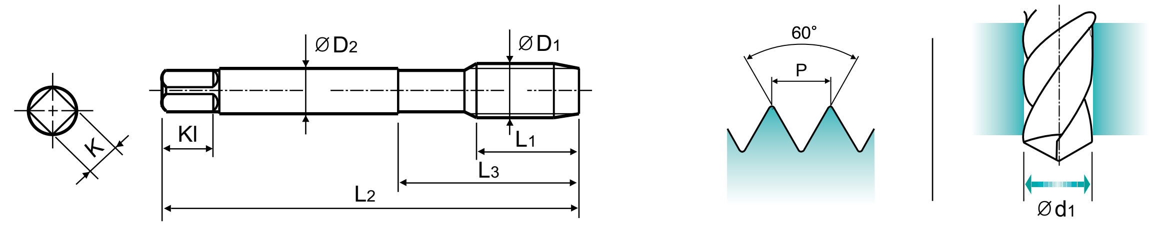
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 374



Hole type
3.0×D



Material groups: GS | HSS-E | DIN 374 | 6H | 60° | B | TiN | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M16	× 1	TD222626	18	100	40	12	9	12	3	15
M18	× 1.5	TD222676	25	110	44	14	11	14	4	16.5
M18	× 1	TD222686	20	110	44	14	11	14	4	17
M20	× 1.5	TD222726	25	125	50	16	12	15	4	18.5
M20	× 1	TD222736	20	125	50	16	12	15	4	19
M22	× 1.5	TD222766	25	125	50	18	14.5	17	4	20.5
M22	× 1	TD222776	20	125	50	18	14.5	17	4	21
M24	× 2	TD222796	27	140	54	18	14.5	17	4	22
M24	× 1.5	TD222806	27	140	54	18	14.5	17	4	22.5
M26	× 1.5	TD222856	28	140	54	18	14.5	17	4	24.5
M27	× 2	TD222876	28	140	54	20	16	19	4	25
M27	× 1.5	TD222886	28	140	54	20	16	19	4	25.5
M28	× 1.5	TD222916	28	140	54	20	16	19	4	26.5
M30	× 2	TD222966	30	150	57	22	18	21	4	28
M30	× 1.5	TD222976	30	150	57	22	18	21	4	28.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP TiNi
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

YG TAP GENERAL

TC214 SERIES

UNC Unified coarse threads

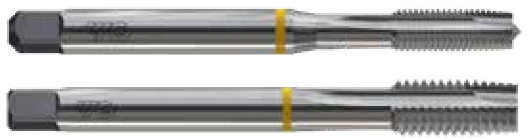
Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

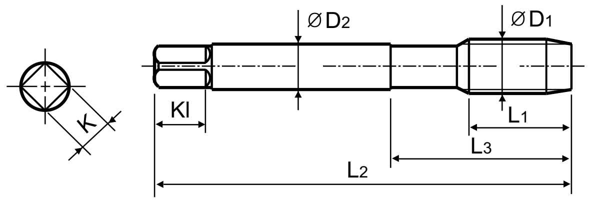
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

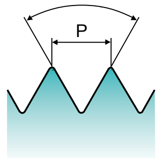
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

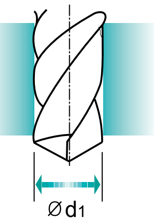
DIN 371
DIN 376



Hole type
3.0×D







Material groups GS | HSS-E | DIN 371/376 | 2B | 60° | B | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.161

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TC214162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TC214202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TC214242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TC214282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TC214322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TC214362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TC214402	17	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TC214442	20	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TC214482	22	100	39	9	7	10	3	8
7/16	- 14UNC	TC214522	22	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TC214562	25	110	44	9	7	10	3	10.75
9/16	- 12UNC	TC214602	26	110	44	11	9	12	3	12.25
5/8	- 11UNC	TC214642	27	110	44	12	9	12	3	13.5
3/4	- 10UNC	TC214702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TC214742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TC214782	36	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TC214822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC234 SERIES

UNF Unified fine threads

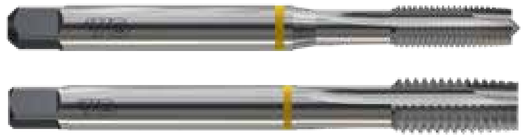
Unified Feingewinde
UNF
Unificato passo fine

Machine taps
Maschinengewindebohrer

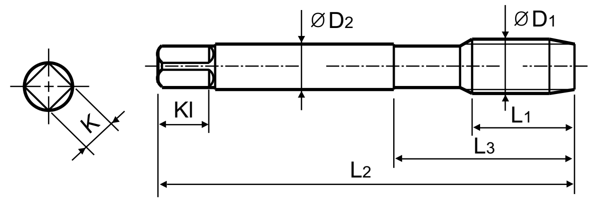
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

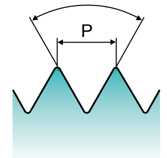
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

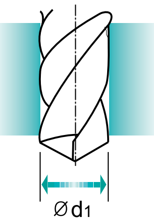
DIN 371
DIN 374



Hole type
3.0×D







Material groups GS | HSS-E | DIN 371/378 | 2B | 60° | B | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.161

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TC234182	11	56	18	3.5	2.7	6	3	2.4
#5	- 44UNF	TC234222	11	56	18	3.5	2.7	6	3	2.7
#6	- 40UNF	TC234262	12	56	20	4	3	6	3	3
#8	- 36UNF	TC234302	13	63	21	4.5	3.4	6	3	3.5
#10	- 32UNF	TC234342	15	70	25	6	4.9	8	3	4.1
#12	- 28UNF	TC234382	16	80	30	6	4.9	8	3	4.7
1/4	- 28UNF	TC234422	17	80	30	7	5.5	8	3	5.5
5/16	- 24UNF	TC234462	17	90	35	8	6.2	9	3	6.9
3/8	- 24UNF	TC234502	18	100	39	9	7	10	3	8.5
7/16	- 20UNF	TC234542	22	100	40	8	6.2	9	3	9.9
1/2	- 20UNF	TC234582	22	100	40	9	7	10	3	11.5
9/16	- 18UNF	TC234622	22	100	40	11	9	12	3	12.9
5/8	- 18UNF	TC234662	22	100	40	12	9	12	3	14.5
3/4	- 16UNF	TC234722	25	110	44	14	11	14	4	17.5
7/8	- 14UNF	TC234762	26	125	50	18	14.5	17	4	20.5
1	- 12UNF	TC234802	28	140	54	18	14.5	17	4	23.25
1-1/8	- 12UNF	TC234842	30	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC224 SERIES

BSW

Whitworth threads

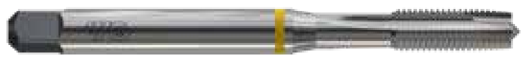
- Whitworth Gewinde
- BSW
- Filettatura Whitworth

Machine taps
Maschinengewindebohrer

▶ Suitable for through hole in more cutting speed than other taps due to thick web.

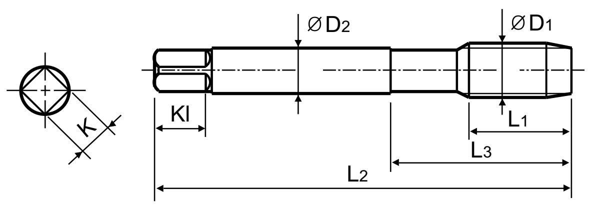
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

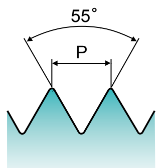
DIN 2182

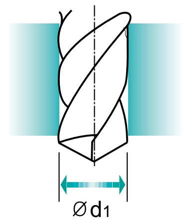


DIN 2183

Hole type
3.0×D







Material groups: GS | HSS-E | DIN 2182/2183 | 2B | 60º | B | Bright | p.B169

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
W1/8	- 40	TC224200	11	56	18	3.5	2.7	6	3	2.5
W5/32	- 32	TC224280	13	63	21	4.5	3.4	6	3	3.1
W3/16	- 24	TC224320	15	70	25	6	4.9	8	3	3.6
W7/32	- 24	TC224360	16	80	30	6	4.9	8	3	4.4
W1/4	- 20	TC224400	17	80	30	7	5.5	8	3	5.1
W5/16	- 18	TC224440	20	90	35	8	6.2	9	3	6.5
W3/8	- 16	TC224480	22	100	39	9	7	10	3	7.9
W7/16	- 14	TC224520	22	100	40	8	6.2	9	3	9.3
W1/2	- 12	TC224560	25	110	44	9	7	10	3	10.5
W9/16	- 12	TC224600	26	110	44	11	9	12	3	12
W5/8	- 11	TC224640	27	110	44	12	9	12	3	13.5
W3/4	- 10	TC224700	30	125	50	14	11	14	4	16.5
W7/8	- 9	TC224740	32	140	54	18	14.5	17	4	19.25
W1	- 8	TC224780	36	160	60	20	16	19	4	22
W1-1/8	- 7	TC224820	40	180	65	22	18	21	4	24.75

▶DIN 2182(W1/8~W3/8) and DIN 2183(W7/16~W1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC227 SERIES

M

ISO metric coarse threads DIN 13

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

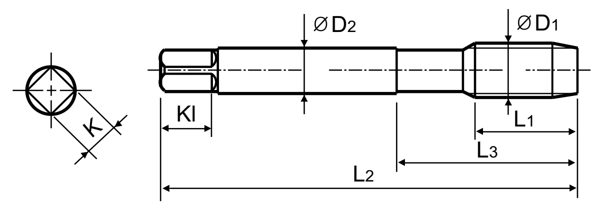
Machine taps
Maschinengewindebohrer

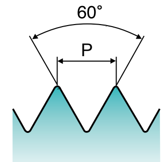
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

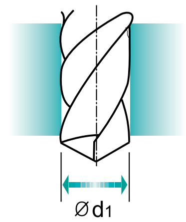
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 376

Hole type
3.0×D







Material groups: GS | HSS-E | DIN 376 | 6H | 60º | B | Bright | p.B169

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
M3	× 0.5	TC227206	11	56	18	2.2	1.8	5	3	2.5
M3.5	× 0.6	TC227226	12	56	20	2.5	2.1	5	3	2.9
M4	× 0.7	TC227246	13	63	21	2.8	2.1	5	3	3.3
M4.5	× 0.75	TC227266	14	70	25	3.5	2.7	6	3	3.7
M5	× 0.8	TC227286	15	70	25	3.5	2.7	6	3	4.2
M6	× 1	TC227316	17	80	30	4.5	3.4	6	3	5
M7	× 1	TC227346	17	80	30	5.5	4.3	7	3	6
M8	× 1.25	TC227366	20	90	36	6	4.9	8	3	6.8
M9	× 1.25	TC227396	20	90	36	7	5.5	8	3	7.8
M10	× 1.5	TC227426	22	100	40	7	5.5	8	3	8.5
M11	× 1.5	TC227466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC227506	24	110	44	9	7	10	3	10.2
M14	× 2	TC227546	26	110	44	11	9	12	3	12
M16	× 2	TC227606	27	110	44	12	9	12	3	14
M18	× 2.5	TC227656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC227706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC227746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC227786	34	160	60	18	14.5	17	4	21
M27	× 3	TC227866	36	160	60	20	16	19	4	24
M30	× 3.5	TC227946	40	180	70	22	18	21	4	26.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TD227 SERIES

M ISO metric coarse threads DIN 13

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

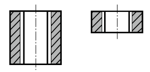
Machine taps
Maschinengewindebohrer

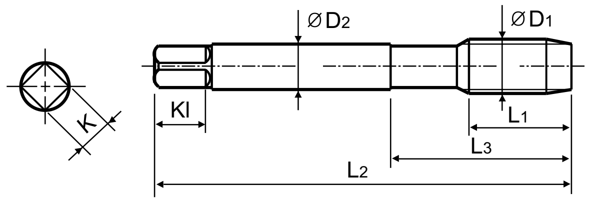
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

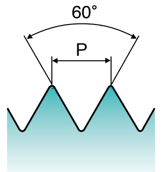
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

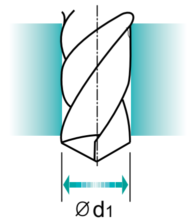
DIN 376

Hole type
3.0×D









Material groups GS | HSS-E | DIN 376 | 6H | 60° | B | TiN | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.161

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	Kl	Z	Ød1
M3	× 0.5	TD227206	11	56	18	2.2	1.8	5	3	2.5
M3.5	× 0.6	TD227226	12	56	20	2.5	2.1	5	3	2.9
M4	× 0.7	TD227246	13	63	21	2.8	2.1	5	3	3.3
M4.5	× 0.75	TD227266	14	70	25	3.5	2.7	6	3	3.7
M5	× 0.8	TD227286	15	70	25	3.5	2.7	6	3	4.2
M6	× 1	TD227316	17	80	30	4.5	3.4	6	3	5
M7	× 1	TD227346	17	80	30	5.5	4.3	7	3	6
M8	× 1.25	TD227366	20	90	36	6	4.9	8	3	6.8
M9	× 1.25	TD227396	20	90	36	7	5.5	8	3	7.8
M10	× 1.5	TD227426	22	100	40	7	5.5	8	3	8.5
M11	× 1.5	TD227466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TD227506	24	110	44	9	7	10	3	10.2
M14	× 2	TD227546	26	110	44	11	9	12	3	12
M16	× 2	TD227606	27	110	44	12	9	12	3	14
M18	× 2.5	TD227656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TD227706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TD227746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TD227786	34	160	60	18	14.5	17	4	21
M27	× 3	TD227866	36	160	60	20	16	19	4	24
M30	× 3.5	TD227946	40	180	70	22	18	21	4	26.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC211 SERIES

M ISO metric coarse threads DIN 13

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

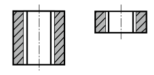
Machine taps
Maschinengewindebohrer

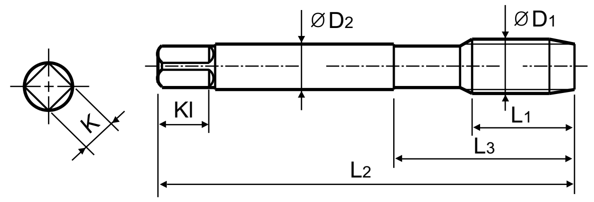
▶ Left spiral flute and right hand thread tap to push chips ahead in powerful than spiral point taps.

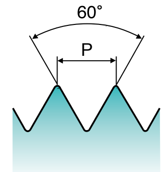
▶ Rechtsschneidender Gewindebohrer mit Linksdrall um kraftvoller nach vorne zu entspanen als mit Gewindebohrern mit Rechtsdrall.

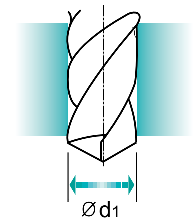
DIN 371
DIN 376

Hole type
3.0×D









Material groups GS | HSS-E | DIN 371/376 | 6H | 60° | B | Bright | L20 | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.161

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC211136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC211156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC211196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC211176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC211496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC211206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC211226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC211246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC211266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC211286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC211316	17	80	30	6	4.9	8	3	5
M7	× 1	TC211346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC211366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC211396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC211426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC211466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC211506	24	110	44	9	7	10	3	10.2
M14	× 2	TC211546	26	110	44	11	9	12	3	12
M16	× 2	TC211606	27	110	44	12	9	12	3	14
M18	× 2.5	TC211656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC211706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC211746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC211786	34	160	60	18	14.5	17	4	21
M27	× 3	TC211866	36	160	60	20	16	19	4	24
M30	× 3.5	TC211946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○		○	○	◎	○		◎													

YG TAP GENERAL

TC463 SERIES

M ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

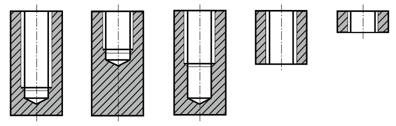
▶ Suitable for tapping shallow holes and the blind holes having enough chip space at the bottom of holes.

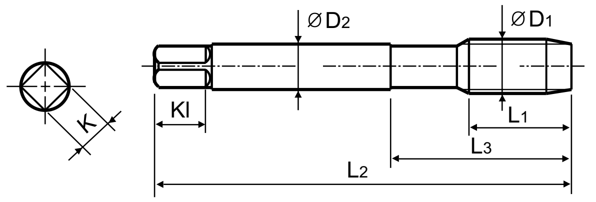
▶ Geeignet zum Schneiden von kurzem Durchgangsgewinde und in Sacklöchern mit ausreichendem Raum für Späne am Bohrungsgrund.

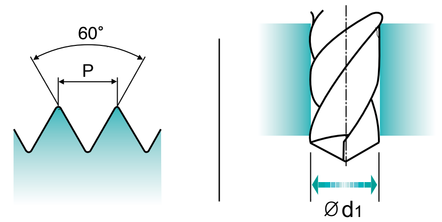
DIN 371

DIN 376

Hole type
2.0×D







Material groups: GS | HSS-E | DIN 371/376 | 6H | 60° | C | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC463136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC463156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC463196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC463176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC463496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC463206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC463226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC463246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC463266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC463286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC463316	17	80	30	6	4.9	8	3	5
M7	× 1	TC463346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC463366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC463396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC463426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC463466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC463506	24	110	44	9	7	10	3	10.2
M14	× 2	TC463546	26	110	44	11	9	12	3	12
M16	× 2	TC463606	27	110	44	12	9	12	3	14
M18	× 2.5	TC463656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC463706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC463746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC463786	34	160	60	18	14.5	17	4	21
M27	× 3	TC463866	36	160	60	20	16	19	4	24
M30	× 3.5	TC463946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

TC473 SERIES

MF ISO metric fine threads DIN 13

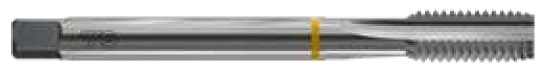
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

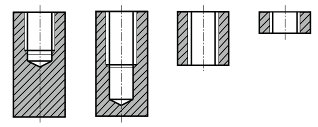
▶ Suitable for tapping shallow holes.

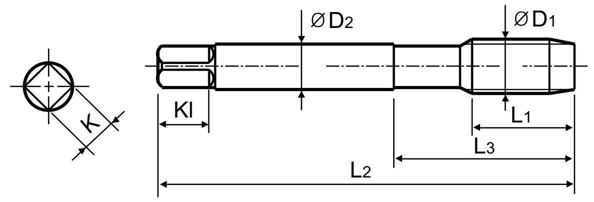
▶ Geeignet zum Gewindeschneiden flacher Sacklöcher.

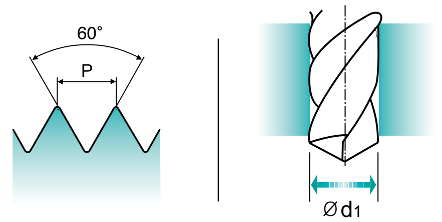
DIN 374



Hole type
2.0×D







Material groups: GS | HSS-E | DIN 374 | 6H | 60° | C | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC473256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TC473296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TC473326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TC473336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TC473356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TC473376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TC473386	14	80	30	6	4.9	8	3	7.2
M8	× 0.5	TC473936	14	80	30	6	4.9	8	3	7.5
M10	× 1.25	TC473436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TC473446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TC473456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TC473516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TC473526	22	100	40	9	7	10	3	10.8
M12	× 1	TC473536	18	100	40	9	7	10	3	11
M14	× 1.5	TC473556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TC473566	22	100	40	11	9	12	3	12.8
M14	× 1	TC473576	18	100	40	11	9	12	3	13
M16	× 1.5	TC473616	22	100	40	12	9	12	3	14.5
M18	× 1.5	TC473676	25	110	44	14	11	14	4	16.5
M20	× 1.5	TC473726	25	125	50	16	12	15	4	18.5
M22	× 1.5	TC473766	25	125	50	18	14.5	17	4	20.5
M24	× 1.5	TC473806	27	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

TC424 SERIES

UNC

Unified coarse threads

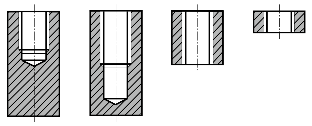
- Unified Grobgewinde
- UNC
- Unificato passo grosso

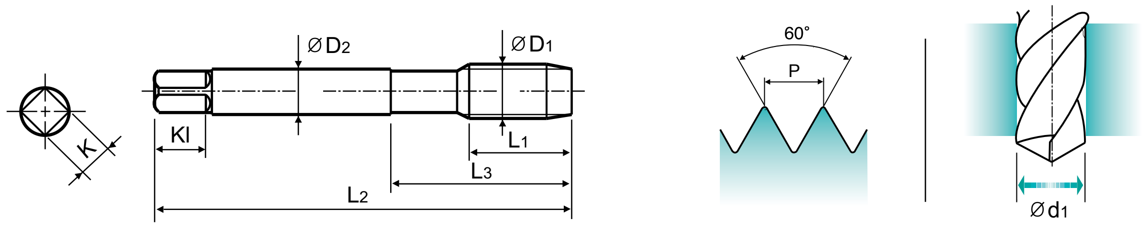
Machine taps
Maschinengewindebohrer

▶ Suitable for tapping shallow holes.

▶ Geeignet zum Gewindeschneiden flacher Sacklöcher.

Hole type
2.0×D





Material groups: GS | HSS-E | DIN 371/376 | 2B | 60° | C | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.161

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TC424162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TC424202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TC424242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TC424282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TC424322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TC424362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TC424402	17	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TC424442	20	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TC424482	22	100	39	9	7	10	3	8
7/16	- 14UNC	TC424522	22	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TC424562	25	110	44	9	7	10	3	10.75
9/16	- 12UNC	TC424602	26	110	44	11	9	12	3	12.25
5/8	- 11UNC	TC424642	27	110	44	12	9	12	3	13.5
3/4	- 10UNC	TC424702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TC424742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TC424782	36	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TC424822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1- 1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

T7109 SERIES

M

ISO metric coarse threads DIN 13

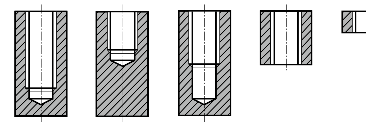
- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

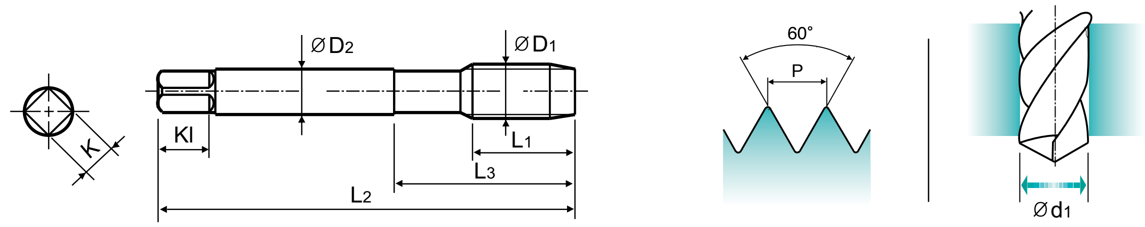
Sets of taps
Gewindebohrer -Satz

▶ This tap is a serial hand tap in set, First, Second and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden

Hole type
2.0×D





Material groups: GS | HSS | DIN 352 | 6H | 60° | I/II/III | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	T7109139	8	36	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	T7109159	9	36	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	T7109199	9	36	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	T7109179	9	40	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	T7109499	9	40	15	2.8	2.1	5	3	2.1
M3	× 0.5	T7109209	11	40	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	T7109229	13	45	21	4	3	6	3	2.9
M4	× 0.7	T7109249	13	45	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	T7109269	16	50	25	6	4.9	8	3	3.7
M5	× 0.8	T7109289	16	52	26	6	4.9	8	3	4.2
M5.5	× 0.9	T7109N69	18	56	27	6	4.9	8	3	4.6
M6	× 1	T7109319	18	56	27	6	4.9	8	3	5
M7	× 1	T7109349	18	56	28.5	6	4.9	8	3	6
M8	× 1.25	T7109369	20	63	34	6	4.9	8	3	6.8
M9	× 1.25	T7109399	20	63	34	7	5.5	8	4	7.8
M10	× 1.5	T7109429	22	70	38	7	5.5	8	4	8.5
M11	× 1.5	T7109469	22	70	38	8	6.2	9	4	9.5
M12	× 1.75	T7109509	24	80	45	9	7	10	4	10.2
M14	× 2	T7109549	26	80	45	11	9	12	4	12
M16	× 2	T7109609	27	80	45	12	9	12	4	14
M18	× 2.5	T7109659	30	95	58	14	11	14	4	15.5
M20	× 2.5	T7109709	32	95	58	16	12	15	4	17.5

▶*DIN profile not ISO

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

T7109 SERIES

M ISO metric coarse threads DIN 13

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

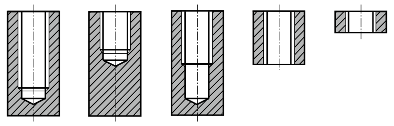
Sets of taps
Gewindebohrer-Satz

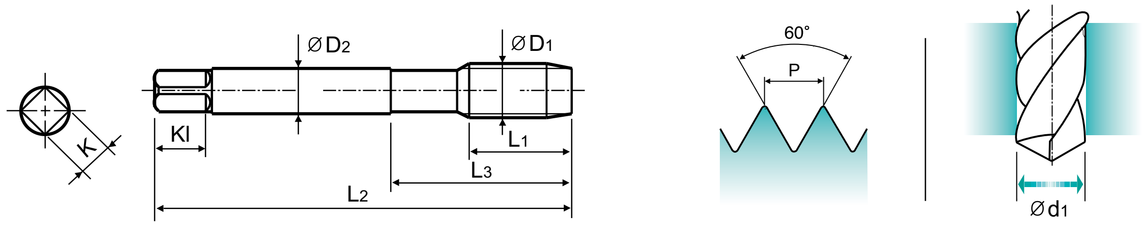
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.

- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

First
Second
Bottoming

Hole type
2.0×D





Material groups: GS | HSS | DIN 352 | 6H | 60° | I/II/III | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M22	× 2.5	T7109749	32	100	62	18	14.5	17	4	19.5
M24	× 3	T7109789	34	110	69	18	14.5	17	4	21
M27	× 3	T7109869	36	110	69	20	16	19	4	24
M30	× 3.5	T7109949	40	125	77	22	18	21	4	26.5
M33	× 3.5	T7109A49	40	125	77	25	20	23	4	29.5
M36	× 4	T7109B39	50	150	88	28	22	25	4	32
M39	× 4	T7109C09	50	150	88	32	24	27	4	35
M42	× 4.5	T7109C89	56	150	88	32	24	27	4	37.5
M45	× 4.5	T7109D59	58	160	93	36	29	32	4	40.5
M48	× 5	T7109E29	65	180	102	36	29	32	4	43
M52	× 5	T7109F39	65	180	102	40	32	35	4	47

▶*DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

T7309 SERIES

MF ISO metric fine threads DIN 13

Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

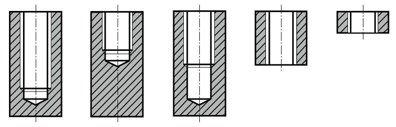
Sets of taps
Gewindebohrer-Satz

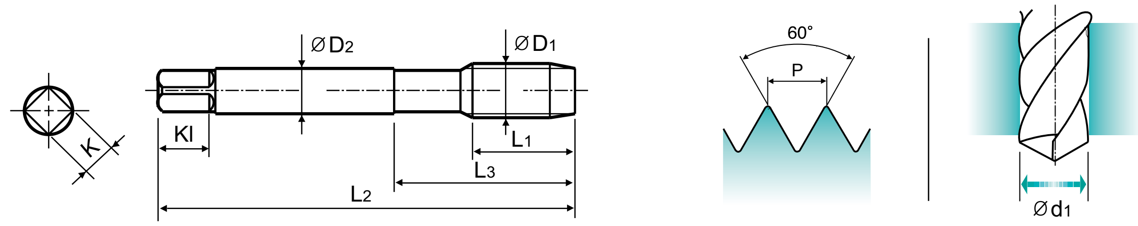
- ▶ This tap is a serial hand tap in set, First and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.

- ▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

First
Bottoming

Hole type
2.0×D





Material groups: GS | HSS | DIN 2181 | 6H | 60° | I/II | Bright | p.B169

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.35	T7309219	9	40	18	3.5	2.7	6	3	2.65
M4	× 0.5	T7309259	10	45	18	4.5	3.4	6	3	3.5
M5	× 0.5	T7309299	13	52	22	6	4.9	8	3	4.5
M6	× 0.75	T7309329	14	56	24	6	4.9	8	3	5.2
M6	× 0.5	T7309339	13	56	24	6	4.9	8	3	5.5
M7	× 0.75	T7309359	14	56	27	6	4.9	8	3	6.2
M8	× 1	T7309379	17	63	27	6	4.9	8	3	7
M8	× 0.75	T7309389	14	63	27	6	4.9	8	3	7.2
M8	× 0.5	T7309939	14	63	27	6	4.9	8	3	7.5
M9	× 1	T7309409	17	63	27	7	5.5	8	4	8
M10	× 1.25	T7309439	22	70	32	7	5.5	8	4	8.8
M10	× 1	T7309449	18	63	27	7	5.5	8	4	9
M10	× 0.75	T7309459	18	63	27	7	5.5	8	4	9.2
M11	× 1	T7309479	18	63	27	8	6.2	9	4	10
M12	× 1.5	T7309519	20	70	32	9	7	10	4	10.5
M12	× 1.25	T7309529	20	70	32	9	7	10	4	10.8
M12	× 1	T7309539	18	70	32	9	7	10	4	11
M13	× 1.5	T7309N19	20	70	32	11	9	12	4	11.5
M13	× 1	T7309N29	18	70	32	11	9	12	4	12
M14	× 1.5	T7309559	20	70	32	11	9	12	4	12.5
M14	× 1.25	T7309569	20	70	32	11	9	12	4	12.8
M14	× 1	T7309579	18	70	32	11	9	12	4	13
M15	× 1.5	T7309589	20	70	32	12	9	12	4	13.5
M15	× 1	T7309599	18	70	32	12	9	12	4	14
M16	× 1.5	T7309619	20	70	32	12	9	12	4	14.5

▶ NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

T7309 SERIES

MF — ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

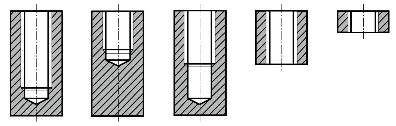
Sets of taps
Gewindebohrer-Satz

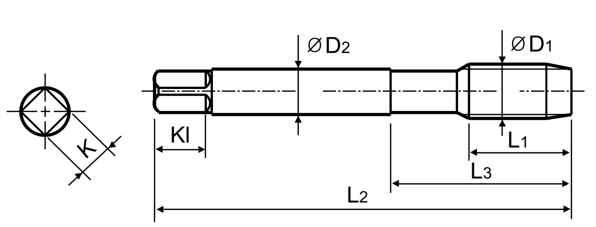
▶ This tap is a serial hand tap in set, First and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

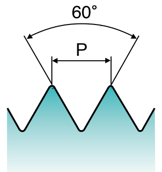
▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

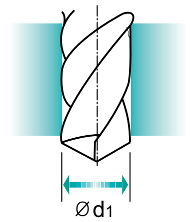
First
Bottoming

Hole type
2.0×D









Material groups: GS | HSS | DIN 2181 | 6H | 60° | I/III | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M16	× 1	T7309629	18	70	32	12	9	12	4	15
M18	× 2	T7309669	22	80	35	14	11	14	4	16
M18	× 1.5	T7309679	22	80	35	14	11	14	4	16.5
M18	× 1	T7309689	18	80	35	14	11	14	4	17
M20	× 2	T7309719	22	80	35	16	12	15	4	18
M20	× 1.5	T7309729	22	80	35	16	12	15	4	18.5
M20	× 1	T7309739	18	80	35	16	12	15	4	19
M22	× 2	T7309759	22	80	35	18	14.5	17	4	20
M22	× 1.5	T7309769	22	80	35	18	14.5	17	4	20.5
M22	× 1	T7309779	18	80	35	18	14.5	17	4	21
M24	× 2	T7309799	22	90	40	18	14.5	17	4	22
M24	× 1.5	T7309809	22	90	40	18	14.5	17	4	22.5
M24	× 1	T7309819	18	90	40	18	14.5	17	4	23
M25	× 1.5	T7309839	22	90	40	18	14.5	17	4	23.5
M25	× 1	T7309849	18	90	40	18	14.5	17	4	24
M26	× 1.5	T7309859	22	90	40	18	14.5	17	4	24.5
M26	× 1	T7309N59	18	90	40	18	14.5	17	4	25
M27	× 2	T7309879	22	90	40	20	16	19	4	25
M27	× 1.5	T7309889	22	90	40	20	16	19	4	25.5
M27	× 1	T7309899	18	90	40	20	16	19	4	26
M28	× 2	T7309909	22	90	40	20	16	19	4	26
M28	× 1.5	T7309919	22	90	40	20	16	19	4	26.5
M30	× 2	T7309969	22	90	40	22	18	21	4	28
M30	× 1.5	T7309979	22	90	40	22	18	21	4	28.5
M30	× 1	T7309989	18	90	40	22	18	21	4	29

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

T7363 SERIES

UNC — Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

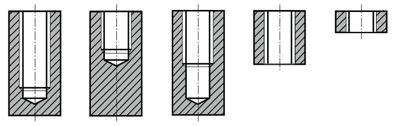
Sets of taps
Gewindebohrer-Satz

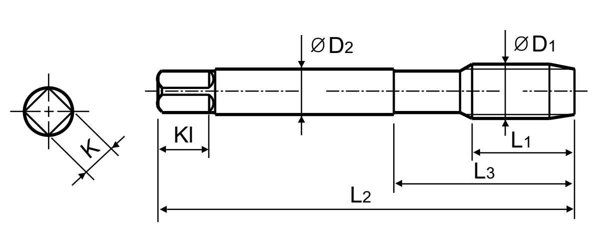
▶ This tap is a serial hand tap in set, First, Second and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

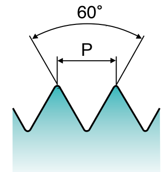
▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

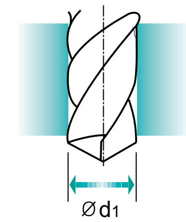
First
Second
Bottoming

Hole type
2.0×D









Material groups: GS | HSS | DIN 351 | 2B | 60° | I/II/III | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#2	- 56UNC	T7363089	9	36	13	2.8	2.1	5	3	1.8
#3	- 48UNC	T7363129	10	40	15	2.8	2.1	5	3	2.1
#4	- 40UNC	T7363169	10	42	18	3.5	2.7	6	3	2.3
#5	- 40UNC	T7363209	10	42	18	3.5	2.7	6	3	2.6
#6	- 32UNC	T7363249	11	45	18	4	3	6	3	2.85
#8	- 32UNC	T7363289	12	48	23	4.5	3.4	6	3	3.5
#10	- 24UNC	T7363329	14	52	26	6	4.9	6	3	3.9
#12	- 24UNC	T7363369	16	56	27	6	4.9	8	3	4.5
1/4	- 20UNC	T7363409	16	56	27	6	4.9	8	3	5.2
5/16	- 18UNC	T7363449	20	63	34	6	4.9	8	3	6.6
3/8	- 16UNC	T7363489	22	70	38	7	5.5	8	4	8
7/16	- 14UNC	T7363529	22	70	38	8	6.2	9	4	9.4
1/2	- 13UNC	T7363569	25	80	45	9	7	10	4	10.75
9/16	- 12UNC	T7363609	26	80	45	11	9	12	4	12.25
5/8	- 11UNC	T7363649	27	90	55	12	9	12	4	13.5
3/4	- 10UNC	T7363709	32	105	65	14	11	14	4	16.5
7/8	- 9UNC	T7363749	32	110	69	18	14.5	17	4	19.5
1	- 8UNC	T7363789	36	110	69	20	16	19	4	22.25
1-1/8	- 7UNC	T7363829	40	125	77	22	18	21	4	25
1-1/4	- 7UNC	T7363869	40	125	77	25	20	23	4	28.25
1-1/8	- 6UNC	T7363909	50	150	88	28	22	25	4	30.75
1-1/2	- 6UNC	T7363949	50	150	88	32	24	27	4	34
1-3/4	- 5UNC	T7363B89	58	160	93	36	29	32	4	39.5
2	- 4½UNC	T7363D29	65	180	102	40	32	35	4	45.25

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

T7509 SERIES

UNF — Unified fine threads

Unified Feingewinde
UNF
Unificato passo fine

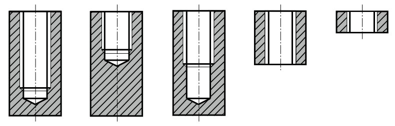
Sets of taps
Gewindebohrer-Satz

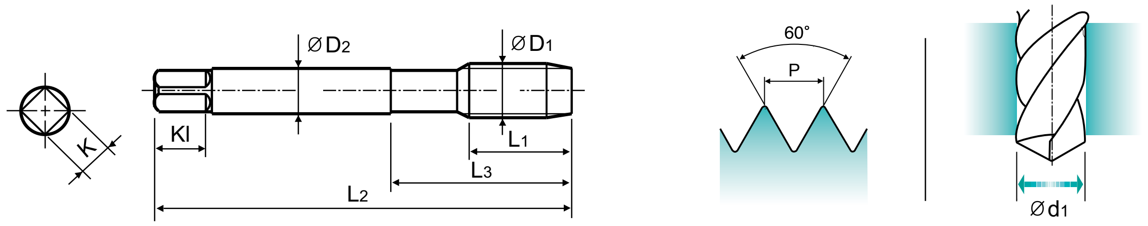
▶ This tap is a serial hand tap in set, First and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

First
Bottoming

Hole type
2.0×D





Material groups: GS | HSS | DIN 2181 | 2B | 60° | I/III | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48 UNF	T7509189	10	42	18	3.5	2.7	6	3	2.4
#5	- 44 UNF	T7509229	10	42	18	3.5	2.7	6	3	2.7
#6	- 40 UNF	T7509269	11	45	18	4	3	6	3	3
#8	- 36 UNF	T7509309	12	48	23	4.5	3.4	6	3	3.5
#10	- 32 UNF	T7509349	14	52	22	6	4.9	8	3	4.1
#12	- 28 UNF	T7509389	16	56	24	6	4.9	8	3	4.7
1/4	- 28 UNF	T7509429	16	56	24	6	4.9	8	3	5.5
5/16	- 24 UNF	T7509469	17	63	27	6	4.9	8	3	6.9
3/8	- 24 UNF	T7509509	18	63	27	7	5.5	8	4	8.5
7/16	- 20 UNF	T7509549	20	70	32	8	6.2	9	4	9.9
1/2	- 20 UNF	T7509589	20	70	32	9	7	10	4	11.5
9/16	- 18 UNF	T7509629	20	70	32	11	9	12	4	12.9
5/8	- 18 UNF	T7509669	20	70	32	12	9	12	4	14.5
3/4	- 16 UNF	T7509729	22	80	38	14	11	14	4	17.5
7/8	- 14 UNF	T7509769	22	80	38	18	14.5	17	4	20.5
1	- 12 UNF	T7509809	22	90	40	18	14.5	17	4	23.25
1-1/8	- 12 UNF	T7509849	22	90	40	22	18	21	4	26.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

T7609 SERIES

BSW — Whitworth threads

Whitworth Gewinde
BSW
Filettatura Whitworth

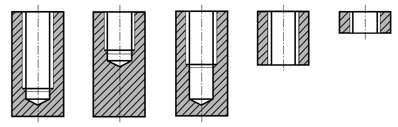
Sets of taps
Gewindebohrer-Satz

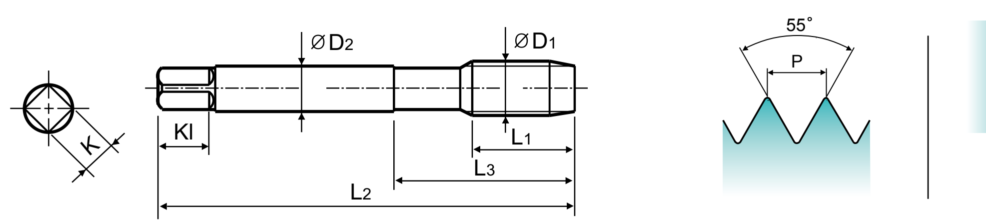
▶ This tap is a serial hand tap in set, First, Second and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

First
Second
Bottoming

Hole type
2.0×D





Material groups: GS | HSS | DIN 351 | 55° | I/II/III | Bright | p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
W3/32	- 48	T7609129	10	40	15	2.8	2.1	5	3	1.8
W1/8	- 40	T7609209	10	42	18	3.5	2.7	6	3	2.5
W5/32	- 32	T7609289	12	48	23	4.5	3.4	6	3	3.1
W3/16	- 24	T7609329	14	52	26	6	4.9	8	3	3.6
W7/32	- 24	T7609369	16	56	27	6	4.9	8	3	4.4
W1/4	- 20	T7609409	16	56	27	6	4.9	8	3	5.1
W5/16	- 18	T7609449	20	63	34	6	4.9	8	3	6.5
W3/8	- 16	T7609489	22	70	38	7	5.5	8	4	7.9
W7/16	- 14	T7609529	22	70	38	8	6.2	9	4	9.3
W1/2	- 12	T7609569	25	80	45	9	7	10	4	10.5
W9/16	- 12	T7609609	26	80	45	11	9	12	4	12
W5/8	- 11	T7609649	27	90	55	12	9	12	4	13.5
W3/4	- 10	T7609709	32	105	65	14	11	14	4	16.5
W7/8	- 9	T7609749	32	110	69	18	14.5	17	4	19.25
W1	- 8	T7609789	36	110	69	20	16	19	4	22
W1-1/8	- 7	T7609829	40	125	77	22	18	21	4	24.75
W1-1/4	- 7	T7609869	40	125	77	25	20	23	4	27.75
W1-3/8	- 6	T7609909	50	150	88	28	22	25	4	30.5
W1-1/2	- 6	T7609949	50	150	88	32	24	27	4	33.5
W1-5/8	- 5	T7609B29	56	150	88	32	24	27	4	35.5
W1-3/4	- 5	T7609B89	58	160	93	36	29	32	4	39
W1-7/8	- 4½	T7609C69	65	180	102	36	29	32	4	41.5
W2	- 4½	T7609D29	65	180	102	40	32	35	4	44.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

T7343 SERIES

M-LH

ISO metric coarse threads DIN 13

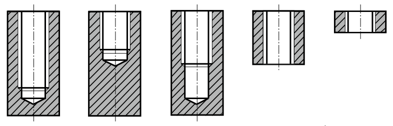
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

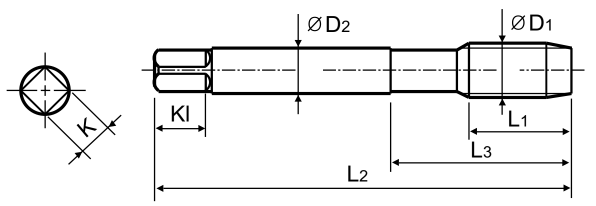
Sets of taps
Gewindebohrer-Satz

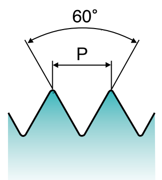
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

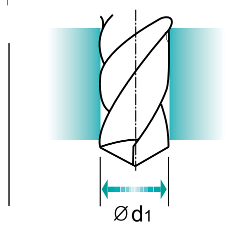
First
Second
Bottoming

Hole type
2.0×D









Material groups: GS | HSS | DIN 352 | 6H | 60° | I/II/III | Bright | p.B169

Recommended ToolHolder — Plain Shank / Page
TAPPING ER CHUCK D215-220
TAPPING CHUCK D221-228
ONE STEP TAPPING CHUCK D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	T7343209	11	40	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	T7343229	13	45	21	4	3	6	3	2.9
M4	× 0.7	T7343249	13	45	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	T7343269	16	50	25	6	4.9	8	3	3.7
M5	× 0.8	T7343289	16	52	26	6	4.9	8	3	4.2
M6	× 1	T7343319	18	56	27	6	4.9	8	3	5
M8	× 1.25	T7343369	20	63	34	6	4.9	8	3	6.8
M10	× 1.5	T7343429	22	70	38	7	5.5	8	4	8.5
M12	× 1.75	T7343509	24	80	45	9	7	10	4	10.2
M14	× 2	T7343549	26	80	45	11	9	12	4	12
M16	× 2	T7343609	27	80	45	12	9	12	4	14
M18	× 2.5	T7343659	30	95	58	14	11	14	4	15.5
M20	× 2.5	T7343709	32	95	58	16	12	15	4	17.5
M22	× 2.5	T7343749	32	100	62	18	14.5	17	4	19.5
M24	× 3	T7343789	34	110	69	18	14.5	17	4	21
M27	× 3	T7343869	36	110	69	20	16	19	4	24
M30	× 3.5	T7343949	40	125	77	22	18	21	4	26.5

▶ LH=Left hand thread

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

YG TAP GENERAL

TB373 SERIES

M

ISO metric coarse threads DIN 13

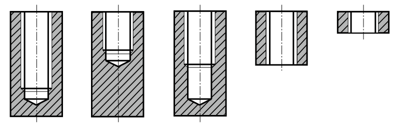
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

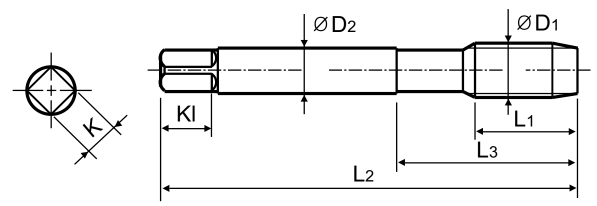
Sets of taps
Gewindebohrer-Satz

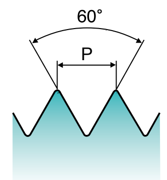
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

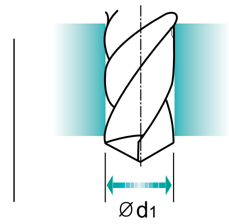
First
Second
Bottoming

Hole type
2.0×D









Material groups: GS | HSS-E | DIN 352 | 6HX | 60° | I/II/III | Vap | p.B169

Recommended ToolHolder — Plain Shank / Page
TAPPING ER CHUCK D215-220
TAPPING CHUCK D221-228
ONE STEP TAPPING CHUCK D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TB373209	11	40	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB373229	13	45	21	4	3	6	3	2.9
M4	× 0.7	TB373249	13	45	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB373269	16	50	25	6	4.9	8	3	3.7
M5	× 0.8	TB373289	16	52	26	6	4.9	8	3	4.2
M6	× 1	TB373319	18	56	27	6	4.9	8	3	5
M8	× 1.25	TB373369	20	63	34	6	4.9	8	3	6.8
M10	× 1.5	TB373429	22	70	38	7	5.5	8	4	8.5
M12	× 1.75	TB373509	24	80	45	9	7	10	4	10.2
M14	× 2	TB373549	26	80	45	11	9	12	4	12
M16	× 2	TB373609	27	80	45	12	9	12	4	14
M18	× 2.5	TB373659	30	95	58	14	11	14	4	15.5
M20	× 2.5	TB373709	32	95	58	16	12	15	4	17.5

▶ First with pilot guide

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended																					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP GENERAL

TC353 SERIES

M ISO metric coarse threads DIN 13

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

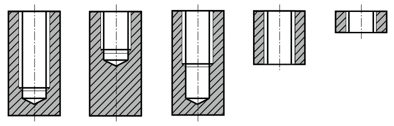
Sets of taps
Gewindebohrer-Satz

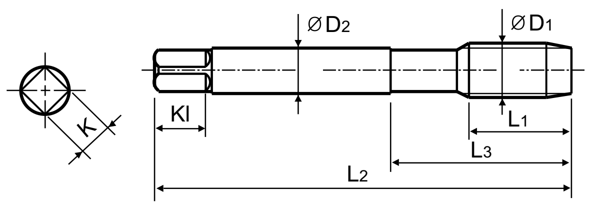
▶ This tap is a serial hand tap in set, First, Second and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only..

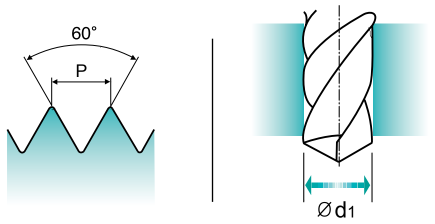
▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

First
Second
Bottoming

Hole type
2.0×D







Material groups: VG | HSS-E | DIN 352 | 6H | 60° | I/II/III | Bright

p.B169

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	TC353209	11	40	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC353229	13	45	21	4	3	6	3	2.9
M4	× 0.7	TC353249	13	45	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC353269	16	50	25	6	4.9	8	3	3.7
M5	× 0.8	TC353289	16	52	26	6	4.9	8	3	4.2
M6	× 1	TC353319	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC353369	20	63	34	6	4.9	8	3	6.8
M10	× 1.5	TC353429	22	70	38	7	5.5	8	4	8.5
M12	× 1.75	TC353509	24	80	45	9	7	10	4	10.2
M14	× 2	TC353549	26	80	45	11	9	12	4	12
M16	× 2	TC353609	27	80	45	12	9	12	4	14
M18	× 2.5	TC353659	30	95	58	14	11	14	4	15.5
M20	× 2.5	TC353709	32	95	58	16	12	15	4	17.5

▶ First with pilot guide

◎ : 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	○	○	○	○		○	○													

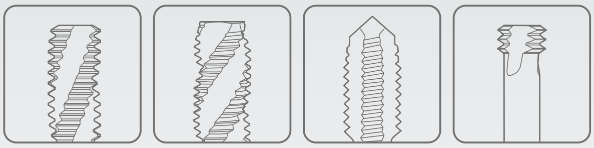
ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	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	400Rm	1050Rm	550	630	400	550
Recommended																					

YG TAP GENERAL

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC711 TC411 TC144 TC124 TC134	TD711 TD411	TC517 TC612	TC127 TC122 TC222 TC214 TC234 TC224	TD127 TD222	TC227	TD227	TC211	TC463 TC473 TC424
					Vc (m/min)								
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	15-20
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	15-20
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	18-24	12-18	12-18
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	10-15
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10	6-10
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	10-15
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	10-15
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10	6-10
M	12	Stainless steel	200	15	7-10	10-13	7-10	7-10	10-13	7-10	10-13	7-10	7-10
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	5-8
K	15	Grey cast iron	180	10									10-15
	16		260	26									5-8
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	10-15
	18		250	25	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	5-8
N	21	Aluminum-wrought alloy	60		10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	
	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	
	24		90		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	
	25		130		10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	10-15
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	35-40	25-35	25-35
	27		90										8-12
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	

Global Cutting Tool Leader YG-1



THREADING

Leading Through Innovation

HSS-E & HSS-PM

YG TAP STEEL

YG Gewindebohrer Stähle

- For Steel Materials but also other Long Chip Forming Materials
- Für Stahlwerkstoffe, aber auch andere langspanende Werkstoffe

SELECTION GUIDE

YG THREADING TOOLS

HSS-E & HSS-PM YG TAP STEEL

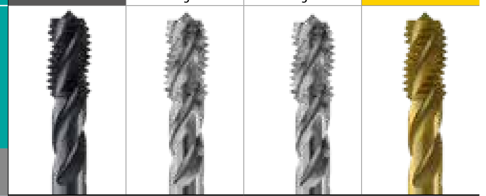
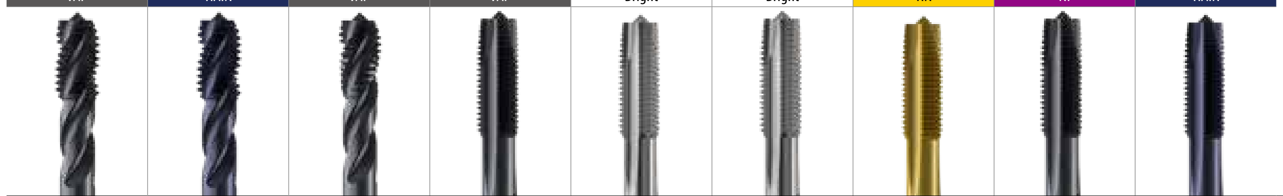
For Steel Materials but also other Long Chip Forming Materials

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B197

HOLE TYPE		Max. 2.5xD Blind Hole							Max. 3.0xD Through Hole					
TOOL MATERIAL		HSS-PM		HSS-E					HSS-PM		HSS-E			
CHAMFER LEAD ACC. TO DIN2197		C	C	C	C	C	C	C	B	B	B	B	B	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		R40	R40	R40	R40	R40	R40	R40	-	-	-	-	-	-
SERIES M	DIN371/376	TQ823 (p.B174)	TR823 (p.B175)	TC312 (p.B176)	TD312 (p.B177)	TB312 (p.B178)	TY312 (p.B179)	TB913 (p.B185)	TQ863 (p.B186)	TR863 (p.B187)	TC422 (p.B188)	TD422 (p.B189)	TE422 (p.B190)	TY422 (p.B191)
M	DIN352													
M	DIN357/LONG													
MF	DIN374			TC413 (p.B180)	TD413 (p.B181)						TC263 (p.B192)	TD263 (p.B193)		
MF	DIN2181													
UNC	DIN371/376			TC174 (p.B182)	TD174 (p.B183)						TC244 (p.B194)	TD244 (p.B195)		
UNC	DIN351													
UNF	DIN371/374			TC184 (p.B184)							TC254 (p.B196)			
UNF	DIN2181													
BSW	DIN2182/2183													
BSW	DIN351													
G(BSP)	DIN5156/5157													
EG-M	DIN371/376													
EG-UNC	DIN371/376													
EG-UNF	DIN371/374													
SURFACE TREATMENT		VAP	Bright	Bright	TiN	VAP	TiAlN	VAP	VAP	Bright	Bright	TiN	Ni	TiAlN
MODEL														

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc	TQ823	TR823	TC312	TD312	TB312	TY312	TB913	TQ863	TR863	TC422	TD422	TE422	TY422
P	1	Non-alloy steel	About 0.15% C Annealed	125														
P	2	Non-alloy steel	About 0.45% C Annealed	190	13	○	○	○	○	○	○	○	○	○	○	○	○	○
P	3	Non-alloy steel	About 0.45% C Quenched & Tempered	250	25	○	○	○	○	○	○	○	○	○	○	○	○	○
P	4	Non-alloy steel	About 0.75% C Annealed	270	28	○	○	○	○	○	○	○	○	○	○	○	○	○
P	5	Non-alloy steel	About 0.75% C Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	6	Low alloy steel	Annealed	180	10	○	○	○	○	○	○	○	○	○	○	○	○	○
P	7	Low alloy steel	Quenched & Tempered	275	29	○	○	○	○	○	○	○	○	○	○	○	○	○
P	8	Low alloy steel	Quenched & Tempered	300	32	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	9	Low alloy steel	Quenched & Tempered	350	38	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel	Annealed	200	15	○	○	○	○	○	○	○	○	○	○	○	○	○
P	11	High alloyed steel, and tool steel	Quenched & Tempered	325	35													
M	12	Stainless steel	Ferritic / Martensitic Annealed	200	15								○	○	○	○	○	○
M	13	Stainless steel	Martensitic Quenched & Tempered	240	23								○	○	○	○	○	○
M	14	Stainless steel	Austenitic	180	10	○	○	○	○	○	○	○	○	○	○	○	○	○
K	15	Grey cast iron	Pearlitic / ferritic	180	10													
K	16	Grey cast iron	Pearlitic (Martensitic)	260	26													
K	17	Nodular cast iron	Ferritic	160	3													
K	18	Nodular cast iron	Pearlitic	250	25													
K	19	Malleable cast iron	Ferritic	130														
K	20	Malleable cast iron	Pearlitic	230	21													
N	21	Aluminum-wrought alloy	Not Curable	60														
N	22	Aluminum-wrought alloy	Curable Hardened	100														
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75														
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable Hardened	90														
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable	130														
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%	110														
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)	90														
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper	100														
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic															
N	30	Non Metallic Materials	Rubber, Wood, etc.															
S	31	Heat Resistant Super Alloys	Fe Based Annealed	200	15	○	○	○	○	○	○	○	○	○	○	○	○	○
S	32	Heat Resistant Super Alloys	Fe Based Cured	280	30													
S	33	Heat Resistant Super Alloys	Ni or Co Based Annealed	250	25													
S	34	Heat Resistant Super Alloys	Ni or Co Based Cured	350	38													
S	35	Heat Resistant Super Alloys	Ni or Co Based Cast	320	34													
S	36	Titanium Alloys	Pure Titanium	400 Rm		○	○	○	○	○	○	○	○	○	○	○	○	○
S	37	Titanium Alloys	Alpha + Beta Alloys Hardened	1050 Rm														
H	38	Hardened steel	Hardened	550	55													
H	39	Hardened steel	Hardened	630	60													
H	40	Chilled Cast Iron	Cast	400	42													
H	41	Hardened Cast Iron	Hardened	550	55													

YG TAP STEEL

TQ823 SERIES

M ISO metric coarse threads DIN 13

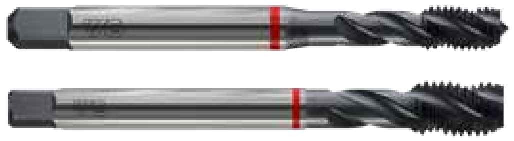
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

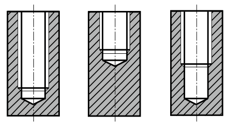
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

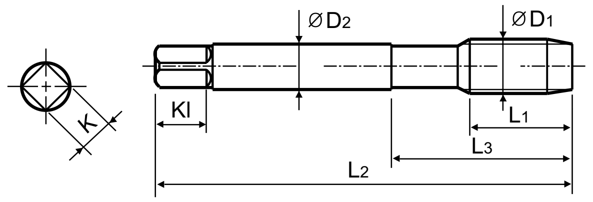
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

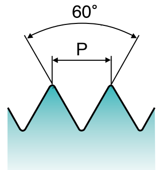
DIN 371
DIN 376

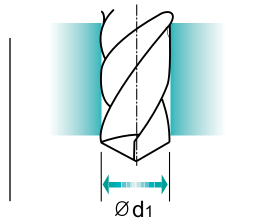


Hole type
2.5×D









Material groups: VG | HSS PM | DIN 371/378 | 6H | 60° | C | R40 | Vap | p.B197

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ823136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ823156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ823176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ823206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ823226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TQ823246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ823266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ823286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TQ823316	10	80	30	6	4.9	8	3	5
M7	× 1	TQ823346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TQ823366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ823426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TQ823506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TR823 SERIES

M ISO metric coarse threads DIN 13

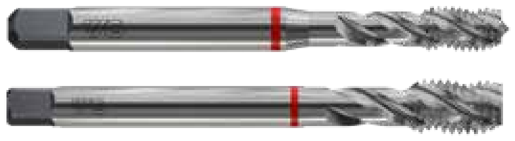
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

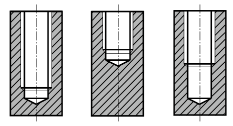
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

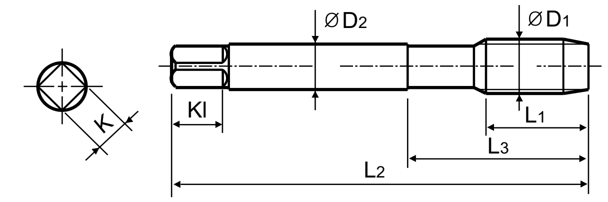
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

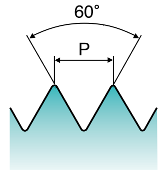
DIN 371
DIN 376

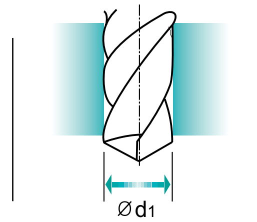


Hole type
2.5×D









Material groups: VG | HSS PM | DIN 371/378 | 6H | 60° | C | R40 | Bright | p.B197

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR823136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR823156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR823176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR823206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR823226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TR823246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR823266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR823286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TR823316	10	80	30	6	4.9	8	3	5
M7	× 1	TR823346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TR823366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR823426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TR823506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS | SYNCHRO TAPS | PRIME 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

YG TAP STEEL

TC312 SERIES

M ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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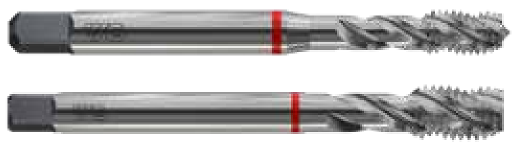
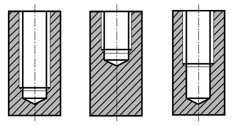
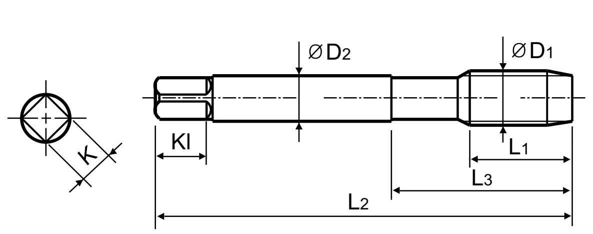
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

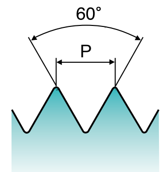
DIN 371
DIN 376

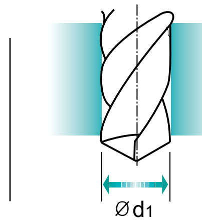


Hole type
2.5×D

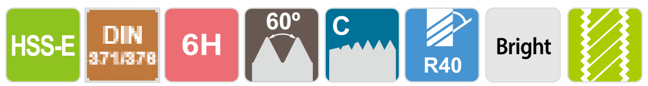








Material groups VG



p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC312136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC312156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC312196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC312176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC312496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC312206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC312226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TC312246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC312266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC312286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TC312316	10	80	30	6	4.9	8	3	5
M7	× 1	TC312346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TC312366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC312396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TC312426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TC312466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC312506	18	110	44	9	7	10	3	10.2
M14	× 2	TC312546	20	110	44	11	9	12	3	12
M16	× 2	TC312606	20	110	44	12	9	12	3	14
M18	× 2.5	TC312656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC312706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TC312746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TC312786	30	160	60	18	14.5	17	4	21
M27	× 3	TC312866	30	160	60	20	16	19	4	24
M30	× 3.5	TC312946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

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YG TAP STEEL

TD312 SERIES

M ISO metric coarse threads DIN 13

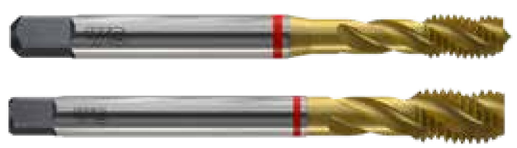
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

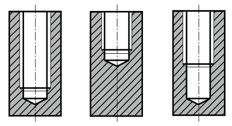
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

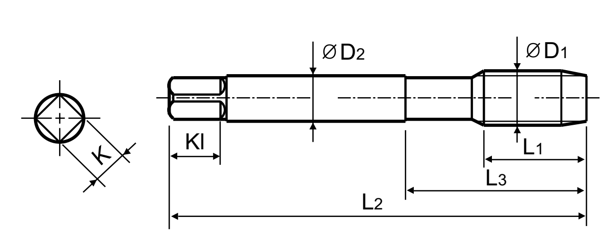
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

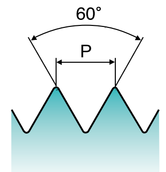
DIN 371
DIN 376

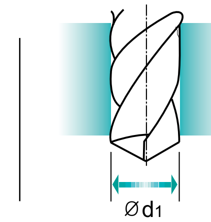


Hole type
2.5×D

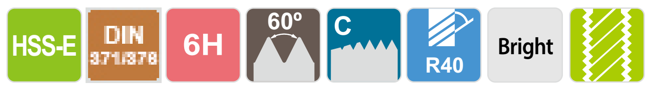








Material groups VG



p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M2	× 0.4	TD312136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TD312156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TD312196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TD312176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TD312496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TD312206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TD312226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TD312246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TD312266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TD312286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TD312316	10	80	30	6	4.9	8	3	5
M7	× 1	TD312346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TD312366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TD312396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TD312426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TD312466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TD312506	18	110	44	9	7	10	3	10.2
M14	× 2	TD312546	20	110	44	11	9	12	3	12
M16	× 2	TD312606	20	110	44	12	9	12	3	14
M18	× 2.5	TD312656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TD312706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TD312746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TD312786	30	160	60	18	14.5	17	4	21
M27	× 3	TD312866	30	160	60	20	16	19	4	24
M30	× 3.5	TD312946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

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CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TB312 SERIES

M ISO metric coarse threads DIN 13

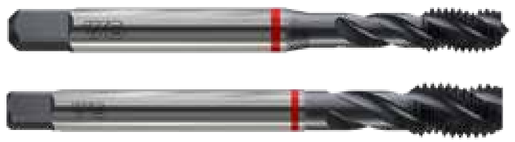
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

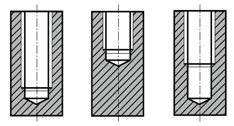
▶ Suitable for threading blind holes due to excellent chip evacuation of tempered steels or similar work materials.

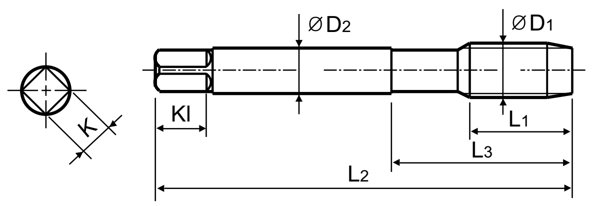
▶ Geeignet zum Gewinden von Sacklöchern dank ausgezeichneter Spanabfuhr von angelassenen Stählen oder ähnlichen Werkstoffen.

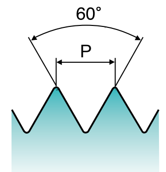
DIN 371
DIN 376

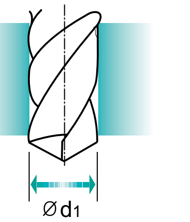


Hole type
2.5×D









Material groups VG | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB312136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB312156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB312196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB312176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB312496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB312206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB312226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB312246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB312266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB312286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TB312316	10	80	30	6	4.9	8	3	5
M7	× 1	TB312346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB312366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB312396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB312426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB312466	17	100	40	8	6.2	12	3	9.5
M12	× 1.75	TB312506	18	110	44	9	7	10	3	10.2
M14	× 2	TB312546	20	110	44	11	9	12	3	12
M16	× 2	TB312606	20	110	44	12	9	12	3	14
M18	× 2.5	TB312656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB312706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB312746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TB312786	30	160	60	18	14.5	17	4	21
M27	× 3	TB312866	30	160	60	20	16	19	4	24
M30	× 3.5	TB312946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TY312 SERIES

M ISO metric coarse threads DIN 13

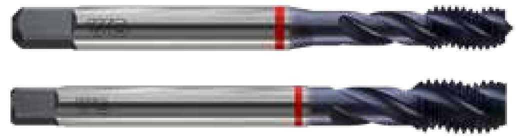
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

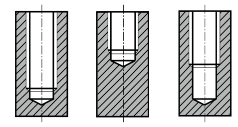
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

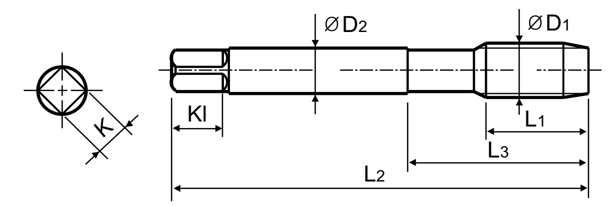
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

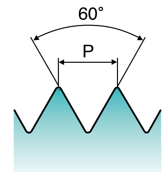
DIN 371
DIN 376

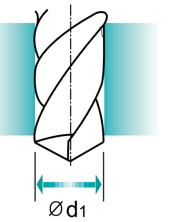


Hole type
2.5×D









Material groups VG | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | TiAlN | p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY312136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY312156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY312196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY312176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY312496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY312206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY312226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TY312246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY312266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY312286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TY312316	10	80	30	6	4.9	8	3	5
M7	× 1	TY312346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TY312366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TY312396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TY312426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TY312466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TY312506	18	110	44	9	7	10	3	10.2
M14	× 2	TY312546	20	110	44	11	9	12	3	12
M16	× 2	TY312606	20	110	44	12	9	12	3	14
M18	× 2.5	TY312656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TY312706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TY312746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TY312786	30	160	60	18	14.5	17	4	21
M27	× 3	TY312866	30	160	60	20	16	19	4	24
M30	× 3.5	TY312946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TC413 SERIES

MF ISO metric fine threads DIN 13

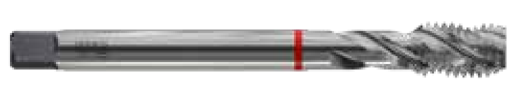
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

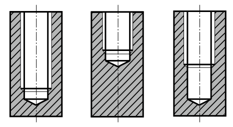
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

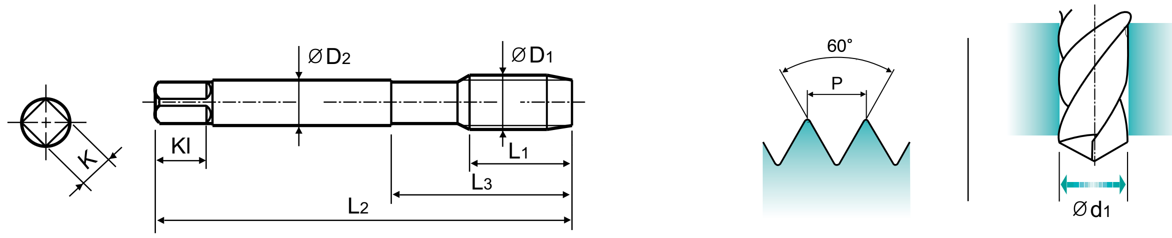
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 374

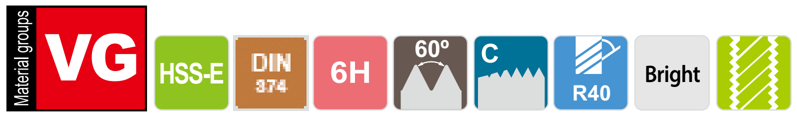


Hole type 2.5×D





Material groups



p.B197

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC413256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TC413296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TC413326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TC413336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TC413356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TC413376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TC413386	8	80	30	6	4.9	8	3	7.2
M10	× 1.25	TC413436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TC413446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TC413456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TC413516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TC413526	15	100	40	9	7	10	3	10.8
M12	× 1	TC413536	11	100	40	9	7	10	3	11
M14	× 1.5	TC413556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TC413566	15	100	40	11	9	12	3	12.8
M16	× 1.5	TC413616	15	100	40	12	9	12	3	14.5
M18	× 1.5	TC413676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TC413726	17	125	50	16	12	15	4	18.5
M22	× 1.5	TC413766	17	125	50	18	14.5	17	4	20.5
M24	× 1.5	TC413806	20	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TD413 SERIES

MF ISO metric fine threads DIN 13

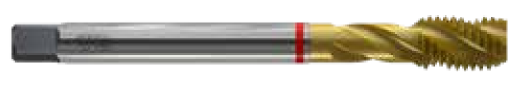
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

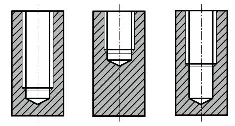
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

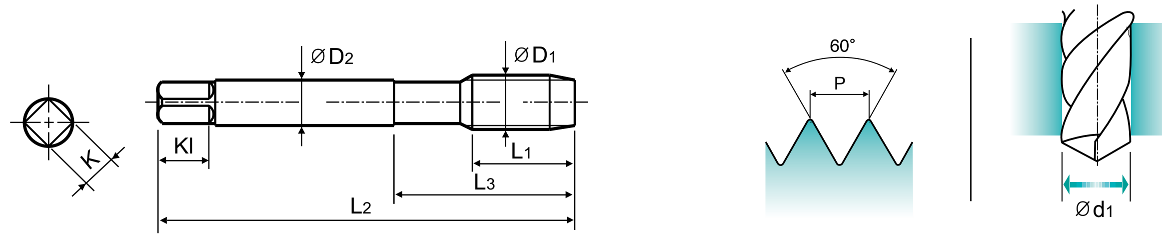
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 374

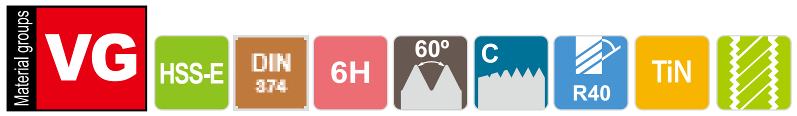


Hole type 2.5×D





Material groups



p.B197

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M4	× 0.5	TD413256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TD413296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TD413326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TD413336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TD413356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TD413376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TD413386	8	80	30	6	4.9	8	3	7.2
M10	× 1.25	TD413436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TD413446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TD413456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TD413516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TD413526	15	100	40	9	7	10	3	10.8
M12	× 1	TD413536	11	100	40	9	7	10	3	11
M14	× 1.5	TD413556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TD413566	15	100	40	11	9	12	3	12.8
M16	× 1.5	TD413616	15	100	40	12	9	12	3	14.5
M18	× 1.5	TD413676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TD413726	17	125	50	16	12	15	4	18.5
M22	× 1.5	TD413766	17	125	50	18	14.5	17	4	20.5
M24	× 1.5	TD413806	20	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TC174 SERIES

UNC

Unified coarse threads

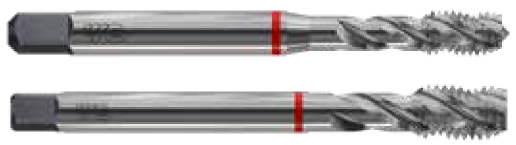
Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

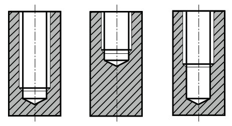
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

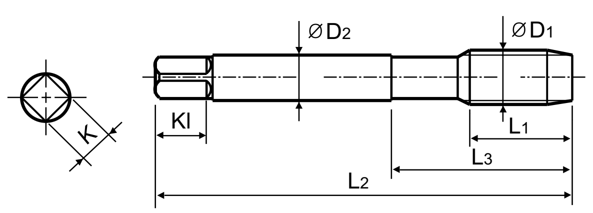
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

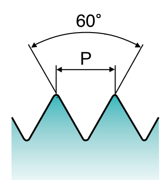
DIN 371
DIN 376

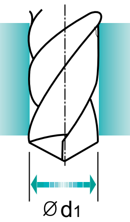


Hole type
2.5×D









Material groups VG | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Bright

p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TC174162	6	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TC174202	7	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TC174242	7	56	20	4	3	6	3	2.85
#8	- 32UNC	TC174282	8	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TC174322	10	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TC174362	10	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TC174402	13	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TC174442	14	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TC174482	16	100	39	9	7	10	3	8
7/16	- 14UNC	TC174522	17	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TC174562	20	110	44	9	7	10	3	10.75
9/16	- 12UNC	TC174602	20	110	44	11	9	12	3	12.25
5/8	- 11UNC	TC174642	22	110	44	12	9	12	3	13.5
3/4	- 10UNC	TC174702	25	125	50	14	11	14	4	16.5
7/8	- 9UNC	TC174742	27	140	54	18	14.5	17	4	19.5
1	- 8UNC	TC174782	30	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TC174822	35	180	65	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TD174 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

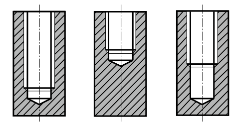
Machine taps
Maschinengewindebohrer

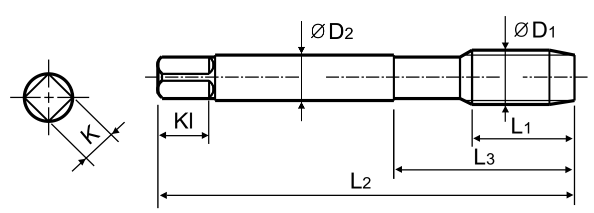
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

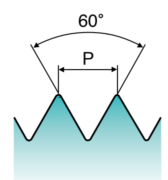
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

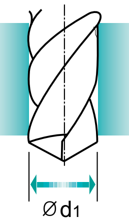
DIN 371
DIN 376

Hole type
2.5×D









Material groups VG | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | TiN

p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TD174162	6	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TD174202	7	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TD174242	7	56	20	4	3	6	3	2.85
#8	- 32UNC	TD174282	8	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TD174322	10	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TD174362	10	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TD174402	13	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TD174442	14	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TD174482	16	100	39	9	7	10	3	8
7/16	- 14UNC	TD174522	17	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TD174562	20	110	44	9	7	10	3	10.75
9/16	- 12UNC	TD174602	20	110	44	11	9	12	3	12.25
5/8	- 11UNC	TD174642	22	110	44	12	9	12	3	13.5
3/4	- 10UNC	TD174702	25	125	50	14	11	14	4	16.5
7/8	- 9UNC	TD174742	27	140	54	18	14.5	17	4	19.5
1	- 8UNC	TD174782	30	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TD174822	35	180	65	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TC184 SERIES

UNF

Unified fine threads

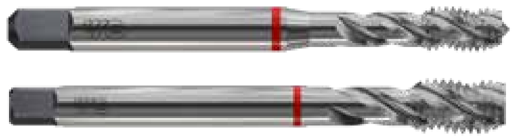
Unified Feingewinde
UNF
Unificato passo grosso

Machine taps
Maschinengewindebohrer

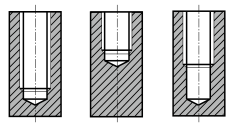
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

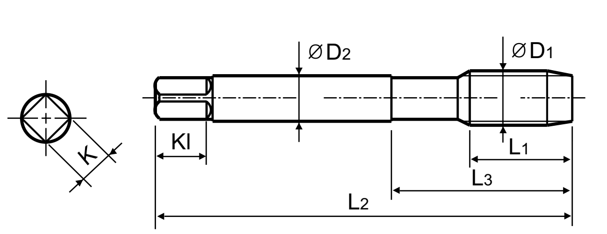
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

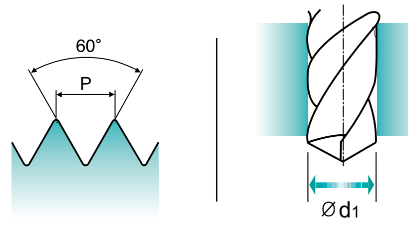
DIN 371
DIN 374



Hole type
2.5×D







Material groups: VG | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Bright | p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TC184182	6	56	18	3.5	2.7	6	3	2.4
#5	- 44UNF	TC184222	7	56	18	3.5	2.7	6	3	2.7
#6	- 40UNF	TC184262	7	56	20	4	3	6	3	3
#8	- 36UNF	TC184302	8	63	21	4.5	3.4	6	3	3.5
#10	- 32UNF	TC184342	10	70	25	6	4.9	8	3	4.1
#12	- 28UNF	TC184382	10	80	30	6	4.9	8	3	4.7
1/4	- 28UNF	TC184422	10	80	30	7	5.5	8	3	5.5
5/16	- 24UNF	TC184462	10	90	35	8	6.2	9	3	6.9
3/8	- 24UNF	TC184502	10	100	39	9	7	10	3	8.5
7/16	- 20UNF	TC184542	13	100	40	8	6.2	9	3	9.9
1/2	- 20UNF	TC184582	13	100	40	9	7	10	3	11.5
9/16	- 18UNF	TC184622	15	100	40	11	9	12	3	12.9
5/8	- 18UNF	TC184662	15	100	40	12	9	12	3	14.5
3/4	- 16UNF	TC184722	17	110	44	14	11	14	4	17.5
7/8	- 14UNF	TC184762	17	125	50	18	14.5	17	4	20.5
1	- 12UNF	TC184802	20	140	54	18	14.5	17	4	23.25
1-1/8	- 12UNF	TC184842	22	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TB913 SERIES

M

ISO metric coarse threads DIN 13

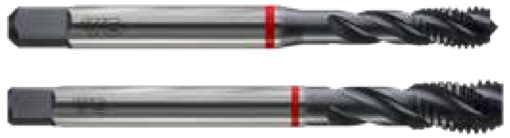
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

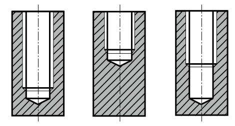
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

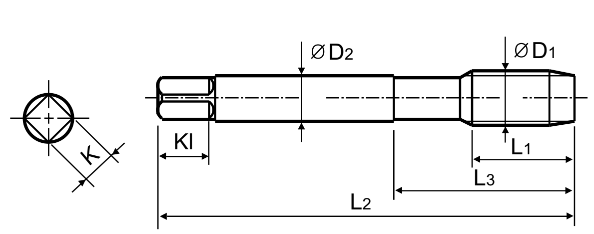
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

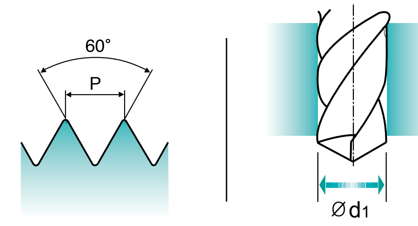
DIN 371
DIN 376



Hole type
2.5×D







Material groups: VG | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Vap | p.B197

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB913136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB913156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB913196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB913176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB913496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB913206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB913226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB913246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB913266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB913286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TB913316	10	80	30	6	4.9	8	3	5
M7	× 1	TB913346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB913366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB913396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB913426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB913466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB913506	18	110	44	9	7	10	3	10.2
M14	× 2	TB913546	20	110	44	11	9	12	3	12
M16	× 2	TB913606	20	110	44	12	9	12	3	14
M18	× 2.5	TB913656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB913706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB913746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TB913786	30	160	60	18	14.5	17	4	21
M27	× 3	TB913866	30	160	60	20	16	19	4	24
M30	× 3.5	TB913946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TQ863 SERIES

M ISO metric coarse threads DIN 13

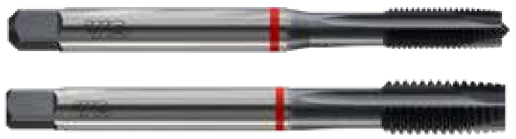
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

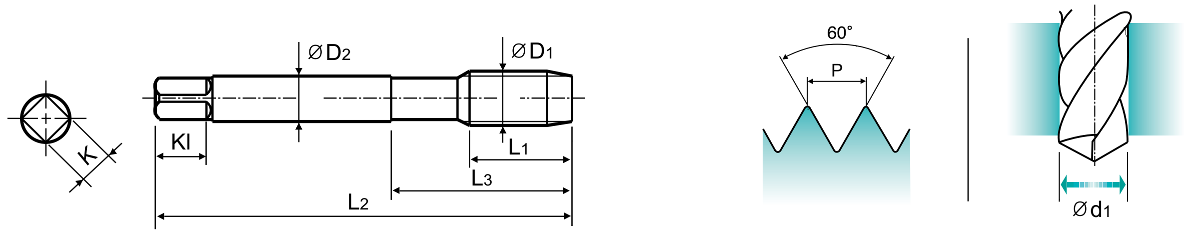
▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

DIN 371
DIN 376



Hole type
3.0×D



Material groups: VG | HSS PM | DIN 371/376 | 2B | 60° | C | R40 | Vap | p.B197

Recommended ToolHolder:

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.189

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ863136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ863156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ863176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ863206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ863226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TQ863246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ863266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ863286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TQ863316	17	80	30	6	4.9	8	3	5
M7	× 1	TQ863346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TQ863366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ863426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TQ863506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◯					◯					

YG TAP STEEL

TR863 SERIES

M ISO metric coarse threads DIN 13

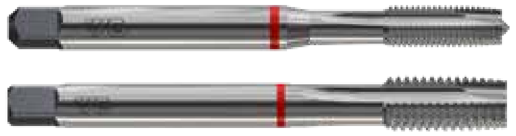
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

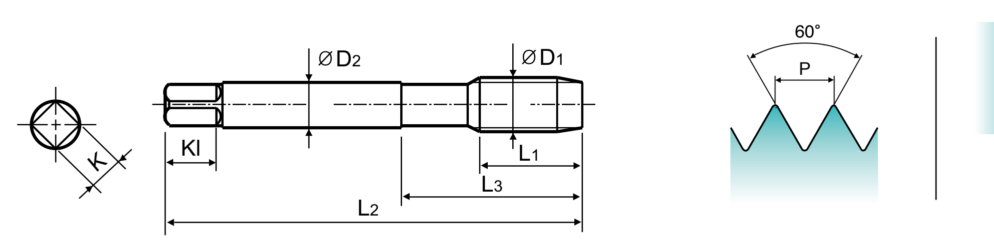
▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

DIN 371
DIN 376



Hole type
3.0×D



Material groups: VG | HSS PM | DIN 371/376 | 2B | 60° | C | R40 | Bright | p.B197

Recommended ToolHolder:

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.189

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR863136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR863156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR863176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR863206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR863226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TR863246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR863266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR863286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TR863316	17	80	30	6	4.9	8	3	5
M7	× 1	TR863346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TR863366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR863426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TR863506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◯					◯					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TC422 SERIES

M ISO metric coarse threads DIN 13

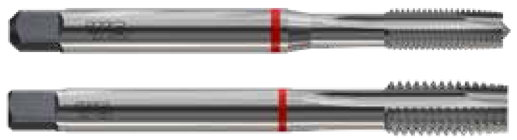
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

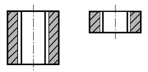
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

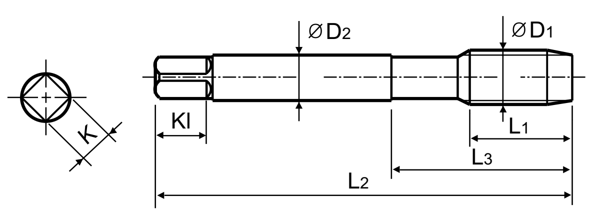
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

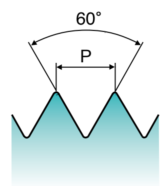
DIN 371
DIN 376

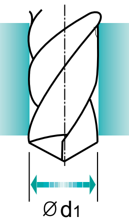


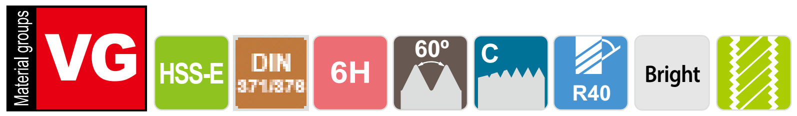
Hole type
3.0×D











p.B197

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC422136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC422156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC422196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC422176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC422496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC422206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC422226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC422246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC422266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC422286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC422316	17	80	30	6	4.9	8	3	5
M7	× 1	TC422346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC422366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC422396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC422426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC422466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC422506	24	110	44	9	7	10	3	10.2
M14	× 2	TC422546	26	110	44	11	9	12	3	12
M16	× 2	TC422606	27	110	44	12	9	12	3	14
M18	× 2.5	TC422656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC422706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC422746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC422786	34	160	60	18	14.5	17	4	21
M27	× 3	TC422866	36	160	60	20	16	19	4	24
M30	× 3.5	TC422946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TD422 SERIES

M ISO metric coarse threads DIN 13

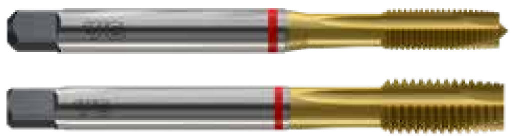
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

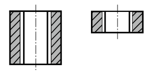
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

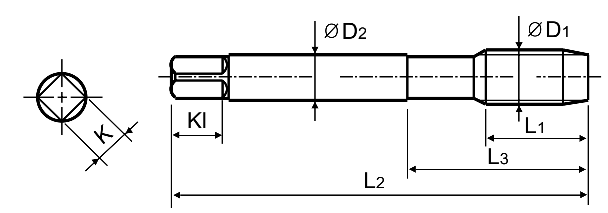
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

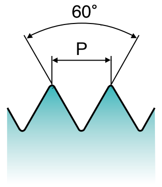
DIN 371
DIN 376

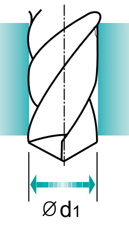


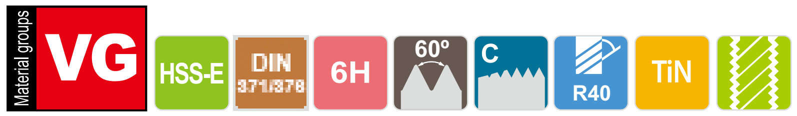
Hole type
3.0×D











p.B197

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	Kl	Z	Ød1
M2	× 0.4	TD422136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TD422156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TD422196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TD422176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TD422496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TD422206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TD422226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TD422246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TD422266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TD422286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TD422316	17	80	30	6	4.9	8	3	5
M7	× 1	TD422346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TD422366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TD422396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TD422426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TD422466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TD422506	24	110	44	9	7	10	3	10.2
M14	× 2	TD422546	26	110	44	11	9	12	3	12
M16	× 2	TD422606	27	110	44	12	9	12	3	14
M18	× 2.5	TD422656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TD422706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TD422746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TD422786	34	160	60	18	14.5	17	4	21
M27	× 3	TD422866	36	160	60	20	16	19	4	24
M30	× 3.5	TD422946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TE422 SERIES

M ISO metric coarse threads DIN 13

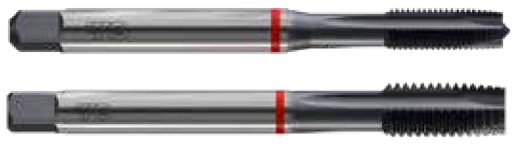
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

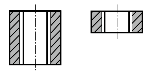
▶ Recommended for tapping abrasive materials due to nitriding, not suitable for tapping tough or high strength materials.

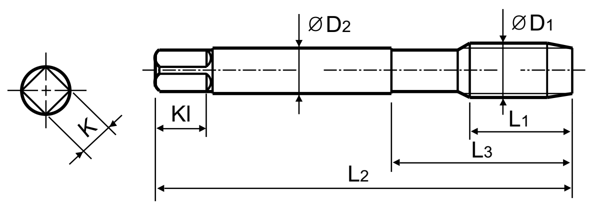
▶ Empfohlen für das Gewindeschneiden verschleißfordernder Werkstoffe wegen der Nitrierung; nicht geeignet für das Gewinden zaher oder hochfester Werkstoffe.

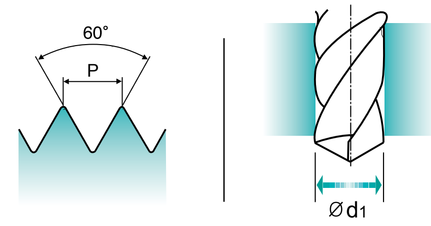
DIN 371
DIN 376



Hole type
3.0×D







Material groups: VG | HSS-E | DIN 371/376 | 6H | 60° | B | Nitride | p.B197

Recommended ToolHolder

◎	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TE422136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TE422156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TE422196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TE422176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TE422496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TE422206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TE422226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TE422246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TE422266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TE422286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TE422316	17	80	30	6	4.9	8	3	5
M7	× 1	TE422346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TE422366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TE422396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TE422426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TE422466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TE422506	24	110	44	9	7	10	3	10.2
M14	× 2	TE422546	26	110	44	11	9	12	3	12
M16	× 2	TE422606	27	110	44	12	9	12	3	14
M18	× 2.5	TE422656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TE422706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TE422746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TE422786	34	160	60	18	14.5	17	4	21
M27	× 3	TE422866	36	160	60	20	16	19	4	24
M30	× 3.5	TE422946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TY422 SERIES

M ISO metric coarse threads DIN 13

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

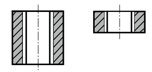
Machine taps
Maschinengewindebohrer

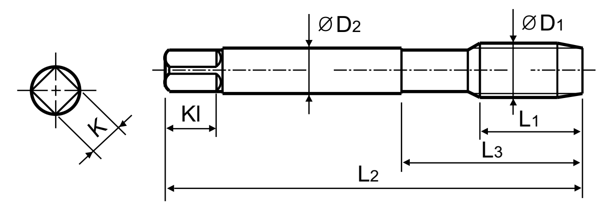
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

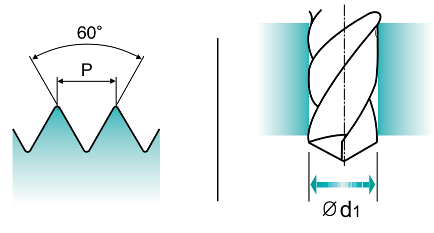
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 376

Hole type
3.0×D







Material groups: VG | HSS-E | DIN 371/376 | 6H | 60° | B | TiAlN | p.B197

Recommended ToolHolder

◎	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiAIN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY422136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY422156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY422196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY422176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY422496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY422206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY422226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TY422246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY422266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY422286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TY422316	17	80	30	6	4.9	8	3	5
M7	× 1	TY422346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TY422366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TY422396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TY422426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TY422466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TY422506	24	110	44	9	7	10	3	10.2
M14	× 2	TY422546	26	110	44	11	9	12	3	12
M16	× 2	TY422606	27	110	44	12	9	12	3	14
M18	× 2.5	TY422656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TY422706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TY422746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TY422786	34	160	60	18	14.5	17	4	21
M27	× 3	TY422866	36	160	60	20	16	19	4	24
M30	× 3.5	TY422946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TC263 SERIES

MF ISO metric fine threads DIN 13

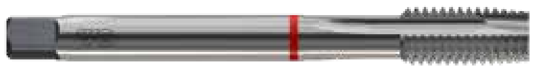
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

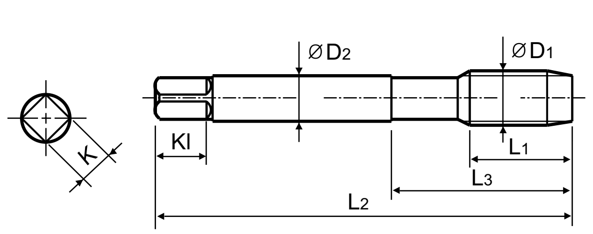
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

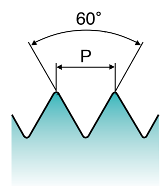
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

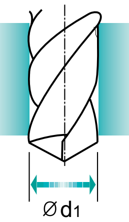
DIN 374



Hole type
3.0×D







Material groups: VG | HSS-E | DIN 374 | 6H | 60° | B | Bright | p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC263256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TC263296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TC263326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TC263336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TC263356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TC263376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TC263386	14	80	30	6	4.9	8	3	7.2
M10	× 1.25	TC263436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TC263446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TC263456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TC263516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TC263526	22	100	40	9	7	10	3	10.8
M12	× 1	TC263536	18	100	40	9	7	10	3	11
M14	× 1.5	TC263556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TC263566	22	100	40	11	9	12	3	12.8
M16	× 1.5	TC263616	22	100	40	12	9	12	3	14.5
M18	× 1.5	TC263676	25	110	44	14	11	14	4	16.5
M20	× 1.5	TC263726	25	125	50	16	12	15	4	18.5
M22	× 1.5	TC263766	25	125	50	18	14.5	17	4	20.5
M24	× 1.5	TC263806	27	140	54	18	14.5	17	4	22.5

◎ : Excellent ○ : Good

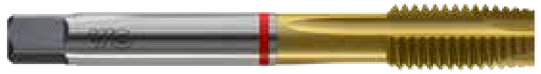
ISO	P										M			K					
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

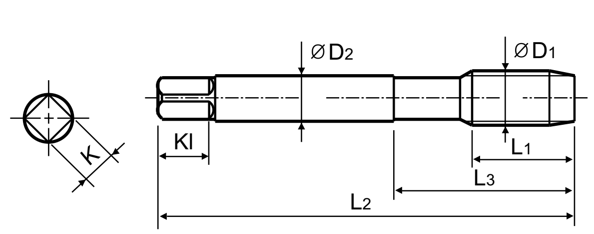
YG TAP STEEL

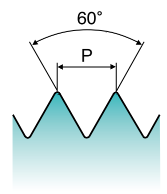
TD263 SERIES

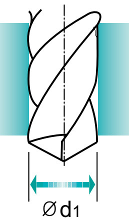
MF ISO metric fine threads DIN 13
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13
Machine taps
Maschinengewindebohrer
▶ Suitable for through hole in more cutting speed than other taps due to thick web.
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.
DIN 374



Hole type
3.0×D







Material groups: VG | HSS-E | DIN 374 | 6H | 60° | B | TiN | p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Kl	Z	Ød1
M4	× 0.5	TD263256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TD263296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TD263326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TD263336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TD263356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TD263376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TD263386	14	80	30	6	4.9	8	3	7.2
M10	× 1.25	TD263436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TD263446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TD263456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TD263516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TD263526	22	100	40	9	7	10	3	10.8
M12	× 1	TD263536	18	100	40	9	7	10	3	11
M14	× 1.5	TD263556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TD263566	22	100	40	11	9	12	3	12.8
M16	× 1.5	TD263616	22	100	40	12	9	12	3	14.5
M18	× 1.5	TD263676	25	110	44	14	11	14	4	16.5
M20	× 1.5	TD263726	25	125	50	16	12	15	4	18.5
M22	× 1.5	TD263766	25	125	50	18	14.5	17	4	20.5
M24	× 1.5	TD263806	27	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TC244 SERIES

UNC

Unified coarse threads

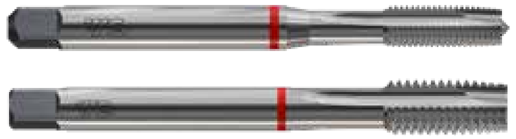
Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

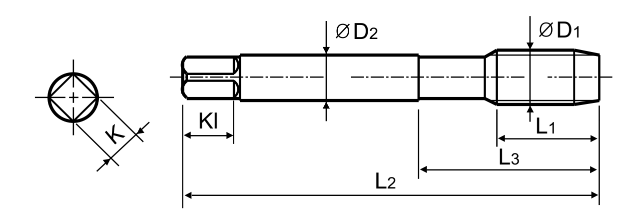
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

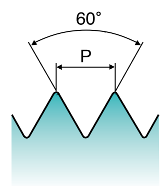
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

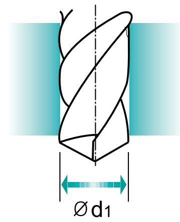
DIN 371
DIN 376



Hole type
3.0×D







Material groups: VG | HSS-E | DIN 371/378 | 2B | 60° | B | Bright | p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TC244162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TC244202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TC244242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TC244282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TC244322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TC244362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TC244402	17	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TC244442	20	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TC244482	22	100	39	9	7	10	3	8
7/16	- 14UNC	TC244522	22	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TC244562	25	110	44	9	7	10	3	10.75
9/16	- 12UNC	TC244602	26	110	44	11	9	12	3	12.25
5/8	- 11UNC	TC244642	27	110	44	12	9	12	3	13.5
3/4	- 10UNC	TC244702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TC244742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TC244782	36	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TC244822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP STEEL

TD244 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

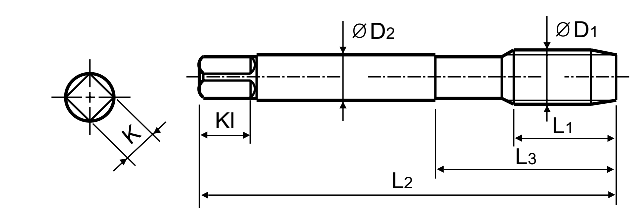
Machine taps
Maschinengewindebohrer

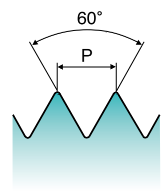
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

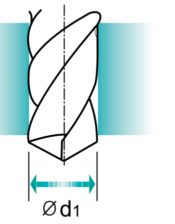
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 376

Hole type
3.0×D







Material groups: VG | HSS-E | DIN 371/378 | 2B | 60° | B | TiN | p.B197

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TD244162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TD244202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TD244242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TD244282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TD244322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TD244362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TD244402	17	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TD244442	20	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TD244482	22	100	39	9	7	10	3	8
7/16	- 14UNC	TD244522	22	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TD244562	25	110	44	9	7	10	3	10.75
9/16	- 12UNC	TD244602	26	110	44	11	9	12	3	12.25
5/8	- 11UNC	TD244642	27	110	44	12	9	12	3	13.5
3/4	- 10UNC	TD244702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TD244742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TD244782	36	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TD244822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP STEEL

TC254 SERIES

UNF

Unified fine threads

- Unified Feingewinde
- UNF
- Unificato passo fine

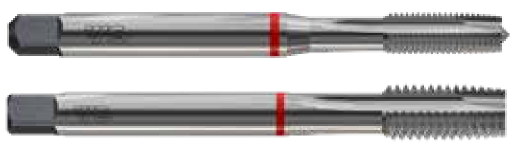
Machine taps
Maschinengewindebohrer

▶ Suitable for through hole in more cutting speed than other taps due to thick web.

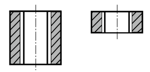
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

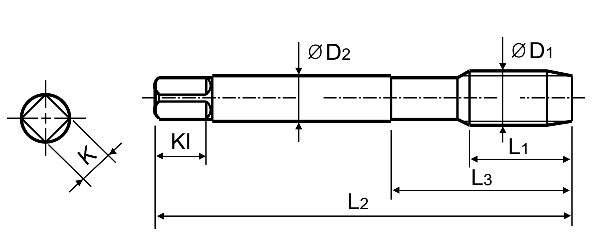
DIN 371

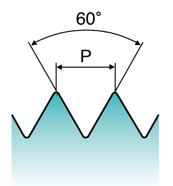
DIN 374

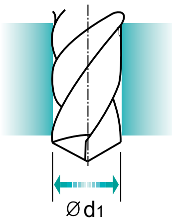


Hole type
3.0×D









Material groups

p.B197

	Page
Plain Shank	
TAPPING ER CHUCK	D215 -220
TAPPING CHUCK	D221 -228
ONE STEP TAPPING CHUCK	D211 -213

Recommended Cutting Page : P.189

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TC254182	11	56	18	3.5	2.7	6	3	2.4
#5	- 44UNF	TC254222	11	56	18	3.5	2.7	6	3	2.7
#6	- 40UNF	TC254262	12	56	20	4	3	6	3	3
#8	- 36UNF	TC254302	13	63	21	4.5	3.4	6	3	3.5
#10	- 32UNF	TC254342	15	70	25	6	4.9	8	3	4.1
#12	- 28UNF	TC254382	16	80	30	6	4.9	8	3	4.7
1/4	- 28UNF	TC254422	17	80	30	7	5.5	8	3	5.5
5/16	- 24UNF	TC254462	17	90	35	8	6.2	9	3	6.9
3/8	- 24UNF	TC254502	18	100	39	9	7	10	3	8.5
7/16	- 20UNF	TC254542	22	100	40	8	6.2	9	3	9.9
1/2	- 20UNF	TC254582	22	100	40	9	7	10	3	11.5
9/16	- 18UNF	TC254622	22	100	40	11	9	12	3	12.9
5/8	- 18UNF	TC254662	22	100	40	12	9	12	3	14.5
3/4	- 16UNF	TC254722	25	110	44	14	11	14	4	17.5
7/8	- 14UNF	TC254762	26	125	50	18	14.5	17	4	20.5
1	- 12UNF	TC254802	28	140	54	18	14.5	17	4	23.25
1-1/8	- 12UNF	TC254842	30	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

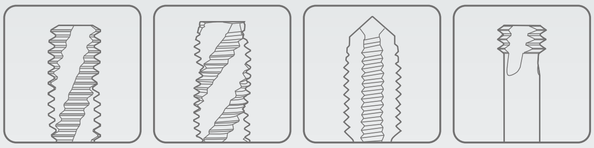
YG TAP STEEL

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TQ823	TR823	TC312 TC413 TC174 TC184	TD312 TD413 TD174	TB312	TY312	TB913	TQ863	TR863	TC422 TC263 TC244 TC254	TD422 TD263 TD244	TE422	TY422
					Vc (m/min)												
P	1	Non-alloy steel	125														
P	2	Non-alloy steel	190	13	15-20	15-20	15-20	20-25	15-20	20-25	15-20	15-20	15-20	15-20	15-20	20-25	20-25
P	3	Non-alloy steel	250	25	12-18	12-18	12-18	18-24	12-18	18-24	12-18	12-18	12-18	12-18	12-18	18-24	18-24
P	4	Non-alloy steel	270	28	10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	10-15	15-20	15-20
P	5	Non-alloy steel	300	32	6-10	6-10	6-10	10-14	6-10	10-14	6-10	6-10	6-10	6-10	6-10	10-14	10-14
P	6	Low alloy steel	180	10	10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	10-15	15-20	15-20
P	7	Low alloy steel	275	29	10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	10-15	15-20	15-20
P	8	Low alloy steel	300	32	6-10	6-10	6-10	10-14	6-10	10-14	6-10	6-10	6-10	6-10	6-10	10-14	10-14
P	9	Low alloy steel	350	38	3-5	3-5	3-5	5-7	3-5	5-7	3-5	3-5	3-5	3-5	3-5	5-7	5-7
P	10	High alloyed steel, and tool steel	200	15	3-5	3-5	3-5	5-7	3-5	5-7	3-5	3-5	3-5	3-5	3-5	5-7	5-7
M	12	Stainless steel	200	15								7-10	7-10	7-10	7-10	10-15	10-15
M	13	Stainless steel	240	23								5-8	5-8	5-8	5-8	8-11	8-11
M	14	Stainless steel	180	10	4-6	4-6	4-6	6-8	4-6	6-8	4-6	4-6	4-6	4-6	4-6	6-8	6-8
S	31	Heat Resistant Super Alloys	200	15	10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	10-15	15-20	15-20
S	36	Titanium Alloys	400Rm		10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	10-15	15-20	15-20

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

Global Cutting Tool Leader YG-1



THREADING

SOLID CARBIDE & HSS-E

YG TAP HARDENED

YG HAHN GEHÄRTET

- For Hardened Steels Applications to Control the Continuous and Red-glowing Chips
- Für gehärtete Stähle zur Kontrolle der kontinuierlichen und rotglühenden Späne

SELECTION GUIDE

YG THREADING TOOLS

SOLID CARBIDE & HSS-E YG TAP HARDENED

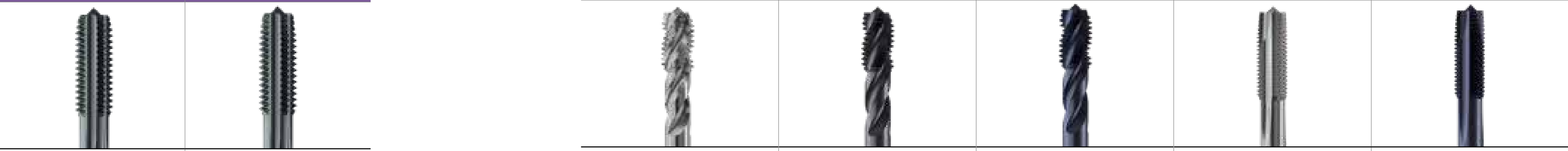
For Hardened Steels Applications
to Control the Continuous and Red-glowing Chips

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B209

HOLE TYPE	Max. 2.0xD Blind / Through Hole		Max. 2.5xD Blind Hole			Max. 3.0xD Through Hole	
TOOL MATERIAL	CARBIDE		HSS-E			HSS-E	
CHAMFER LEAD ACC. TO DIN2197	C	D	C	C	C	B	B
FLUTE TYPE	Straight Flute	Straight Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE	-	-	R40	R40	R40	-	-
	T0997-TIC (p.B202)	T0999-TIC (p.B203)	TC313 (p.B204)	TB313 (p.B205)	TY313 (p.B206)	TC283 (p.B207)	TY283 (p.B208)
M DIN371/376							
M DIN352							
M DIN357/LONG							
MF DIN—374							
MF DIN2181							
UNC DIN371/376							
UNC DIN351							
UNF DIN371/374							
UNF DIN2181							
BSW DIN2182/2183							
BSW DIN351							
G(BSP) DIN5156/5157							
EG-M DIN371/376							
EG-UNC DIN371/376							
EG-UNF DIN371/374							
SURFACE TREATMENT	TiCN	TiCN	Bright	VAP	TiAlN	Bright	TiAlN
MODEL							



ISO	VDI 3323	Material Description	Composition / Structure	Heat Treatment	HB	HRc	T0997-TIC	T0999-TIC	TC313	TB313	TY313	TC283	TY283
P	1	Non-alloy steel	About 0.15% C	Annealed	125								
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13							
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25							
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28							
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32							
P	6	Low alloy steel		Annealed	180	10							
P	7	Low alloy steel		Quenched & Tempered	275	29			○	○	○	○	○
P	8	Low alloy steel		Quenched & Tempered	300	32			○	○	○	○	○
P	9	Low alloy steel		Quenched & Tempered	350	38	○	○	◎	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel		Annealed	200	15							
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35							
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15							
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23							
M	14	Stainless steel	Austenitic		180	10			○	○	○	○	○
K	15	Grey cast iron	Pearlitic / ferritic		180	10							
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26							
K	17	Nodular cast iron	Ferritic		160	3							
K	18	Nodular cast iron	Pearlitic		250	25							
K	19	Malleable cast iron	Ferritic		130								
K	20	Malleable cast iron	Pearlitic		230	21							
N	21	Aluminum-wrought alloy	Not Curable		60								
N	22	Aluminum-wrought alloy	Curable	Hardened	100								
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75								
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90								
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130								
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110				○	○	○	○	○
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90								
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100								
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic										
N	30	Non Metallic Materials	Rubber, Wood, etc.										
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15							
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30							
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25							
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38							
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34							
S	36	Titanium Alloys	Pure Titanium		400 Rm								
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm								
H	38	Hardened steel		Hardened	550	55	◎	◎					
H	39	Hardened steel		Hardened	630	60	◎	◎					
H	40	Chilled Cast Iron		Cast	400	42	◎	◎					
H	41	Hardened Cast Iron		Hardened	550	55	◎	◎					

YG TAP HARDENED

T0997-TIC SERIES

M ISO metric coarse threads DIN 13

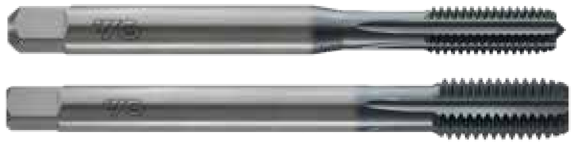
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

▶ Carbide tap can increase tool life longer than HSS taps due to higher hardness. Suitable for hardened steels (HRc50~60)

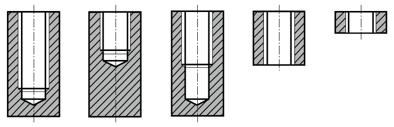
▶ VHM-Gewindebohrer ermöglichen aufgrund ihrer höheren Härte bessere Standzeiten als HSS-Gewindebohrer. Geeignet für gehärtete Stähle (HRc50~60)

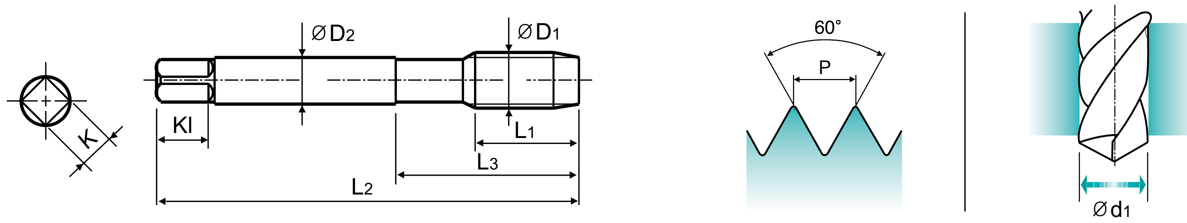
DIN 371

DIN 376



Hole type
2.0×D





Material groups HR CARBIDE DIN 371/376 6HX 60° C TiCN p.B209

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiCN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	T0997206TIC	11	56	18	3.5	2.7	6	4	2.55
M4	× 0.7	T0997246TIC	13	63	21	4.5	3.4	6	4	3.4
M5	× 0.8	T0997286TIC	15	70	25	6	4.9	8	4	4.3
M6	× 1	T0997316TIC	17	80	30	6	4.9	8	5	5.1
M8	× 1.25	T0997366TIC	20	90	35	8	6.2	9	5	6.9
M10	× 1.5	T0997426TIC	22	100	39	10	8	11	5	8.6
M12	× 1.75	T0997506TIC	24	110	–	9	7	12	5	10.4
M14	× 2	T0997546TIC	26	110	–	11	9	12	6	12.2
M16	× 2	T0997606TIC	27	110	–	12	9	12	6	14.2
M18	× 2.5	T0997656TIC	30	125	–	14	11	14	6	15.7
M20	× 2.5	T0997706TIC	32	140	–	16	12	15	6	17.7

▶DIN 371(M3~M10) and DIN 376(M12~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended																		◎	◎	◎	◎

YG TAP HARDENED

T0999-TIC SERIES

M ISO metric coarse threads DIN 13

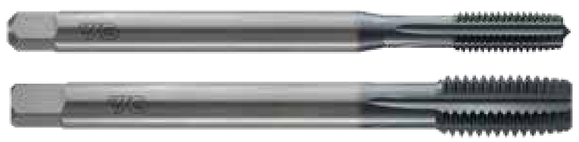
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

▶ Carbide tap can increase tool life longer than HSS taps due to higher hardness. Suitable for hardened steels (HRc50~60)

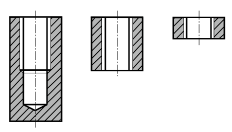
▶ VHM-Gewindebohrer ermöglichen aufgrund ihrer höheren Härte bessere Standzeiten als HSS-Gewindebohrer. Geeignet für gehärtete Stähle (HRc50~60)

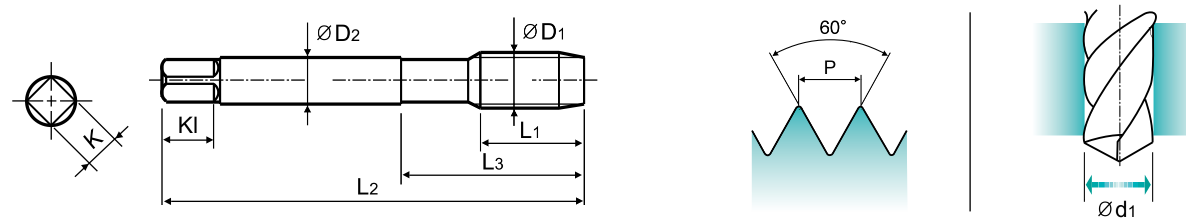
DIN 371

DIN 376



Hole type
2.0×D





Material groups HR CARBIDE DIN 371/376 6HX 60° C TiCN p.B209

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiCN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	× 0.5	T0999206TIC	11	56	18	3.5	2.7	6	4	2.55
M4	× 0.7	T0999246TIC	13	63	21	4.5	3.4	6	4	3.4
M5	× 0.8	T0999286TIC	15	70	25	6	4.9	8	4	4.3
M6	× 1	T0999316TIC	17	80	30	6	4.9	8	5	5.1
M8	× 1.25	T0999366TIC	20	90	35	8	6.2	9	5	6.9
M10	× 1.5	T0999426TIC	22	100	39	10	8	11	5	8.6
M12	× 1.75	T0999506TIC	24	110	–	9	7	12	5	10.4
M14	× 2	T0999546TIC	26	110	–	11	9	12	6	12.2
M16	× 2	T0999606TIC	27	110	–	12	9	12	6	14.2
M18	× 2.5	T0999656TIC	30	125	–	14	11	14	6	15.7
M20	× 2.5	T0999706TIC	32	140	–	16	12	15	6	17.7

▶DIN 371(M3~M10) and DIN 376(M12~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended																		◎	◎	◎	◎

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP HARDENED

TC313 SERIES

M ISO metric coarse threads DIN 13

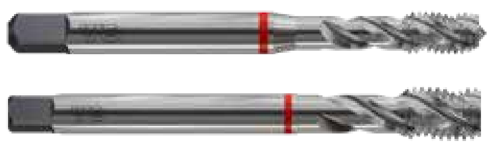
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

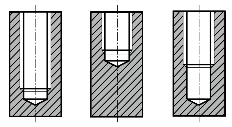
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

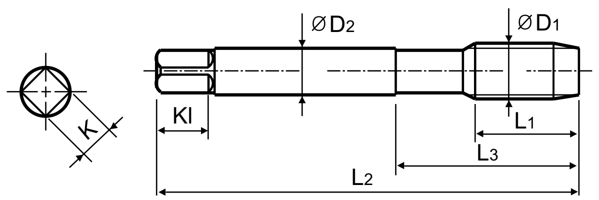
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

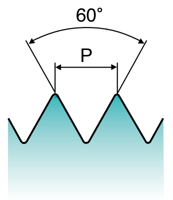
DIN 371
DIN 376

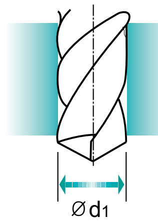


Hole type
2.5×D









Material groups HR | HSS-E | DIN 371/376 | 6H | 60° | C | Bright | p.B209

Recommended ToolHolder: Plain Shank — Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC313136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC313156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC313196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC313176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC313496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC313206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC313226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TC313246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC313266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC313286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TC313316	10	80	30	6	4.9	8	3	5
M7	× 1	TC313346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TC313366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC313396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TC313426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TC313466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC313506	18	110	44	9	7	10	3	10.2
M14	× 2	TC313546	20	110	44	11	9	12	3	12
M16	× 2	TC313606	20	110	44	12	9	12	3	14
M18	× 2.5	TC313656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TC313706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TC313746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TC313786	30	160	60	18	14.5	17	4	21
M27	× 3	TC313866	30	160	60	20	16	19	4	24
M30	× 3.5	TC313946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						○															

YG TAP HARDENED

TB313 SERIES

M ISO metric coarse threads DIN 13

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

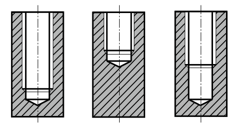
Machine taps
Maschinengewindebohrer

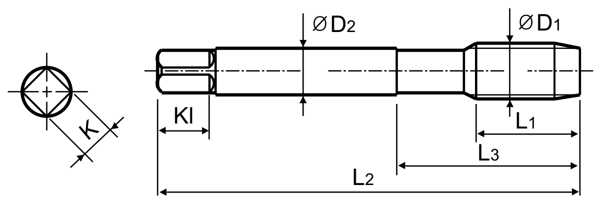
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

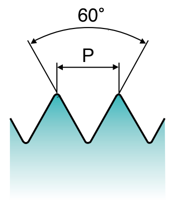
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

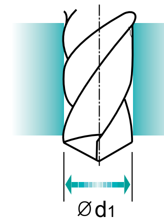
DIN 371
DIN 376

Hole type
2.5×D









Material groups HR | HSS-E | DIN 371/376 | 6H | 60° | C | Vap | p.B209

Recommended ToolHolder: Plain Shank — Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB313136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB313156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB313196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB313176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB313496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB313206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB313226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB313246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB313266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB313286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TB313316	10	80	30	6	4.9	8	3	5
M7	× 1	TB313346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB313366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB313396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB313426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB313466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB313506	18	110	44	9	7	10	3	10.2
M14	× 2	TB313546	20	110	44	11	9	12	3	12
M16	× 2	TB313606	20	110	44	12	9	12	3	14
M18	× 2.5	TB313656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB313706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB313746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TB313786	30	160	60	18	14.5	17	4	21
M27	× 3	TB313866	30	160	60	20	16	19	4	24
M30	× 3.5	TB313946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						○															

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP HARDENED

TY313 SERIES

M ISO metric coarse threads DIN 13

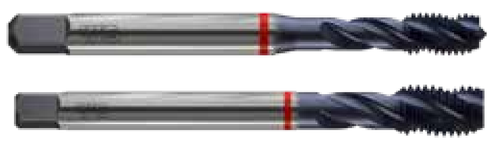
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

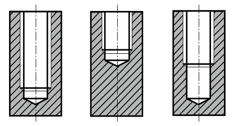
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

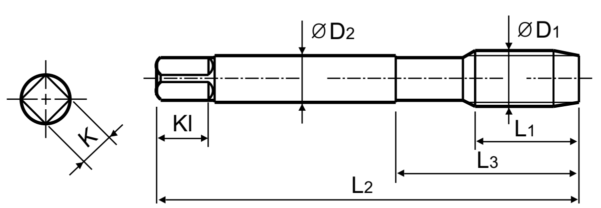
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

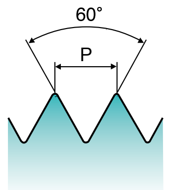
DIN 371
DIN 376

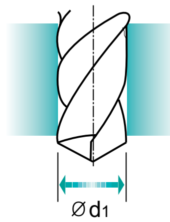


Hole type
2.5×D









Material groups HR | HSS-E | DIN 371/376 | 6H | 60° | C | TiAlN | p.B209

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY313136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY313156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY313196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY313176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY313496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY313206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY313226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TY313246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY313266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY313286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TY313316	10	80	30	6	4.9	8	3	5
M7	× 1	TY313346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TY313366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TY313396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TY313426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TY313466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TY313506	18	110	44	9	7	10	3	10.2
M14	× 2	TY313546	20	110	44	11	9	12	3	12
M16	× 2	TY313606	20	110	44	12	9	12	3	14
M18	× 2.5	TY313656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TY313706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TY313746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TY313786	30	160	60	18	14.5	17	4	21
M27	× 3	TY313866	30	160	60	20	16	19	4	24
M30	× 3.5	TY313946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						○															

YG TAP HARDENED

TC283 SERIES

M ISO metric coarse threads DIN 13

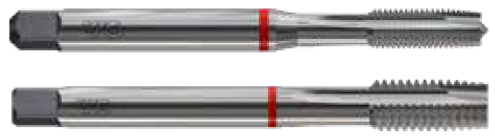
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

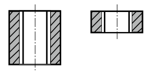
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

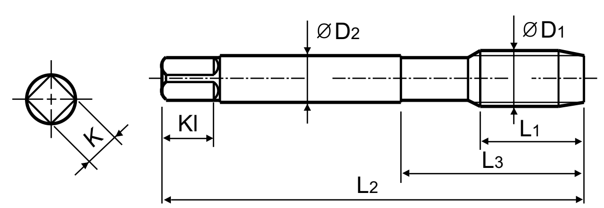
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

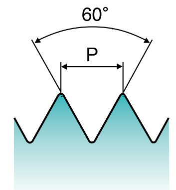
DIN 371
DIN 376

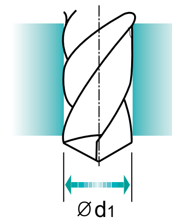


Hole type
3.0×D









Material groups HR | HSS-E | DIN 371/376 | 6H | 60° | C | Bright | p.B209

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC283136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC283156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC283196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC283176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC283496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC283206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC283226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC283246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC283266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC283286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC283316	17	80	30	6	4.9	8	3	5
M7	× 1	TC283346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC283366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC283396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC283426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC283466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC283506	24	110	44	9	7	10	3	10.2
M14	× 2	TC283546	26	110	44	11	9	12	3	12
M16	× 2	TC283606	27	110	44	12	9	12	3	14
M18	× 2.5	TC283656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC283706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC283746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC283786	34	160	60	18	14.5	17	4	21
M27	× 3	TC283866	36	160	60	20	16	19	4	24
M30	× 3.5	TC283946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						○															

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP HARDENED

TY283 SERIES

M ISO metric coarse threads DIN 13

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

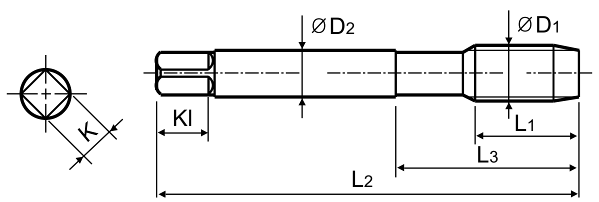
Machine taps
Maschinengewindebohrer

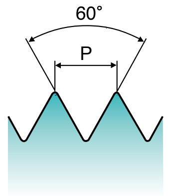
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

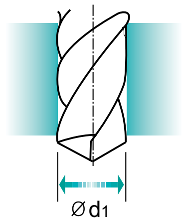
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 376

Hole type
3.0×D







Material groups: HR | HSS-E | DIN 371/376 | 6H | 60° | C | TiAlN | p.B209

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY283136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY283156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY283196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY283176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY283496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY283206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY283226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TY283246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY283266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY283286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TY283316	17	80	30	6	4.9	8	3	5
M7	× 1	TY283346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TY283366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TY283396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TY283426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TY283466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TY283506	24	110	44	9	7	10	3	10.2
M14	× 2	TY283546	26	110	44	11	9	12	3	12
M16	× 2	TY283606	27	110	44	12	9	12	3	14
M18	× 2.5	TY283656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TY283706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TY283746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TY283786	34	160	60	18	14.5	17	4	21
M27	× 3	TY283866	36	160	60	20	16	19	4	24
M30	× 3.5	TY283946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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							○	○	◎					○						

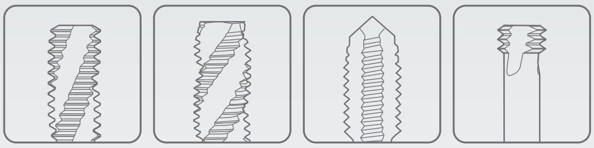
ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	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	400Rm	1050Rm	550	630	400	550
Recommended						○															

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	T0997-TIC	T0999-TIC	TC313 TB313 TY313	TC283 TY283
					Vc (m/min)			
P	7	Non-alloy steel	275	29			10-15	10-15
	8		300	32			6-10	6-10
	9		350	38	5-8	5-8	3-5	3-5
M	14	Stainless steel	180	10			4-6	4-6
N	26	Copper and Copper Alloys (Bronze / Brass)	110				25-35	25-35
H	38	Hardened steel	550	55	3-7	3-7		
	39		630	60	3-7	3-7		
	40	Chilled Cast Iron	400	42	3-7	3-7		
	41	Hardened Cast Iron	550	55	3-7	3-7		

THREAD MILLS
SYNCHRO TAPS
PRIME 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

Global Cutting Tool Leader **YG-1**



THREADING

Leading Through Innovation

HSS-E & HSS-PM

YG TAP INOX

YG Gewindebohrer INOX

- For Stainless Steels with Lamellar, Irregular Chip Formation where the Cutting Forces are Higher

- Für nichtrostende Stähle mit lamellarer, unregelmäßiger Spänebildung, bei denen die Schnittkräfte größer sind.

SELECTION GUIDE

THREADING TOOLS

HSS-E & HSS-PM YG TAP INOX

For Stainless Steels with Lamellar, Irregular Chip Formation where the Cutting Forces are Higher

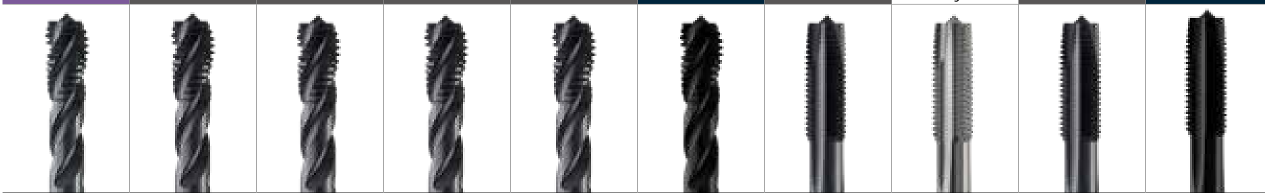
Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B233

HOLE TYPE		Max. 2.0xD Blind Hole	Max. 2.5xD Blind Hole									Max. 3.0xD Through Hole			
TOOL MATERIAL		HSS-E	HSS-PM		HSS-E	HSS-E						HSS-PM		HSS-E	
CHAMFER LEAD ACC. TO DIN2197		C	C	C	C	C	C	C	C	C	C	B	B	B	B
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE		R40	R40	R40	R40	R40	R40	R40	R40	R40	R40	-	-	-	-
SERIES: M	DIN371/376	TB711 (p.B214)	TQ813 (p.B215)	TR813 (p.B216)	TB914 (p.B217)	TI914 (p.B217)	TBE15 (p.B218)	TBE16 (p.B219)	TBE17 (p.B220)	TBE18 (p.B221)	TCH14 (p.B222)	TQ853 (p.B223)	TR853 (p.B224)	TB623 (p.B225)	TCH23 (p.B226)
M	DIN352														
M	DIN357/LONG														
MF	DIN374				TB183 (p.B227)									TB123 (p.B230)	
MF	DIN2181														
UNC	DIN371/376				TB904 (p.B228)									TB264 (p.B231)	
UNC	DIN351														
UNF	DIN371/374				TB924 (p.B229)									TB274 (p.B232)	
UNF	DIN2181														
BSW	DIN2182/2183														
BSW	DIN351														
G(BSP)	DIN5156/5157														
EG-M	DIN371/376														
EG-UNC	DIN371/376														
EG-UNF	DIN371/374														
SURFACE TREATMENT		VAP	VAP	Bright	VAP	TiCN	VAP	VAP	VAP	VAP	HardSlick	VAP	Bright	VAP	HardSlick

MODEL

ISO	VDI 3323	Material Description	Composition / Structure	Heat Treatment	HB	HRc	TB711	TQ813	TR813	TB914	TI914	TBE15	TBE16	TBE17	TBE18	TCH14	TQ853	TR853	TB623	TCH23
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	○	○	◎	◎	◎	◎	◎	◎	◎	○	○	◎	◎
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25		○	○	○	○	○	○	○	○	○	○	○	○	○
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28		○	○	○	○	○	○	○	○	○	○	○	○	○
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32														
P	6	Low alloy steel		Annealed	180	10		○	○	○	○	○	○	○	○	○	○	○	○	○
P	7	Low alloy steel		Quenched & Tempered	275	29														
P	8	Low alloy steel		Quenched & Tempered	300	32														
P	9	Low alloy steel		Quenched & Tempered	350	38														
P	10	High alloyed steel, and tool steel		Annealed	200	15														
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35														
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
M	14	Stainless steel	Austenitic		180	10	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
K	15	Grey cast iron	Pearlitic / ferritic		180	10														
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26														
K	17	Nodular cast iron	Ferritic		160	3														
K	18	Nodular cast iron	Pearlitic		250	25														
K	19	Malleable cast iron	Ferritic		130															
K	20	Malleable cast iron	Pearlitic		230	21														
N	21	Aluminum-wrought alloy	Not Curable		60		○													
N	22	Aluminum-wrought alloy	Curable	Hardened	100															
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75															
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90															
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130															
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110															
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90															
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		○													
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic																	
N	30	Non Metallic Materials	Rubber, Wood, etc.																	
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15		○	○	○	○	○	○	○	○	○	○	○	○	○
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30														
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25														
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38														
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34														
S	36	Titanium Alloys	Pure Titanium		400 Rm			○	○	○	○	○	○	○	○	○	○	○	○	○
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm															
H	38	Hardened steel		Hardened	550	55														
H	39	Hardened steel		Hardened	630	60														
H	40	Chilled Cast Iron		Cast	400	42														
H	41	Hardened Cast Iron		Hardened	550	55														

YG-1 CO., LTD. phone:+82-32-526-0909, www.yg1.kr, E-mail:yg1@yg1.kr

YG TAP INOX

TB711 SERIES

M ISO metric coarse threads DIN 13

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

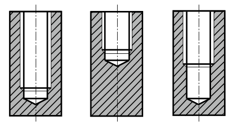
Machine taps
Maschinengewindebohrer

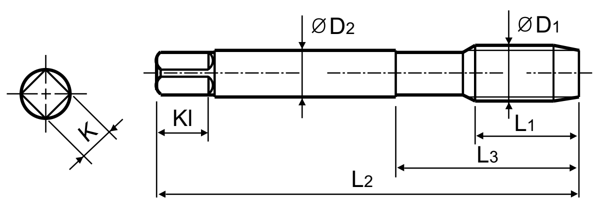
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

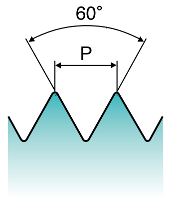
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

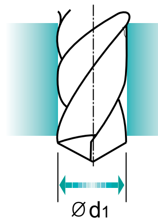
DIN 371
DIN 376

Hole type
2.0×D









Material groups: NW | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB711136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB711156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB711196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB711176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB711496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB711206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB711226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB711246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB711266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB711286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TB711316	10	80	30	6	4.9	8	3	5
M7	× 1	TB711346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB711366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB711396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB711426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB711466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB711506	18	110	44	9	7	10	3	10.2
M14	× 2	TB711546	20	110	44	11	9	12	3	12
M16	× 2	TB711606	20	110	44	12	9	12	3	14
M18	× 2.5	TB711656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB711706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB711746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TB711786	30	160	60	18	14.5	17	4	21
M27	× 3	TB711866	30	160	60	20	16	19	4	24
M30	× 3.5	TB711946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○							○													

YG TAP INOX

TQ813 SERIES

M ISO metric coarse threads DIN 13

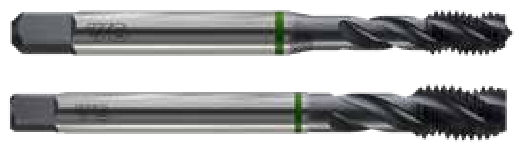
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

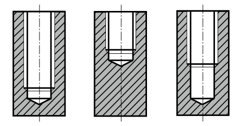
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

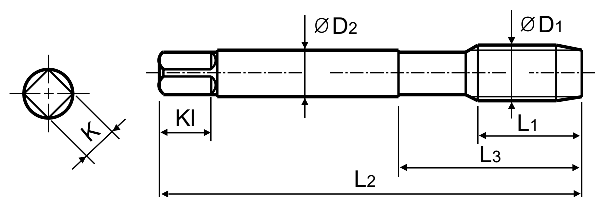
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

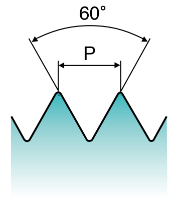
DIN 371
DIN 376

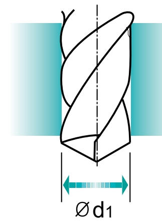


Hole type
2.5×D









Material groups: VA | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ813136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ813156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ813176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ813206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ813226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TQ813246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ813266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ813286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TQ813316	10	80	30	6	4.9	8	3	5
M7	× 1	TQ813346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TQ813366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ813426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TQ813506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TR813 SERIES

M ISO metric coarse threads DIN 13

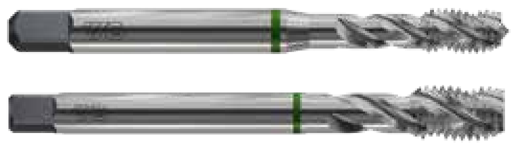
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

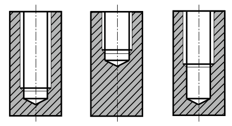
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

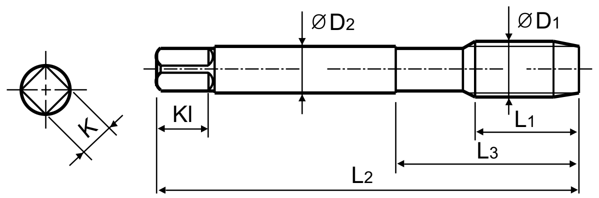
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

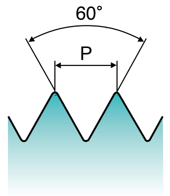
DIN 371
DIN 376

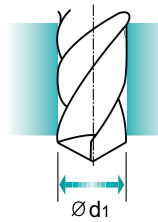


Hole type
2.5×D









Material groups: VA | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR813136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR813156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR813176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR813206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR813226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TR813246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR813266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR813286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TR813316	10	80	30	6	4.9	8	3	5
M7	× 1	TR813346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TR813366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR813426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TR813506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

Vap TB914 SERIES
TiCN TI914 SERIES

M ISO metric coarse threads DIN 13

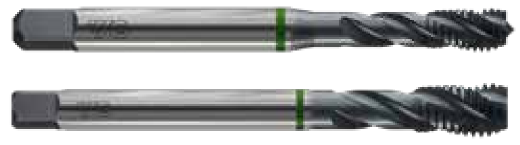
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

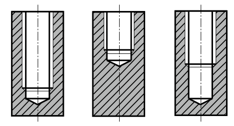
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

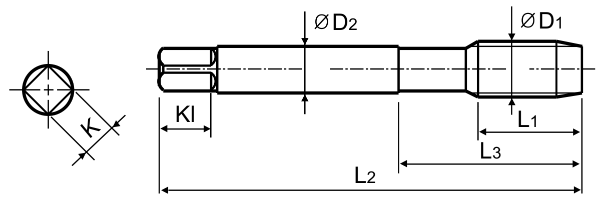
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

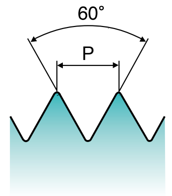
DIN 371
DIN 376

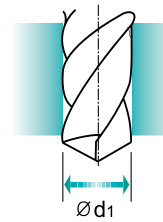


Hole type
2.5×D









Material groups: VA NW | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Vap TiCN | p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	TiCN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB914136	TI914136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB914156	TI914156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB914196	TI914196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB914176	TI914176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB914496	TI914496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB914206	TI914206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB914226	TI914226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TB914246	TI914246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB914266	TI914266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB914286	TI914286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TB914316	TI914316	10	80	30	6	4.9	8	3	5
M7	× 1	TB914346	TI914346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TB914366	TI914366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB914396	TI914396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TB914426	TI914426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TB914466	TI914466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB914506	TI914506	18	110	44	9	7	10	3	10.2
M12	× 1.75	TB914506F4	TI914506F4	18	110	44	9	7	10	4	10.2
M14	× 2	TB914546	TI914546	20	110	44	11	9	12	3	12
M14	× 2	TB914546F4	TI914546F4	20	110	44	11	9	12	4	12
M16	× 2	TB914606	TI914606	20	110	44	12	9	12	3	14
M16	× 2	TB914606F4	TI914606F4	20	110	44	12	9	12	4	14
M18	× 2.5	TB914656	TI914656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TB914706	TI914706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TB914746	TI914746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TB914786	TI914786	30	160	60	18	14.5	17	4	21
M27	× 3	TB914866	TI914866	30	160	60	20	16	19	4	24
M30	× 3.5	TB914946	TI914946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME TAPS
COMBO TAPS
YG TAP GENERAL
YG TAP STEEL
YG TAP HARDENED
YG TAP INOX
YG TAP CAST IRON
YG TAP ALU
YG TAP TiNi
YG TAP FORMING
NUT TAPS
STI TAPS
PIPE TAPS
TECHNICAL DATA

YG TAP INOX

TBE15 SERIES

M ISO metric coarse threads DIN 13

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

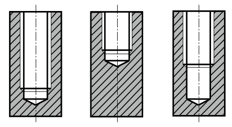
Machine taps
Maschinengewindebohrer

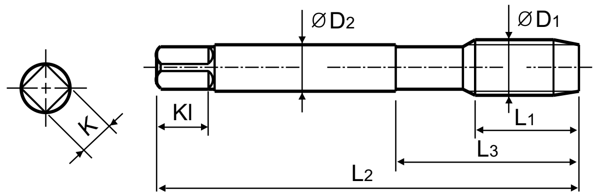
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

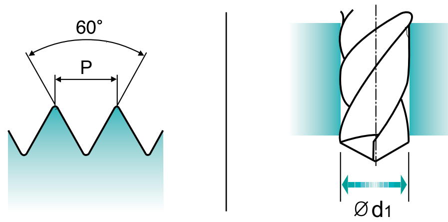
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 371
DIN 376

Hole type
2.5×D







Material groups VA NW | HSS-E | DIN 371/376 | 4H | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE15136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE15156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TBE15196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE15176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TBE15496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE15206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE15226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE15246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE15266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE15286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE15316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE15346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE15366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE15396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE15426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE15466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE15506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE15546	20	110	44	11	9	12	3	12
M16	× 2	TBE15606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE15656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE15706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE15746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE15786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE15866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE15946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TBE16 SERIES

M ISO metric coarse threads DIN 13

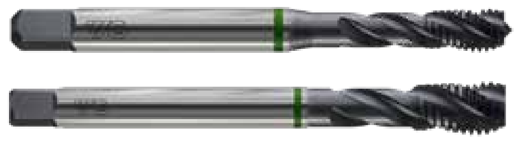
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

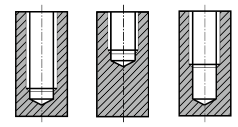
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

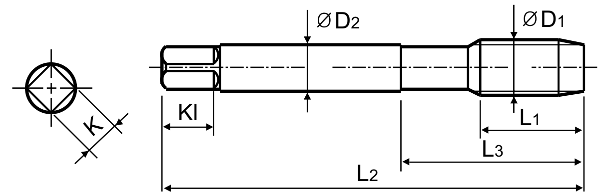
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

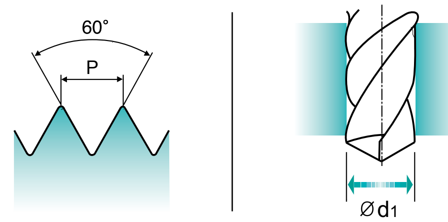
DIN 371
DIN 376



Hole type
2.5×D







Material groups VA NW | HSS-E | DIN 371/376 | 6H+0.1 | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE16136	8	45	13	2.8	2.1	5	3	1.7
M2.2	× 0.45	TBE16156	8	45	13	2.8	2.1	5	3	1.85
*M2.3	× 0.4	TBE16196	8	45	13	2.8	2.1	5	3	2
M2.5	× 0.45	TBE16176	9	50	15	2.8	2.1	5	3	2.15
*M2.6	× 0.45	TBE16496	9	50	15	2.8	2.1	5	3	2.2
M3	× 0.5	TBE16206	6	56	18	3.5	2.7	6	3	2.6
M3.5	× 0.6	TBE16226	7	56	20	4	3	6	3	3
M4	× 0.7	TBE16246	7	63	21	4.5	3.4	6	3	3.4
M4.5	× 0.75	TBE16266	8	70	25	6	4.9	8	3	3.8
M5	× 0.8	TBE16286	8	70	25	6	4.9	8	3	4.3
M6	× 1	TBE16316	10	80	30	6	4.9	8	3	5.1
M7	× 1	TBE16346	10	80	30	7	5.5	8	3	6.1
M8	× 1.25	TBE16366	13	90	35	8	6.2	9	3	6.9
M9	× 1.25	TBE16396	13	90	35	9	7	10	3	7.9
M10	× 1.5	TBE16426	15	100	39	10	8	11	3	8.6
M11	× 1.5	TBE16466	17	100	40	8	6.2	9	3	9.6
M12	× 1.75	TBE16506	18	110	44	9	7	10	3	10.3
M14	× 2	TBE16546	20	110	44	11	9	12	3	12.1
M16	× 2	TBE16606	20	110	44	12	9	12	3	14.1
M18	× 2.5	TBE16656	25	125	50	14	11	14	4	15.6
M20	× 2.5	TBE16706	25	140	54	16	12	15	4	17.6
M22	× 2.5	TBE16746	25	140	54	18	14.5	17	4	19.6
M24	× 3	TBE16786	30	160	60	18	14.5	17	4	21.1
M27	× 3	TBE16866	30	160	60	20	16	19	4	24.1
M30	× 3.5	TBE16946	35	180	70	22	18	21	4	26.6

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP INOX

TBE17 SERIES

M ISO metric coarse threads DIN 13

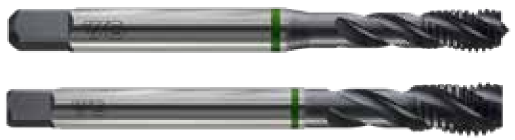
- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

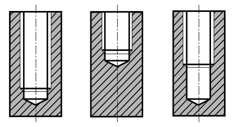
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

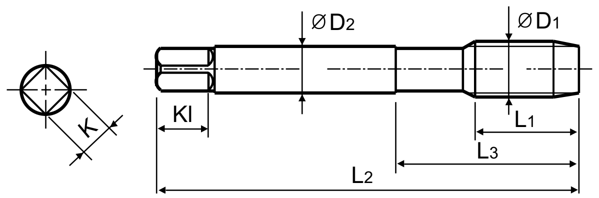
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

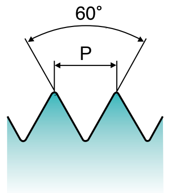
DIN 371
DIN 376

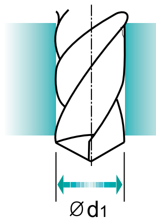


Hole type
2.5×D









Material groups VA NW | HSS-E | DIN 371/376 | 6G | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE17136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE17156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TBE17196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE17176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TBE17496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE17206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE17226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE17246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE17266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE17286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE17316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE17346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE17366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE17396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE17426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE17466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE17506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE17546	20	110	44	11	9	12	3	12
M16	× 2	TBE17606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE17656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE17706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE17746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE17786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE17866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE17946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TBE18 SERIES

M ISO metric coarse threads DIN 13

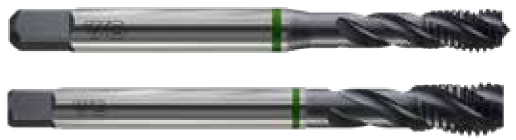
- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

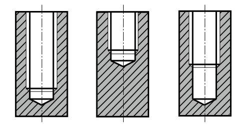
▶ With recessed threads for machine tapping of deep blind holes.
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

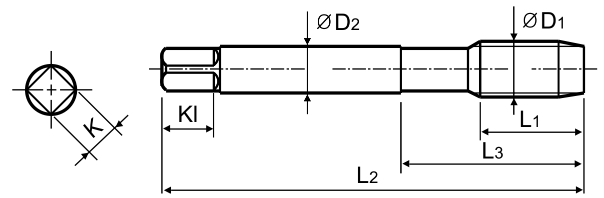
▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

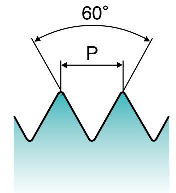
DIN 371
DIN 376

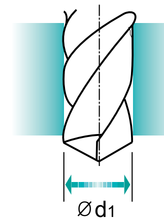


Hole type
2.5×D









Material groups VA NW | HSS-E | DIN 371/376 | 7G | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TBE18136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TBE18156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TBE18196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TBE18176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TBE18496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TBE18206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TBE18226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TBE18246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TBE18266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TBE18286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TBE18316	10	80	30	6	4.9	8	3	5
M7	× 1	TBE18346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TBE18366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TBE18396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TBE18426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TBE18466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TBE18506	18	110	44	9	7	10	3	10.2
M14	× 2	TBE18546	20	110	44	11	9	12	3	12
M16	× 2	TBE18606	20	110	44	12	9	12	3	14
M18	× 2.5	TBE18656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TBE18706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TBE18746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TBE18786	30	160	60	18	14.5	17	4	21
M27	× 3	TBE18866	30	160	60	20	16	19	4	24
M30	× 3.5	TBE18946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP INOX

TCH14 SERIES

M ISO metric coarse threads DIN 13

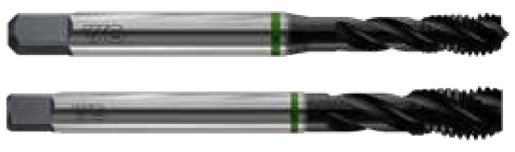
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

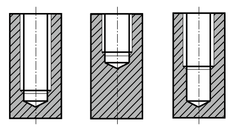
- ▶ With recessed threads for machine tapping of deep blind holes.
- ▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

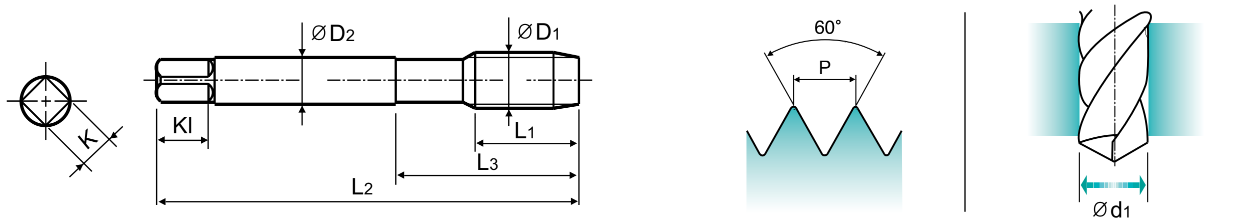
- ▶ Mit abgesetztem Gewinde zum Schneiden von tiefen Sacklochgewinden.
- ▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 371
DIN 376



Hole type
2.5×D





Material groups: VA NW | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Hardslick | p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Hardslick	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TCH14136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TCH14156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TCH14196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TCH14176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TCH14496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TCH14206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TCH14226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TCH14246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TCH14266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TCH14286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TCH14316	10	80	30	6	4.9	8	3	5
M7	× 1	TCH14346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TCH14366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TCH14396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TCH14426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TCH14466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TCH14506	18	110	44	9	7	10	3	10.2
M14	× 2	TCH14546	20	110	44	11	9	12	3	12
M16	× 2	TCH14606	20	110	44	12	9	12	3	14
M18	× 2.5	TCH14656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TCH14706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TCH14746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TCH14786	30	160	60	18	14.5	17	4	21
M27	× 3	TCH14866	30	160	60	20	16	19	4	24
M30	× 3.5	TCH14946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TQ853 SERIES

M ISO metric coarse threads DIN 13

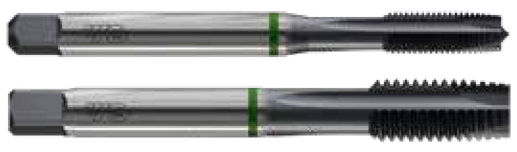
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

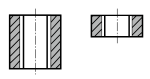
- ▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

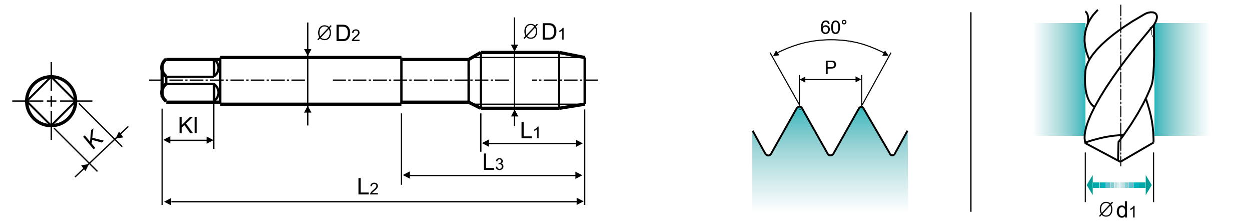
- ▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

DIN 371
DIN 376



Hole type
3.0×D





Material groups: VA | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ853136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ853156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ853176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ853206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ853226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TQ853246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ853266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ853286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TQ853316	17	80	30	6	4.9	8	3	5
M7	× 1	TQ853346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TQ853366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ853426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TQ853506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TR853 SERIES

M ISO metric coarse threads DIN 13

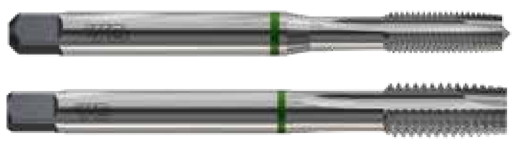
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

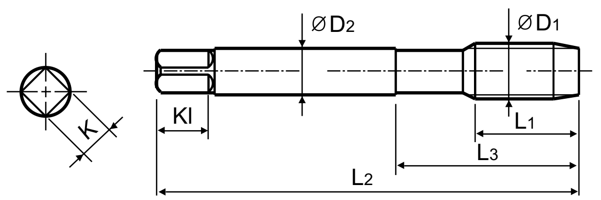
▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

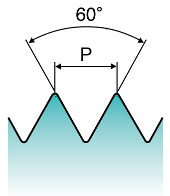
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

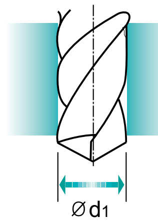
DIN 371
DIN 376



Hole type
3.0×D







Material groups: VA | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Bright | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR853136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR853156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR853176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR853206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR853226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TR853246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR853266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR853286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TR853316	17	80	30	6	4.9	8	3	5
M7	× 1	TR853346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TR853366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR853426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TR853506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP INOX

TB623 SERIES

M ISO metric coarse threads DIN 13

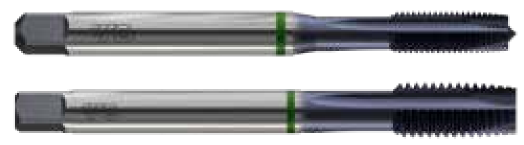
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

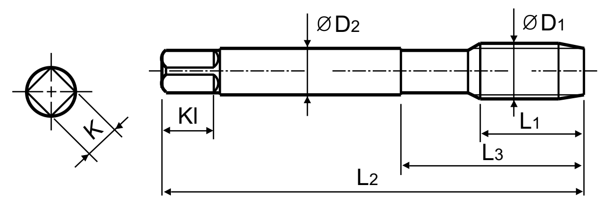
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

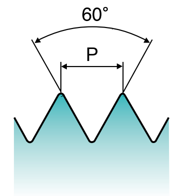
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

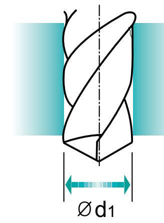
DIN 371
DIN 376



Hole type
3.0×D







Material groups: VA NW | HSS-E | DIN 371/376 | 6HX | 60° | C | R40 | Vap | p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TB623136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TB623156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TB623196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TB623176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TB623496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TB623206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TB623226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TB623246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TB623266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TB623286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TB623316	17	80	30	6	4.9	8	3	5
M7	× 1	TB623346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TB623366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TB623396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TB623426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TB623466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TB623506	24	110	44	9	7	10	4	10.2
M14	× 2	TB623546	26	110	44	11	9	12	4	12
M16	× 2	TB623606	27	110	44	12	9	12	4	14
M18	× 2.5	TB623656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TB623706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TB623746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TB623786	34	160	60	18	14.5	17	4	21
M27	× 3	TB623866	36	160	60	20	16	19	4	24
M30	× 3.5	TB623946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TCH23 SERIES

M — ISO metric coarse threads DIN 13

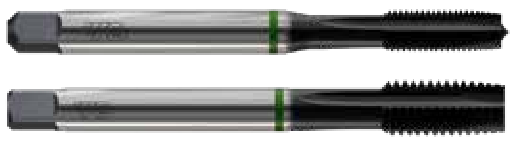
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

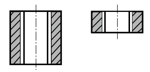
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

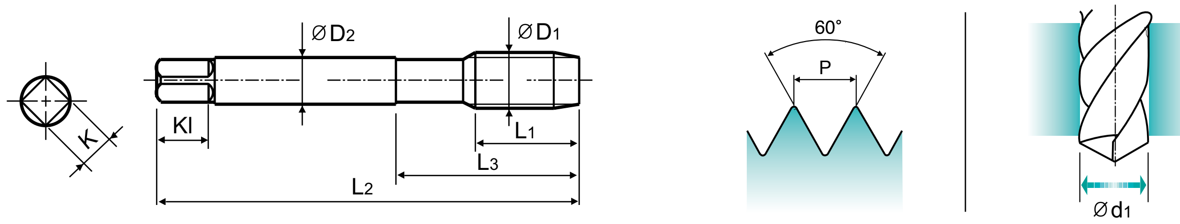
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 376



Hole type
3.0×D





Material groups VA NW | HSS-E | DIN 371/376 | 6HX | 60° | C | R40 | Hardslick

p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Hardslick	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TCH23136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TCH23156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TCH23196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TCH23176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TCH23496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TCH23206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TCH23226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TCH23246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TCH23266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TCH23286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TCH23316	17	80	30	6	4.9	8	3	5
M7	× 1	TCH23346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TCH23366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TCH23396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TCH23426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TCH23466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TCH23506	24	110	44	9	7	10	4	10.2
M14	× 2	TCH23546	26	110	44	11	9	12	4	12
M16	× 2	TCH23606	27	110	44	12	9	12	4	14
M18	× 2.5	TCH23656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TCH23706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TCH23746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TCH23786	34	160	60	18	14.5	17	4	21
M27	× 3	TCH23866	36	160	60	20	16	19	4	24
M30	× 3.5	TCH23946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TB183 SERIES

MF — ISO metric fine threads DIN 13

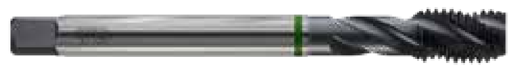
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

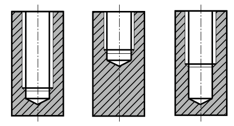
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

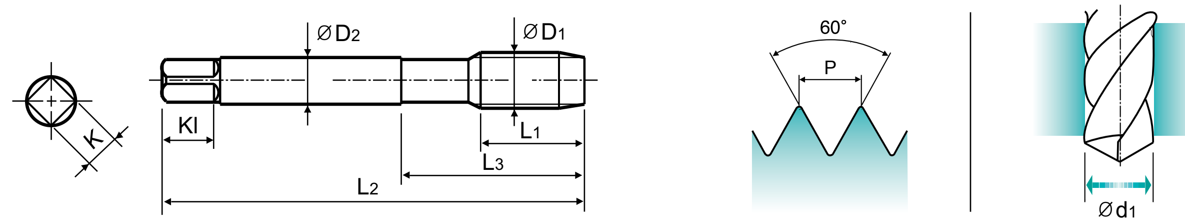
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 374



Hole type
2.5×D





Material groups VA NW | HSS-E | DIN 374 | 6H | 60° | C | R40 | Vap

p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TB183256	5	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TB183296	5	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TB183326	8	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TB183336	5	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TB183356	10	80	30	5.5	4.3	7	3	6.2
M8	× 1	TB183376	10	90	36	6	4.9	8	3	7
M8	× 0.75	TB183386	8	80	30	6	4.9	8	3	7.2
M10	× 1.25	TB183436	16	100	40	7	5.5	8	3	8.8
M10	× 1	TB183446	10	90	36	7	5.5	8	3	9
M10	× 0.75	TB183456	10	90	36	7	5.5	8	3	9.2
M12	× 1.5	TB183516	15	100	40	9	7	10	3	10.5
M12	× 1.25	TB183526	15	100	40	9	7	10	3	10.8
M12	× 1	TB183536	11	100	40	9	7	10	3	11
M14	× 1.5	TB183556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TB183566	15	100	40	11	9	12	3	12.8
M16	× 1.5	TB183616	15	100	40	12	9	12	3	14.5
M18	× 1.5	TB183676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TB183726	17	125	50	16	12	15	4	18.5
M22	× 1.5	TB183766	17	125	50	18	14.5	17	4	20.5
M24	× 1.5	TB183806	20	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TB904 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

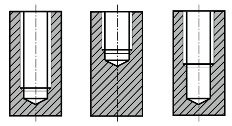
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

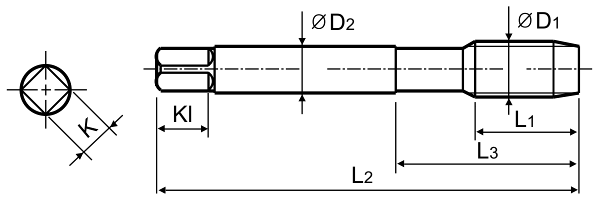
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

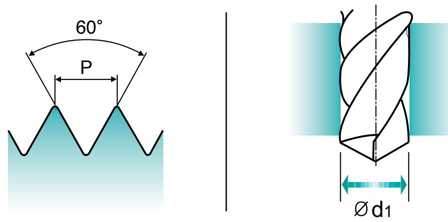
DIN 371

DIN 376

Hole type
2.5×D







Material groups: VA NW | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Vap

p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TB904162	6	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TB904202	7	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TB904242	7	56	20	4	3	6	3	2.85
#8	- 32UNC	TB904282	8	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TB904322	10	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TB904362	10	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TB904402	13	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TB904442	14	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TB904482	16	100	39	9	7	10	3	8
7/16	- 14UNC	TB904522	17	100	40	8	6.2	9	3	9.4
1/2	- 13UNC	TB904562	20	110	44	9	7	10	3	10.75
9/16	- 12UNC	TB904602	20	110	44	11	9	12	3	12.25
5/8	- 11UNC	TB904642	22	110	44	12	9	12	3	13.5
3/4	- 10UNC	TB904702	25	125	50	14	11	14	4	16.5
7/8	- 9UNC	TB904742	27	140	54	18	14.5	17	4	19.5
1	- 8UNC	TB904782	30	160	60	20	16	19	4	22.25
1-1/8	- 7UNC	TB904822	35	180	65	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TB924 SERIES

UNF

Unified fine threads

Unified Feingewinde
UNF
Unificato passo grosso

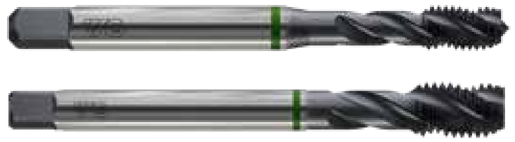
Machine taps
Maschinengewindebohrer

▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

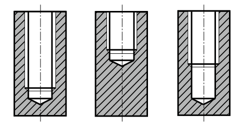
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

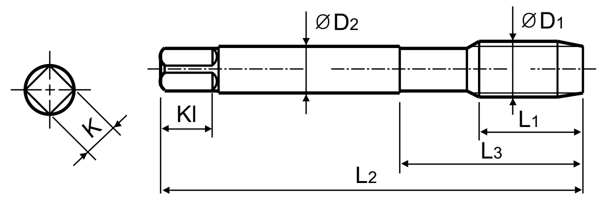
DIN 371

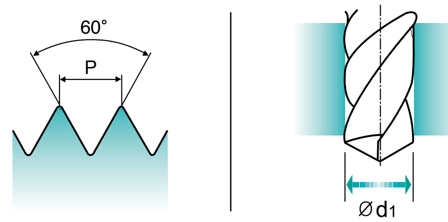
DIN 374



Hole type
2.5×D







Material groups: VA NW | HSS-E | DIN 371/376 | 2B | 60° | C | R40 | Vap

p.B233

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TB924182	6	56	18	3.5	2.7	6	3	2.4
#5	- 44UNF	TB924222	7	56	18	3.5	2.7	6	3	2.7
#6	- 40UNF	TB924262	7	56	20	4	3	6	3	3
#8	- 36UNF	TB924302	8	63	21	4.5	3.4	6	3	3.5
#10	- 32UNF	TB924342	10	70	25	6	4.9	8	3	4.1
#12	- 28UNF	TB924382	10	80	30	6	4.9	8	3	4.7
1/4	- 28UNF	TB924422	10	80	30	7	5.5	8	3	5.5
5/16	- 24UNF	TB924462	10	90	35	8	6.2	9	3	6.9
3/8	- 24UNF	TB924502	10	100	39	9	7	10	3	8.5
7/16	- 20UNF	TB924542	13	100	40	8	6.2	9	3	9.9
1/2	- 20UNF	TB924582	13	100	40	9	7	10	3	11.5
9/16	- 18UNF	TB924622	15	100	40	11	9	12	3	12.9
5/8	- 18UNF	TB924662	15	100	40	12	9	12	3	14.5
3/4	- 16UNF	TB924722	17	110	44	14	11	14	4	17.5
7/8	- 14UNF	TB924762	17	125	50	18	14.5	17	4	20.5
1	- 12UNF	TB924802	20	140	54	18	14.5	17	4	23.25
1-1/8	- 12UNF	TB924842	22	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP INOX

TB123 SERIES

MF

ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

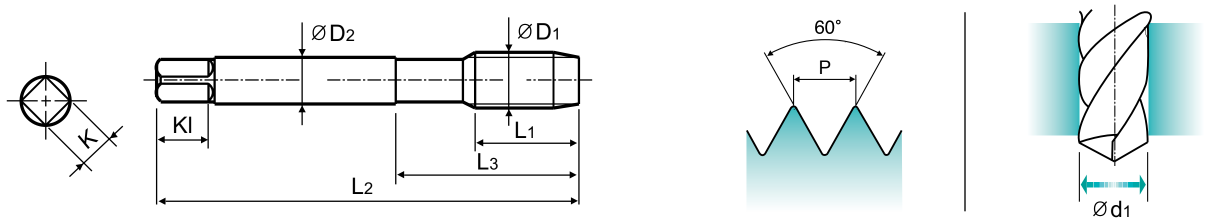
Machine taps
Maschinengewindebohrer

▶ Suitable for through hole in more cutting speed than other taps due to thick web.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 374

Hole type
3.0×D



Material groups: VA NW | HSS-E | DIN 374 | 6HX | 60° | C | Vap | p.B233

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TB123256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TB123296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TB123326	13	80	30	4.5	3.4	6	3	5.2
M6	× 0.5	TB123336	13	80	30	4.5	3.4	6	3	5.5
M7	× 0.75	TB123356	14	80	30	5.5	4.3	7	3	6.2
M8	× 1	TB123376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TB123386	14	80	30	6	4.9	8	3	7.2
M10	× 1.25	TB123436	22	100	40	7	5.5	8	3	8.8
M10	× 1	TB123446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TB123456	18	90	36	7	5.5	8	3	9.2
M12	× 1.5	TB123516	22	100	40	9	7	10	4	10.5
M12	× 1.25	TB123526	22	100	40	9	7	10	3	10.8
M12	× 1	TB123536	18	100	40	9	7	10	3	11
M14	× 1.5	TB123556	22	100	40	11	9	12	3	12.5
M14	× 1.25	TB123566	22	100	40	11	9	12	3	12.8
M16	× 1.5	TB123616	22	100	40	12	9	12	3	14.5
M18	× 1.5	TB123676	25	110	44	14	11	14	4	16.5
M20	× 1.5	TB123726	25	125	50	16	12	15	4	18.5
M22	× 1.5	TB123766	25	125	50	18	14.5	17	4	20.5
M24	× 1.5	TB123806	27	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP INOX

TB264 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

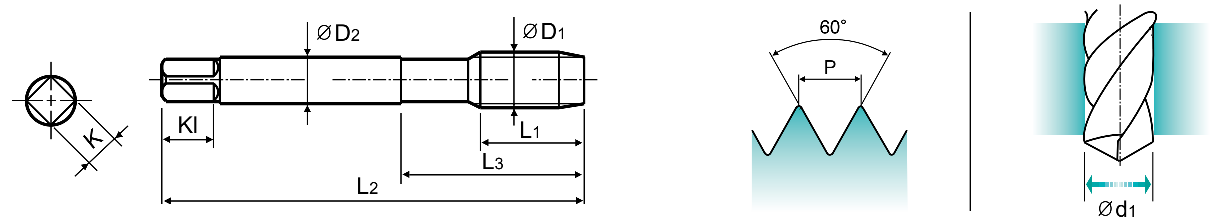
Machine taps
Maschinengewindebohrer

▶ Suitable for through hole in more cutting speed than other taps due to thick web.

▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 376

Hole type
3.0×D



Material groups: VA NW | HSS-E | DIN 371/376 | 2B | 60° | C | Vap | p.B233

Recommended ToolHolder

	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TB264162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TB264202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TB264242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TB264282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TB264322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TB264362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TB264402	17	80	30	7	5.5	8	3	5.2
5/16	- 18UNC	TB264442	20	90	35	8	6.2	9	3	6.6
3/8	- 16UNC	TB264482	22	100	39	9	7	10	3	8
7/16	- 14UNC	TB264522	22	100	44	8	6.2	9	3	9.4
1/2	- 13UNC	TB264562	25	110	44	9	7	10	3	10.75
9/16	- 12UNC	TB264602	26	110	44	11	9	12	3	12.25
5/8	- 11UNC	TB264642	27	110	44	12	9	12	3	13.5
3/4	- 10UNC	TB264702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TB264742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TB264782	36	160	60	20	16	17	4	22.25
1-1/8	- 7UNC	TB264822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

YG TAP INOX

TB274 SERIES

UNF

Unified fine threads

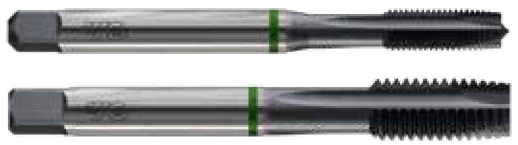
Unified Feingewinde
UNF
Unificato passo fine

Machine taps
Maschinengewindebohrer

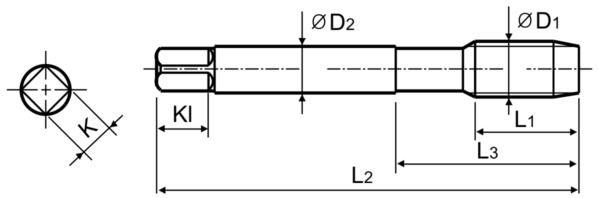
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

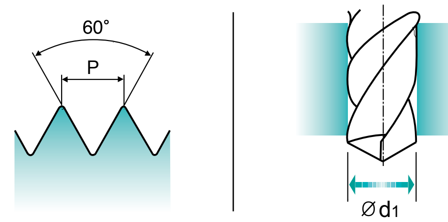
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

DIN 371
DIN 374



Hole type
3.0×D





Material groups: VA NW | HSS-E | DIN 371/376 | 2B | 60° | C | Vap

p.B233

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE		TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1			Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	-	48UNF	TB274182	11	56	18	3.5	2.7	6	3	2.4
#5	-	44UNF	TB274222	11	56	18	3.5	2.7	6	3	2.7
#6	-	40UNF	TB274262	12	56	20	4	3	6	3	3
#8	-	36UNF	TB274302	13	63	21	4.5	3.4	6	3	3.5
#10	-	32UNF	TB274342	15	70	25	6	4.9	8	3	4.1
#12	-	28UNF	TB274382	16	80	30	6	4.9	8	3	4.7
1/4	-	28UNF	TB274422	17	80	30	7	5.5	8	3	5.5
5/16	-	24UNF	TB274462	17	90	35	8	6.2	9	3	6.9
3/8	-	24UNF	TB274502	18	100	39	9	7	10	3	8.5
7/16	-	20UNF	TB274542	22	100	40	8	6.2	9	3	9.9
1/2	-	20UNF	TB274582	22	100	40	9	7	10	3	11.5
9/16	-	18UNF	TB274622	22	100	40	11	9	12	3	12.9
5/8	-	18UNF	TB274662	22	100	40	12	9	12	3	14.5
3/4	-	16UNF	TB274722	25	110	44	14	11	14	4	17.5
7/8	-	14UNF	TB274762	26	125	50	18	14.5	17	4	20.5
1	-	12UNF	TB274802	28	140	54	18	14.5	17	4	23.25
1-1/8	-	12UNF	TB274842	30	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○					

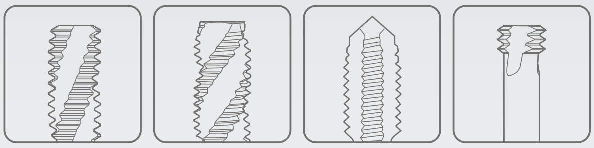
YG TAP INOX

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TB711	TQ813	TR813	TB914 TB183 TB904 TB924	TI914	TBE15	TBE16	TBE17	TBE18	TCH14	TQ853	TR853	TB623 TB123 TB264 TB274	TCH23
					Vc (m/min)													
P	1	Non-alloy steel	125		15-20	15-20	15-20	15-20	20-25	15-20	15-20	15-20	15-20	20-25	15-20	15-20	15-20	20-25
P	2	Non-alloy steel	190	13	15-20	15-20	15-20	15-20	20-25	15-20	15-20	15-20	15-20	20-25	15-20	15-20	15-20	20-25
P	3	Non-alloy steel	250	25		12-18	12-18	12-18	18-24	12-18	12-18	12-18	12-18	18-24	12-18	12-18	12-18	18-24
P	4	Non-alloy steel	270	28		10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	10-15	15-20
P	6	Low alloy steel	180	10		10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	10-15	15-20
M	12	Stainless steel	200	15	7-10	7-10	7-10	7-10	10-13	7-10	7-10	7-10	7-10	10-13	7-10	7-10	7-10	10-13
M	13	Stainless steel	240	23	5-8	5-8	5-8	5-8	8-11	5-8	5-8	5-8	5-8	8-11	5-8	5-8	5-8	8-11
M	14	Stainless steel	180	10	4-6	4-6	4-6	4-6	6-8	4-6	4-6	4-6	4-6	6-8	4-6	4-6	4-6	6-8
N	21	Aluminum-wrought alloy	60		10-15													
N	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20													
S	31	Heat Resistant Super Alloys	200	15		10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	10-15	15-20
S	36	Titanium Alloys	400Rm			10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	10-15	15-20

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

Global Cutting Tool Leader YG-1



THREADING

Leading Through Innovation

SOLID CARBIDE & HSS-E

YG TAP CAST IRON

HSS YG Gewindebohrer Guss

- For Cast Iron or Similar Work Materials
- Für Gusseisen oder ähnliche Werkstoffe

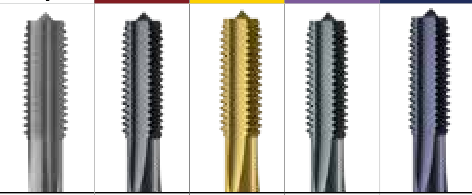
SELECTION GUIDE

THREADING TOOLS

SOLID CARBIDE & HSS-E YG TAP CAST IRON

For Cast Iron or Similar Work Materials

HOLE TYPE		Max. 2.0xD Blind / Through Hole				
TOOL MATERIAL		CARBIDE	HSS-E			
CHAMFER LEAD ACC. TO DIN2197		C	C	C	C	C
FLUTE TYPE		Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute
SPIRAL FLUTE ANGLE		-	-	-	-	-
SERIES M	DIN371/376	T0993 (p.B237)	TE821 (p.B238)	TD821 (p.B239)	TI821 (p.B240)	TY821 (p.B241)
M	DIN352					
M	DIN357/LONG					
MF	DIN374		TE403 (p.B242)			
MF	DIN2181					
UNC	DIN371/376		TE434 (p.B243)			
UNC	DIN351					
UNF	DIN371/374		TE454 (p.B244)			
UNF	DIN2181					
BSW	DIN2182/2183					
BSW	DIN351					
G(BSP)	DIN5156/5157					
EG-M	DIN371/376					
EG-UNC	DIN371/376					
EG-UNF	DIN371/374					
SURFACE TREATMENT		Bright	NI	TiN	TiCN	TiAlN
MODEL						



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B245

ISO	VDI 3323	Material Description	Composition / Structure	Heat Treatment	HB	HRc	T0993	TE821	TD821	TI821	TY821
P	1	Non-alloy steel	About 0.15% C	Annealed	125						
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13					
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25					
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28					
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32					
P	6	Low alloy steel		Annealed	180	10					
P	7	Low alloy steel		Quenched & Tempered	275	29					
P	8	Low alloy steel		Quenched & Tempered	300	32					
P	9	Low alloy steel		Quenched & Tempered	350	38					
P	10	High alloyed steel, and tool steel		Annealed	200	15					
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35					
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15					
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23					
M	14	Stainless steel	Austenitic		180	10					
K	15	Grey cast iron	Pearlitic / ferritic		180	10	◎	◎	◎	◎	◎
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26	◎	◎	◎	◎	◎
K	17	Nodular cast iron	Ferritic		160	3	◎	◎	◎	◎	◎
K	18	Nodular cast iron	Pearlitic		250	25	◎	◎	◎	◎	◎
K	19	Malleable cast iron	Ferritic		130		○	○	○	○	○
K	20	Malleable cast iron	Pearlitic		230	21	○	○	○	○	○
N	21	Aluminum-wrought alloy	Not Curable		60						
N	22	Aluminum-wrought alloy	Curable	Hardened	100						
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎				
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90						
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130		◎				
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110						
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90			○	◎	◎	◎
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100						
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic								
N	30	Non Metallic Materials	Rubber, Wood, etc.								
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15					
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30					
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25					
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38					
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34					
S	36	Titanium Alloys	Pure Titanium		400 Rm						
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm						
H	38	Hardened steel		Hardened	550	55					
H	39	Hardened steel		Hardened	630	60					
H	40	Chilled Cast Iron		Cast	400	42	◎				
H	41	Hardened Cast Iron		Hardened	550	55					

YG TAP CAST IRON

T0993 SERIES

M ISO metric coarse threads DIN 13

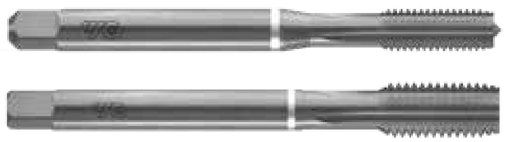
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

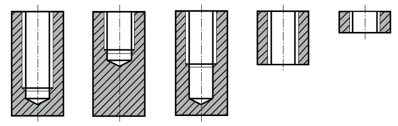
▶ Carbide tap can increase tool life longer than HSS taps due to higher hardness. Suitable for cast iron and high silicon aluminiums.

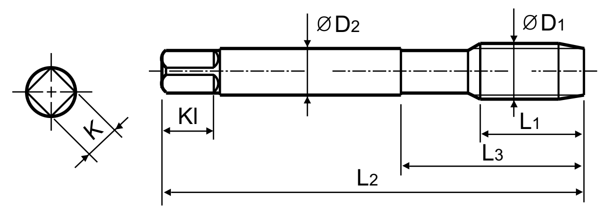
▶ Der VHM-Gewindebohrer kann die Lebensdaüer gegenuber HSS-Gewindebohrern erhöhen dank der größeren Härte. Geeignet für Guss und Aluminium mit hohem Siliziumanteil

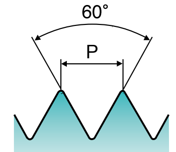
DIN 371
DIN 376

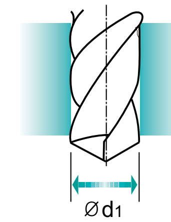


Hole type
2.0×D









p.B245

Plain Shank	Page
TAPPING ER CHUCK	D215 -220
TAPPING CHUCK	D221 -228
ONE STEP TAPPING CHUCK	D211 -213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M3	×0.5	T0993206	11	56	18	3.5	2.7	6	3	2.5
M3.5	×0.6	T0993226	12	56	20	4	3	6	3	2.9
M4	×0.7	T0993246	13	63	21	4.5	3.4	6	3	3.3
M5	×0.8	T0993286	15	70	25	6	4.9	8	4	4.2
M6	×1	T0993316	17	80	30	6	4.9	8	4	5
M8	×1.25	T0993366	20	90	35	8	6.2	9	4	6.8
M10	×1.5	T0993426	22	100	39	10	8	11	4	8.5
M12	×1.75	T0993506	24	110	44	9	7	10	4	10.2
M14	×2	T0993546	26	110	44	11	9	12	4	12
M16	×2	T0993606	27	110	44	12	9	12	4	14
M18	×2.5	T0993656	30	125	50	14	11	14	4	15.5
M20	×2.5	T0993706	32	140	54	16	12	15	4	17.5

▶DIN 371(M2~M10) and DIN 376(M11~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended			◎		◎															◎	

YG TAP CAST IRON

TE821 SERIES

M ISO metric coarse threads DIN 13

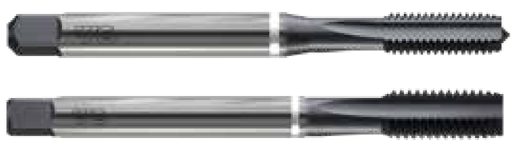
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

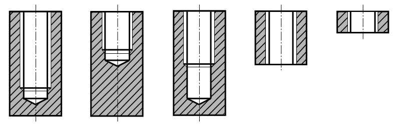
▶ Suitable for tapping cast iron or similar work materials.

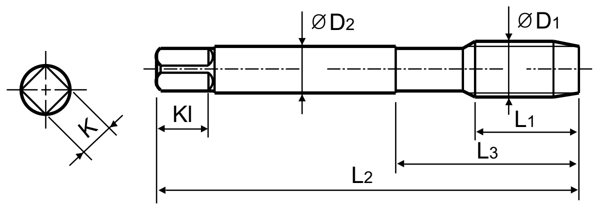
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen

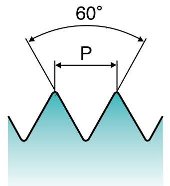
DIN 371
DIN 376

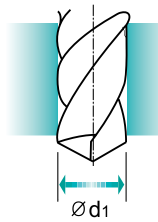


Hole type
2.0×D









Material groups GG | HSS-E | DIN 371/376 | 6HX | 60° | C | Nitride | p.B245

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215 -220
◎	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TE821136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TE821156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TE821196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TE821176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TE821496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TE821206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TE821226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TE821246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TE821266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TE821286	15	70	25	6	4.9	8	4	4.2
M6	× 1	TE821316	17	80	30	6	4.9	8	4	5
M7	× 1	TE821346	17	80	30	7	5.5	8	4	6
M8	× 1.25	TE821366	20	90	35	8	6.2	9	4	6.8
M9	× 1.25	TE821396	20	90	35	9	7	10	4	7.8
M10	× 1.5	TE821426	22	100	39	10	8	11	4	8.5
M11	× 1.5	TE821466	22	100	40	8	6.2	9	4	9.5
M12	× 1.75	TE821506	24	110	44	9	7	10	4	10.2
M14	× 2	TE821546	26	110	44	11	9	12	4	12
M16	× 2	TE821606	27	110	44	12	9	12	4	14
M18	× 2.5	TE821656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TE821706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TE821746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TE821786	34	160	60	18	14.5	17	4	21
M27	× 3	TE821866	36	160	60	20	16	19	4	24
M30	× 3.5	TE821946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							○														

YG TAP CAST IRON

TD821 SERIES

M ISO metric coarse threads DIN 13

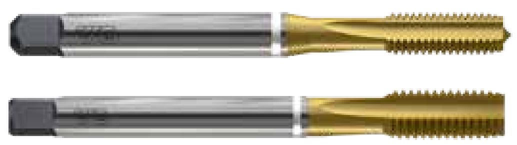
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

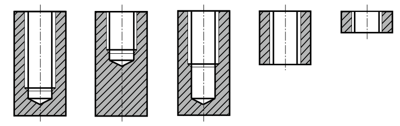
▶ Suitable for tapping cast iron or similar work materials.

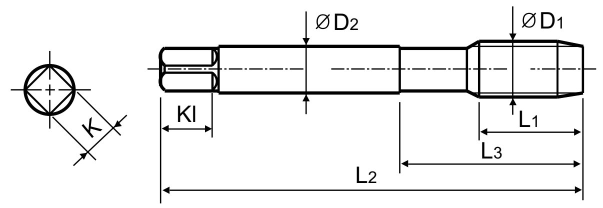
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen

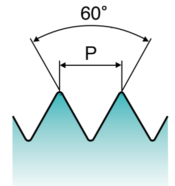
DIN 371
DIN 376

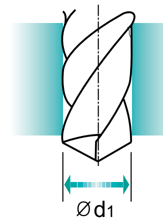


Hole type
2.0×D









Material groups GG | HSS-E | DIN 371/376 | 6HX | 60° | C | TiN | p.B245

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215 -220
◎	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Kl	Z	Ød1
M2	× 0.4	TD821136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TD821156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TD821196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TD821176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TD821496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TD821206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TD821226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TD821246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TD821266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TD821286	15	70	25	6	4.9	8	4	4.2
M6	× 1	TD821316	17	80	30	6	4.9	8	4	5
M7	× 1	TD821346	17	80	30	7	5.5	8	4	6
M8	× 1.25	TD821366	20	90	35	8	6.2	9	4	6.8
M9	× 1.25	TD821396	20	90	35	9	7	10	4	7.8
M10	× 1.5	TD821426	22	100	39	10	8	11	4	8.5
M11	× 1.5	TD821466	22	100	40	8	6.2	9	4	9.5
M12	× 1.75	TD821506	24	110	44	9	7	10	4	10.2
M14	× 2	TD821546	26	110	44	11	9	12	4	12
M16	× 2	TD821606	27	110	44	12	9	12	4	14
M18	× 2.5	TD821656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TD821706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TD821746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TD821786	34	160	60	18	14.5	17	4	21
M27	× 3	TD821866	36	160	60	20	16	19	4	24
M30	× 3.5	TD821946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							◎														

YG TAP CAST IRON

TI821 SERIES

M ISO metric coarse threads DIN 13

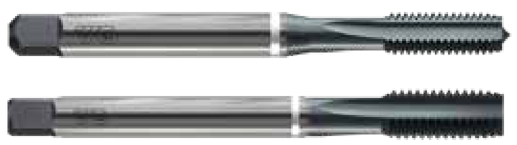
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

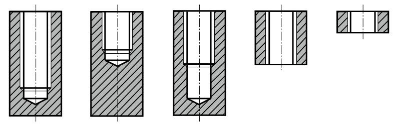
▶ Suitable for tapping cast iron or similar work materials.

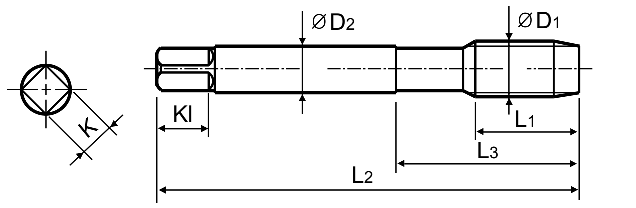
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen

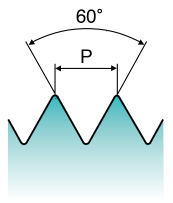
DIN 371
DIN 376

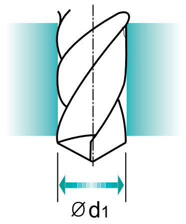


Hole type
2.0×D









Material groups GG | HSS-E | DIN 371/376 | 6HX | 60° | C | TiCN | p.B245

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	TiCN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TI821136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TI821156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TI821196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TI821176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TI821496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TI821206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TI821226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TI821246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TI821266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TI821286	15	70	25	6	4.9	8	4	4.2
M6	× 1	TI821316	17	80	30	6	4.9	8	4	5
M7	× 1	TI821346	17	80	30	7	5.5	8	4	6
M8	× 1.25	TI821366	20	90	35	8	6.2	9	4	6.8
M9	× 1.25	TI821396	20	90	35	9	7	10	4	7.8
M10	× 1.5	TI821426	22	100	39	10	8	11	4	8.5
M11	× 1.5	TI821466	22	100	40	8	6.2	9	4	9.5
M12	× 1.75	TI821506	24	110	44	9	7	10	4	10.2
M14	× 2	TI821546	26	110	44	11	9	12	4	12
M16	× 2	TI821606	27	110	44	12	9	12	4	14
M18	× 2.5	TI821656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TI821706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TI821746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TI821786	34	160	60	18	14.5	17	4	21
M27	× 3	TI821866	36	160	60	20	16	19	4	24
M30	× 3.5	TI821946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							◎														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP CAST IRON

TY821 SERIES

M ISO metric coarse threads DIN 13

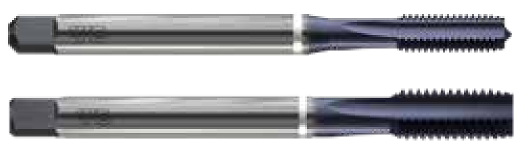
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

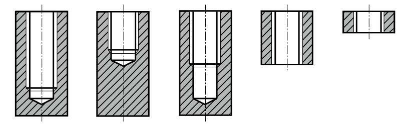
▶ Suitable for tapping cast iron or similar work materials.

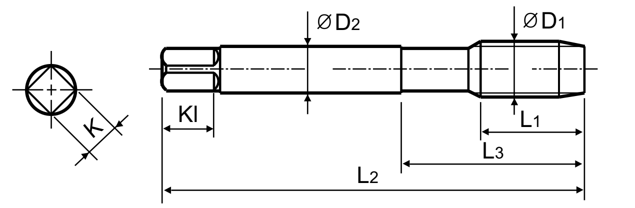
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen

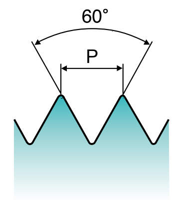
DIN 371
DIN 376

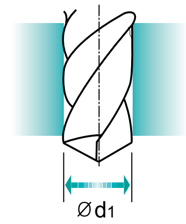


Hole type
2.0×D









Material groups GG | HSS-E | DIN 371/376 | 6HX | 60° | C | TiAlN | p.B245

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY821136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY821156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY821196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY821176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY821496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY821206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY821226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TY821246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY821266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY821286	15	70	25	6	4.9	8	4	4.2
M6	× 1	TY821316	17	80	30	6	4.9	8	4	5
M7	× 1	TY821346	17	80	30	7	5.5	8	4	6
M8	× 1.25	TY821366	20	90	35	8	6.2	9	4	6.8
M9	× 1.25	TY821396	20	90	35	9	7	10	4	7.8
M10	× 1.5	TY821426	22	100	39	10	8	11	4	8.5
M11	× 1.5	TY821466	22	100	40	8	6.2	9	4	9.5
M12	× 1.75	TY821506	24	110	44	9	7	10	4	10.2
M14	× 2	TY821546	26	110	44	11	9	12	4	12
M16	× 2	TY821606	27	110	44	12	9	12	4	14
M18	× 2.5	TY821656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TY821706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TY821746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TY821786	34	160	60	18	14.5	17	4	21
M27	× 3	TY821866	36	160	60	20	16	19	4	24
M30	× 3.5	TY821946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							◎														

YG TAP CAST IRON

TE403 SERIES

MF

ISO metric fine threads DIN 13

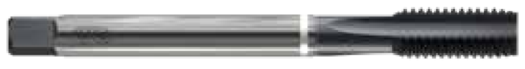
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

Machine taps
Maschinengewindebohrer

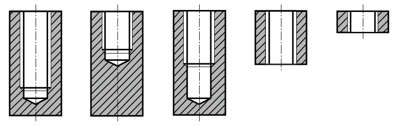
▶ Suitable for tapping cast iron or similar work materials due to nitriding.

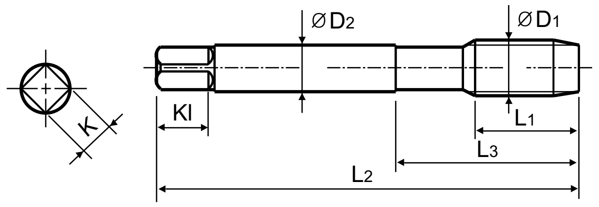
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung

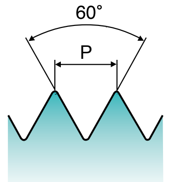
DIN 374

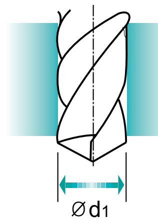


Hole type
2.0×D









Material groups: GG | HSS-E | DIN 374 | 6HX | 60° | C | Nitride | p.B245

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Ni	L1	L2	L3	ØD2	K	KI	Z	Ød1
M4	× 0.5	TE403256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TE403296	11	70	25	3.5	2.7	6	4	4.5
M6	× 0.75	TE403326	13	80	30	4.5	3.4	6	4	5.2
M6	× 0.5	TE403336	13	80	30	4.5	3.4	6	4	5.5
M7	× 0.75	TE403356	14	80	30	5.5	4.3	7	4	6.2
M8	× 1	TE403376	17	90	36	6	4.9	8	4	7
M8	× 0.75	TE403386	14	80	30	6	4.9	8	4	7.2
M10	× 1.25	TE403436	22	100	40	7	5.5	8	4	8.8
M10	× 1	TE403446	18	90	36	7	5.5	8	4	9
M10	× 0.75	TE403456	18	90	36	7	5.5	8	4	9.2
M12	× 1.5	TE403516	22	100	40	9	7	10	4	10.5
M12	× 1.25	TE403526	22	100	40	9	7	10	4	10.8
M12	× 1	TE403536	18	100	40	9	7	10	4	11
M14	× 1.5	TE403556	22	100	40	11	9	12	4	12.5
M14	× 1.25	TE403566	22	100	40	11	9	12	4	12.8
M16	× 1.5	TE403616	22	100	40	12	9	12	4	14.5
M18	× 1.5	TE403676	25	110	44	14	11	14	4	16.5
M20	× 1.5	TE403726	25	125	50	16	12	15	4	18.5
M22	× 1.5	TE403766	25	125	50	18	14.5	17	4	20.5
M24	× 1.5	TE403806	27	140	54	18	14.5	17	4	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							○														

YG TAP CAST IRON

TE434 SERIES

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

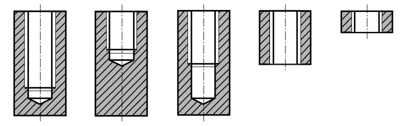
Machine taps
Maschinengewindebohrer

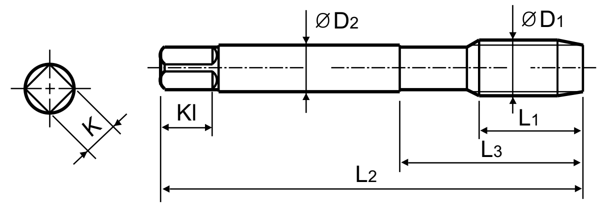
▶ Suitable for tapping cast iron or similar work materials due to nitriding.

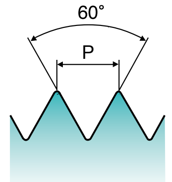
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung

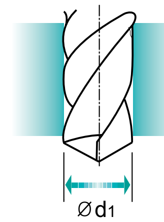
DIN 371
DIN 376

Hole type
2.0×D









Material groups: GG | HSS-E | DIN 371/376 | 2BX | 60° | C | Nitride | p.B245

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Ni	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4	- 40UNC	TE434162	11	56	18	3.5	2.7	6	3	2.3
#5	- 40UNC	TE434202	11	56	18	3.5	2.7	6	3	2.6
#6	- 32UNC	TE434242	12	56	20	4	3	6	3	2.85
#8	- 32UNC	TE434282	13	63	21	4.5	3.4	6	3	3.5
#10	- 24UNC	TE434322	15	70	25	6	4.9	8	3	3.9
#12	- 24UNC	TE434362	16	80	30	6	4.9	8	3	4.5
1/4	- 20UNC	TE434402	17	80	30	7	5.5	8	4	5.2
5/16	- 18UNC	TE434442	20	90	35	8	6.2	9	4	6.6
3/8	- 16UNC	TE434482	22	100	39	9	7	10	4	8
7/16	- 14UNC	TE434522	22	100	40	8	6.2	9	4	9.4
1/2	- 13UNC	TE434562	25	110	44	9	7	10	4	10.75
9/16	- 12UNC	TE434602	26	110	44	11	9	12	4	12.25
5/8	- 11UNC	TE434642	27	110	44	12	9	12	4	13.5
3/4	- 10UNC	TE434702	30	125	50	14	11	14	4	16.5
7/8	- 9UNC	TE434742	32	140	54	18	14.5	17	4	19.5
1	- 8UNC	TE434782	36	160	60	20	16	17	4	22.25
1-1/8	- 7UNC	TE434822	40	180	70	22	18	21	4	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							○														

YG TAP CAST IRON

TE454 SERIES

UNF

Unified fine threads

Unified Feingewinde
UNF
Unificato passo fine

Machine taps
Maschinengewindebohrer

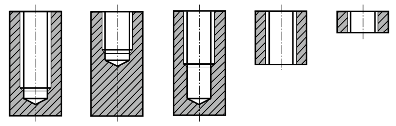
▶ Suitable for tapping cast iron or similar work materials due to nitriding.

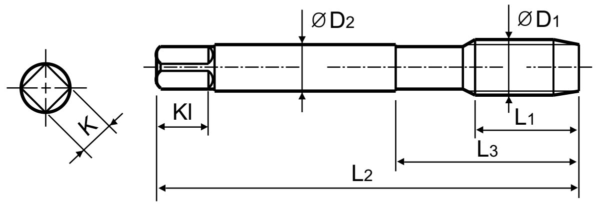
▶ Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung

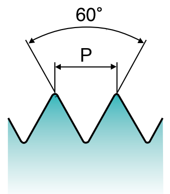
DIN 371

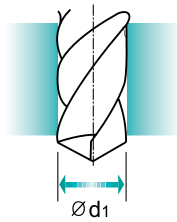
DIN 374

Hole type
2.0×D









Material groups: GG | HSS-E | DIN 371/376 | 2BX | 60° | C | Nitride

p.B245

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TE454182	11	56	18	3.5	2.7	6	3	2.4
#5	- 44UNF	TE454222	11	56	18	3.5	2.7	6	3	2.7
#6	- 40UNF	TE454262	12	56	20	4	3	6	3	3
#8	- 36UNF	TE454302	13	63	21	4.5	3.4	6	3	3.5
#10	- 32UNF	TE454342	15	70	25	6	4.9	8	3	4.1
#12	- 28UNF	TE454382	16	80	30	6	4.9	8	4	4.7
1/4	- 28UNF	TE454422	17	80	30	7	5.5	8	4	5.5
5/16	- 24UNF	TE454462	17	90	35	8	6.2	9	4	6.9
3/8	- 24UNF	TE454502	18	100	39	9	7	10	4	8.5
7/16	- 20UNF	TE454542	22	100	40	8	6.2	9	4	9.9
1/2	- 20UNF	TE454582	22	100	40	9	7	10	4	11.5
9/16	- 18UNF	TE454622	22	100	40	11	9	12	4	12.9
5/8	- 18UNF	TE454662	22	100	40	12	9	12	4	14.5
3/4	- 16UNF	TE454722	25	110	44	14	11	14	4	17.5
7/8	- 14UNF	TE454762	26	125	50	18	14.5	17	4	20.5
1	- 12UNF	TE454802	28	140	54	18	14.5	17	4	23.25
1-1/8	- 12UNF	TE454842	30	150	60	22	18	21	4	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended							○														

YG TAP CAST IRON

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	T0993	TE821 TE403 TE434 TE454	TD821	TI821	TY821
					Vc (m/min)				
K	15	Grey cast iron	180	10	10-15	10-15	15-20	15-20	15-20
	16		260	26	5-8	5-8	8-11	8-11	8-11
	17	Nodular cast iron	160	3	10-15	10-15	15-20	15-20	15-20
	18		250	25	5-8	5-8	8-11	8-11	8-11
	19	Malleable cast iron	130		10-15	10-15	15-20	15-20	15-20
	20		230	21	5-8	5-8	8-11	8-11	8-11
N	23	Aluminum-cast, alloyed	75		15-20				
	25		130		10-15				
	27	Copper and Copper Alloys (Bronze / Brass)	90			8-12	12-16	12-16	12-16
H	40	Chilled Cast Iron	400	42	3-5				

Global Cutting Tool Leader **YG-1**

THREADING

YG TAP ALU

YG TAP Aluminium

- For long-chipping Aluminum Wrought Alloys with Large Chip Gullets to Avoid Clogging in the Threading Operations
- Für langspanende Aluminium-Knetlegierungen mit großen Spanabständen zur Vermeidung von Verstopfungen beim Gewindeschneiden.

SELECTION GUIDE

YG THREADING TOOLS

HSS-E YG TAP ALU

For long-chipping Aluminum Wrought Alloys with Large Chip Gullets to Avoid Clogging in the Threading Operations

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B260

HOLE TYPE		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Max. 2.0xD Blind/Through Hole		
TOOL MATERIAL		HSS-E		HSS-E				
CHAMFER LEAD ACC. TO DIN2197		C	C	B	B	C	C	C
FLUTE TYPE		Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Straight Flute	Straight Flute	Straight Flute
SPIRAL FLUTE ANGLE		R45	R40	-	-	-	-	-
SERIES M	DIN371/376	TC163 (p.B250)	TE953 (p.B251)	TC622 (p.B255)	TE943 (p.B256)	TC433 (p.B257)	TE443 (p.B258)	TY433 (p.B259)
M	DIN352							
M	DIN357/LONG							
MF	DIN374	TC963 (p.B252)						
MF	DIN2181							
UNC	DIN371/376	TC169 (p.B253)						
UNC	DIN351							
UNF	DIN371/374	TC170 (p.B254)						
UNF	DIN2181							
BSW	DIN2182/2183							
BSW	DIN351							
G(BSP)	DIN5156/5157							
EG-M	DIN371/376							
EG-UNC	DIN371/376							
EG-UNF	DIN371/374							
SURFACE TREATMENT		Bright	Ni	Bright	Ni	Bright	Ni	TiAlN
MODEL								

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TC163	TE953	TC622	TE943	TC433	TE443	TY433
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○		○				
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	○		○				
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	○	○	○	○			
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28							
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32							
P	6	Low alloy steel		Annealed	180	10							
P	7	Low alloy steel		Quenched & Tempered	275	29							
P	8	Low alloy steel		Quenched & Tempered	300	32							
P	9	Low alloy steel		Quenched & Tempered	350	38							
P	10	High alloyed steel, and tool steel		Annealed	200	15							
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35							
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15							
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23							
M	14	Stainless steel	Austenitic		180	10							
K	15	Grey cast iron	Pearlitic / ferritic		180	10							
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26							
K	17	Nodular cast iron	Ferritic		160	3							
K	18	Nodular cast iron	Pearlitic		250	25							
K	19	Malleable cast iron	Ferritic		130								
K	20	Malleable cast iron	Pearlitic		230	21							
N	21	Aluminum-wrought alloy	Not Curable		60		◎	○	◎	○			
N	22	Aluminum-wrought alloy	Curable	Hardened	100		◎	○	◎	○			
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	○	◎	○			
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90		◎	○	◎	○			
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130			◎		◎			
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110						◎	◎	◎
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90		○		○		○	○	○
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100						○		○
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic										
N	30	Non Metallic Materials	Rubber, Wood, etc.										
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15							
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30							
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25							
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38							
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34							
S	36	Titanium Alloys	Pure Titanium		400 Rm								
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm								
H	38	Hardened steel		Hardened	550	55							
H	39	Hardened steel		Hardened	630	60							
H	40	Chilled Cast Iron		Cast	400	42							
H	41	Hardened Cast Iron		Hardened	550	55							

YG TAP ALU

TC163 SERIES

M ISO metric coarse threads DIN 13

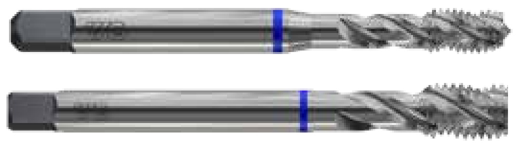
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

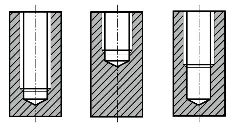
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

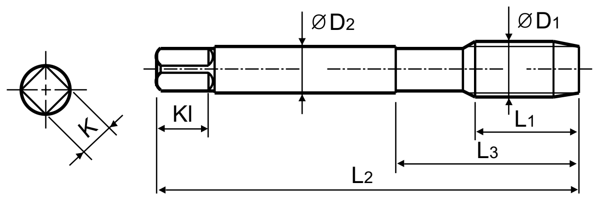
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

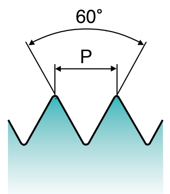
DIN 371
DIN 376

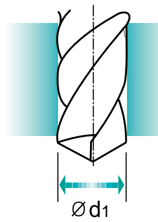


Hole type
2.5×D









Material groups: Al | HSS-E | DIN 371/376 | 6H | 60° | C | R45 | Bright | p.B260

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC163136	8	45	13	2.8	2.1	5	2	1.6
M2.2	× 0.45	TC163156	8	45	13	2.8	2.1	5	2	1.75
*M2.3	× 0.4	TC163196	8	45	13	2.8	2.1	5	2	1.9
M2.5	× 0.45	TC163176	9	50	15	2.8	2.1	5	2	2.05
*M2.6	× 0.45	TC163496	9	50	15	2.8	2.1	5	2	2.1
M3	× 0.5	TC163206	6	56	18	3.5	2.7	6	2	2.5
M3.5	× 0.6	TC163226	7	56	20	4	3	6	2	2.9
M4	× 0.7	TC163246	7	63	21	4.5	3.4	6	2	3.3
M4.5	× 0.75	TC163266	8	70	25	6	4.9	8	2	3.7
M5	× 0.8	TC163286	8	70	25	6	4.9	8	2	4.2
M6	× 1	TC163316	10	80	30	6	4.9	8	2	5
M7	× 1	TC163346	10	80	30	7	5.5	8	2	6
M8	× 1.25	TC163366	13	90	35	8	6.2	9	2	6.8
M9	× 1.25	TC163396	13	90	35	9	7	10	2	7.8
M10	× 1.5	TC163426	15	100	39	10	8	11	2	8.5
M11	× 1.5	TC163466	17	100	40	8	6.2	9	2	9.5
M12	× 1.75	TC163506	18	110	44	9	7	10	2	10.2
M14	× 2	TC163546	20	110	44	11	9	12	3	12
M16	× 2	TC163606	20	110	44	12	9	12	3	14
M18	× 2.5	TC163656	25	125	50	14	11	14	3	15.5
M20	× 2.5	TC163706	25	140	54	16	12	15	3	17.5
M22	× 2.5	TC163746	25	140	54	18	14.5	17	3	19.5
M24	× 3	TC163786	30	160	60	18	14.5	17	3	21
M27	× 3	TC163866	30	160	60	20	16	19	3	24
M30	× 3.5	TC163946	35	180	70	22	18	21	3	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			○														

phone:+82-32-526-0909, www.yg1.kr, E-mail:yg1@yg1.kr

YG TAP ALU

TE953 SERIES

M ISO metric coarse threads DIN 13

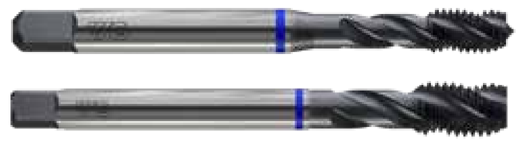
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

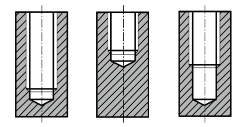
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

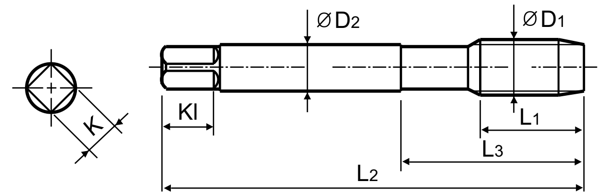
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

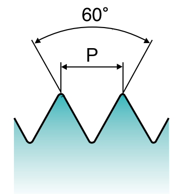
DIN 371
DIN 376

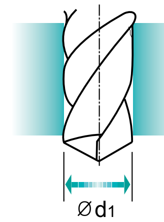


Hole type
2.5×D









Material groups: Al | HSS-E | DIN 371/376 | 6H | 60° | C | R40 | Nitride | p.B260

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TE953136	8	45	13	2.8	2.1	5	2	1.6
M2.2	× 0.45	TE953156	8	45	13	2.8	2.1	5	2	1.75
*M2.3	× 0.4	TE953196	8	45	13	2.8	2.1	5	2	1.9
M2.5	× 0.45	TE953176	9	50	15	2.8	2.1	5	2	2.05
*M2.6	× 0.45	TE953496	9	50	15	2.8	2.1	5	2	2.1
M3	× 0.5	TE953206	6	56	18	3.5	2.7	6	2	2.5
M3.5	× 0.6	TE953226	7	56	20	4	3	6	2	2.9
M4	× 0.7	TE953246	7	63	21	4.5	3.4	6	2	3.3
M4.5	× 0.75	TE953266	8	70	25	6	4.9	8	2	3.7
M5	× 0.8	TE953286	8	70	25	6	4.9	8	2	4.2
M6	× 1	TE953316	10	80	30	6	4.9	8	2	5
M7	× 1	TE953346	10	80	30	7	5.5	8	2	6
M8	× 1.25	TE953366	13	90	35	8	6.2	9	2	6.8
M9	× 1.25	TE953396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TE953426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TE953466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TE953506	18	110	44	9	7	10	3	10.2
M14	× 2	TE953546	20	110	44	11	9	12	3	12
M16	× 2	TE953606	20	110	44	12	9	12	3	14
M18	× 2.5	TE953656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TE953706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TE953746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TE953786	30	160	60	18	14.5	17	4	21
M27	× 3	TE953866	30	160	60	20	16	19	4	24
M30	× 3.5	TE953946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	◎																

phone:+82-32-526-0909, www.yg1.kr, E-mail:yg1@yg1.kr

YG TAP ALU

TC963 SERIES

MF ISO metric fine threads DIN 13

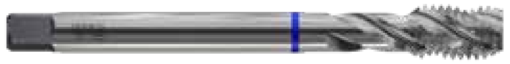
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

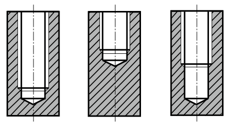
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

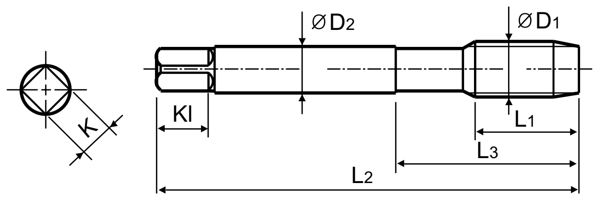
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

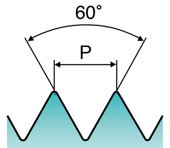
DIN 374

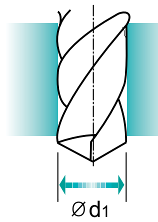


Hole type
2.5×D









Material groups: Al | HSS-E | DIN 374 | 6H | 60° | C | R45 | Bright | p.B260

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.5	TC963256	5	63	21	2.8	2.1	5	2	3.5
M5	× 0.5	TC963296	5	70	25	3.5	2.7	6	2	4.5
M6	× 0.75	TC963326	8	80	30	4.5	3.4	6	2	5.2
M6	× 0.5	TC963336	5	80	30	4.5	3.4	6	2	5.5
M7	× 0.75	TC963356	10	80	30	5.5	4.3	7	2	6.2
M8	× 1	TC963376	10	90	36	6	4.9	8	2	7
M8	× 0.75	TC963386	8	80	30	6	4.9	8	2	7.2
M10	× 1.25	TC963436	16	100	40	7	5.5	8	2	8.8
M10	× 1	TC963446	10	90	36	7	5.5	8	2	9
M10	× 0.75	TC963456	10	90	36	7	5.5	8	2	9.2
M12	× 1.5	TC963516	15	100	40	9	7	10	2	10.5
M12	× 1.25	TC963526	15	100	40	9	7	10	2	10.8
M12	× 1	TC963536	11	100	40	9	7	10	2	11
M14	× 1.5	TC963556	15	100	40	11	9	12	3	12.5
M14	× 1.25	TC963566	15	100	40	11	9	12	3	12.8
M16	× 1.5	TC963616	15	100	40	12	9	12	3	14.5
M18	× 1.5	TC963676	17	110	44	14	11	14	3	16.5
M20	× 1.5	TC963726	17	125	50	16	12	15	3	18.5
M22	× 1.5	TC963766	17	125	50	18	14.5	17	3	20.5
M24	× 1.5	TC963806	20	140	54	18	14.5	17	3	22.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			○														

YG TAP ALU

TC169 SERIES

UNC Unified coarse threads

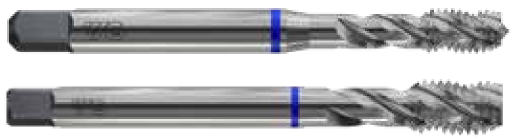
Unified Grobgewinde
UNC
Unificato passo grosso

Machine taps
Maschinengewindebohrer

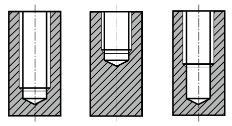
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

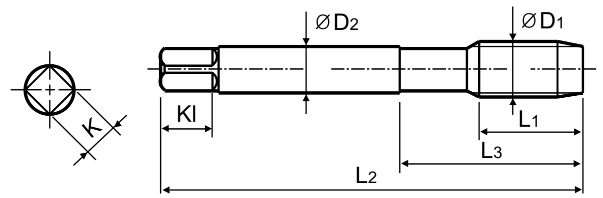
Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

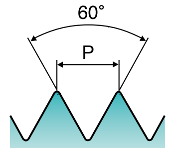
DIN 371
DIN 376

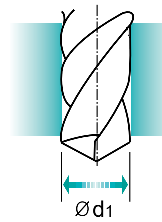


Hole type
2.5×D









Material groups: Al | HSS-E | DIN 371/376 | 2B | 60° | C | R45 | Bright | p.B260

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40UNC	TC169162	6	56	18	3.5	2.7	6	2	2.3
#5	- 40UNC	TC169202	7	56	18	3.5	2.7	6	2	2.6
#6	- 32UNC	TC169242	7	56	20	4	3	6	2	2.85
#8	- 32UNC	TC169282	8	63	21	4.5	3.4	6	2	3.5
#10	- 24UNC	TC169322	10	70	25	6	4.9	8	2	3.9
#12	- 24UNC	TC169362	10	80	30	6	4.9	8	2	4.5
1/4	- 20UNC	TC169402	13	80	30	7	5.5	8	2	5.2
5/16	- 18UNC	TC169442	14	90	35	8	6.2	9	2	6.6
3/8	- 16UNC	TC169482	16	100	39	9	7	10	2	8
7/16	- 14UNC	TC169522	17	100	40	8	6.2	9	2	9.4
1/2	- 13UNC	TC169562	20	110	44	9	7	10	2	10.75
9/16	- 12UNC	TC169602	20	110	44	11	9	12	3	12.25
5/8	- 11UNC	TC169642	22	110	44	12	9	12	3	13.5
3/4	- 10UNC	TC169702	25	125	50	14	11	14	3	16.5
7/8	- 9UNC	TC169742	27	140	54	18	14.5	17	3	19.5
1	- 8UNC	TC169782	30	160	60	20	16	19	3	22.25
1-1/8	- 7UNC	TC169822	35	180	65	22	18	21	3	25

▶DIN 371(#4~3/8) and DIN 376(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			○														

YG TAP ALU

TC170 SERIES

UNF Unified fine threads

Unified Feingewinde
UNF
Unificato passo grosso

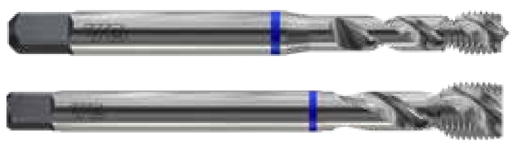
Machine taps
Maschinengewindebohrer

▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

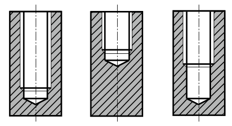
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

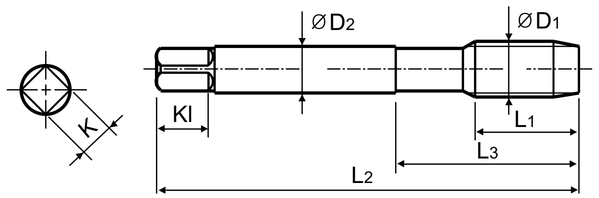
DIN 371

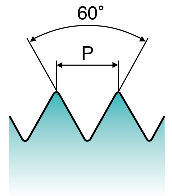
DIN 374

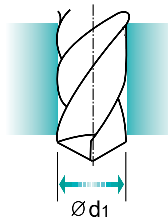


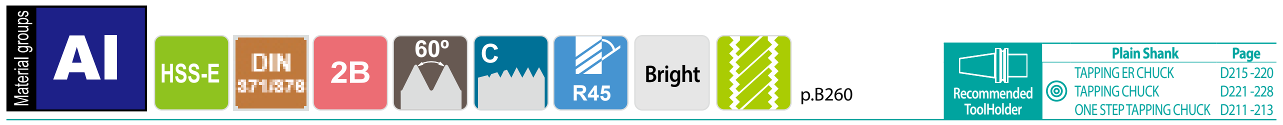
Hole type
2.5×D











Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48UNF	TC170182	6	56	18	3.5	2.7	6	2	2.4
#5	- 44UNF	TC170222	7	56	18	3.5	2.7	6	2	2.7
#6	- 40UNF	TC170262	7	56	20	4	3	6	2	3
#8	- 36UNF	TC170302	8	63	21	4.5	3.4	6	2	3.5
#10	- 32UNF	TC170342	10	70	25	6	4.9	8	2	4.1
#12	- 28UNF	TC170382	10	80	30	6	4.9	8	2	4.7
1/4	- 28UNF	TC170422	10	80	30	7	5.5	8	2	5.5
5/16	- 24UNF	TC170462	10	90	35	8	6.2	9	2	6.9
3/8	- 24UNF	TC170502	10	100	39	9	7	10	2	8.5
7/16	- 20UNF	TC170542	13	100	40	8	6.2	9	2	9.9
1/2	- 20UNF	TC170582	13	100	40	9	7	10	2	11.5
9/16	- 18UNF	TC170622	15	100	40	11	9	12	3	12.9
5/8	- 18UNF	TC170662	15	100	40	12	9	12	3	14.5
3/4	- 16UNF	TC170722	17	110	44	14	11	14	3	17.5
7/8	- 14UNF	TC170762	17	125	50	18	14.5	17	3	20.5
1	- 12UNF	TC170802	20	140	54	18	14.5	17	3	23.25
1-1/8	- 12UNF	TC170842	22	150	60	22	18	21	3	26.5

▶DIN 371(#4~3/8) and DIN 374(7/16~1-1/8)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			○														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP ALU

TC622 SERIES

M-Az ISO metric coarse threads DIN 13

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

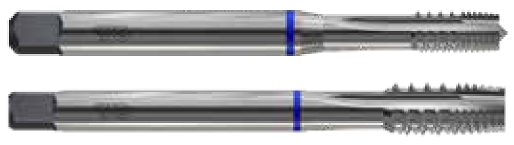
Machine taps
Maschinengewindebohrer

▶ Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

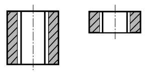
▶ Gewindebohrer mit ausgesetzten Zähnen um die Kontaktzone mit dem Werkstuck und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.

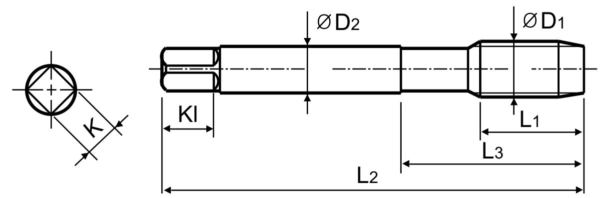
DIN 371

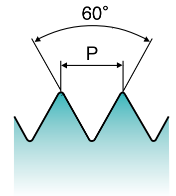
DIN 376

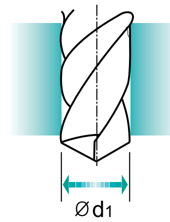


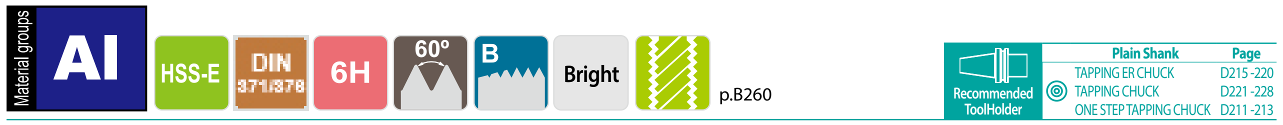
Hole type
3.0×D











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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC622136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC622156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC622196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC622176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC622496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC622206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC622226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC622246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC622266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC622286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC622316	17	80	30	6	4.9	8	3	5
M7	× 1	TC622346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC622366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC622396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC622426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC622466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC622506	24	110	44	9	7	10	3	10.2
M14	× 2	TC622546	26	110	44	11	9	12	3	12
M16	× 2	TC622606	27	110	44	12	9	12	3	14
M18	× 2.5	TC622656	30	125	50	14	11	14	3	15.5
M20	× 2.5	TC622706	32	140	54	16	12	15	3	17.5
M22	× 2.5	TC622746	32	140	54	18	14.5	17	3	19.5
M24	× 3	TC622786	34	160	60	18	14.5	17	3	21
M27	× 3	TC622866	36	160	60	20	16	19	3	24
M30	× 3.5	TC622946	40	180	70	22	18	21	3	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)

▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			○														

YG TAP ALU

TE943 SERIES

M ISO metric coarse threads DIN 13

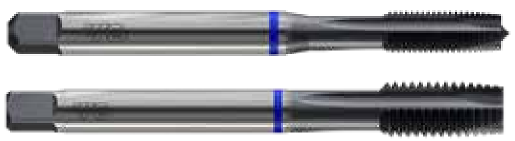
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

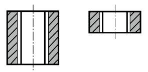
▶ Suitable for through hole in more cutting speed than other taps due to thick web.

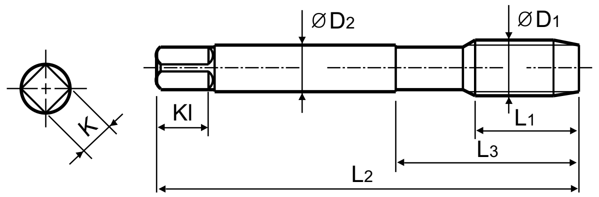
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

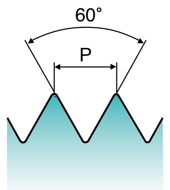
DIN 371
DIN 376

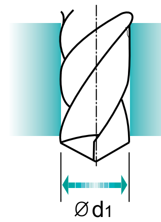


Hole type
3.0×D









Material groups: Al | HSS-E | DIN 371/376 | 6H | 60° | B | Nitride | p.B260

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TE943136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TE943156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TE943196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TE943176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TE943496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TE943206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TE943226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TE943246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TE943266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TE943286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TE943316	17	80	30	6	4.9	8	3	5
M7	× 1	TE943346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TE943366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TE943396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TE943426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TE943466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TE943506	24	110	44	9	7	10	3	10.2
M14	× 2	TE943546	26	110	44	11	9	12	3	12
M16	× 2	TE943606	27	110	44	12	9	12	3	14
M18	× 2.5	TE943656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TE943706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TE943746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TE943786	34	160	60	18	14.5	17	4	21
M27	× 3	TE943866	36	160	60	20	16	19	4	24
M30	× 3.5	TE943946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	◎																

YG TAP ALU

TC433 SERIES

M ISO metric coarse threads DIN 13

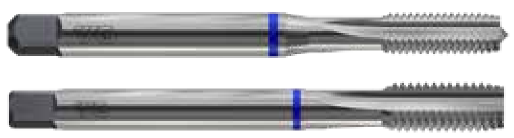
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

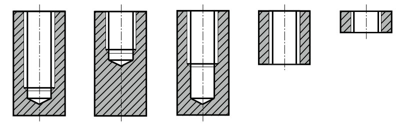
▶ Suitable for brass and short chip work materials.

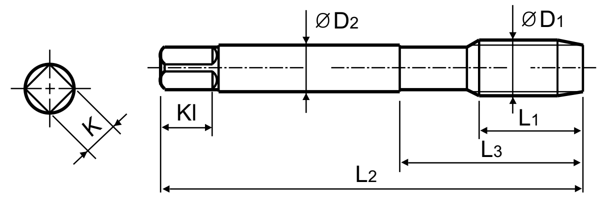
▶ Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen

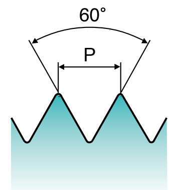
DIN 371
DIN 376

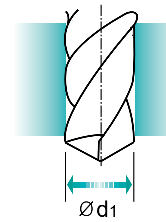


Hole type
2.0×D









Material groups: Ms | HSS-E | DIN 371/376 | 6H | 60° | C | Bright | p.B260

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
◎ TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TC433136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TC433156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TC433196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TC433176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TC433496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TC433206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TC433226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TC433246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TC433266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TC433286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TC433316	17	80	30	6	4.9	8	3	5
M7	× 1	TC433346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TC433366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TC433396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TC433426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TC433466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TC433506	24	110	44	9	7	10	3	10.2
M14	× 2	TC433546	26	110	44	11	9	12	3	12
M16	× 2	TC433606	27	110	44	12	9	12	3	14
M18	× 2.5	TC433656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TC433706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TC433746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TC433786	34	160	60	18	14.5	17	4	21
M27	× 3	TC433866	36	160	60	20	16	19	4	24
M30	× 3.5	TC433946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						◎	○	○													

YG TAP ALU

TE443 SERIES

M ISO metric coarse threads DIN 13

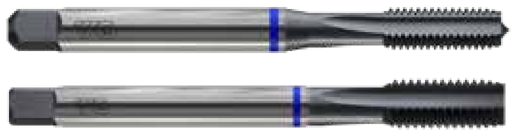
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

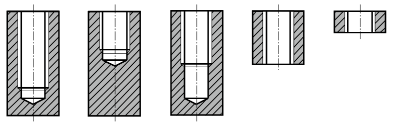
▶ Suitable for brass and short chip work materials.

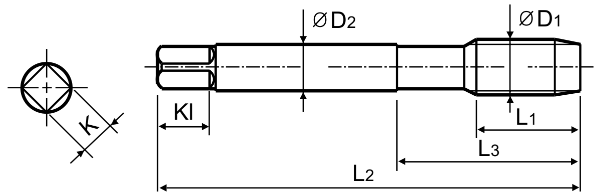
▶ Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen

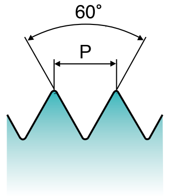
DIN 371
DIN 376

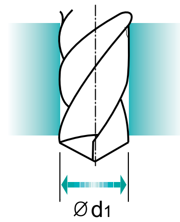


Hole type
2.0×D









Material groups: Ms | HSS-E | DIN 371/376 | 6HX | 60° | C | Nitride | p.B260

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Ni	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TE443136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TE443156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TE443196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TE443176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TE443496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TE443206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TE443226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TE443246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TE443266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TE443286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TE443316	17	80	30	6	4.9	8	3	5
M7	× 1	TE443346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TE443366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TE443396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TE443426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TE443466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TE443506	24	110	44	9	7	10	3	10.2
M14	× 2	TE443546	26	110	44	11	9	12	3	12
M16	× 2	TE443606	27	110	44	12	9	12	3	14
M18	× 2.5	TE443656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TE443706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TE443746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TE443786	34	160	60	18	14.5	17	4	21
M27	× 3	TE443866	36	160	60	20	16	19	4	24
M30	× 3.5	TE443946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						◎	○														

YG TAP ALU

TY433 SERIES

M ISO metric coarse threads DIN 13

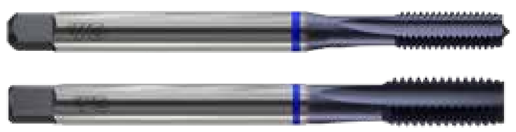
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

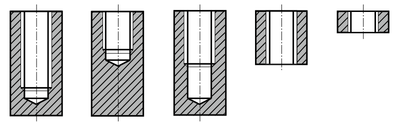
▶ Suitable for brass and short chip work materials.

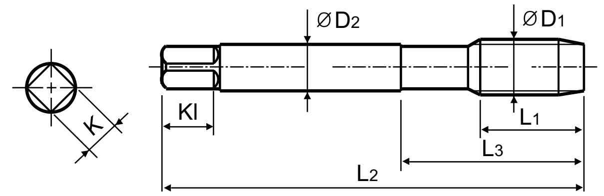
▶ Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen

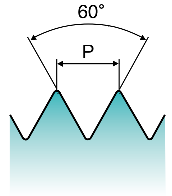
DIN 371
DIN 376

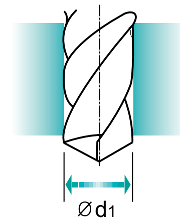


Hole type
2.0×D









Material groups: Ms | HSS-E | DIN 371/376 | 6H | 60° | C | TiAlN | p.B260

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TY433136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TY433156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TY433196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TY433176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TY433496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TY433206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TY433226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TY433246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TY433266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TY433286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TY433316	17	80	30	6	4.9	8	3	5
M7	× 1	TY433346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TY433366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TY433396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TY433426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TY433466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TY433506	24	110	44	9	7	10	3	10.2
M14	× 2	TY433546	26	110	44	11	9	12	3	12
M16	× 2	TY433606	27	110	44	12	9	12	3	14
M18	× 2.5	TY433656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TY433706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TY433746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TY433786	34	160	60	18	14.5	17	4	21
M27	× 3	TY433866	36	160	60	20	16	19	4	24
M30	× 3.5	TY433946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶ * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended						◎	○	○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP ALU

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC163 TC963 TC169 TC170	TE953	TC622	TE943	TC433	TE443	TY433
					Vc (m/min)						
P	1	Non-alloy steel	125		15-20		15-20				
	2		190	13	15-20		15-20				
	3		250	25	12-18	12-18	12-18	12-18			
N	21	Aluminum-wrought alloy	60		10-15	10-15	10-15	10-15			
	22		100		10-15	10-15	10-15	10-15			
	23	Aluminum-cast, alloyed	75		15-20	15-20	15-20	15-20			
	24		90		15-20	15-20	15-20	15-20			
	25		130			10-15		10-15			
	26	Copper and Copper Alloys (Bronze / Brass)	110						25-35	25-35	35-40
	27		90		8-12		8-12		8-12	8-12	12-16
	28		100						15-20		20-25

Leading Through Innovation

HSS-PM

YG TAP Ti Ni

YG Gewindebohrer Titan / Superlegierungen

- For Heat Resistent Super Alloys and Titanium Alloys Applied with Cutting Edge Rake Angles and Thread Relief
- Für hitzebeständige Superlegierungen und Titanlegierungen, mit Schneidkanten-Spanwinkeln und Gewindehinterschliff

SELECTION GUIDE

THREADING TOOLS

HSS-PM
YG TAP
Ti Ni

For Heat Resistent Super Alloys and Titanium Alloys
Applied with Cutting Edge Rake Angles and Thread Relief

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

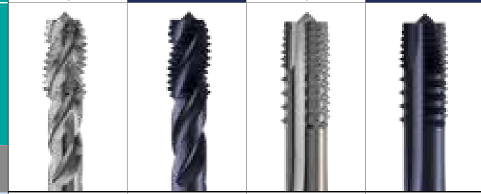
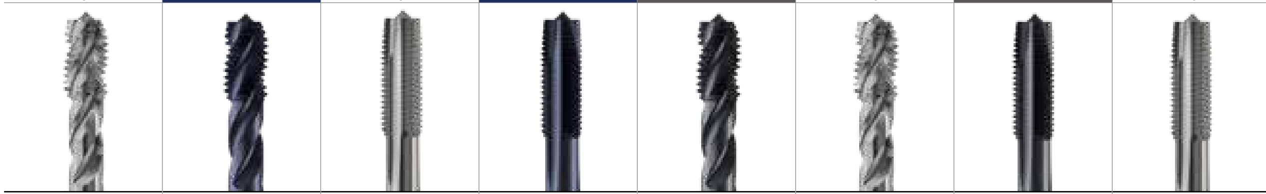
Recommended cutting conditions : p.B276

	TM903	TZ903	TM293	TZ293	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
HOLE TYPE	Max. 2.5xD Blind Hole	Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 3.0xD Through Hole	Max. 2.5xD Blind Hole	Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 3.0xD Through Hole	Max. 2.5xD Blind Hole	Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole	Max. 3.0xD Through Hole
TOOL MATERIAL	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM	HSS-PM
CHAMFER LEAD ACC. TO DIN2197	C	C	B	B	C	C	B	B	C	C	B	B
FLUTE TYPE	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
SPIRAL FLUTE ANGLE	R25	R25	-	-	R40	R40	-	-	R40	R40	-	-
Page	(p.B264)	(p.B265)	(p.B266)	(p.B267)	(p.B268)	(p.B269)	(p.B270)	(p.B271)	(p.B272)	(p.B273)	(p.B274)	(p.B275)
SURFACE TREATMENT	Bright	TiAlN	Bright	TiAlN	Bright	TiAlN	Bright	TiAlN	VAP	Bright	VAP	Bright

SERIES

Series	Standard	TM903	TZ903	TM293	TZ293	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
M	DIN371/376												
M	DIN352												
M	DIN357/LONG												
MF	DIN374												
MF	DIN2181												
UNC	DIN371/376												
UNC	DIN351												
UNF	DIN371/374												
UNF	DIN2181												
BSW	DIN2182/2183												
BSW	DIN351												
G(BSP)	DIN5156/5157												
EG-M	DIN371/376												
EG-UNC	DIN371/376												
EG-UNF	DIN371/374												

MODEL

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TM903	TZ903	TM293	TZ293	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
P	1	Non-alloy steel	About 0.15% C	Annealed	125													
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13												
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25												
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28												
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32												
P	6	Low alloy steel		Annealed	180	10					◎	◎	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel		Quenched & Tempered	275	29	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
P	8	Low alloy steel		Quenched & Tempered	300	32	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
P	9	Low alloy steel		Quenched & Tempered	350	38	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
P	10	High alloyed steel, and tool steel		Annealed	200	15												
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35												
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15												
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23												
M	14	Stainless steel	Austenitic		180	10												
K	15	Grey cast iron	Pearlitic / ferritic		180	10												
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26												
K	17	Nodular cast iron	Ferritic		160	3												
K	18	Nodular cast iron	Pearlitic		250	25												
K	19	Malleable cast iron	Ferritic		130													
K	20	Malleable cast iron	Pearlitic		230	21												
N	21	Aluminum-wrought alloy	Not Curable		60													
N	22	Aluminum-wrought alloy	Curable	Hardened	100													
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75													
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90													
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130													
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110													
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90													
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100													
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic															
N	30	Non Metallic Materials	Rubber, Wood, etc.															
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30			○	○	◎	◎	◎	◎	◎	◎	◎	◎
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25			○	○	◎	◎	◎	◎	◎	◎	◎	◎
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38			○	○	◎	◎	◎	◎	◎	◎	◎	◎
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34			○	○	◎	◎	◎	◎	◎	◎	◎	◎
S	36	Titanium Alloys	Pure Titanium		400 Rm		○	○	○	○					○	○	○	○
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm		◎	◎	◎	◎	○	○	○	○	◎	◎	◎	◎
H	38	Hardened steel		Hardened	550	55								○				
H	39	Hardened steel		Hardened	630	60												
H	40	Chilled Cast Iron		Cast	400	42			○	○			○	○			○	○
H	41	Hardened Cast Iron		Hardened	550	55												

YG TAP Ti Ni

TM903 SERIES

M ISO metric coarse threads DIN 13

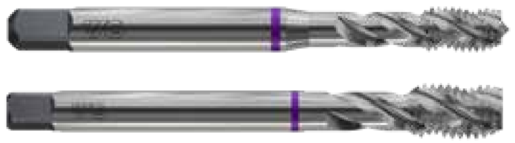
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

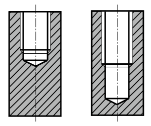
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

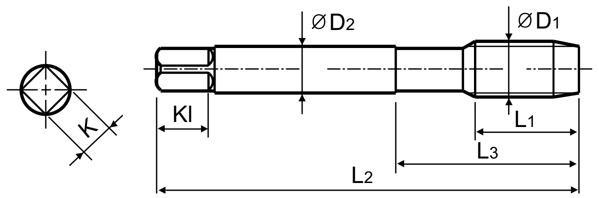
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

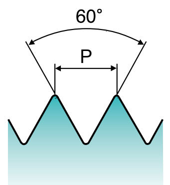
DIN 371
DIN 376

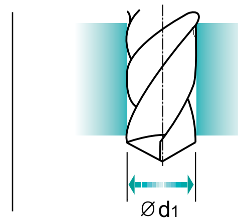


Hole type
2.5×D









Material groups | Ti | HSS PM | DIN 371/376 | 6H | 60° | C | R25 | Bright | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TM903136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TM903156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TM903196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TM903176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TM903496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TM903206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TM903226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TM903246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TM903266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TM903286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TM903316	10	80	30	6	4.9	8	3	5
M7	× 1	TM903346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TM903366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TM903396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TM903426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TM903466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TM903506	18	110	44	9	7	10	3	10.2
M14	× 2	TM903546	20	110	44	11	9	12	3	12
M16	× 2	TM903606	20	110	44	12	9	12	3	14
M18	× 2.5	TM903656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TM903706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TM903746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TM903786	30	160	60	18	14.5	17	4	21
M27	× 3	TM903866	30	160	60	20	16	19	4	24
M30	× 3.5	TM903946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○	◎				

YG TAP Ti Ni

TZ903 SERIES

M ISO metric coarse threads DIN 13

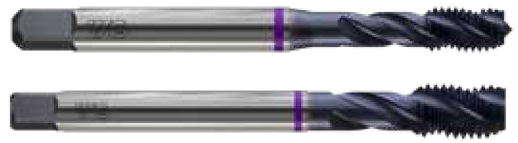
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

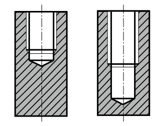
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

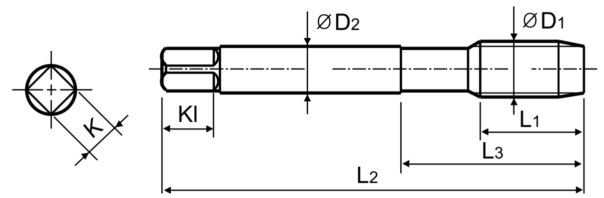
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

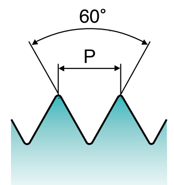
DIN 371
DIN 376

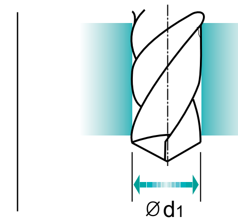


Hole type
2.5×D









Material groups | Ti | HSS PM | DIN 371/376 | 6H | 60° | C | R25 | TiAIN | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiAIN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TZ903136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TZ903156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TZ903196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TZ903176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TZ903496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TZ903206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TZ903226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TZ903246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TZ903266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TZ903286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TZ903316	10	80	30	6	4.9	8	3	5
M7	× 1	TZ903346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TZ903366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TZ903396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TZ903426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TZ903466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TZ903506	18	110	44	9	7	10	3	10.2
M14	× 2	TZ903546	20	110	44	11	9	12	3	12
M16	× 2	TZ903606	20	110	44	12	9	12	3	14
M18	× 2.5	TZ903656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TZ903706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TZ903746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TZ903786	30	160	60	18	14.5	17	4	21
M27	× 3	TZ903866	30	160	60	20	16	19	4	24
M30	× 3.5	TZ903946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○					○	◎				

YG TAP Ti Ni

TM293 SERIES

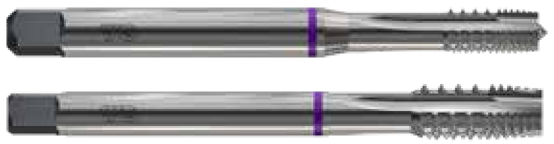
M-Az ISO metric coarse threads DIN 13

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

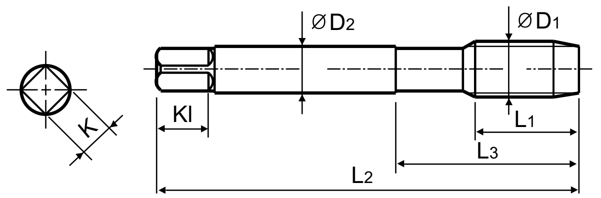
▶ Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

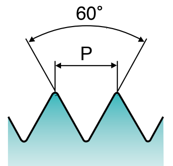
▶ Gewindebohrer mit ausgesetzten Zahnen um die Kontaktzone mit dem Werkstuck und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.

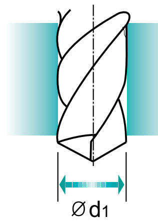
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ti | HSS PM | DIN 371/376 | 6H | 60° | B | Bright | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TM293136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TM293156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TM293196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TM293176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TM293496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TM293206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TM293226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TM293246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TM293266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TM293286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TM293316	17	80	30	6	4.9	8	3	5
M7	× 1	TM293346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TM293366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TM293396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TM293426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TM293466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TM293506	24	110	44	9	7	10	3	10.2
M14	× 2	TM293546	26	110	44	11	9	12	3	12
M16	× 2	TM293606	27	110	44	12	9	12	3	14
M18	× 2.5	TM293656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TM293706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TM293746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TM293786	34	160	60	18	14.5	17	4	21
M27	× 3	TM293866	36	160	60	20	16	19	4	24
M30	× 3.5	TM293946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○	○	○	○	○	○	◎			○	

YG TAP Ti Ni

TZ293 SERIES

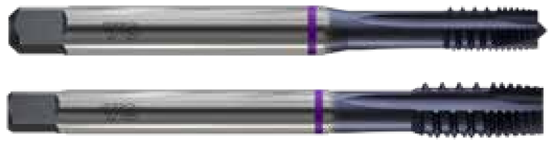
M-Az ISO metric coarse threads DIN 13

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

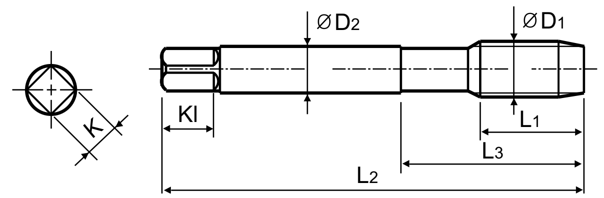
▶ Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

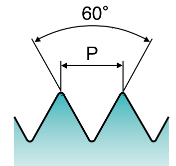
▶ Gewindebohrer mit ausgesetzten Zahnen um die Kontaktzone mit dem Werkstuck und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.

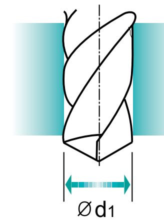
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ti | HSS PM | DIN 371/376 | 6H | 60° | B | TiAlN | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TZ293136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TZ293156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TZ293196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TZ293176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TZ293496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TZ293206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TZ293226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TZ293246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TZ293266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TZ293286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TZ293316	17	80	30	6	4.9	8	3	5
M7	× 1	TZ293346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TZ293366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TZ293396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TZ293426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TZ293466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TZ293506	24	110	44	9	7	10	3	10.2
M14	× 2	TZ293546	26	110	44	11	9	12	3	12
M16	× 2	TZ293606	27	110	44	12	9	12	3	14
M18	× 2.5	TZ293656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TZ293706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TZ293746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TZ293786	34	160	60	18	14.5	17	4	21
M27	× 3	TZ293866	36	160	60	20	16	19	4	24
M30	× 3.5	TZ293946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											○	○	○	○	○	○	◎			○	

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP Ti Ni

TM933 SERIES

M ISO metric coarse threads DIN 13

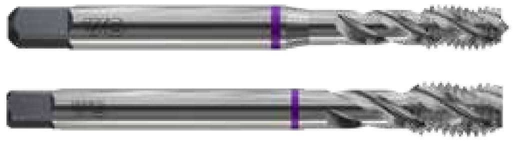
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

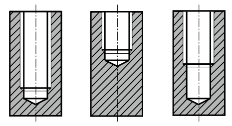
▶ For tapping Nickel alloys and heat resistant alloy steels which are used in aerospace and checmical industries.

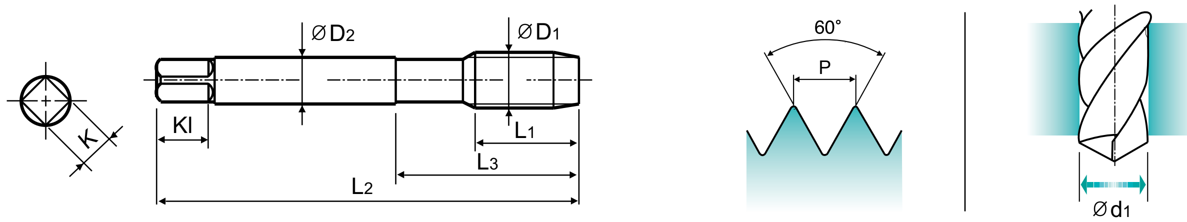
▶ Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

DIN 371
DIN 376



Hole type
2.5×D





Material groups: Ni | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Bright | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

Recommended Cutting Page : P.268

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TM933136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TM933156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TM933196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TM933176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TM933496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TM933206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TM933226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TM933246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TM933266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TM933286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TM933316	10	80	30	6	4.9	8	3	5
M7	× 1	TM933346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TM933366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TM933396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TM933426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TM933466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TM933506	18	110	44	9	7	10	3	10.2
M14	× 2	TM933546	20	110	44	11	9	12	3	12
M16	× 2	TM933606	20	110	44	12	9	12	3	14
M18	× 2.5	TM933656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TM933706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TM933746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TM933786	30	160	60	18	14.5	17	4	21
M27	× 3	TM933866	30	160	60	20	16	19	4	24
M30	× 3.5	TM933946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎		○				

YG TAP Ti Ni

TZ933 SERIES

M ISO metric coarse threads DIN 13

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

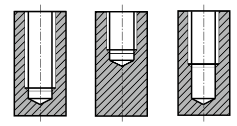
Machine taps
Maschinengewindebohrer

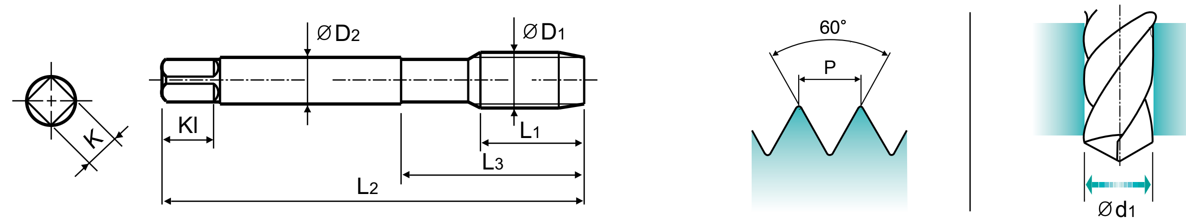
▶ For tapping Nickel alloys and heat resistant alloy steels which are used in aerospace and checmical industries.

▶ Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

DIN 371
DIN 376

Hole type
2.5×D





Material groups: Ni | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | TiAlN | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

Recommended Cutting Page : P.268

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TZ933136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TZ933156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TZ933196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TZ933176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TZ933496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TZ933206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TZ933226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TZ933246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TZ933266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TZ933286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TZ933316	10	80	30	6	4.9	8	3	5
M7	× 1	TZ933346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TZ933366	13	90	35	8	6.2	9	3	6.8
M9	× 1.25	TZ933396	13	90	35	9	7	10	3	7.8
M10	× 1.5	TZ933426	15	100	39	10	8	11	3	8.5
M11	× 1.5	TZ933466	17	100	40	8	6.2	9	3	9.5
M12	× 1.75	TZ933506	18	110	44	9	7	10	3	10.2
M14	× 2	TZ933546	20	110	44	11	9	12	3	12
M16	× 2	TZ933606	20	110	44	12	9	12	3	14
M18	× 2.5	TZ933656	25	125	50	14	11	14	4	15.5
M20	× 2.5	TZ933706	25	140	54	16	12	15	4	17.5
M22	× 2.5	TZ933746	25	140	54	18	14.5	17	4	19.5
M24	× 3	TZ933786	30	160	60	18	14.5	17	4	21
M27	× 3	TZ933866	30	160	60	20	16	19	4	24
M30	× 3.5	TZ933946	35	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎		○				

YG TAP Ti Ni

TM923 SERIES

M ISO metric coarse threads DIN 13

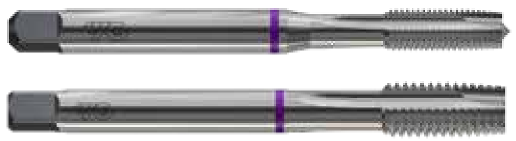
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

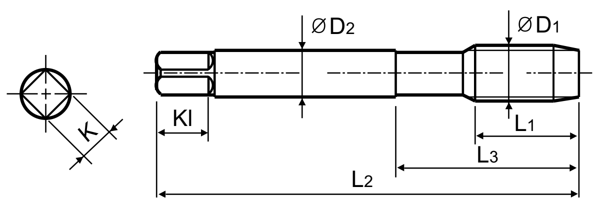
▶ For tapping Nickel alloys and heat resistant alloy steels which are used in aero space and checmical industries.

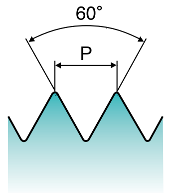
▶ Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

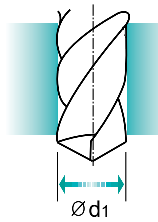
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ni | HSS PM | DIN 371/376 | 6H | 60° | B | Bright | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TM923136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TM923156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TM923196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TM923176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TM923496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TM923206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TM923226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TM923246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TM923266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TM923286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TM923316	17	80	30	6	4.9	8	3	5
M7	× 1	TM923346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TM923366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TM923396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TM923426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TM923466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TM923506	24	110	44	9	7	10	3	10.2
M14	× 2	TM923546	26	110	44	11	9	12	3	12
M16	× 2	TM923606	27	110	44	12	9	12	3	14
M18	× 2.5	TM923656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TM923706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TM923746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TM923786	34	160	60	18	14.5	17	4	21
M27	× 3	TM923866	36	160	60	20	16	19	4	24
M30	× 3.5	TM923946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎		○			○	

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP Ti Ni

TZ923 SERIES

M ISO metric coarse threads DIN 13

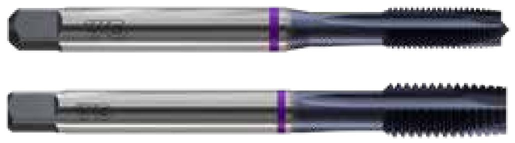
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

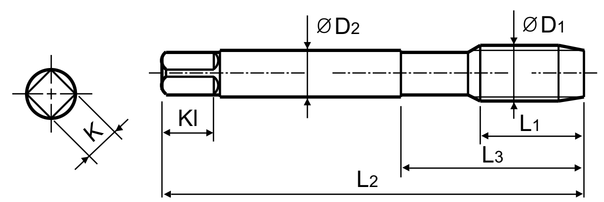
▶ For tapping Nickel alloys and heat resistant alloy steels which are used in aero space and checmical industries.

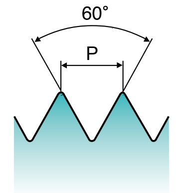
▶ Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

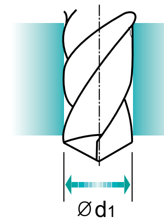
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ni | HSS PM | DIN 371/376 | 6H | 60° | B | TiAlN | p.B276

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

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	TiAlN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TZ923136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TZ923156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	× 0.4	TZ923196	8	45	13	2.8	2.1	5	3	1.9
M2.5	× 0.45	TZ923176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	× 0.45	TZ923496	9	50	15	2.8	2.1	5	3	2.1
M3	× 0.5	TZ923206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TZ923226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TZ923246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TZ923266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TZ923286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TZ923316	17	80	30	6	4.9	8	3	5
M7	× 1	TZ923346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TZ923366	20	90	35	8	6.2	9	3	6.8
M9	× 1.25	TZ923396	20	90	35	9	7	10	3	7.8
M10	× 1.5	TZ923426	22	100	39	10	8	11	3	8.5
M11	× 1.5	TZ923466	22	100	40	8	6.2	9	3	9.5
M12	× 1.75	TZ923506	24	110	44	9	7	10	3	10.2
M14	× 2	TZ923546	26	110	44	11	9	12	3	12
M16	× 2	TZ923606	27	110	44	12	9	12	3	14
M18	× 2.5	TZ923656	30	125	50	14	11	14	4	15.5
M20	× 2.5	TZ923706	32	140	54	16	12	15	4	17.5
M22	× 2.5	TZ923746	32	140	54	18	14.5	17	4	19.5
M24	× 3	TZ923786	34	160	60	18	14.5	17	4	21
M27	× 3	TZ923866	36	160	60	20	16	19	4	24
M30	× 3.5	TZ923946	40	180	70	22	18	21	4	26.5

▶DIN 371(M2~M10) and DIN 376(M11~M30)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎		○			○	

YG TAP Ti Ni

TQ833 SERIES

M ISO metric coarse threads DIN 13

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

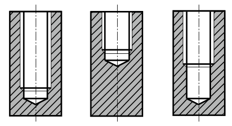
Machine taps
Maschinengewindebohrer

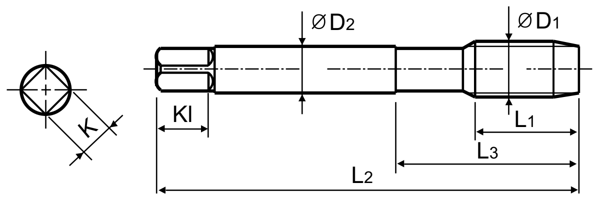
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

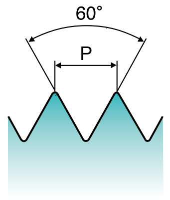
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

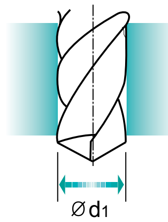
DIN 371
DIN 376

Hole type
2.5×D









Material groups Ti Ni | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Vap | p.B276

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ833136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ833156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ833176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ833206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ833226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TQ833246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ833266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ833286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TQ833316	10	80	30	6	4.9	8	3	5
M7	× 1	TQ833346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TQ833366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ833426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TQ833506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	◎				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP Ti Ni

TR833 SERIES

M ISO metric coarse threads DIN 13

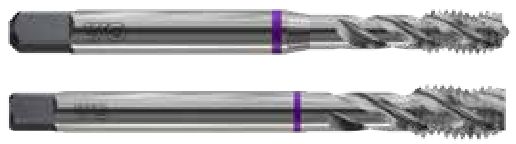
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

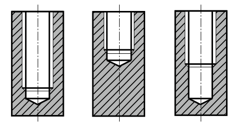
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

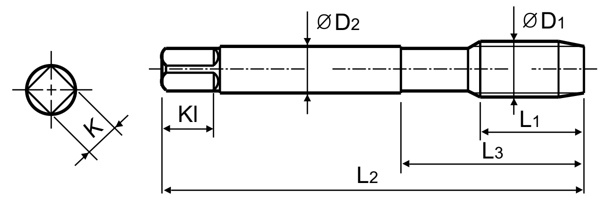
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

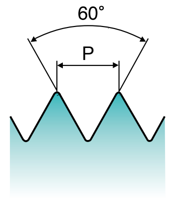
DIN 371
DIN 376

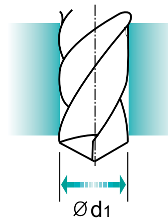


Hole type
2.5×D









Material groups Ti Ni | HSS PM | DIN 371/376 | 6H | 60° | C | R40 | Bright | p.B276

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR833136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR833156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR833176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR833206	6	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR833226	7	56	20	4	3	6	3	2.9
M4	× 0.7	TR833246	7	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR833266	8	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR833286	8	70	25	6	4.9	8	3	4.2
M6	× 1	TR833316	10	80	30	6	4.9	8	3	5
M7	× 1	TR833346	10	80	30	7	5.5	8	3	6
M8	× 1.25	TR833366	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR833426	15	100	39	10	8	11	3	8.5
M12	× 1.75	TR833506	18	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	◎				

YG TAP Ti Ni

TQ873 SERIES

M ISO metric coarse threads DIN 13

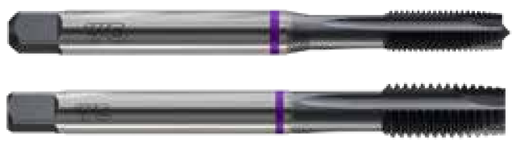
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

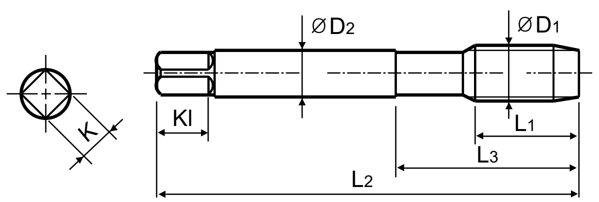
▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

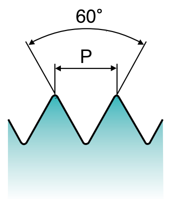
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

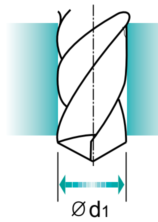
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ti Ni | HSS PM | DIN 371/376 | 6H | 60° | B | Vap | p.B276

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TQ873136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ873156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ873176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ873206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ873226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TQ873246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ873266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ873286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TQ873316	17	80	30	6	4.9	8	3	5
M7	× 1	TQ873346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TQ873366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ873426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TQ873506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	◎			○	

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP Ti Ni

TR873 SERIES

M ISO metric coarse threads DIN 13

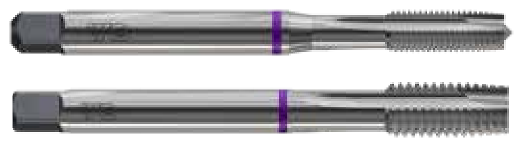
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

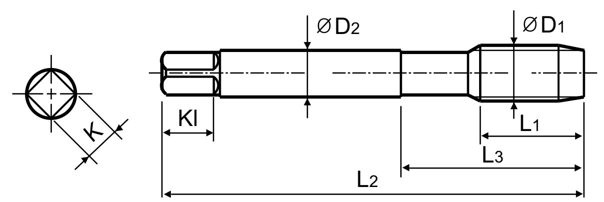
▶ Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

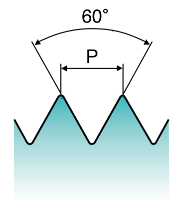
▶ Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

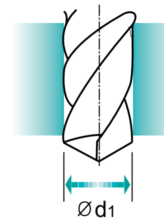
DIN 371
DIN 376



Hole type
3.0×D







Material groups: Ti Ni | HSS PM | DIN 371/376 | 6H | 60° | B | Bright | p.B276

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2	× 0.4	TR873136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR873156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR873176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR873206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR873226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TR873246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR873266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR873286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TR873316	17	80	30	6	4.9	8	3	5
M7	× 1	TR873346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TR873366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR873426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TR873506	24	110	44	9	7	10	3	10.2

▶DIN 371(M2~M10) and DIN 376(M12)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended											◎	◎	◎	◎	◎	○	◎			○	

YG TAP Ti Ni

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TM903	TZ903	TM293	TZ293	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
					Vc (m/min)											
P	6	Low alloy steel	180	10					10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	7		275	29	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	8		300	32	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10
	9		350	38	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
S	31	Heat Resistant Super Alloys	200	15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	32		280	30			10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	33		250	25			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
	34		350	38			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
	35		320	34			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
	36	Titanium Alloys	400 Rm		10-15	10-15	10-15	10-15					10-15	10-15	10-15	10-15
	37		1050 Rm		4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6
H	38	Hardened steel	550	55								3-5				
	40	Chilled Cast Iron	400	42			3-5	3-5			3-5	3-5			3-5	3-5

Leading Through Innovation

HSS-E & HSS-PM

YG TAP FORMING

YG INNENGEWINDEFORMER

- **Tapping by Forming Soft Materials**
- **Gewindeherstellung duch Formen von weichen Materialien**

SELECTION GUIDE

YG THREADING TOOLS

HSS-E & HSS-PM YG TAP FORMING

Tapping by Forming Soft Materials

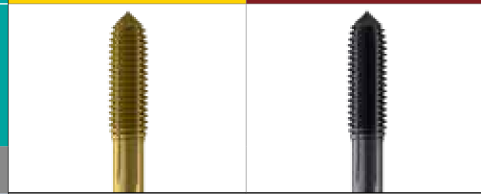
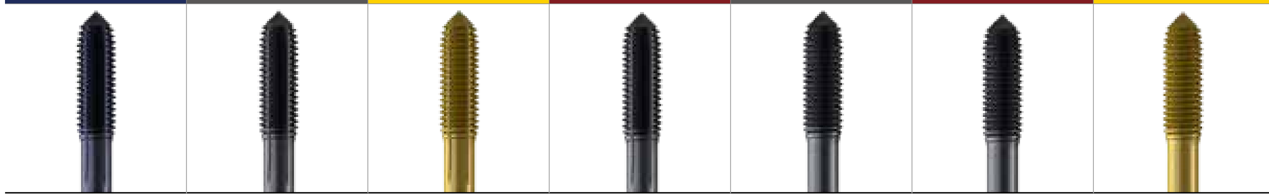
Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B293

HOLE TYPE	Max. 3.0xD Blind / Through Hole								
TOOL MATERIAL	HSS-E	HSS-E	HSS-E	HSS-PM	HSS-E	HSS-E	HSS-PM	HSS-E	HSS-E
CHAMFER LEAD ACC. TO DIN2197	C	C	C	C	C	C	C	C	C
FLUTE TYPE	-	-	-	-	-	-	-	-	-
SPIRAL FLUTE ANGLE	-	-	-	-	-	-	-	-	-
SERIES M DIN371/376	TD703 (p.B280)	TE703 (p.B281)	TY703 (p.B282)	TQ703 (p.B283)	TD713 (p.B284)	TE713 (p.B285)	TQ723 (p.B286)	TE723 (p.B287)	TD723 (p.B288)
SERIES M DIN352									
SERIES M DIN357/LONG									
SERIES MF DIN374	TD733 (p.B289)	TE733 (p.B290)							
SERIES MF DIN2181									
SERIES UNC DIN371/376	TD704 (p.B291)	TE704 (p.B292)							
SERIES UNC DIN351									
SERIES UNF DIN371/374									
SERIES UNF DIN2181									
SERIES BSW DIN2182/2183									
SERIES BSW DIN351									
SERIES G(BSP) DIN5156/5157									
SERIES EG-M DIN371/376									
SERIES EG-UNC DIN371/376									
SERIES EG-UNF DIN371/374									
SURFACE TREATMENT /COATING	TiN	Ni	TiAlN	VAP	TiN	Ni	VAP	Ni	TiN

MODEL

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TD703	TE703	TY703	TQ703	TD713	TE713	TQ723	TE723	TD723
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	◎	◎	◎	◎	◎	◎	◎	◎
P	2	Non-alloy steel	About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	3	Non-alloy steel	About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	4	Non-alloy steel	About 0.75% C	Annealed	270	28									
P	5	Non-alloy steel	About 0.75% C	Quenched & Tempered	300	32									
P	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎	◎	◎	◎	◎
P	7	Low alloy steel		Quenched & Tempered	275	29									
P	8	Low alloy steel		Quenched & Tempered	300	32									
P	9	Low alloy steel		Quenched & Tempered	350	38									
P	10	High alloyed steel, and tool steel		Annealed	200	15									
P	11	High alloyed steel, and tool steel		Quenched & Tempered	325	35									
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	○	○	○	○	○	○	○	○	○
M	13	Stainless steel	Martensitic	Quenched & Tempered	240	23	○	○	○	○	○	○	○	○	○
M	14	Stainless steel	Austenitic		180	10	○	○	○	○	○	○	○	○	○
K	15	Grey cast iron	Pearlitic / ferritic		180	10									
K	16	Grey cast iron	Pearlitic (Martensitic)		260	26									
K	17	Nodular cast iron	Ferritic		160	3									
K	18	Nodular cast iron	Pearlitic		250	25									
K	19	Malleable cast iron	Ferritic		130										
K	20	Malleable cast iron	Pearlitic		230	21									
N	21	Aluminum-wrought alloy	Not Curable		60		◎	◎	◎	◎	◎	◎	◎	◎	◎
N	22	Aluminum-wrought alloy	Curable	Hardened	100		◎	◎	◎	◎	◎	◎	◎	◎	◎
N	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		○	○	○	○	○	○	○	○	○
N	24	Aluminum-cast, alloyed	≤ 12% Si, Curable	Hardened	90		○	○	○	○	○	○	○	○	○
N	25	Aluminum-cast, alloyed	> 12% Si, Not Curable		130										
N	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		○	○	○	○	○	○	○	○	○
N	27	Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)		90										
N	28	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100		○	○	◎	○	◎	○	○	○	◎
N	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic												
N	30	Non Metallic Materials	Rubber, Wood, etc.												
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15									
S	32	Heat Resistant Super Alloys	Fe Based	Cured	280	30									
S	33	Heat Resistant Super Alloys	Ni or Co Based	Annealed	250	25									
S	34	Heat Resistant Super Alloys	Ni or Co Based	Cured	350	38									
S	35	Heat Resistant Super Alloys	Ni or Co Based	Cast	320	34									
S	36	Titanium Alloys	Pure Titanium		400 Rm										
S	37	Titanium Alloys	Alpha + Beta Alloys	Hardened	1050 Rm										
H	38	Hardened steel		Hardened	550	55									
H	39	Hardened steel		Hardened	630	60									
H	40	Chilled Cast Iron		Cast	400	42									
H	41	Hardened Cast Iron		Hardened	550	55									

YG TAP FORMING

TD703 SERIES

M ISO metric coarse threads DIN 13

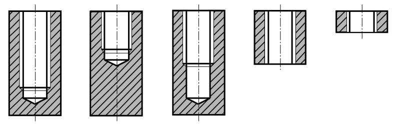
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

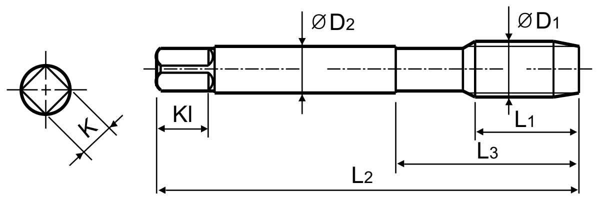
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

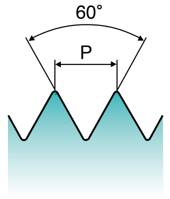
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

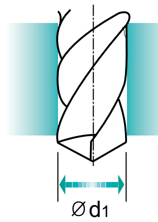
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV | HSS-E | DIN 371/378 | 6HX | 60° | C | TiN | p.B293

Recommended ToolHolder: Plain Shank – Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TD703136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TD703156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TD703196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TD703176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TD703496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TD703206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TD703226	12	56	20	4	3	6	3.25
M4	× 0.7	TD703246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TD703266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TD703286	15	70	25	6	4.9	8	4.65
M6	× 1	TD703316	17	80	30	6	4.9	8	5.55
M7	× 1	TD703346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TD703366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TD703396	20	90	35	9	7	10	8.4
M10	× 1.5	TD703426	22	100	39	10	8	11	9.3
M11	× 1.5	TD703466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TD703506	24	110	44	9	7	10	11.2
M14	× 2	TD703546	26	110	44	11	9	12	13
M16	× 2	TD703606	27	110	44	12	9	12	15
M18	× 2.5	TD703656	30	125	50	14	11	14	16.8
M20	× 2.5	TD703706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

YG TAP FORMING

TE703 SERIES

M ISO metric coarse threads DIN 13

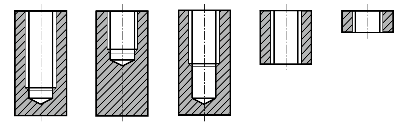
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

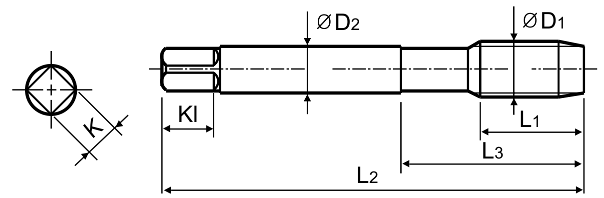
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

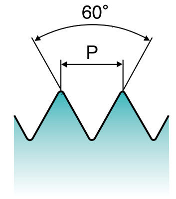
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

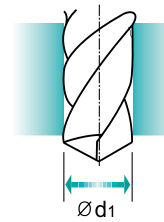
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV | HSS-E | DIN 371/378 | 6HX | 60° | C | Nitride | p.B293

Recommended ToolHolder: Plain Shank – Page; TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Ni	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TE703136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TE703156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TE703196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TE703176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TE703496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TE703206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TE703226	12	56	20	4	3	6	3.25
M4	× 0.7	TE703246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TE703266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TE703286	15	70	25	6	4.9	8	4.65
M6	× 1	TE703316	17	80	30	6	4.9	8	5.55
M7	× 1	TE703346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TE703366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TE703396	20	90	35	9	7	10	8.4
M10	× 1.5	TE703426	22	100	39	10	8	11	9.3
M11	× 1.5	TE703466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TE703506	24	110	44	9	7	10	11.2
M14	× 2	TE703546	26	110	44	11	9	12	13
M16	× 2	TE703606	27	110	44	12	9	12	15
M18	× 2.5	TE703656	30	125	50	14	11	14	16.8
M20	× 2.5	TE703706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

YG TAP FORMING

TY703 SERIES

M ISO metric coarse threads DIN 13

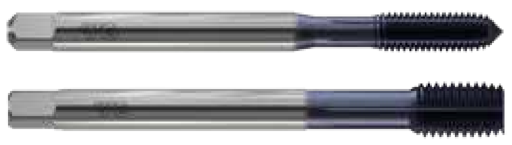
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

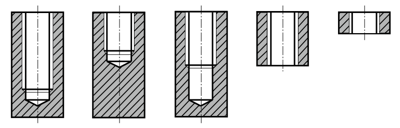
- Suitable for threading soft materials with at least 8-10% elongation.
- The pre-drilling holes are bigger than normal sized holes.

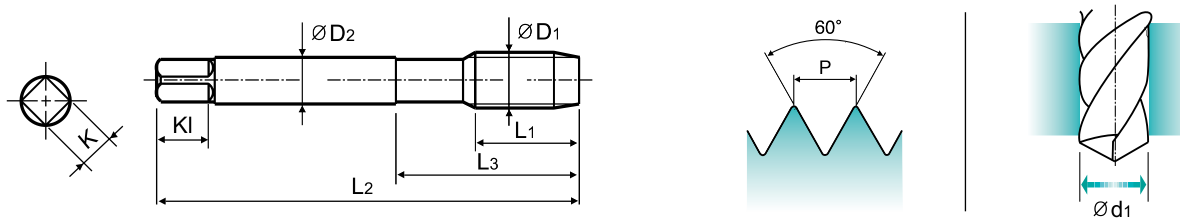
- Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

DIN 371
DIN 376



Hole type
3.0×D





Material groups: GV | HSS-E | DIN 371/376 | 6HX | 60° | C | TiAlN | p.B293

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	TiAlN	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TY703136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TY703156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TY703196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TY703176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TY703496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TY703206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TY703226	12	56	20	4	3	6	3.25
M4	× 0.7	TY703246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TY703266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TY703286	15	70	25	6	4.9	8	4.65
M6	× 1	TY703316	17	80	30	6	4.9	8	5.55
M7	× 1	TY703346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TY703366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TY703396	20	90	35	9	7	10	8.4
M10	× 1.5	TY703426	22	100	39	10	8	11	9.3
M11	× 1.5	TY703466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TY703506	24	110	44	9	7	10	11.2
M14	× 2	TY703546	26	110	44	11	9	12	13
M16	× 2	TY703606	27	110	44	12	9	12	15
M18	× 2.5	TY703656	30	125	50	14	11	14	16.8
M20	× 2.5	TY703706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		◎													

YG TAP FORMING

TQ703 SERIES

M ISO metric coarse threads DIN 13

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

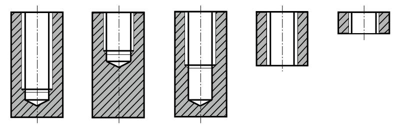
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

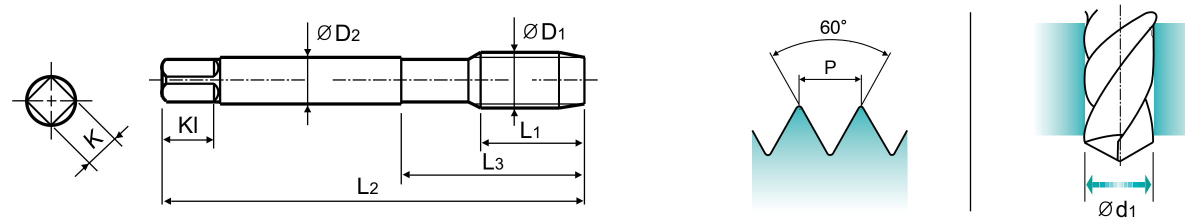
- Suitable for threading soft materials with at least 8-10% elongation in the best substrate.
- The pre-drilling holes are bigger than normal sized holes.

- Aus bestem Werkstoff geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

DIN 371
DIN 376

Hole type
3.0×D





Material groups: GV | HSS PM | DIN 371/376 | 6HX | 60° | C | Vap | p.B293

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Vap	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TQ703136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TQ703156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TQ703196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TQ703176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TQ703496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TQ703206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TQ703226	12	56	20	4	3	6	3.25
M4	× 0.7	TQ703246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TQ703266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TQ703286	15	70	25	6	4.9	8	4.65
M6	× 1	TQ703316	17	80	30	6	4.9	8	5.55
M7	× 1	TQ703346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TQ703366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TQ703396	20	90	35	9	7	10	8.4
M10	× 1.5	TQ703426	22	100	39	10	8	11	9.3
M11	× 1.5	TQ703466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TQ703506	24	110	44	9	7	10	11.2
M14	× 2	TQ703546	26	110	44	11	9	12	13
M16	× 2	TQ703606	27	110	44	12	9	12	15
M18	× 2.5	TQ703656	30	125	50	14	11	14	16.8
M20	× 2.5	TQ703706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		◎													

YG TAP FORMING

TD713 SERIES

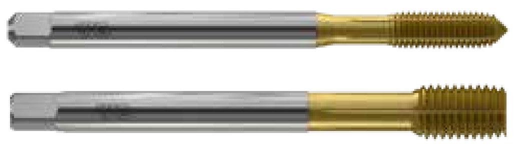
M ISO metric coarse threads DIN 13

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

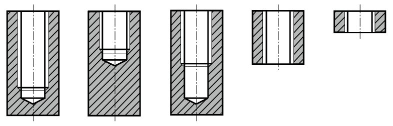
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

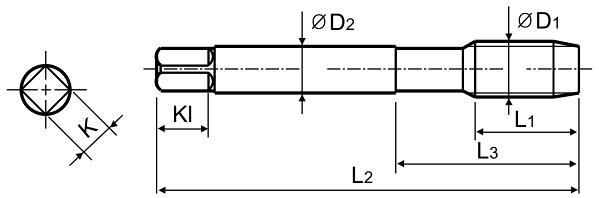
- Suitable for threading soft materials with at least 8-10% elongation.
- The pre-drilling holes are bigger than normal sized holes.
- Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

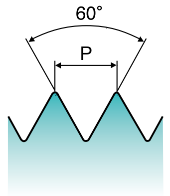
DIN 371
DIN 376

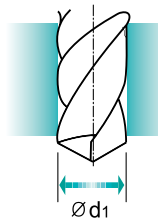


Hole type
3.0×D









Material groups GV HSS-E DIN 371/376 6GX 60° C TiN p.B293

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TD713136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TD713156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TD713196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TD713176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TD713496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TD713206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TD713226	12	56	20	4	3	6	3.25
M4	× 0.7	TD713246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TD713266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TD713286	15	70	25	6	4.9	8	4.65
M6	× 1	TD713316	17	80	30	6	4.9	8	5.55
M7	× 1	TD713346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TD713366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TD713396	20	90	35	9	7	10	8.4
M10	× 1.5	TD713426	22	100	39	10	8	11	9.3
M11	× 1.5	TD713466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TD713506	24	110	44	9	7	10	11.2
M14	× 2	TD713546	26	110	44	11	9	12	13
M16	× 2	TD713606	27	110	44	12	9	12	15
M18	× 2.5	TD713656	30	125	50	14	11	14	16.8
M20	× 2.5	TD713706	32	140	54	16	12	15	18.8

- DIN 371(M2~M10) and DIN 376(M11~M20)
- * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		◎													

YG TAP FORMING

TE713 SERIES

M ISO metric coarse threads DIN 13

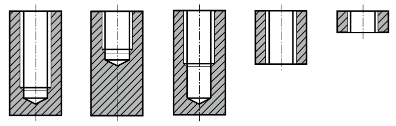
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

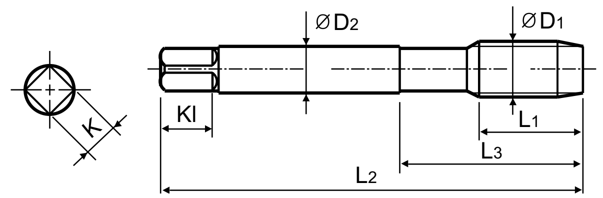
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

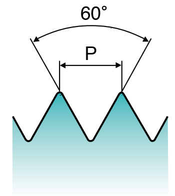
- Suitable for threading soft materials with at least 8-10% elongation.
- The pre-drilling holes are bigger than normal sized holes.
- Aus bestem Werkstoff geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

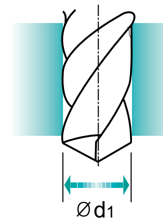
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV HSS-E DIN 371/376 6GX 60° C Nitride p.B293

Recommended ToolHolder

Plain Shank	Page
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Ni	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TE713136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TE713156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TE713196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TE713176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TE713496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TE713206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TE713226	12	56	20	4	3	6	3.25
M4	× 0.7	TE713246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TE713266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TE713286	15	70	25	6	4.9	8	4.65
M6	× 1	TE713316	17	80	30	6	4.9	8	5.55
M7	× 1	TE713346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TE713366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TE713396	20	90	35	9	7	10	8.4
M10	× 1.5	TE713426	22	100	39	10	8	11	9.3
M11	× 1.5	TE713466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TE713506	24	110	44	9	7	10	11.2
M14	× 2	TE713546	26	110	44	11	9	12	13
M16	× 2	TE713606	27	110	44	12	9	12	15
M18	× 2.5	TE713656	30	125	50	14	11	14	16.8
M20	× 2.5	TE713706	32	140	54	16	12	15	18.8

- DIN 371(M2~M10) and DIN 376(M11~M20)
- * DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP FORMING

TQ723 SERIES

M ISO metric coarse threads DIN 13

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

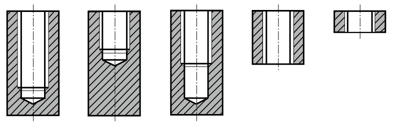
Cold forming taps
Gewindeformer

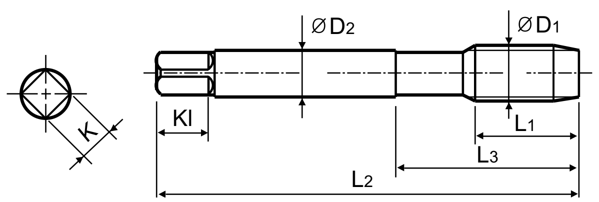
- ▶ Suitable for threading soft materials with at least 8-10% elongation in the best substrate.
- ▶ The pre-drilling holes are bigger than normal sized holes.

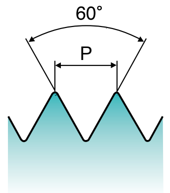
- ▶ Aus bestem Werkstoff geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

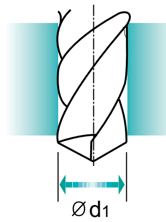
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV | HSS PM | DIN 371/376 | 6HX | 60° | C | Vap | p.B293

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Vap	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TQ723136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TQ723156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TQ723196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TQ723176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TQ723496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TQ723206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TQ723226	12	56	20	4	3	6	3.25
M4	× 0.7	TQ723246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TQ723266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TQ723286	15	70	25	6	4.9	8	4.65
M6	× 1	TQ723316	17	80	30	6	4.9	8	5.55
M7	× 1	TQ723346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TQ723366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TQ723396	20	90	35	9	7	10	8.4
M10	× 1.5	TQ723426	22	100	39	10	8	11	9.3
M11	× 1.5	TQ723466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TQ723506	24	110	44	9	7	10	11.2
M14	× 2	TQ723546	26	110	44	11	9	12	13
M16	× 2	TQ723606	27	110	44	12	9	12	15
M18	× 2.5	TQ723656	30	125	50	14	11	14	16.8
M20	× 2.5	TQ723706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

YG TAP FORMING

TE723 SERIES

M ISO metric coarse threads DIN 13

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

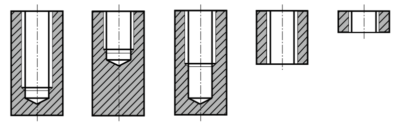
Cold forming taps
Gewindeformer

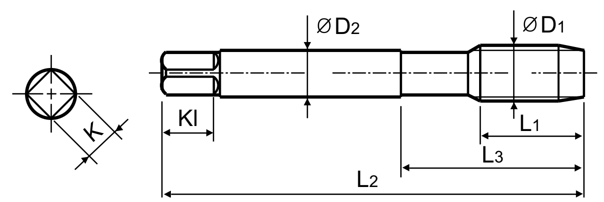
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.

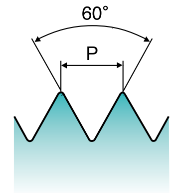
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

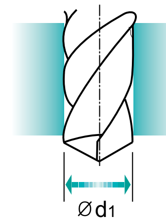
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV | HSS PM | DIN 371/376 | 6HX | 60° | C | Nitride | p.B293

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Ni	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TE723136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TE723156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TE723196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TE723176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TE723496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TE723206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TE723226	12	56	20	4	3	6	3.25
M4	× 0.7	TE723246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TE723266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TE723286	15	70	25	6	4.9	8	4.65
M6	× 1	TE723316	17	80	30	6	4.9	8	5.55
M7	× 1	TE723346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TE723366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TE723396	20	90	35	9	7	10	8.4
M10	× 1.5	TE723426	22	100	39	10	8	11	9.3
M11	× 1.5	TE723466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TE723506	24	110	44	9	7	10	11.2
M14	× 2	TE723546	26	110	44	11	9	12	13
M16	× 2	TE723606	27	110	44	12	9	12	15
M18	× 2.5	TE723656	30	125	50	14	11	14	16.8
M20	× 2.5	TE723706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP FORMING

TD723 SERIES

M ISO metric coarse threads DIN 13

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

Cold forming taps
Gewindeformer

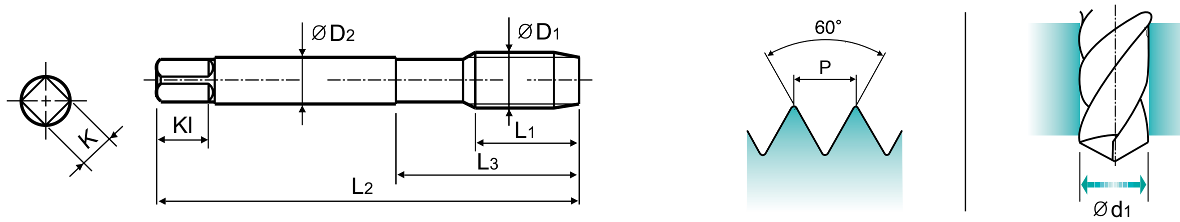
- Suitable for threading soft materials with at least 8-10% elongation.
- The pre-drilling holes are bigger than normal sized holes.

- Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

DIN 371

DIN 376

Hole type
3.0×D



Material groups: GV | HSS-E | DIN 371/376 | 6HX | 60° | C | TiN | p.B293

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Recommended Cutting Page : P.285

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	Kl	Ød1
M2	× 0.4	TD723136	8	45	13	2.8	2.1	5	1.83
M2.2	× 0.45	TD723156	8	45	13	2.8	2.1	5	2
*M2.3	× 0.4	TD723196	8	45	13	2.8	2.1	5	2.1
M2.5	× 0.45	TD723176	9	50	15	2.8	2.1	5	2.3
*M2.6	× 0.45	TD723496	9	50	15	2.8	2.1	5	2.4
M3	× 0.5	TD723206	11	56	18	3.5	2.7	6	2.8
M3.5	× 0.6	TD723226	12	56	20	4	3	6	3.25
M4	× 0.7	TD723246	13	63	21	4.5	3.4	6	3.7
M4.5	× 0.75	TD723266	14	70	25	6	4.9	8	4.15
M5	× 0.8	TD723286	15	70	25	6	4.9	8	4.65
M6	× 1	TD723316	17	80	30	6	4.9	8	5.55
M7	× 1	TD723346	17	80	30	7	5.5	8	6.55
M8	× 1.25	TD723366	20	90	35	8	6.2	9	7.4
M9	× 1.25	TD723396	20	90	35	9	7	10	8.4
M10	× 1.5	TD723426	22	100	39	10	8	11	9.3
M11	× 1.5	TD723466	22	100	40	8	6.2	9	10.3
M12	× 1.75	TD723506	24	110	44	9	7	10	11.2
M14	× 2	TD723546	26	110	44	11	9	12	13
M16	× 2	TD723606	27	110	44	12	9	12	15
M18	× 2.5	TD723656	30	125	50	14	11	14	16.8
M20	× 2.5	TD723706	32	140	54	16	12	15	18.8

▶DIN 371(M2~M10) and DIN 376(M11~M20)
▶* DIN profile not ISO

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		◎													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG TAP FORMING

TD733 SERIES

MF ISO metric fine threads DIN 13

Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

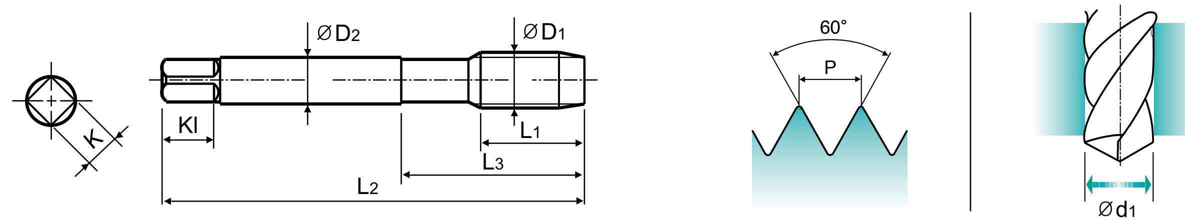
Cold forming taps
Gewindeformer

- Suitable for threading soft materials with at least 8-10% elongation.
- The pre-drilling holes are bigger than normal sized holes.

- Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- Die Kernlochbohrungen sind größer als normale Kernlöcher.

DIN 374

Hole type
3.0×D



Material groups: GV | HSS-E | DIN 374 | 6HX | 60° | C | TiN | p.B293

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Recommended Cutting Page : P.285

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	Kl	Ød1
M4	× 0.5	TD733256	10	63	21	2.8	2.1	5	3.75
M5	× 0.5	TD733296	11	70	25	3.5	2.7	6	4.75
M6	× 0.75	TD733326	13	80	30	4.5	3.4	6	5.65
M6	× 0.5	TD733336	13	80	30	4.5	3.4	6	5.75
M7	× 0.75	TD733356	14	80	30	5.5	4.3	7	6.65
M8	× 1	TD733376	17	90	36	6	4.9	8	7.5
M8	× 0.75	TD733386	14	80	30	6	4.9	8	7.65
M10	× 1.25	TD733436	22	100	40	7	5.5	8	9.4
M10	× 1	TD733446	18	90	36	7	5.5	8	9.5
M10	× 0.75	TD733456	18	90	36	7	5.5	8	9.65
M12	× 1.5	TD733516	22	100	40	9	7	10	11.25
M12	× 1.25	TD733526	22	100	40	9	7	10	11.4
M12	× 1	TD733536	18	100	40	9	7	10	11.5
M14	× 1.5	TD733556	22	100	40	11	9	12	13.25
M14	× 1.25	TD733566	22	100	40	11	9	12	13.4
M16	× 1.5	TD733616	22	100	40	12	9	12	15.25
M18	× 1.5	TD733676	25	110	44	14	11	14	17.25
M20	× 1.5	TD733726	25	125	50	16	12	15	19.25

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		◎													

YG TAP FORMING

TE733 SERIES

MF ISO metric fine threads DIN 13

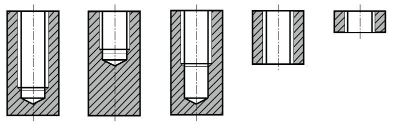
Metrisches ISO-Feingewinde DIN 13
ISO MÉTRIQUE PAS FINS DIN13
ISO Metrico passo fine DIN 13

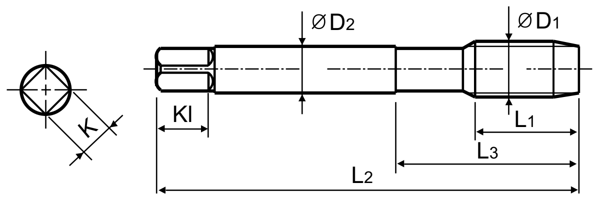
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

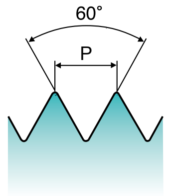
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

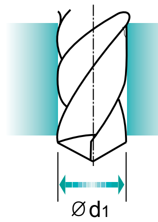
DIN 374

Hole type
3.0×D









Material groups GV | HSS-E | DIN 374 | 6HX | 60° | C | Nitride | p.B293

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.285

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Ni	L1	L2	L3	ØD2	K	Kl	Ød1
M4	× 0.5	TE733256	10	63	21	2.8	2.1	5	3.75
M5	× 0.5	TE733296	11	70	25	3.5	2.7	6	4.75
M6	× 0.75	TE733326	13	80	30	4.5	3.4	6	5.65
M6	× 0.5	TE733336	13	80	30	4.5	3.4	6	5.75
M7	× 0.75	TE733356	14	80	30	5.5	4.3	7	6.65
M8	× 1	TE733376	17	90	36	6	4.9	8	7.5
M8	× 0.75	TE733386	14	80	30	6	4.9	8	7.65
M10	× 1.25	TE733436	22	100	40	7	5.5	8	9.4
M10	× 1	TE733446	18	90	36	7	5.5	8	9.5
M10	× 0.75	TE733456	18	90	36	7	5.5	8	9.65
M12	× 1.5	TE733516	22	100	40	9	7	10	11.25
M12	× 1.25	TE733526	22	100	40	9	7	10	11.4
M12	× 1	TE733536	18	100	40	9	7	10	11.5
M14	× 1.5	TE733556	22	100	40	11	9	12	13.25
M14	× 1.25	TE733566	22	100	40	11	9	12	13.4
M16	× 1.5	TE733616	22	100	40	12	9	12	15.25
M18	× 1.5	TE733676	25	110	44	14	11	14	17.25
M20	× 1.5	TE733726	25	125	50	16	12	15	19.25

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

YG TAP FORMING

TD704 SERIES

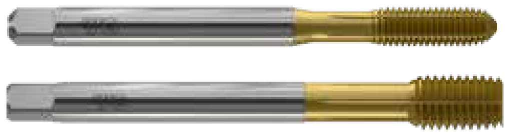
UNC Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

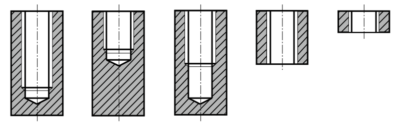
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

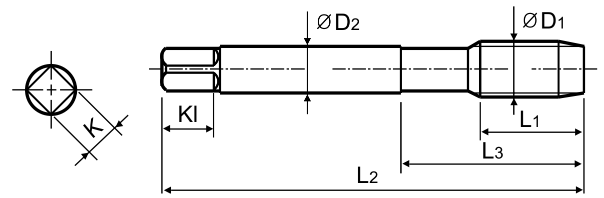
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

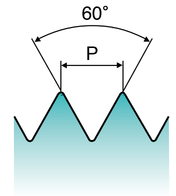
DIN 371
DIN 376

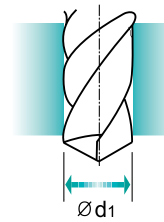


Hole type
3.0×D









Material groups GV | HSS-E | DIN 371/376 | 2BX | 60° | C | TiN | p.B293

Recommended ToolHolder

	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.285

Unit : mm

SIZE		TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			TiN	L1	L2	L3	ØD2	K	Kl	Ød1
#5	-	40 UNC	TD704202	11	56	18	3.5	2.7	6	2.87
#6	-	32 UNC	TD704242	12	56	20	4	3	6	3.1
#8	-	32 UNC	TD704282	13	63	21	4.5	3.4	6	3.8
#10	-	24 UNC	TD704322	15	70	25	6	4.9	8	4.3
#12	-	24 UNC	TD704362	16	80	30	6	4.9	8	4.95
1/4	-	20 UNC	TD704402	17	80	30	7	5.5	8	5.75
5/16	-	18 UNC	TD704442	20	90	35	8	6.2	9	7.25
3/8	-	16 UNC	TD704482	22	100	39	9	7	10	8.75
7/16	-	14 UNC	TD704522	22	100	40	8	6.2	9	10.2
1/2	-	13 UNC	TD704562	25	110	44	9	7	10	11.7
9/16	-	12 UNC	TD704602	26	110	40	11	9	12	13.2
5/8	-	11 UNC	TD704642	27	110	44	12	9	12	14.7
3/4	-	10 UNC	TD704702	30	125	50	14	11	14	17.8

▶DIN 371(#4~3/8) and DIN 376(7/16~3/4)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

UNC

Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

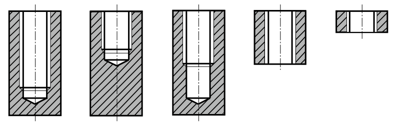
Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

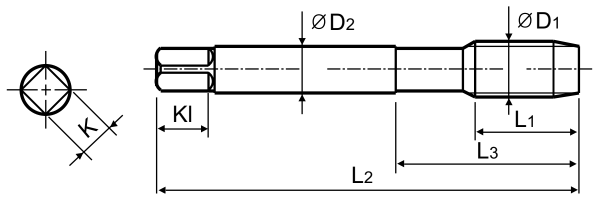
- ▶ Suitable for threading soft materials with at least 8-10% elongation.
- ▶ The pre-drilling holes are bigger than normal sized holes.

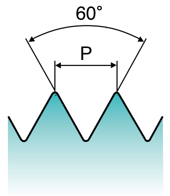
- ▶ Geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.

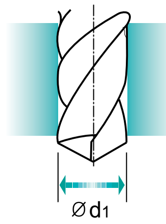
DIN 371
DIN 376

Hole type
3.0×D









Material groups GV | HSS-E | DIN 371/376 | 2BX | 60° | C | Nitride | p.B293

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1		Ni	L1	L2	L3	ØD2	K	Kl	Ød1
#5	- 40 UNC	TE704202	11	56	18	3.5	2.7	6	2.87
#6	- 32 UNC	TE704242	12	56	20	4	3	6	3.1
#8	- 32 UNC	TE704282	13	63	21	4.5	3.4	6	3.8
#10	- 24 UNC	TE704322	15	70	25	6	4.9	8	4.3
#12	- 24 UNC	TE704362	16	80	30	6	4.9	8	4.95
1/4	- 20 UNC	TE704402	17	80	30	7	5.5	8	5.75
5/16	- 18 UNC	TE704442	20	90	35	8	6.2	9	7.25
3/8	- 16 UNC	TE704482	22	100	39	9	7	10	8.75
7/16	- 14 UNC	TE704522	22	100	40	8	6.2	9	10.2
1/2	- 13 UNC	TE704562	25	110	44	9	7	10	11.7
9/16	- 12 UNC	TE704602	26	110	40	11	9	12	13.2
5/8	- 11 UNC	TE704642	27	110	44	12	9	12	14.7
3/4	- 10 UNC	TE704702	30	125	50	14	11	14	17.8

▶DIN 371(#4~3/8) and DIN 376(7/16~3/4)

◎ : 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	◎	◎	◎			◎						○	○	○						

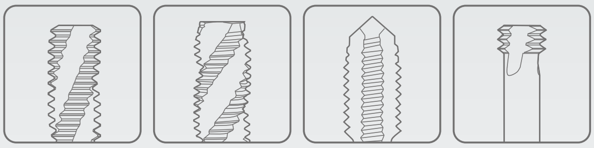
ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	○	○		○		○													

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TD703 TD733 TD704	TE703 TE733 TE704	TY703	TQ703	TD713	TE713	TQ723	TE723	TD723
					Vc (m/min)								
P	1	Non-alloy steel	125		15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
	2	Non-alloy steel	190	13	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
	3	Non-alloy steel	250	25	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18
	6	Low alloy steel	180	10	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
M	12	Stainless steel	200	15	10-13	7-10	10-13	7-10	10-13	7-10	7-10	7-10	10-13
	13	Stainless steel	240	23	8-11	5-8	8-11	5-8	8-11	5-8	5-8	5-8	8-11
	14	Stainless steel	180	10	6-8	4-6	6-8	4-6	6-8	4-6	4-6	4-6	6-8
N	21	Aluminum-wrought alloy	60		10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	22	Aluminum-wrought alloy	100		10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	23	Aluminum-cast, alloyed	75		15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
	24	Aluminum-cast, alloyed	90		10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	25-35	25-35	25-35	25-35	25-35	25-35	25-35	25-35
	28	Copper and Copper Alloys (Bronze / Brass)	100		15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

Global Cutting Tool Leader **YG-1**



THREADING

NUT TAPS

MUTTERGEWINDEBOHRER

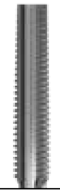
- Nut Tapping Machines
- Zum Gewindeschneiden von Muttern

SELECTION GUIDE

YG THREADING TOOLS

HSS-E NUT TAPS

Nut Tapping Machines

HOLE TYPE			Max. 2.0xD Through Hole
TOOL MATERIAL			HSS-E
CHAMFER LEAD ACC. TO DIN2197			Long
FLUTE TYPE			Straight Flute
SPIRAL FLUTE ANGLE			-
SERIES	M	DIN371/376	
		DIN352	
		DIN357/LONG	TC803 (p.B297)
	MF	DIN374	
		DIN2181	
	UNC	DIN371/376	
		DIN351	
	UNF	DIN371/374	
		DIN2181	
	BSW	DIN2182/2183	
		DIN351	
	G(BSP)	DIN5156/5157	
	EG-M	DIN371/376	
	EG-UNC	DIN371/376	
	EG-UNF	DIN371/374	
SURFACE TREATMENT			Bright
MODEL			

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◎ : Excellent ○ : Good

Recommended cutting conditions : p.B296

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TC803	Vc (m/min)
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	15-20
	2		About 0.45% C	Annealed	190	13	○	15-20
	3		About 0.45% C	Quenched & Tempered	250	25	○	12-18
	4		About 0.75% C	Annealed	270	28	○	10-15
	5		About 0.75% C	Quenched & Tempered	300	32		
	6	Low alloy steel		Annealed	180	10	○	10-15
	7			Quenched & Tempered	275	29	○	10-15
	8			Quenched & Tempered	300	32		
	9			Quenched & Tempered	350	38		
	10	High alloyed steel, and tool steel		Annealed	200	15		
	11			Quenched & Tempered	325	35		
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15		
	13		Martensitic	Quenched & Tempered	240	23		
	14		Austenitic		180	10		
K	15	Grey cast iron	Pearlitic / ferritic		180	10		
	16		Pearlitic (Martensitic)		260	26		
	17	Nodular cast iron	Ferritic		160	3	○	10-15
	18		Pearlitic		250	25	○	5-8
	19	Malleable cast iron	Ferritic		130			
	20		Pearlitic		230	21		
N	21	Aluminum-wrought alloy	Not Curable		60			
	22		Curable	Hardened	100			
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75			
	24		≤ 12% Si, Curable	Hardened	90			
	25		> 12% Si, Not Curable		130		○	10-15
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		○	25-35
	27		CuZn, CuSnZn (Brass)		90		○	8-12
	28		CuSn, lead-free copper and electrolytic copper		100			
	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		Ni or Co Based	Annealed	250	25		
	34			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		

NUT TAPS

TC803 SERIES

M ISO metric coarse threads DIN 13

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

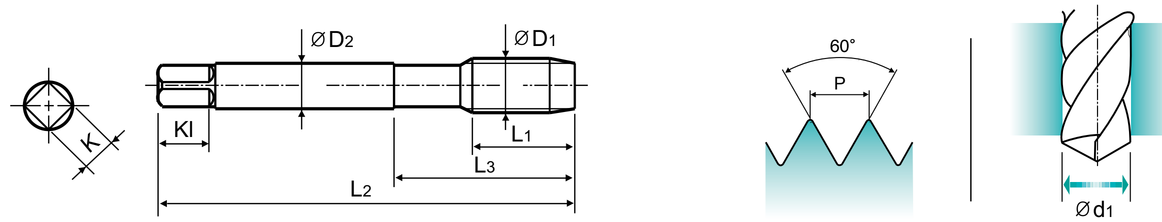
Nut taps
Muttergewindebohrer

- For making nuts on machines.
- The work pieces can be taken out from shank side only.

- Zur Herstellung von Muttern auf Sondermaschinen.
- Die fertigen Muttern können nur über das Schaftende entnommen werden.

DIN 357

Hole type
2.0×D



Material groups GS HSS-E DIN 357 6H 60° LONG Bright

p.B296

Recommended ToolHolder

	Page
Plain Shank	
TAPPING ER CHUCK	D215-220
TAPPING CHUCK	D221-228
ONE STEP TAPPING CHUCK	D211-213

Unit : mm

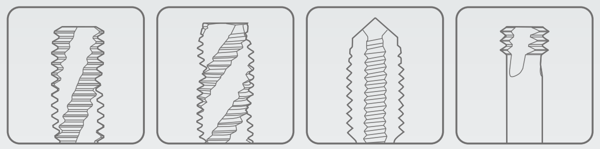
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M4	× 0.7	TC803246	25	90	45	2.8	2.1	5	3	3.3
M5	× 0.8	TC803286	28	100	50	3.5	2.7	6	3	4.2
M6	× 1	TC803316	32	110	55	4.5	3.4	6	3	5
M7	× 1	TC803346	36	110	55	5.5	4.3	7	3	6
M8	× 1.25	TC803366	40	125	62	6	4.9	8	3	6.8
M10	× 1.5	TC803426	45	140	70	7	5.5	8	3	8.5
M12	× 1.75	TC803506	50	180	90	9	7	10	3	10.2
M14	× 2	TC803546	56	200	100	11	9	12	4	12
M16	× 2	TC803606	63	200	100	12	9	12	4	14
M18	× 2.5	TC803656	63	220	110	14	11	14	4	15.5
M20	× 2.5	TC803706	70	250	125	16	12	15	4	17.5

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended					○	○	○														

Global Cutting Tool Leader **YG-1**



THREADING

SCREW THREAD INSERT TAPS

SCHRAUBENGEWINDE INSERT TAPS

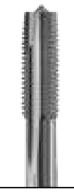
- Tapping STI Threads of Soft Materials
- Gewindeschneiden von STI-Gewinden in weichen Materialien

SELECTION GUIDE

THREADING TOOLS

HSS-E SCREW THREAD INSERT TAPS

Tapping STI Threads of Soft Materials

HOLE TYPE			Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole
TOOL MATERIAL			HSS-E	HSS-E
CHAMFER LEAD ACC. TO DIN2197			C	B
FLUTE TYPE			Spiral Flute	Spiral Point
SPIRAL FLUTE ANGLE			R40	-
SERIES	M	DIN371/376		
		DIN352		
		DIN357/LONG		
	MF	DIN374		
		DIN2181		
	UNC	DIN371/376		
		DIN351		
	UNF	DIN371/374		
		DIN2181		
	BSW	DIN2182/2183		
		DIN351		
	G(BSP)	DIN5156/5157		
	EG-M	DIN371/376	TC909 (p.B301)	TC973 (p.B302)
	EG-UNC	DIN371/376	TC944 (p.B303)	TC934 (p.B304)
	EG-UNF	DIN371/374		TC954 (p.B305)
SURFACE TREATMENT			Bright	Bright
MODEL				

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◎ : Excellent ○ : Good

Recommended cutting conditions : p.B306

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	TC909	TC973
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○
	2		About 0.45% C	Annealed	190	13	○	○
	3		About 0.45% C	Quenched & Tempered	250	25	○	○
	4		About 0.75% C	Annealed	270	28		
	5		About 0.75% C	Quenched & Tempered	300	32		
	6	Low alloy steel		Annealed	180	10		
	7			Quenched & Tempered	275	29		
	8			Quenched & Tempered	300	32		
	9			Quenched & Tempered	350	38		
	10	High alloyed steel, and tool steel		Annealed	200	15		
	11			Quenched & Tempered	325	35		
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15		
	13		Martensitic	Quenched & Tempered	240	23		
	14		Austenitic		180	10		
K	15	Grey cast iron	Pearlitic / ferritic		180	10		
	16		Pearlitic (Martensitic)		260	26		
	17	Nodular cast iron	Ferritic		160	3		
	18		Pearlitic		250	25		
	19	Malleable cast iron	Ferritic		130			
	20		Pearlitic		230	21		
N	21	Aluminum-wrought alloy	Not Curable		60		◎	◎
	22		Curable	Hardened	100		◎	◎
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		◎	◎
	24		≤ 12% Si, Curable	Hardened	90		◎	◎
	25		> 12% Si, Not Curable		130			
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110			
	27		CuZn, CuSnZn (Brass)		90		◎	◎
	28		CuSn, lead-free copper and electrolytic copper		100			
	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		Ni or Co Based	Annealed	250	25		
	34			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		

SCREW THREAD INSERT TAPS

TC909 SERIES

EG-M ISO metric coarse threads for Screw Thread insert

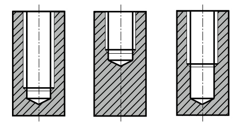
Metrisches ISO Regelgew.f.Gew. Drahteins
ISO MÉTRIQUE DIN13 POUR FILETS RAPPORTÉS
ISO Metrico passo grosso per Helicoil

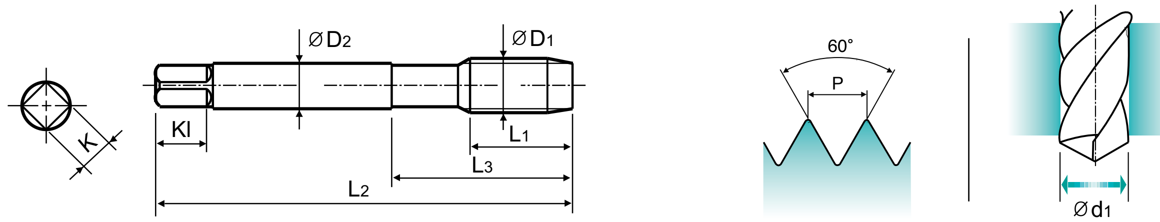
Machine taps
Maschinengewindebohrer

▶ Wire insert threads are used for increasing fastening strength in soft materials.

▶ Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

Hole type 2.5×D





Material groups: AI, HSS-E, DIN 371/376, 6H Mod., 60°, C, R40, Bright, p.B306

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215~220; TAPPING CHUCK D221~228; ONE STEP TAPPING CHUCK D211~213

Recommended Cutting Page : P.298

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2.5	× 0.45	TC909176	6	56	18	3.5	2.7	6	3	2.65
M3	× 0.5	TC909206	5	63	21	4.5	3.4	6	3	3.15
M3.5	× 0.6	TC909226	8	70	25	6	4.9	8	3	3.7
M4	× 0.7	TC909246	8	70	25	6	4.9	8	3	4.2
M5	× 0.8	TC909286	8	80	30	6	4.9	8	3	5.25
M6	× 1	TC909316	10	90	35	8	6.2	9	3	6.3
M8	× 1.25	TC909366	16	100	39	10	8	11	3	8.4
M10	× 1.5	TC909426	15	110	44	9	7	10	3	10.4
M12	× 1.75	TC909506	20	110	44	11	9	12	3	12.5
M14	× 2	TC909546	22	110	44	12	9	12	3	14.5
M16	× 2	TC909606	25	125	50	14	11	14	4	16.5
M18	× 2.5	TC909656	27	140	54	18	14.5	17	4	18.75
M20	× 2.5	TC909706	30	160	60	18	14.5	17	4	20.75

▶DIN 371(M2.5~M8) and DIN 376(M10~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			◎														

SCREW THREAD INSERT TAPS

TC973 SERIES

EG-M

ISO metric coarse threads for Screw Thread insert

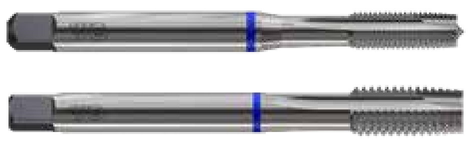
Metrisches ISO Regelgew.f.Gew. Drahteins
ISO MÉTRIQUE DIN13 POUR FILETS RAPPORTÉS
ISO Metrico passo grosso per Helicoil

Machine taps
Maschinengewindebohrer

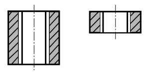
▶ Wire insert threads are used for increasing fastening strength in soft materials.

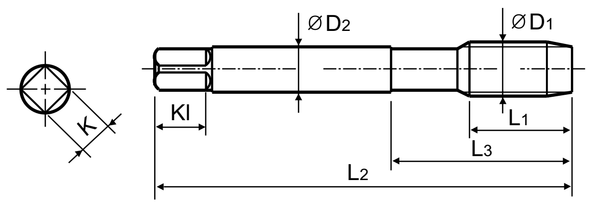
▶ Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

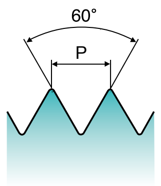
DIN 371
DIN 376

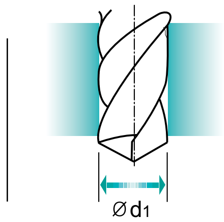


Hole type
3.0×D









Material groups: AI | HSS-E | DIN 371/378 | 6H Mod. | 60° | B | Bright | p.B306

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Recommended Cutting Page : P.298

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	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2.5	× 0.45	TC973176	11	56	18	3.5	2.7	6	3	2.65
M3	× 0.5	TC973206	10	63	21	4.5	3.4	6	3	3.15
M3.5	× 0.6	TC973226	14	70	25	6	4.9	8	3	3.7
M4	× 0.7	TC973246	13	70	25	6	4.9	8	3	4.2
M5	× 0.8	TC973286	13	80	30	6	4.9	8	3	5.25
M6	× 1	TC973316	17	90	35	8	6.2	9	3	6.3
M8	× 1.25	TC973366	18	100	39	10	8	11	3	8.4
M10	× 1.5	TC973426	22	110	44	9	7	10	3	10.4
M12	× 1.75	TC973506	26	110	44	11	9	12	3	12.5
M14	× 2	TC973546	27	110	44	12	9	12	3	14.5
M16	× 2	TC973606	30	125	50	14	11	14	4	16.5
M18	× 2.5	TC973656	32	140	54	18	14.5	17	4	18.75
M20	× 2.5	TC973706	34	160	60	18	14.5	17	4	20.75

▶DIN 371(M2.5~M8) and DIN 376(M10~M20)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			◎														

SCREW THREAD INSERT TAPS

TC944 SERIES

EG-UNC

Unified coarse threads for Screw Thread insert

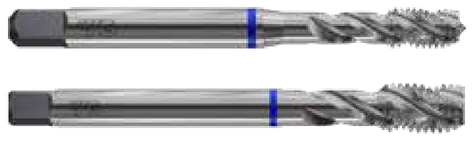
Unified Regelgew.f.Gew.Drahteins
UNC POUR FILETS RAPPORTÉS
ISO Metrico passo grosso per Helicoil

Machine taps
Maschinengewindebohrer

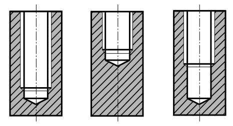
▶ Wire insert threads are used for increasing fastening strength in soft materials.

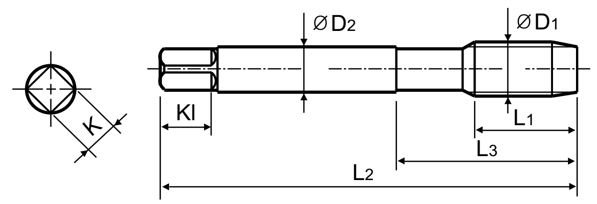
▶ Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

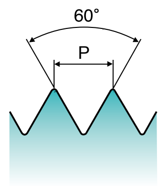
DIN 371
DIN 376

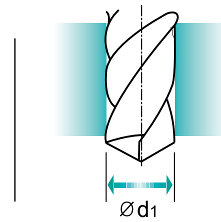


Hole type
2.5×D









Material groups: AI | HSS-E | DIN 371/378 | 2B | 60° | C | R40 | Bright | p.B306

Recommended ToolHolder: Plain Shank — TAPPING ER CHUCK D215-220; TAPPING CHUCK D221-228; ONE STEP TAPPING CHUCK D211-213

Recommended Cutting Page : P.298

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40 UNC	TC944162	7	63	21	4.5	3.4	6	3	3.1
#5	- 40 UNC	TC944202	7	63	21	4.5	3.4	6	3	3.4
#6	- 32 UNC	TC944242	8	70	25	6	4.9	8	3	3.8
#8	- 32 UNC	TC944282	8	80	25	6	4.9	8	3	4.4
#10	- 24 UNC	TC944322	10	80	30	7	5.5	8	3	5.2
#12	- 24 UNC	TC944362	10	80	30	7	5.5	8	3	5.8
1/4	- 20 UNC	TC944402	14	90	35	8	6.2	9	3	6.7
5/16	- 18 UNC	TC944442	16	100	39	10	8	11	3	8.4
3/8	- 16 UNC	TC944482	16	110	39	12	9	12	3	10
7/16	- 14 UNC	TC944522	20	110	44	11	9	12	3	11.6
1/2	- 13 UNC	TC944562	22	110	44	12	9	12	3	13.3
9/16	- 12 UNC	TC944602	22	125	50	14	11	14	3	15
5/8	- 11 UNC	TC944642	25	125	50	14	11	14	4	16.5
3/4	- 10 UNC	TC944702	27	140	56	18	14.5	17	4	19.75

▶DIN 371(#4~3/8) and DIN 376(7/16~3/4)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			◎														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

SCREW THREAD INSERT TAPS

TC934 SERIES

EG-UNC

Unified coarse threads for Screw Thread insert

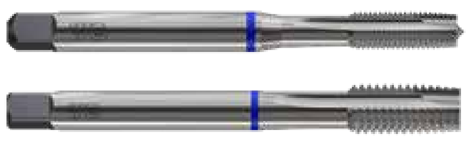
Unified Regelgew.f.Gew.Drahteins
UNC POUR FILETS RAPPORTÉS
ISO Metrico passo grosso per Helicoil

Machine taps
Maschinengewindebohrer

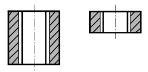
▶ Wire insert threads are used for increasing fastening strength in soft materials.

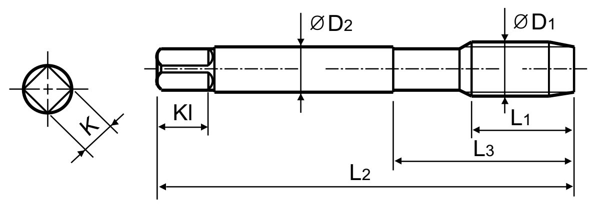
▶ Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

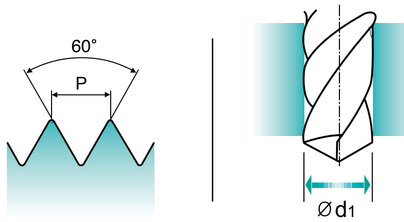
DIN 371
DIN 376



Hole type
3.0×D







p.B306

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.298

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 40 UNC	TC934162	13	63	21	4.5	3.4	6	3	3.1
#5	- 40 UNC	TC934202	13	63	21	4.5	3.4	6	3	3.4
#6	- 32 UNC	TC934242	14	70	25	6	4.9	8	3	3.8
#8	- 32 UNC	TC934282	13	80	25	6	4.9	8	3	4.4
#10	- 24 UNC	TC934322	17	80	30	7	5.5	8	3	5.2
#12	- 24 UNC	TC934362	17	80	30	7	5.5	8	3	5.8
1/4	- 20 UNC	TC934402	20	90	35	8	6.2	9	3	6.7
5/16	- 18 UNC	TC934442	22	100	39	10	8	11	3	8.4
3/8	- 16 UNC	TC934482	21	110	39	12	9	12	3	10
7/16	- 14 UNC	TC934522	26	110	44	11	9	12	3	11.6
1/2	- 13 UNC	TC934562	27	110	44	12	9	12	3	13.3
9/16	- 12 UNC	TC934602	30	125	50	14	11	14	3	15
5/8	- 11 UNC	TC934642	30	125	50	14	11	14	4	16.5
3/4	- 10 UNC	TC934702	32	140	54	18	14.5	17	4	19.75

▶DIN 371(#4~3/8) and DIN 376(7/16~3/4)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			◎														

SCREW THREAD INSERT TAPS

TC954 SERIES

EG-UNF

Unified fine threads for Screw Thread insert

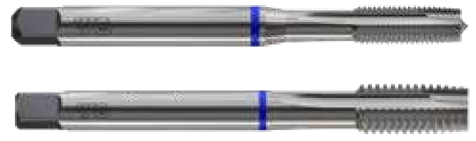
Unified Feingew.f.Gew.Drahteins
UNC POUR FILETS RAPPORTÉS
ISO Metrico passo grosso per Helicoil

Machine taps
Maschinengewindebohrer

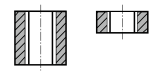
▶ Wire insert threads are used for increasing fastening strength in soft materials.

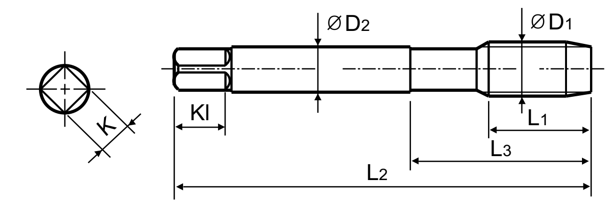
▶ Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

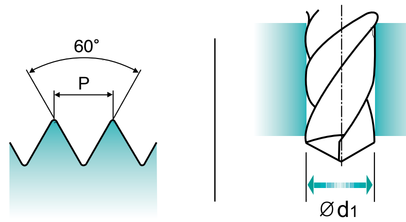
DIN 371
DIN 374



Hole type
3.0×D







p.B306

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.298

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
#4	- 48 UNF	TC954182	12	56	20	4	3	6	3	3.1
#6	- 40 UNF	TC954262	14	70	25	6	4.9	8	3	3.7
#8	- 36 UNF	TC954302	13	70	25	6	4.9	8	3	4.4
#10	- 32 UNF	TC954342	13	80	25	6	4.9	8	3	5.1
1/4	- 28 UNF	TC954422	17	90	35	8	6.2	9	3	6.6
5/16	- 24 UNF	TC954462	18	100	39	10	8	11	3	8.25
3/8	- 24 UNF	TC954502	18	110	39	12	9	12	3	9.8
7/16	- 20 UNF	TC954542	22	100	40	9	7	10	3	11.5
1/2	- 20 UNF	TC954582	22	100	40	11	9	12	3	13.1
9/16	- 18 UNF	TC954622	22	100	40	12	9	12	3	14.75
5/8	- 18 UNF	TC954662	25	110	44	14	11	14	4	16.25
3/4	- 16 UNF	TC954722	25	125	50	16	12	15	4	19.5

▶DIN 371(#4~3/8) and DIN 374(7/16~3/4)

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎			◎														

SCREW THREAD INSERT TAPS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC909 TC944	TC973 TC934 TC954
					Vc (m/min)	
P	1	Non-alloy steel	125		15-20	15-20
	2		190	13	15-20	15-20
	3		250	25	12-18	12-18
N	21	Aluminum-wrought alloy	60		10-15	10-15
	22		100		10-15	10-15
	23	Aluminum-cast, alloyed	75		15-20	15-20
	24		90		15-20	15-20
	27	Copper and Copper Alloys (Bronze / Brass)	90		8-12	8-12

PIPE TAPS
GASGEWINDEBOHRER

- Tapping Whitworth Pipe threads
- Zum Gewindeschneiden von Whitworth-Rohrgewinden

SELECTION GUIDE

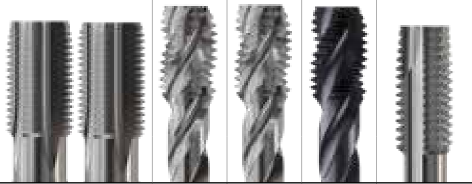
THREADING TOOLS

HSS & HSS-E PIPE TAPS

Tapping Whitworth Pipe threads

HOLE TYPE		Max. 2.0xD Blind/Through Hole	Max. 2.5xD Blind Hole			Max. 3.0xD Through Hole
TOOL MATERIAL		HSS	HSS-E			
CHAMFER LEAD ACC. TO DIN2197		I/III	C			B
FLUTE TYPE		Straight Flute	Spiral Flute			Spiral Point
SPIRAL FLUTE ANGLE		-	R40	R40	R40	-
SERIES M	DIN371/376					
	DIN352					
	DIN357/LONG					
MF	DIN374					
	DIN2181					
UNC	DIN371/376					
	DIN351					
UNF	DIN371/374					
	DIN2181					
BSW	DIN2182/2183					
	DIN351					
G(BSP)	DIN5156/5157	T7709 (p.B309)	TC728 (p.B310)	TC729 (p.B311)	TB514 (p.B312)	TC727 (p.B313)
EG-M	DIN371/376					
EG-UNC	DIN371/376					
EG-UNF	DIN371/374					
SURFACE TREATMENT		Bright	Bright	Bright	VAP	Bright

MODEL



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.B314

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	T7709	TC728	TC729	TB514	TC727
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○			◎	
	2		About 0.45% C	Annealed	190	13	○	◎		◎	◎
	3		About 0.45% C	Quenched & Tempered	250	25	○	◎			◎
	4		About 0.75% C	Annealed	270	28		◎			◎
	5		About 0.75% C	Quenched & Tempered	300	32					
	6	Low alloy steel		Annealed	180	10	○	◎	○		◎
	7			Quenched & Tempered	275	29		◎	○		◎
	8			Quenched & Tempered	300	32			◎		
	9			Quenched & Tempered	350	38			◎		
	10	High alloyed steel, and tool steel		Annealed	200	15					
	11			Quenched & Tempered	325	35					
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15				◎	
	13		Martensitic	Quenched & Tempered	240	23				◎	
	14		Austenitic		180	10			○	◎	
K	15	Grey cast iron	Pearlitic / ferritic		180	10	○				
	16		Pearlitic (Martensitic)		260	26	○				
	17	Nodular cast iron	Ferritic		160	3		◎			◎
	18		Pearlitic		250	25		◎			◎
	19	Malleable cast iron	Ferritic		130						
	20		Pearlitic		230	21					
N	21	Aluminum-wrought alloy	Not Curable		60		○	○			○
	22		Curable	Hardened	100		○	○			○
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		○	○			○
	24		≤ 12% Si, Curable	Hardened	90			○			○
	25		> 12% Si, Not Curable		130			◎			◎
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110			◎			◎
	27		CuZn, CuSnZn (Brass)		90			○			○
	28		CuSn, lead-free copper and electrolytic copper		100						
	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		Ni or Co Based	Annealed	250	25					
	34			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					

PIPE TAPS

T7709 SERIES

G(BSP) Whitworth Pipe threads DIN ISO 228/1

Whitworth Rohrgewinde DIN ISO 228/1
G(BSP) PROFIL 55° DIN ISO 228/1
Filettatura Whitworth per tubi DIN ISO 228/1

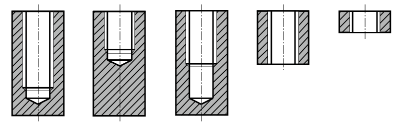
Sets of taps
Gewindebohrer-Satz

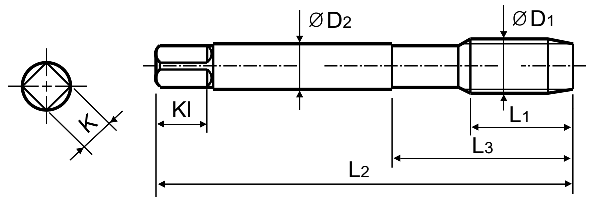
▶ Serial hand tap set in First and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only.

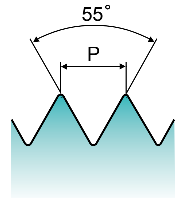
▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

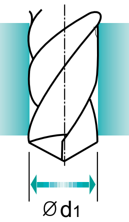
First
Bottoming

Hole type 2.0×D









Material groups GS | HSS | DIN 6167 | 55° | I/III | Bright | p.B314

Recommended ToolHolder	Plain Shank	Page
	TAPPING ER CHUCK	D215-220
◎	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/16	28	T7709029	22	56	26	6	4.9	8	3	6.8
G1/8	28	T7709209	20	63	27	7	5.5	8	4	8.8
G1/4	19	T7709409	22	70	32	11	9	12	4	11.8
G3/8	19	T7709489	22	70	32	12	9	12	4	15.25
G1/2	14	T7709569	22	80	35	16	12	15	4	19
G3/4	14	T7709709	22	90	40	20	16	19	4	24.5
G1	11	T7709789	25	100	45	25	20	23	6	30.75
G1-1/4	11	T7709869	40	125	77	32	24	27	6	39.5
G1-1/2	11	T7709949	40	140	85	36	29	32	6	45.2

◎ : 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	○	○	○																		

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

YG PIPE TAPS

TC728 SERIES

G(BSP) Whitworth pipe threads DIN ISO 228/1

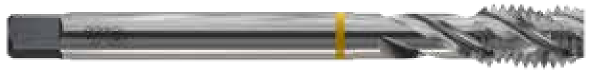
Whitworth Rohrgewinde DIN ISO 228/1
G(BSP) PROFIL 55° DIN ISO 228/1
Filettatura Whitworth per tubi DIN ISO 228/1

Machine taps
Maschinengewindebohrer

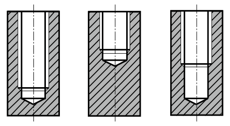
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

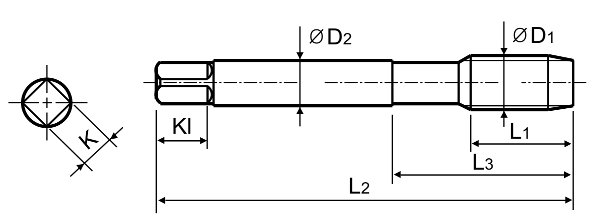
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

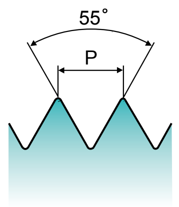
DIN 5156

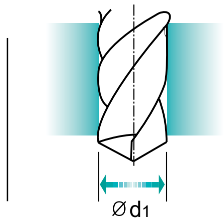


Hole type
2.5×D









Material groups: GS | HSS-E | DIN 5156 | 55° | C | R40 | Bright | p.B314

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.306

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/8 -	28	TC728200	20	90	36	7	5.5	8	3	8.8
G1/4 -	19	TC728400	22	100	40	11	9	12	3	11.8
G3/8 -	19	TC728480	22	100	40	12	9	12	3	15.25
G1/2 -	14	TC728560	25	125	50	16	12	15	4	19
G3/4 -	14	TC728700	28	140	54	20	16	19	4	24.5
G1 -	11	TC728780	30	160	60	25	20	23	4	30.75

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	◎	◎	○														

YG PIPE TAPS

TC729 SERIES

G(BSP) Whitworth pipe threads DIN ISO 228/1

Whitworth Rohrgewinde DIN ISO 228/1
G(BSP) PROFIL 55° DIN ISO 228/1
Filettatura Whitworth per tubi DIN ISO 228/1

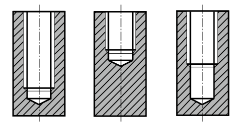
Machine taps
Maschinengewindebohrer

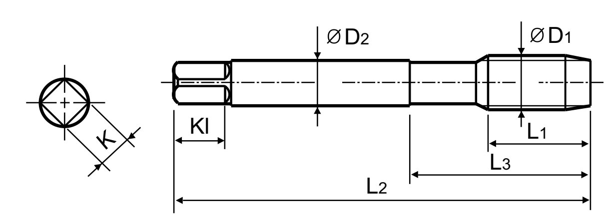
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

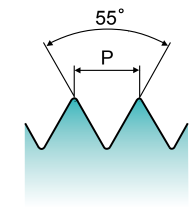
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

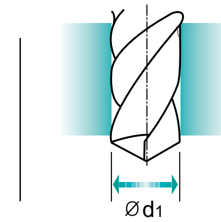
DIN 5156

Hole type
2.5×D









Material groups: VG | HSS-E | DIN 5156 | 55° | C | R40 | Bright | p.B314

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215-220
	TAPPING CHUCK	D221-228
	ONE STEP TAPPING CHUCK	D211-213

Recommended Cutting Page : P.306

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/8 -	28	TC729200	20	90	36	7	5.5	8	3	8.8
G1/4 -	19	TC729400	22	100	40	11	9	12	3	11.8
G3/8 -	19	TC729480	22	100	40	12	9	12	3	15.25
G1/2 -	14	TC729560	25	125	50	16	12	15	4	19
G3/4 -	14	TC729700	28	140	54	20	16	19	4	24.5
G1 -	11	TC729780	30	160	60	25	20	23	4	30.75

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended																					

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

PIPE TAPS

TB514 SERIES

G(BSP) Whitworth pipe threads DIN ISO 228/1

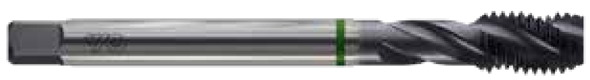
Whitworth Rohrgewinde DIN ISO 228/1
G(BSP) PROFIL 55° DIN ISO 228/1
Filettatura Whitworth per tubi DIN ISO 228/1

Machine taps
Maschinengewindebohrer

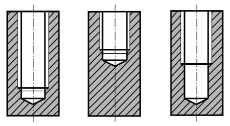
▶ Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

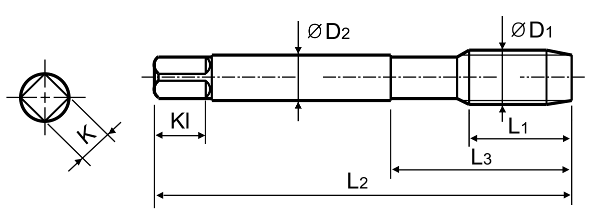
▶ Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

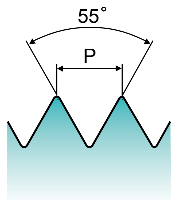
DIN 5156

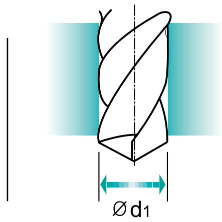


Hole type
2.5×D









Material groups: VA NW | HSS-E | DIN 5156 | 55° | C | R40 | Vap | p.B314

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

Recommended Cutting Page : P.306

Unit : mm

SIZE		TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1			Vap	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/8	-	28	TB514200	20	90	36	7	5.5	8	3	8.8
G1/4	-	19	TB514400	22	100	40	11	9	12	3	11.8
G3/8	-	19	TB514480	22	100	40	12	9	12	3	15.25
G1/2	-	14	TB514560	25	125	50	16	12	15	4	19
G3/4	-	14	TB514700	28	140	54	20	16	19	4	24.5
G1	-	11	TB514780	30	160	60	25	20	23	4	30.75

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended																					

PIPE TAPS

TC727 SERIES

G(BSP) Whitworth Pipe threads DIN ISO 228/1

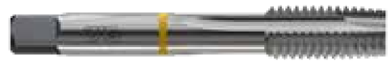
Whitworth Rohrgewinde DIN ISO 228/1
G(BSP) PROFIL 55° DIN ISO 228/1
Filettatura Whitworth per tubi DIN ISO 228/1

Machine taps
Maschinengewindebohrer

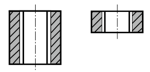
▶ Suitable for through hole in more cutting speed than other taps due to strong geometry.

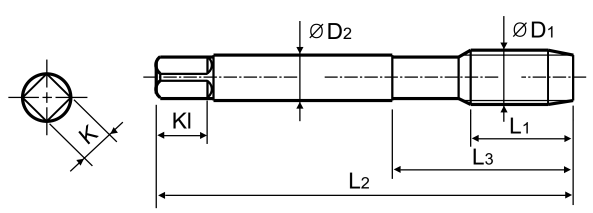
▶ Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

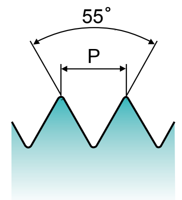
DIN 5156

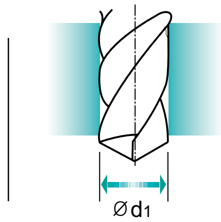


Hole type
3.0×D









Material groups: VG | HSS-E | DIN 5156 | 55° | B | Bright | p.B314

Recommended ToolHolder	Plain Shank	Page
◎	TAPPING ER CHUCK	D215 -220
	TAPPING CHUCK	D221 -228
	ONE STEP TAPPING CHUCK	D211 -213

Recommended Cutting Page : P.306

Unit : mm

SIZE		TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1			Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/8	-	28	TC727200	20	90	36	7	5.5	8	3	8.8
G1/4	-	19	TC727400	22	100	40	11	9	12	3	11.8
G3/8	-	19	TC727480	22	100	40	12	9	12	3	15.25
G1/2	-	14	TC727560	25	125	50	16	12	15	4	19
G3/4	-	14	TC727700	28	140	54	20	16	19	4	24.5
G1	-	11	TC727780	30	160	60	25	20	23	4	30.75

◎ : 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	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	◎	◎	○														

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

PIPE TAPS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	TC728	TC729	TB514	TC727
					Vc (m/min)			
P	1	Non-alloy steel	125				15-20	
	2		190	13	15-20		15-20	15-20
	3		250	25	12-18			12-18
	4		270	28	10-15			10-15
	5		300	32				
	6	Low alloy steel	180	10	10-15	10-15		10-15
	7		275	29	10-15	10-15		10-15
	8		300	32		6-10		
	9		350	38		3-5		
M	12	Stainless steel	200	15			7-10	
	13		240	23			5-8	
	14		180	10		4-6	4-6	
K	17	Nodular cast iron	160	3	10-15			10-15
	18		250	25	5-8			5-8
N	21	Aluminum-wrought alloy	60		10-15			10-15
	22		100		10-15			10-15
	23	Aluminum-cast, alloyed	75		15-20			15-20
	24		90		15-20			15-20
	25		130		10-15			10-15
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35			25-35
	27		90		8-12			8-12

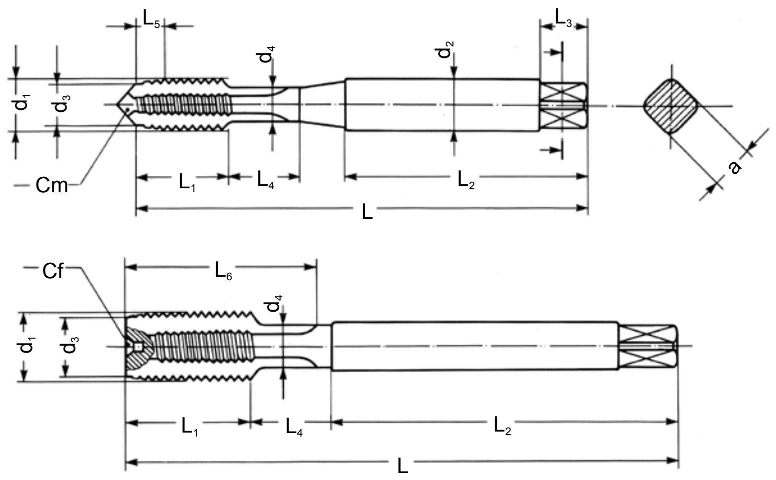
Leading Through Innovation

TAPS

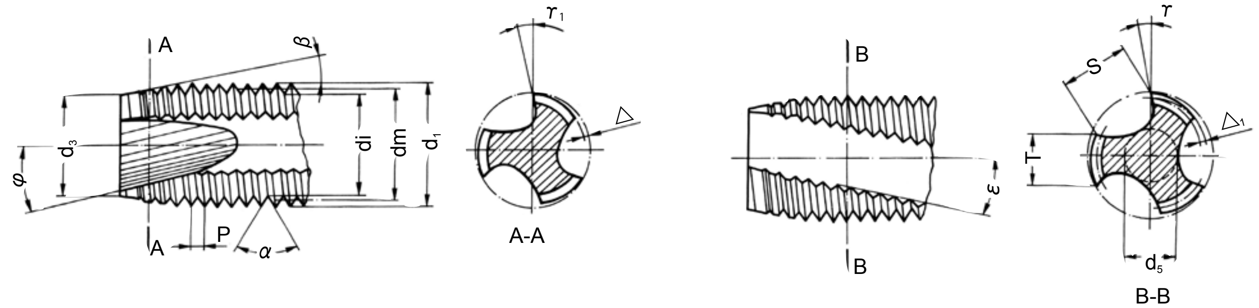
TECHNICAL DATA

TECHNISCHE DATEN

1 TAPS TERMINOLOGY
FACHAUSDRÜCKE BEI GEWINDEBOHRERN (Terminologie)



d_1	Major diameter	d_1	Nenn Aussendurchmesser	d_1	Diamètre externe nominal
d_2	Shank diameter	d_2	Schaftdurchmesser	d_2	Diamètre de la queue
d_3	Chamfer diameter	d_3	Anschnittdurchmesser	d_3	Diamètre de l'entrée
d_4	Neck diameter	d_4	Bunddurchmesser	d_4	Diamètre de la collerette de dégagement
L	Total length	L	Gesamtlänge	L	Longueur totale
L_1	Thread length	L_1	Gewindelänge	L_1	Longueur de la patie filetée
L_2	Shank length	L_2	Schaftlänge	L_2	Longueur de la queue
L_3	Square length	L_3	Vierkantlänge	L_3	Longueur du carré
L_4	Neck length	L_4	Bundlänge	L_4	Longueur de la collerette de dégagement
L_5	Chamfer length	L_5	Anschnittlänge	L_5	Longueur de l'entrée
L_6	Flutes length	L_6	Nutenlänge	L_6	Longueur des goujures
a	Square	a	Vierkantma ß	a	Carré
Cm	Center male	Cm	Mittelpunkt des Aussengewindes	Cm	Centre male
Cf	Center female	Cf	Mittelpunkt des Innengewindes	Cf	Centre femelle



d_1	Major diameter	d_1	Nenn Aussendurchmesser	d_1	Diamètre externe nominal
dm	Flank diameter	dm	Flankendurchmesser	dm	Diamètre moyen
di	Minor diameter	di	Kerndurchmesser	di	Diamètre interne
d_3	Chamfer diameter	d_3	Anschnittdurchmesser	d_3	Diamètre de l'entrée
P	Pitch	P	Steigung	P	Pas
a	Flank angle	a	Flankenwinkel	α	Angle du filet
β	Chamfer angle	β	Anschnittwinkel	β	Demi-angle du cône d'entrée
φ	Gun nose angle	φ	Schälschnittwinkel	φ	Angle de l'entrée GUN
τ	Gun nose rake angle in front	τ_1	Schälschnitt-Spanwinkel	τ_1	Angle de coupe sur l'entrée GUN
$\triangle$	Chamfer relief	$\triangle$	Hinterschliff am Anschnitt	$\triangle$	Détalonnage sur l'entrée
$\triangle_1$	Pitch diameter relief on the land	$\triangle_1$	Flankenhinterschliff auf Zahnbreite	$\triangle_1$	Détalonnage sur le filet
τ	Rake angle	τ	Spanwinkel	τ	Angle de coupe frontale
T	Width of land	T	Zahnstollenbreite	T	Largeur des dents
S	Flute width	S	Nutenbreite	S	Largeur des goujoures
d_5	Web tickness	d_5	Seelendicke	d_5	Diamètre de l'ame
ε	Angle of spiral flute	ε	Spiralwinkel	ε	Angle d'hélice des goujures

TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

2 RECOMMENDED TAP DRILL SIZE
EMPFOHLENE KERNLOCHMASSE

Unit : mm

Metric-ISO threads coarse pitch				Metric-ISO threads fine pitch				Metric-ISO threads fine pitch			
M	Pitch	Maximum core dia.	Drill size	MF	Pitch	Maximum core dia.	Drill size	MF	Pitch	Maximum core dia.	Drill size
1	0.25	0.785	0.75	2.5	0.35	2.221	2.15	25	2.00	23.210	23.00
1.1	0.25	0.885	0.85	3	0.35	2.271	2.65	26	1.50	24.676	24.50
1.2	0.25	0.985	0.95	3.5	0.35	3.221	3.15	27	1.00	26.153	26.00
1.4	0.30	1.160	1.10	4	0.50	3.599	3.50	27	1.50	25.676	25.50
1.6	0.35	1.321	1.25	4.5	0.50	4.099	4.00	27	2.00	25.210	25.00
1.7	0.35	1.346	1.30	5	0.50	4.599	4.50	28	1.00	27.153	27.00
1.8	0.35	1.521	1.45	5.5	0.50	5.099	5.00	28	1.50	26.676	26.50
2	0.40	1.679	1.60	6	0.75	5.378	5.20	28	2.00	26.210	26.00
2.2	0.45	1.838	1.75	7	0.75	6.378	6.20	30	1.00	29.153	29.00
2.3	0.40	1.920	1.90	8	0.75	7.378	7.20	30	1.50	28.676	28.50
2.5	0.45	2.138	2.05	8	1.00	7.153	7.00	30	2.00	28.210	28.00
2.6	0.45	2.176	2.10	9	0.75	8.378	8.20	30	3.00	27.252	27.00
3	0.50	2.599	2.50	9	1.00	8.153	8.00	32	1.50	30.675	30.50
3.5	0.60	3.010	2.90	10	0.75	9.378	9.20	32	2.00	30.210	30.00
4	0.70	3.422	3.30	10	1.00	9.153	9.00	33	1.50	31.676	31.50
4.5	0.75	3.878	3.70	10	1.25	8.912	8.80	33	2.00	31.210	31.00
5	0.80	4.334	4.20	11	0.75	10.378	10.20	33	3.00	30.252	30.00
6	1.00	5.153	5.00	11	1.00	10.153	10.00	35	1.50	33.676	33.50
7	1.00	6.153	6.00	12	1.00	11.153	11.00	36	1.50	34.676	34.50
8	1.25	6.912	6.80	12	1.25	10.912	10.80	36	2.00	34.210	34.00
9	1.25	7.912	7.80	12	1.50	10.676	10.50	36	3.00	33.252	33.00
10	1.50	8.676	8.50	14	1.00	13.153	13.00	38	1.50	36.676	36.50
11	1.50	9.676	9.50	14	1.25	12.912	12.80	39	1.50	37.676	37.50
12	1.75	10.441	10.20	14	1.50	12.676	12.50	39	2.00	37.210	37.00
14	2.00	12.210	12.00	15	1.00	14.153	14.00	39	3.00	36.252	36.00
16	2.00	14.210	14.00	15	1.50	13.676	13.50	40	1.50	38.676	38.50
18	2.50	15.744	15.50	16	1.00	15.153	15.00	40	2.00	38.210	38.00
20	2.50	17.744	17.50	16	1.50	14.676	14.50	40	3.00	37.252	37.00
22	2.50	19.744	19.50	17	1.00	16.153	16.00	42	1.50	40.676	40.50
24	3.00	21.252	21.00	17	1.50	15.676	15.50	42	2.00	40.210	40.00
27	3.00	24.252	24.00	18	1.00	17.153	17.00	42	3.00	39.252	39.00
30	3.50	26.771	26.50	18	1.50	16.676	16.50	45	1.50	43.676	43.50
33	3.50	29.771	29.50	18	2.00	16.210	16.00	45	2.00	43.210	43.00
36	4.00	32.270	32.00	20	1.00	19.153	19.00	45	3.00	42.252	42.00
39	4.00	35.270	35.00	20	1.50	18.676	18.50	48	1.50	46.676	46.50
42	4.50	37.799	37.50	20	2.00	18.210	18.00	48	2.00	46.210	46.00
45	4.50	40.799	40.50	22	1.00	21.153	21.00	48	3.00	45.252	45.00
48	5.00	43.297	43.00	22	1.50	20.676	20.50	50	1.50	48.676	48.50
52	5.00	47.297	47.00	22	2.00	20.210	20.00	50	2.00	48.210	48.00
56	5.50	50.796	50.50	24	1.00	23.153	23.00	50	3.00	47.252	47.00
60	5.50	54.796	54.50	24	1.50	22.676	22.50	52	1.50	50.676	50.50
64	6.00	58.305	58.00	24	2.00	22.210	22.00	52	2.00	50.210	50.00
68	6.00	62.305	62.00	25	1.00	24.153	24.00	52	3.00	49.252	49.00
				25	1.50	23.676	23.50				

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

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SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

Unit : mm

American Unified coarse threads

UNC	T.P.I	Maximum core dia.	Drill size
#1	64	1.585	1.50
#2	56	1.872	1.80
#3	48	2.146	2.10
#4	40	2.385	2.30
#5	40	2.697	2.60
#6	32	2.896	2.85
#8	32	3.528	3.50
#10	24	3.950	3.90
#12	24	4.590	4.50
1/4"	20	5.250	5.20
5/16"	18	6.680	6.60
3/8"	16	8.082	8.00
7/16"	14	9.441	9.40
1/2"	13	10.881	10.75
9/16"	12	12.301	12.25
5/8"	11	13.693	13.50
3/4"	10	16.624	16.50
7/8"	9	19.520	19.50
1"	8	22.344	22.25
1*1/8"	7	25.082	25.00
1*1/4"	7	28.258	28.25
1*3/8"	6	30.851	30.75
1*1/2"	6	34.026	34.00
1*3/4"	5	39.560	39.50
2"	4.5	45.367	45.25

American Unified fine threads

UNF	T.P.I	Maximum core dia.	Drill size
#0	80	1.306	1.30
#1	72	1.613	1.60
#2	64	1.913	1.90
#3	56	2.197	2.10
#4	48	2.459	2.40
#5	44	2.741	2.70
#6	40	3.012	3.00
#8	36	3.597	3.50
#10	32	4.168	4.10
#12	28	4.717	4.70
1/4"	28	5.563	5.50
5/16"	24	6.995	6.90
3/8"	24	8.565	8.50
7/16"	20	9.947	9.90
1/2"	20	11.524	11.50
9/16"	18	12.969	12.90
5/8"	18	14.554	14.50
3/4"	16	17.546	17.50
7/8"	14	20.493	20.50
1"	12	23.363	23.25
1*1/8"	12	26.538	26.50
1*1/4"	12	29.713	29.50
1*3/8"	12	32.888	32.70
1*1/2"	12	36.063	36.00

Whitworth threads B.S.W.

BSW	T.P.I	Maximum core dia.	Drill size
3/32"	48	1.910	1.80
1/8"	40	2.590	2.50
5/32"	32	3.211	3.10
3/16"	24	3.743	3.60
7/32"	24	4.538	4.40
1/4"	20	5.224	5.10
5/16"	18	6.661	6.50
3/8"	16	8.052	7.90
7/16"	14	9.379	9.30
1/2"	12	10.610	10.50
9/16"	12	12.176	12.00
5/8"	11	13.598	13.50
3/4"	10	16.538	16.50
7/8"	9	19.411	19.25
1"	8	22.185	22.00
1*1/8"	7	24.879	24.75
1*1/4"	7	28.054	27.75
1*3/8"	6	30.555	30.50
1*1/2"	6	33.730	33.50
1*5/8"	5	35.921	35.50
1*3/4"	5	39.096	39.00
1*7/8"	4.5	41.648	41.50
2"	4.5	44.823	44.50
2*1/4"	4	50.420	50.00
2*1/2"	4	56.770	56.50
2*3/4"	3.5	62.108	62.00
3"	3.5	68.459	68.50

Whitworth pipe thread BSP.PI

G(BSP)	T.P.I	Maximum core dia.	Drill size
1/8"	28	8.848	8.80
1/4"	19	11.890	11.80
3/8"	19	15.395	15.25
1/2"	14	19.172	19.00
5/8"	14	21.128	21.00
3/4"	14	24.658	24.50
7/8"	14	28.418	28.25
1"	11	30.931	30.75
1*1/8"	11	35.579	35.50
1*1/4"	11	39.592	39.50
1*3/8"	11	42.005	42.00
1*1/2"	11	45.485	45.20
1*5/8"	11	49.670	49.60
1*3/4"	11	51.428	51.40
2"	11	57.296	57.20
2*1/4"	11	63.392	63.30
2*3/8"	11	67.080	67.00
2*1/2"	11	72.866	72.80
2*3/4"	11	79.216	79.10
3"	11	85.566	85.50
3*1/4"	11	91.662	91.50
3*1/2"	11	98.012	98.00
3*3/4"	11	104.362	104.00
4"	11	110.712	110.50

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
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YG TAP GENERAL
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YG TAP HARDENED
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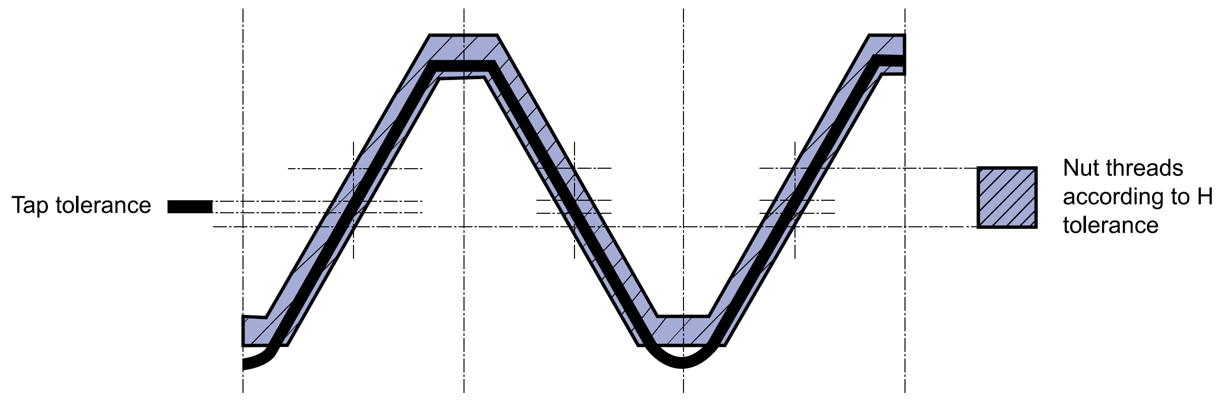
TECHNICAL DATA

TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

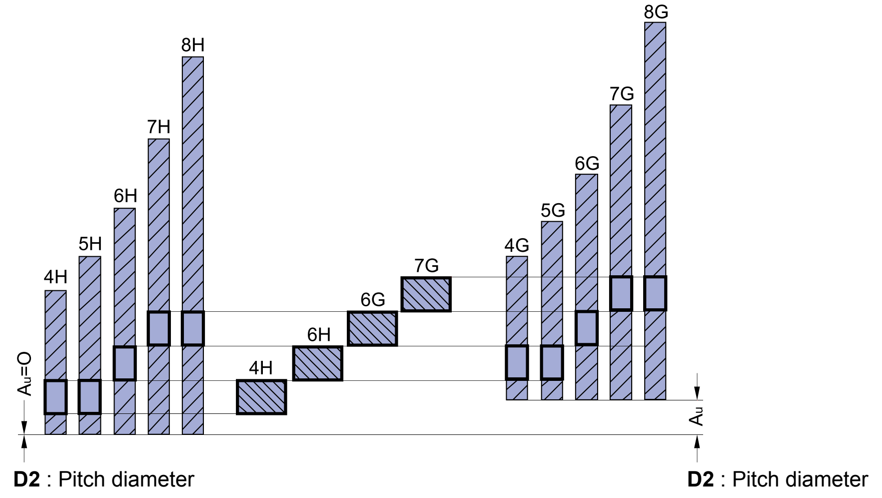
3 TAP TOLERANCES
GEWINDEBOHRER TOLERANZEN

Tolerance classes of taps and tolerance positions for screw threads as per Metric ISO Standard.

Toleranzklassen und Toleranzfelder für Schraubengewinde entsprechen dem metrischen ISO-Standard



Nut thread Positioning of H tolerance	Tolerance Classes for Taps	Nut thread Positioning of G tolerance



Taps tolerances and recomanded classes

Tap tolerance ISO	Tap tolerance DIN	Correct class to obtain Nut thread with tolerance					
ISO 1	4H	4H	5H				
ISO 2	6H	4G	5G	6H			
ISO 3	6G			6G	7H	8H	
	7G				7G	8G	

3-1 METRIC ISO COARSE THREADS
METRISCHES ISO-GEWINDE

Nominal dimensions UNI 4535-64
Production tolerances on tap pitch diameter for ISO 6H Nut threads
Limit dimensions-Nut threads ISO 6H

Dimensions in mm

$H = 0.86603P$

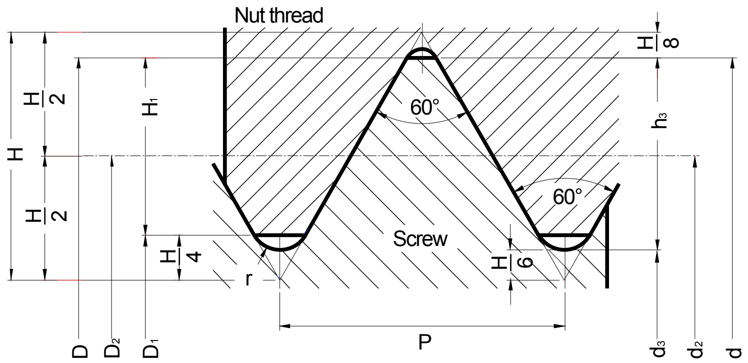
$H_1 = \frac{5}{8} H = 0.54127P$

$h_3 = \frac{17}{24} H = 0.61343P$

$d_2 = D_2 = d - \frac{3}{4} H = d - 0.64952P$

$d_3 = d - 2h_3 = d - 1.22687P$

$r = \frac{H}{6} = 0.14434P$



Nominal diameter	Pitch	Pitch diameter	Minor diameter		Thread depth		Radius	Pitch diameter Tap tolerance 6H		Pitch diameter Nut tolerance 6H	
			Screw	Nut	Screw	Nut		min.	max.	min.	max.
d = D	P	d2 = D2	d3	D1	h3	H1	r	d2			
M 1.6	0.35	1.373	1.171	1.221	0.215	0.189	0.051	1.393	1.407	1.373	1.458
M 1.8	0.35	1.573	1.371	1.421	0.215	0.189	0.051	1.593	1.607	1.573	1.658
M 2	0.4	1.740	1.509	1.567	0.245	0.217	0.058	1.761	1.776	1.740	1.830
M 2.2	0.45	1.908	1.648	1.713	0.276	0.244	0.065	1.931	1.946	1.908	2.003
M 2.5	0.45	2.208	1.948	2.013	0.276	0.244	0.065	2.231	2.246	2.208	2.303
M 3	0.5	2.675	2.387	2.459	0.307	0.271	0.072	2.699	2.715	2.675	2.775
M 3.5	0.6	3.110	2.764	2.850	0.368	0.325	0.087	3.137	3.155	3.110	3.222
M 4	0.7	3.545	3.141	3.242	0.429	0.379	0.101	3.574	3.593	3.545	3.663
M 4.5	0.75	4.013	3.580	3.688	0.460	0.406	0.108	4.042	4.061	4.013	4.131
M 5	0.8	4.480	4.019	4.134	0.491	0.433	0.115	4.510	4.530	4.480	4.605
M 6	1	5.350	4.773	4.917	0.613	0.541	0.144	5.385	5.409	5.350	5.500
M 7	1	6.350	5.773	5.917	0.613	0.541	0.144	6.385	6.409	6.350	6.500
M 8	1.25	7.188	6.466	6.647	0.767	0.677	0.180	7.226	7.251	7.188	7.348
M 9	1.25	8.188	7.466	7.647	0.767	0.677	0.180	8.226	8.251	8.188	8.348
M 10	1.5	9.026	8.160	8.376	0.920	0.812	0.217	9.068	9.096	9.026	9.206
M 11	1.5	10.026	9.160	9.376	0.920	0.812	0.217	10.068	10.096	10.026	10.206
M 12	1.75	10.863	9.853	10.106	1.074	0.947	0.253	10.911	10.943	10.863	11.063
M 14	2	12.701	11.546	11.835	1.227	1.083	0.289	12.752	12.786	12.701	12.913
M 16	2	14.701	13.546	13.835	1.227	1.083	0.289	14.752	14.786	14.701	14.913
M 18	2.5	16.376	14.933	15.294	1.534	1.353	0.361	16.430	16.466	16.376	16.600
M 20	2.5	18.376	16.933	17.294	1.534	1.353	0.361	18.430	18.466	18.376	18.600
M 22	2.5	20.376	18.933	19.294	1.534	1.353	0.361	20.430	20.466	20.376	20.600
M 24	3	22.051	20.319	20.752	1.840	1.624	0.433	22.115	22.157	22.051	22.316
M 27	3	25.051	23.319	23.752	1.840	1.624	0.433	25.115	25.157	25.051	25.316
M 30	3.5	27.727	25.706	26.211	2.147	1.894	0.505	27.794	27.839	27.727	28.007
M 33	3.5	30.727	28.706	29.211	2.147	1.894	0.505	30.794	30.839	30.727	31.007
M 36	4	33.402	31.093	31.670	2.454	2.165	0.577	33.473	33.520	33.402	33.702
M 39	4	36.402	34.093	34.670	2.454	2.165	0.577	36.473	36.520	36.402	36.702
M 42	4.5	39.077	36.479	37.129	2.760	2.436	0.650	39.152	39.202	39.077	39.392
M 45	4.5	42.077	39.479	40.129	2.760	2.436	0.650	42.152	42.202	42.077	42.392
M 48	5	44.752	41.866	42.587	3.067	2.706	0.722	44.832	44.885	44.752	45.087
M 52	5	48.752	45.866	46.587	3.067	2.706	0.722	48.832	48.885	48.752	49.087
M 56	5.5	52.428	49.252	50.046	3.374	2.977	0.794	52.512	52.568	52.428	52.783
M 60	5.5	56.428	53.252	54.046	3.374	2.977	0.794	56.512	56.568	56.428	56.783
M 64	6	60.103	56.639	57.505	3.681	3.248	0.866	60.193	60.253	60.103	60.478
M 68	6	64.103	60.639	61.505	3.681	3.248	0.866	64.193	64.253	64.103	64.478

Metric thread MA(old UNI 159 Profile) **Nut tolerance SH8**

M 1.7	0.35	1.473	1.246	1.246	0.227	0.227	0.040	1.493	1.507	1.473	1.529
M 2.3	0.4	2.040	1.780	1.780	0.260	0.260	0.040	2.061	2.076	2.040	2.120
M 2.6	0.45	2.308	2.016	2.016	0.292	0.292	0.050	2.331	2.346	2.308	2.388

YG TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

3-2 METRIC ISO FINE THREADS
METRISCHES ISO-FEINGEWINDE

Nominal dimensions UNI 4535-64
Production tolerances on tap flank diameter for ISO 6H Nut threads
Limit dimensions-Nut threads ISO 6H

Dimensions in mm

$H = 0.86603P$

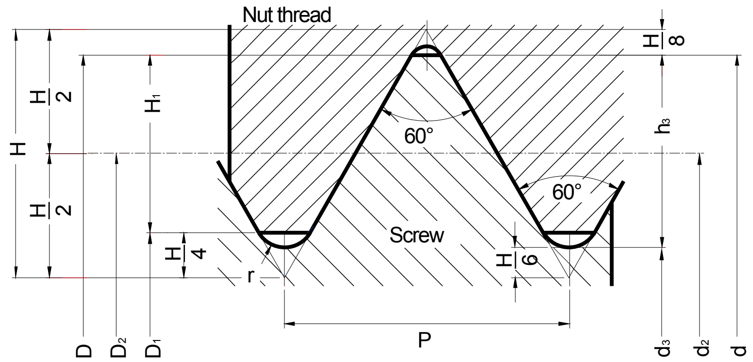
$H_1 = \frac{5}{8} H = 0.54127P$

$h_3 = \frac{17}{24} H = 0.61343P$

$d_2 = D_2 = d - \frac{3}{4} H = d - 0.64952P$

$d_3 = d - 2h_3 = d - 1.22687P$

$r = \frac{H}{6} = 0.14434P$



Nominal diameter	Pitch	Pitch diameter	Minor diameter		Thread depth		Radius	Pitch diameter Tap tolerance 6H		Pitch diameter Nut tolerance 6H	
			Screw	Nut	Screw	Nut		min.	max.	min.	max.
d = D	P	d2 = D2	d3	D1	h3	H1	r	d2			
M 2	0.25	1.838	1.693	1.729	0.153	0.135	0.036	1.844	1.856	1.838	1.886
M 2.5	0.35	2.273	2.701	2.121	0.215	0.189	0.051	2.293	2.307	2.273	2.358
M 3	0.35	2.773	2.571	2.621	0.215	0.189	0.051	2.794	2.809	2.773	2.863
M 3.5	0.35	3.273	3.071	3.121	0.215	0.189	0.051	3.294	3.309	3.273	3.363
M 4	0.5	3.675	3.387	3.459	0.307	0.271	0.072	3.699	3.715	3.675	3.775
M 4.5	0.5	4.175	3.887	3.959	0.307	0.271	0.072	4.199	4.215	4.175	4.275
M 5	0.5	4.675	4.387	4.459	0.307	0.271	0.072	4.699	4.715	4.675	4.775
M 5.5	0.5	5.175	4.887	4.959	0.307	0.271	0.072	5.199	5.215	5.175	5.275
M 6	0.5	5.675	5.387	5.459	0.307	0.271	0.072	5.702	5.720	5.675	5.787
M 6	0.75	5.513	5.080	5.188	0.460	0.406	0.108	5.545	5.566	5.513	5.645
M 7	0.75	6.513	6.080	6.188	0.460	0.406	0.108	6.545	6.566	6.513	6.645
M 8	0.5	7.675	7.387	7.459	0.307	0.271	0.072	7.702	7.720	7.675	7.787
M 8	0.75	7.513	7.080	7.188	0.460	0.406	0.108	7.545	7.566	7.513	7.645
M 8	1	7.350	6.773	6.917	0.613	0.541	0.144	7.835	7.409	7.350	7.500
M 9	0.75	8.513	8.080	8.188	0.460	0.406	0.108	8.545	8.566	8.513	8.645
M 9	1	8.350	7.773	7.917	0.613	0.541	0.144	8.385	8.409	8.350	8.500
M 10	0.5	9.675	9.387	9.459	0.307	0.271	0.072	9.702	9.720	9.675	9.787
M 10	0.75	9.513	9.080	9.188	0.460	0.406	0.108	9.545	9.566	9.513	9.645
M 10	1	9.350	8.773	8.917	0.613	0.541	0.144	9.385	9.409	9.350	9.500
M 10	1.25	9.188	8.466	8.647	0.767	0.677	0.180	9.226	9.251	9.188	9.348
M 11	0.75	10.513	10.080	10.188	0.460	0.406	0.108	10.545	10.566	10.513	10.645
M 11	1	10.350	9.773	9.917	0.613	0.541	0.144	10.385	10.409	10.350	10.500
M 12	0.75	11.513	11.080	11.188	0.460	0.406	0.108	11.547	11.569	11.513	11.653
M 12	1	11.350	10.773	10.917	0.613	0.541	0.144	11.388	11.413	11.350	11.510
M 12	1.25	11.188	10.466	10.647	0.767	0.677	0.180	11.230	11.258	11.188	11.368
M 12	1.5	11.026	10.160	10.376	0.920	0.812	0.217	11.071	11.101	11.026	11.216
M 13	1	12.350	11.773	11.917	0.613	0.541	0.144	12.388	12.413	12.350	12.510
M 14	1	13.350	12.773	12.917	0.613	0.541	0.144	13.388	13.413	13.350	13.510
M 14	1.25	13.188	12.466	12.647	0.767	0.677	0.180	13.230	13.258	13.188	13.368
M 14	1.5	13.026	12.160	12.376	0.920	0.812	0.217	13.071	13.101	13.026	13.216
M 15	1	14.350	13.773	13.917	0.613	0.541	0.144	14.388	14.413	14.350	14.510
M 15	1.5	14.026	13.160	13.376	0.920	0.812	0.217	14.071	14.101	14.026	14.216
M 16	1	15.350	14.773	14.917	0.613	0.541	0.144	15.388	15.413	15.350	15.510
M 16	1.25	15.188	14.466	14.647	0.767	0.677	0.180	15.230	15.258	15.188	15.368
M 16	1.5	15.026	14.160	14.376	0.920	0.812	0.217	15.071	15.101	15.026	15.216
M 17	1	16.350	15.773	15.917	0.613	0.541	0.144	16.388	16.413	16.350	16.510
M 17	1.5	16.026	15.160	15.376	0.920	0.812	0.217	16.071	16.101	16.026	16.216
M 18	1	17.350	16.773	16.917	0.613	0.541	0.144	17.388	17.413	17.350	17.510
M 18	1.5	17.026	16.160	16.376	0.920	0.812	0.217	17.071	17.101	17.026	17.216
M 18	2	16.701	15.546	15.835	1.227	1.083	0.289	16.752	16.786	16.701	16.913
M 20	1	19.350	18.773	18.917	0.613	0.541	0.144	19.388	19.413	19.350	19.510
M 20	1.5	19.026	18.160	18.376	0.920	0.812	0.217	19.071	19.101	19.026	19.216
M 20	2	18.701	17.546	17.835	1.227	1.083	0.289	18.752	18.786	18.701	18.913
M 22	1	21.350	20.773	20.917	0.613	0.541	0.144	21.388	21.413	21.350	21.510
M 22	1.5	21.026	20.160	20.376	0.920	0.812	0.217	21.071	21.101	21.026	21.216

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

TECHNICAL DATA

SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

Nominal diameter	Pitch	Pitch diameter	Minor diameter Screw	Minor diameter Nut	Thread depth Screw	Thread depth Nut	Radius	Pitch diameter Tap tolerance 6H min.	Pitch diameter Tap tolerance 6H max.	Pitch diameter Nut tolerance 6H min.	Pitch diameter Nut tolerance 6H max.
d = D	P	d2 = D2	d3	D1	h3	H1	r	d2			
M 22	2	20.701	19.546	19.835	1.227	1.083	0.289	20.752	20.786	20.701	20.913
M 24	1	23.350	22.773	22.917	0.613	0.541	0.144	23.390	23.416	23.350	23.520
M 24	1.5	23.026	22.160	22.376	0.920	0.812	0.217	23.074	23.106	23.026	23.226
M 24	2	22.701	21.546	21.835	1.227	1.083	0.289	22.754	22.791	22.701	22.925
M 25	1	24.350	23.773	23.917	0.613	0.541	0.144	24.390	24.416	24.350	24.520
M 25	1.5	24.026	23.160	23.376	0.920	0.812	0.217	24.074	24.106	24.026	24.226
M 25	2	23.701	22.546	22.835	1.227	1.083	0.289	23.754	23.791	23.701	23.925
M 26	1	25.350	24.773	24.917	0.613	0.541	0.144	25.390	25.416	25.350	25.520
M 26	1.5	25.026	24.160	24.376	0.920	0.812	0.217	25.074	25.106	25.026	25.226
M 26	2	24.701	23.546	23.835	1.227	1.083	0.289	24.754	24.791	24.701	24.925
M 27	1	26.350	25.773	25.917	0.613	0.541	0.144	26.390	26.416	26.350	26.520
M 27	1.5	26.026	25.160	25.376	0.920	0.812	0.217	26.074	26.106	26.026	26.226
M 27	2	25.701	24.546	24.835	1.227	1.083	0.289	25.754	25.791	25.701	25.925
M 28	1	27.350	26.773	26.917	0.613	0.541	0.144	27.390	27.416	27.350	27.520
M 28	1.5	27.026	26.160	26.376	0.920	0.812	0.217	27.074	27.106	27.026	27.226
M 28	2	26.701	25.546	25.835	1.227	1.083	0.289	26.754	26.791	26.701	26.925
M 30	1	29.350	28.773	28.917	0.613	0.541	0.144	29.390	29.416	29.350	29.520
M 30	1.5	29.026	28.160	28.376	0.920	0.812	0.217	29.074	29.106	29.026	29.226
M 30	2	28.701	27.546	27.835	1.227	1.083	0.289	28.754	28.791	28.701	28.925
M 30	3	28.051	26.319	26.752	1.840	1.624	0.433	28.115	28.157	28.051	28.316
M 32	1.5	31.026	30.160	30.376	0.920	0.812	0.217	31.074	31.106	31.026	31.226
M 32	2	30.701	29.546	29.835	1.227	1.083	0.289	30.754	30.791	30.701	30.925
M 33	1.5	32.026	31.160	31.376	0.920	0.812	0.217	32.074	32.106	32.026	32.226
M 33	2	31.701	30.546	30.835	1.227	1.083	0.289	31.754	31.791	31.701	31.925
M 33	3	31.051	29.319	29.752	1.840	1.624	0.433	31.115	31.157	31.051	31.316
M 35	1.5	34.026	33.160	33.376	0.920	0.812	0.217	34.074	34.106	34.026	34.226
M 35	2	33.701	32.546	32.835	1.227	1.083	0.289	33.754	33.791	33.701	33.925
M 36	1.5	35.026	34.160	34.376	0.920	0.812	0.217	35.074	35.106	35.026	35.226
M 36	2	34.701	33.546	33.835	1.227	1.083	0.289	34.754	34.791	34.701	34.925
M 36	3	34.051	32.319	32.752	1.840	1.624	0.433	34.115	34.157	34.051	34.316
M 38	1.5	37.026	36.160	36.376	0.920	0.812	0.217	37.074	37.106	37.026	37.226
M 39	1.5	38.026	37.160	37.376	0.920	0.812	0.217	38.074	38.106	38.026	38.226
M 39	2	37.701	36.546	36.835	1.227	1.083	0.289	37.754	37.791	37.701	37.925
M 39	3	37.051	35.319	35.752	1.840	1.624	0.433	37.115	37.157	37.051	37.316
M 40	1.5	39.026	38.160	38.376	0.920	0.812	0.217	39.074	39.106	39.026	39.226
M 40	2	38.701	37.546	37.835	1.227	1.083	0.289	38.754	38.791	38.701	38.925
M 40	3	38.051	36.319	36.752	1.840	1.624	0.433	38.115	38.157	38.051	38.316
M 42	1.5	41.026	40.160	40.376	0.920	0.812	0.217	41.074	41.106	41.026	41.226
M 42	2	40.701	39.546	39.835	1.227	1.083	0.289	40.754	40.791	40.701	40.925
M 42	3	40.051	38.319	38.752	1.840	1.624	0.433	40.115	40.157	40.051	40.316
M 45	1.5	44.026	43.160	43.376	0.920	0.812	0.217	44.074	44.106	44.026	44.226
M 45	2	43.701	42.546	42.835	1.227	1.083	0.289	43.754	43.791	43.701	43.925
M 45	3	43.051	41.319	41.752	1.840	1.624	0.433	43.115	43.157	43.051	43.316
M 48	1.5	47.026	46.160	46.376	0.920	0.812	0.217	47.077	47.111	47.026	47.238
M 48	2	46.701	45.546	45.835	1.227	1.083	0.289	46.758	46.796	46.701	46.937
M 48	3	46.051	44.319	44.752	1.840	1.624	0.433	46.118	46.163	46.051	46.331
M 50	1.5	49.026	48.160	48.376	0.920	0.812	0.217	49.077	49.111	49.026	49.238
M 50	2	48.701	47.546	47.835	1.227	1.083	0.289	48.758	48.796	48.701	48.937
M 50	3	48.051	46.319	46.752	1.840	1.624	0.433	48.118	48.163	48.051	48.331
M 52	1.5	51.026	50.160	50.376	0.920	0.812	0.217	51.077	51.111	51.026	51.238
M 52	2	50.701	49.546	49.835	1.227	1.083	0.289	50.758	50.796	50.701	50.937
M 52	3	50.051	48.319	48.752	1.840	1.624	0.433	50.118	50.163	50.051	50.331
M 55	1.5	54.026	53.160	53.376	0.920	0.812	0.217	54.077	54.111	54.026	54.238
M 55	2	53.701	52.546	52.835	1.227	1.083	0.289	53.758	53.796	53.701	53.937
M 55	3	53.051	51.319	51.752	1.840	1.624	0.433	53.118	53.163	53.051	53.331
M 56	1.5	55.026	54.160	54.376	0.920	0.812	0.217	55.077	55.111	55.026	55.238
M 56	2	54.701	53.546	53.835	1.227	1.083	0.289	54.758	54.796	54.701	54.937
M 56	3	54.051	52.319	52.752	1.840	1.624	0.433	54.118	54.163	54.051	54.331
M 58	1.5	57.026	56.160	56.376	0.920	0.812	0.217	57.077	57.111	57.026	57.238
M 58	2	56.701	55.546	55.835	1.227	1.083	0.289	56.758	56.796	56.701	56.937
M 58	3	56.051	54.319	54.752	1.840	1.624	0.433	56.118	56.163	56.051	56.331
M 60	1.5	59.026	58.160	58.376	0.920	0.812	0.217	59.077	59.111	59.026	59.238
M 60	2	58.701	57.546	57.835	1.227	1.083	0.289	58.758	58.796	58.701	58.937
M 60	3	58.051	56.319	56.752	1.840	1.624	0.433	58.118	58.163	58.051	58.331

Metric thread MB(old UNI 160 Profile) — **Nut tolerance SH8**

M 2,3	0.25	2.138	1.976	1.976	0.162	0.162	0.030	2.144	2.156	2.138	2.194
M 2,6	0.35	2.373	2.146	2.146	0.227	0.227	0.040	2.393	2.407	2.373	2.429

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

3-3 UNIFIED COARSE THREADS
UNIFIED GROBGEWINDE

Nominal dimensions as per ANSI B1.1
Production tolerances on tap flank diameter for 2B class nut threads
Limit dimensions-Nut threads as per ANSI B1.1, 2B-3B tolerance classes

Dimensions in mm

$H = 0.86603P$

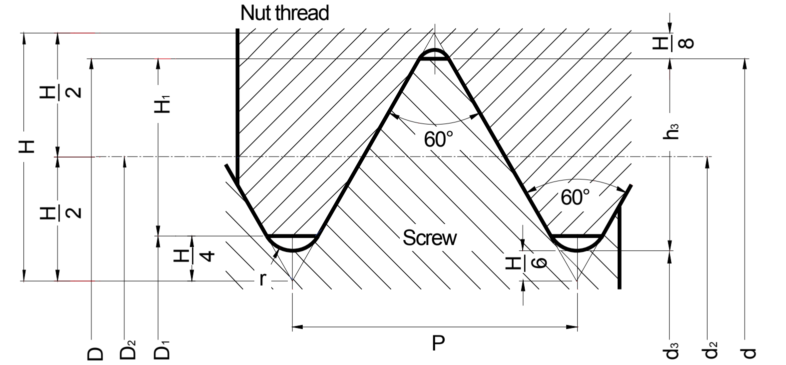
$H_1 = \frac{5}{8}H = 0.54127P$

$h_3 = \frac{17}{24}H = 0.61343P$

$d_2 = D_2 = d - \frac{3}{4}H = d - 0.64952P$

$d_3 = d - 2h_3 = d - 1.22687P$

$r = \frac{H}{6} = 0.14434P$



Nominal diameter	T.P.I	Pitch	External diameter	Flank diameter	Thread depth Nut	Thread depth Screw	Flank diameter Tap tolerance 2B min.	Flank diameter Tap tolerance 2B max.	Flank diameter Nut tolerance min. 2B/3B	Flank diameter Nut tolerance max. 2B	Flank diameter Nut tolerance max. 3B
		P	d = D	d2 = D2	D1	d3					
#1	- 64 UNC	0.397	1.854	1.598	1.425	1.367	1.610	1.623	1.598	1.664	1.646
#2	- 64 UNC	0.454	2.184	1.890	1.694	1.628	1.902	1.915	1.890	1.961	1.943
#3	- 48 UNC	0.529	2.515	2.172	1.941	1.864	2.184	2.197	2.172	2.248	2.228
#4	- 40 UNC	0.635	2.845	2.433	2.156	2.065	2.446	2.459	2.433	2.517	2.494
#5	- 40 UNC	0.635	3.175	2.764	2.487	2.395	2.776	2.789	2.764	2.847	2.827
#6	- 32 UNC	0.794	3.505	2.990	2.647	2.532	3.105	3.028	2.990	3.084	3.058
#8	- 32 UNC	0.794	4.166	3.650	3.307	3.193	3.675	3.688	3.650	3.746	3.721
#10	- 24 UNC	1.058	4.826	4.138	3.680	3.528	4.163	4.176	4.138	4.247	4.219
#12	- 24 UNC	1.058	5.486	4.798	4.341	4.188	4.823	4.836	4.798	4.910	4.882
1/4"	- 20 UNC	1.270	6.350	5.524	4.976	4.793	5.575	5.588	5.524	5.646	5.616
5/16"	- 18 UNC	1.411	7.938	7.021	6.411	6.205	7.071	7.084	7.021	7.155	7.120
3/8"	- 16 UNC	1.588	9.525	8.494	7.805	7.577	8.545	8.557	8.494	8.639	8.603
7/16"	- 14 UNC	1.814	11.112	9.934	9.149	8.887	9.985	9.997	9.934	10.089	10.051
1/2"	- 13 UNC	1.954	12.700	11.430	10.584	10.302	11.481	11.494	11.430	11.595	11.552
9/16"	- 12 UNC	2.117	14.288	12.913	11.996	11.692	12.964	12.977	12.913	13.086	13.043
5/8"	- 11 UNC	2.309	15.875	14.376	13.376	13.043	14.427	14.440	14.376	14.559	14.514
3/4"	- 10 UNC	2.540	19.050	17.399	16.229	15.933	17.450	17.463	17.399	17.595	17.544
7/8"	- 9 UNC	2.822	22.225	20.391	19.169	18.763	20.455	20.467	20.391	20.599	20.546
1"	- 8 UNC	3.175	25.400	23.338	21.963	21.504	23.401	23.414	23.338	23.561	23.505
1*1/8"	- 7 UNC	3.629	28.575	26.218	24.648	24.122	26.294	26.319	26.218	26.457	26.398
1*1/4"	- 7 UNC	3.629	31.750	29.393	27.823	27.297	29.469	29.494	29.393	29.637	29.576
1*3/8"	- 6 UNC	4.233	34.925	32.174	30.343	29.731	32.250	32.276	32.174	32.438	32.372
1*1/2"	- 6 UNC	4.233	38.100	35.349	33.518	32.906	35.425	35.451	35.349	35.616	35.550
1*3/4"	- 5 UNC	5.080	44.450	41.151	38.951	38.217	41.241	41.266	41.151	41.445	41.372
2"	- 4 1/2 UNC	5.644	50.800	47.135	44.689	43.876	47.235	47.260	47.135	47.450	47.371
2*1/4"	- 4 1/2 UNC	5.644	57.150	53.485	51.039	50.226			53.485	53.805	53.726
2*1/2"	- 4 UNC	6.350	63.500	59.375	56.627	55.710			59.375	59.718	59.632
2*3/4"	- 4 UNC	6.350	69.850	65.725	62.977	62.060			65.725	66.073	65.987
3"	- 4 UNC	6.350	76.200	72.075	69.327	68.410			72.075	72.428	72.339
3*1/4"	- 4 UNC	6.350	82.550	78.425	75.677	74.760			78.425	78.783	78.694
3*1/2"	- 4 UNC	6.350	88.900	84.775	82.027	81.110			84.775	85.183	85.049
3*3/4"	- 4 UNC	6.350	95.250	91.125	88.377	87.460			91.125	91.493	91.402
4"	- 4 UNC	6.350	101.600	97.475	94.727	93.810			97.475	97.848	97.757

3-4 UNIFIED FINE THREADS
UNIFIED FEINGEWINDE

Nominal dimensions as per ANSI B1.1
Production tolerances on tap flank diameter for 2B class nut threads
Limit dimensions-Nut threads as per ANSI B1.1, 2B-3B tolerance classes

Dimensions in mm

$H = 0.86603P$

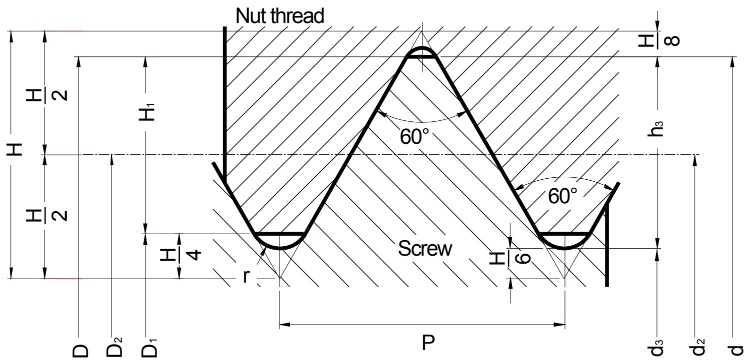
$H_1 = \frac{5}{8}H = 0.54127P$

$h_3 = \frac{17}{24}H = 0.61343P$

$d_2 = D_2 = d - \frac{3}{4}H = d - 0.64952P$

$d_3 = d - 2h_3 = d - 1.22687P$

$r = \frac{H}{6} = 0.14434P$



Nominal diameter	T.P.I	Pitch	External diameter	Flank diameter	Thread depth Nut	Thread depth Screw	Flank diameter Tap tolerance 2B min.	Flank diameter Tap tolerance 2B max.	Flank diameter Nut tolerance min. 2B/3B	Flank diameter Nut tolerance max. 2B	Flank diameter Nut tolerance max. 3B
		P	d = D	d2 = D2	D1	d3					
#0	- 80 UNF	0.318	1.524	1.318	1.181	1.135	1.331	1.344	1.318	1.377	1.361
#1	- 72 UNF	0.353	1.854	1.626	1.473	1.422	1.638	1.651	1.626	1.689	1.674
#2	- 64 UNF	0.397	2.184	1.928	1.755	1.697	1.941	1.953	1.928	1.996	1.979
#3	- 56 UNF	0.454	2.515	2.220	2.024	1.958	2.233	2.245	2.220	2.291	2.273
#4	- 48 UNF	0.529	2.845	2.502	2.271	2.195	2.515	2.527	2.502	2.581	2.560
#5	- 44 UNF	0.577	3.175	2.799	2.550	2.466	2.812	2.824	2.799	2.880	2.860
#6	- 40 UNF	0.635	3.505	3.094	2.817	2.725	3.108	3.119	3.094	3.180	3.157
#8	- 36 UNF	0.706	4.166	3.708	3.401	3.299	3.721	3.734	3.708	3.800	3.777
#10	- 32 UNF	0.794	4.826	4.310	3.967	3.853	4.336	4.348	4.310	4.409	4.384
#12	- 28 UNF	0.907	5.486	4.897	4.503	4.374	4.923	4.935	4.897	5.004	4.976
1/4"	- 28 UNF	0.907	6.350	5.761	5.367	5.237	5.799	5.812	5.761	5.870	5.842
5/16"	- 24 UNF	1.058	7.938	7.249	6.792	6.640	7.287	7.300	7.249	7.371	7.341
3/8"	- 24 UNF	1.058	9.525	8.837	8.379	8.227	8.875	8.887	8.837	8.961	8.931
7/16"	- 20 UNF	1.270	11.112	10.287	9.738	9.555	10.338	10.351	10.287	10.424	10.391
1/2"	- 20 UNF	1.270	12.700	11.874	11.326	11.143	11.925	11.938	11.874	12.017	11.981
9/16"	- 18 UNF	1.411	14.288	13.371	12.761	12.555	13.421	13.434	13.371	13.520	13.482
5/8"	- 18 UNF	1.411	15.875	14.958	14.348	14.143	15.009	15.022	14.958	15.110	15.072
3/4"	- 16 UNF	1.588	19.050	18.019	17.330	17.102	18.070	18.082	18.019	18.184	18.143
7/8"	- 14 UNF	1.814	22.225	21.046	20.262	20.000	21.110	21.123	21.046	21.224	21.181
1"	- 12 UNF	2.117	25.400	24.026	23.109	22.804	24.089	24.102	24.026	24.219	24.171
1*1/8"	- 12 UNF	2.117	28.575	27.201	26.284	25.979	27.252	27.277	27.201	27.339	27.351
1*1/4"	- 12 UNF	2.117	31.750	30.376	29.459	29.154	30.427	30.452	30.376	30.579	30.528
1*3/8"	- 12 UNF	2.117	34.925	33.551	32.634	32.329	33.602	33.627	33.551	33.759	33.706
1*1/2"	- 12 UNF	2.117	38.100	36.726	35.809	35.504	36.777	36.802	36.726	36.937	36.886

YG TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

3-5 WHITWORTH PIPE THREADS
WHITWORTH ROHRGEWINDE

Nominal dimensions ISO 228/1-UNI 338-66
Production tolerances on tap flank diameter
Limit dimensions for internal threads

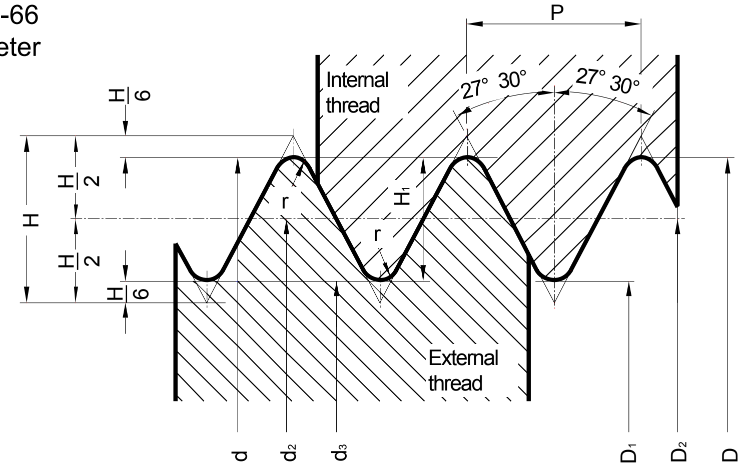
Dimensions in mm

$P = \frac{25.4}{z}$

$H = 0.960491\ P$

$H_1 = 0.640327\ P$

$r = 0.137329\ P$



Type	Thread diameter	Pitch	T.P.I	Flank diameter	Minor diameter	H1	r	Tap Flank diameter min.	Tap Flank diameter max.	Internal Thread Flank diameter min.	Internal Thread Flank diameter max.
(1)	d = D	P	z	d2 = D2	d3 = d1			d2			
G 1/8"	9.728	0.907	28	9.147	8.566	0.581	0.125	9.177	9.194	9.147	9.254
G 1/4"	13.157	1.157	19	12.301	11.445	0.856	0.184	12.336	12.356	12.301	12.426
G 3/8"	16.662	1.337	19	15.806	14.950	0.856	0.184	15.841	15.861	15.806	15.933
G 1/2"	20.955	1.814	14	19.793	18.631	1.162	0.249	19.828	19.848	19.793	19.935
G 5/8"	22.911	1.814	14	21.749	20.587	1.162	0.249	21.784	21.804	21.749	21.891
G 3/4"	26.441	1.814	14	25.279	24.117	1.162	0.249	25.314	25.334	25.279	25.421
G 7/8"	32.201	1.814	14	29.039	27.877	1.162	0.249	29.074	29.094	29.039	29.181
G 1"	33.249	2.309	11	31.770	30.291	1.479	0.317	31.815	31.839	31.770	31.950
G 1*1/8"	37.897	2.309	11	36.418	34.939	1.479	0.317	36.463	36.487	36.418	36.598
G 1*1/4"	41.910	2.309	11	40.431	38.952	1.479	0.317	40.476	40.500	40.431	40.611
G 1*3/8"	44.323	2.309	11	42.844	41.365	1.479	0.317	42.889	42.913	42.844	43.024
G 1*1/2"	47.803	2.309	11	46.324	44.845	1.479	0.317	46.374	46.398	46.324	46.504
G 1*3/4"	53.746	2.309	11	52.267	50.788	1.479	0.317	52.327	52.354	52.267	52.447
G 2"	59.614	2.309	11	58.135	56.656	1.479	0.317	58.195	58.222	58.135	58.315
G 2*1/4"	65.710	2.309	11	64.231	62.752	1.479	0.317	64.291	64.318	64.231	64.448
G 2*3/8"	69.398	2.309	11	67.919	66.440	1.479	0.317	67.979	68.006	67.919	68.136
G 2*1/2"	75.184	2.309	11	73.705	72.226	1.479	0.317	73.765	73.792	73.705	73.922
G 2*3/4"	81.534	2.309	11	80.055	78.576	1.479	0.317	80.127	80.157	80.055	80.272
G 3"	87.884	2.309	11	86.405	84.926	1.479	0.317	86.477	86.507	86.405	86.622
G 3*1/4"	93.980	2.309	11	92.501	91.022	1.479	0.317	92.573	92.603	92.501	92.718
G 3*1/2"	100.330	2.309	11	98.851	97.372	1.479	0.317	98.923	98.953	98.851	99.068
G 3*3/4"	106.680	2.309	11	105.201	103.722	1.479	0.317	105.273	105.303	105.201	105.418
G 4"	113.030	2.309	11	111.551	110.072	1.479	0.317	111.623	111.653	111.551	111.768
G 4*1/2"	125.730	2.309	11	124.251	122.772	1.479	0.317				
G 5"	138.430	2.309	11	136.951	135.472	1.479	0.317				
G 5*1/2"	151.130	2.309	11	149.651	148.172	1.479	0.317				
G 6"	163.830	2.309	11	162.351	160.872	1.479	0.317				

(1) - This type is conventional:originally the value in inches was the internal pipe diameter.

INTERESTING HINTS FOR TAPPING
HINWEISE ZUM GEWINDESCHNEIDEN

Selection of the most suitable tap
Auswahl des geeigneten Gewindebohrers

Which types of tap or whether or not a thread former can be used, depends on the type of material to be machined.
As a general guide, materials with an extension of at least 10% can be cold-formed.
To determine the most suitable tap, refer to the tap recommendation table on pages 356 to 363.
Welcher Typ Gewindebohrer oder ob ein Gewindeformer eingesetzt werden kann, hängt von dem zu bearbeitenden Werkstoff ab.
Als allgemeiner Leitwert gilt, daß Werkstoffe mit mindestens 10% Dehnung kaltgeformt werden können.
Zur Bestimmung des optimalen Gewindebohrers nutzen Sie die Empfehlungstabelle auf den Seiten 356 bis 363.

Core holes
Kernlöcher

- Core holes should be clean and swarf-free.
- Core holes should be of the prescribed size, see chart extract on page 583-584 of this catalogue, and dependent on the actual application, selected towards the upper diameter limit.
- Kernlöcher sollten sauber und spanfrei sein.
- Kernlöcher sollten die angegebenen Durchmesser haben, siehe Seiten 583 und 584, und abhängig vom aktuellen Einsatzfall, zur größtmöglichen Durchmesserangabe tendieren.

Lubricant in relation to machining centers
Schmiermitteleinsatz auf Bearbeitungszentren

Frequently the coolants used on machining centers are unsatisfactory for tapping because their percentage lubricant content is too low. If it is not possible to increase the percentage of lubricant in the emulsion, the lubrification problem can be solved in other ways, i.e.:
Meistens sind die gebräuchlichen Kühlmittel in Bearbeitungszentren zum Gewindeschneiden nicht geeignet, weil ihr Anteil an Schmierstoffen zu gering ist. Wenn es nicht möglich ist, den Anteil an Schmierstoffen in der Emulsion zu erhöhen, kann das Schmierproblem in anderer Weise gelöst werden, z. B.:

Lubricating with concentrated emulsion **Schmierung mit konzentrierter Emulsion**
A. A lubricating unit, connected to the machine control, delivers at the required instant a specific quantity of concentrated emulsion into the core hole or onto the tap.
B. A pump in a separate tank, controlled by the machine, delivers a specific amount of concentrate into the core hole.
A. Eine Schmiervorrichtung, die mit der Maschinensteuerung verbunden ist, gibt zum gewünschten Zeitpunkt eine bestimmte Menge konzentrierter Emulsion in das Kernloch oder auf den Gewindebohrer ab.
B. Eine Pumpe mit separatem Tank, mit der Maschinensteuerung verbunden, gibt eine bestimmte Menge des Konzentrats in das Kernloch

Tapping in separate operations **Gewindeschneiden als separater Bearbeitungsgang**
This procedure allows the use of the ideal tapping lubricant.
Dies erlaubt den Einsatz des idealen Gewindeschneid Schmiermittels.

Cutting speeds for taps
Schnittgeschwindigkeiten für Gewindebohrer

The cutting speed has a great influence on chip flow and the life of the tap.
It is worthwhile to establish the ideal cutting speed by tapping trials.
Guide values see on the recommendation table page 364. The cutting speed should be in relation to the characteristics of the material, the machine and its equipment.
Die Schnittgeschwindigkeit hat großen Einfluss auf den Spanabgang und die Lebensdauer des Gewindebohrers.
Bei Großserien ist es lohnend, die ideale Schnittgeschwindigkeit durch Versuche zu ermitteln.
Leitwerte finden Sie in der Empfehlungstabelle Seite 364. Die Schnittgeschwindigkeit sollte auf den Werkstoff, die Maschine und das Umfeld abgestimmt sein.

Effects of unsuitable cutting speed **Die Folgen falscher Schnittgeschwindigkeiten**
- forced tapping Zu hoher Kraftaufwand
- tap lead chipping caused by overloaded cutting tooth Beschädigte Steigung durch überlastete Schneide
- torn threads Verschnittenes Gewinde
- unsatisfactory tap-life Ungenügende Standzeit
- rejected threads Ausschuss

Cold welding
Kaltaufschweißung

What are the causes of cold welding? Was sind die Gründe für eine Kaltaufschweißung?
- unsuitable tap selection Ungeeignete Gewindebohrer Auswahl
- tap with incorrect cutting geometry Gewindebohrer mit falscher Schneidengeometrie
- coolant unsuitable for material Kühlmittel ungeeignet für den Werkstoff
- insufficient coolant Unzureichende Kühlung
- axial pressure (pull or push) on the tap Axialer Druck (Zug oder Druck) auf den Gewindebohrer
- core hole too small Kernloch zu klein
- breaks in walls of core hole Risse in der Wand des Kernlochs
- speed too high or too low Schnittgeschwindigkeit zu hoch oder zu klein
- swarf trapped in the hole Verklemmter Span im Kernloch
- incorrect alignment of tap and core hole Achsversatz zwischen Gewindebohrer und Kernloch
- tap eccentricity Gewindebohrer läuft unrun

Effects of cold welding: Die Folgen von Kaltaufschweißungen
- torn threads verschnittene Gewinde
- short tap life kurze Standzeit
- rejected threads Ausschuss
- tap breakage Werkzeugbruch
- scrap workpieces schrottreife Werkstücke

Tap mounting
Gewindebohrer einspannen

- The tap must be mounted on the axis of the core hole.
- On non-synchronized machines (feed / speed) we recommend the use of a tapping spindle.
- Die Achsen von Gewindebohrer und Kernloch müssen genau fluchten.
- Auf nicht synchronisierten Maschinen (Vorschub / Schnittgeschwindigkeit) empfehlen wir den Einsatz einer Gewindeschneidspindel.

Tapping heads
Gewindeschneidköpfe

With non-synchronized machine spindles (feed / speed) the feed rate should as a rule be programmed approx. 5-10% lower than the thread pitch. In these cases a tapping chuck must be used which will compensate the difference between the feed rate and the thread pitch.
It is important that the tension spring in the axial compensation is set to a light rate to avoid axially loading the tap.
The compression spring should be tensioned so that the tap starts to cut by compressing the spring at the most up to one half pitch.
Bei nicht synchronisierten Maschinenspindeln (Vorschub / Schnittgeschwindigkeit) sollte der Vorschub in der Regel 5 – 10% kleiner sein als die Gewindesteigung. In diesen Fällen muss ein Gewindeschneidfutter verwendet werden, das die Differenz zwischen dem Vorschub und der Gewindesteigung ausgleicht.
Es ist wichtig, daß die Spannfeder im axialen Ausgleich locker eingestellt wird, um eine zu große axiale Belastung des Gewindebohrers zu vermeiden.
Die Druckfeder sollte so gespannt sein, daß der Gewindebohrer zu schneiden beginnt, wenn die Feder bei höchstens einer halben Steigung gespannt ist.

Important hints: **Wichtige Hinweise :**
Ensure that the correct speed is selected.
Ensure that ample lubricating coolant is used when tapping.
Good machine and equipment stability is essential for optimum quality and performance.
Sorgen Sie für die richtige Schnittgeschwindigkeit.
Sorgen Sie dafür, daß reichlich Kühlschmiermittel beim Gewindeschneiden verwendet wird.
Gute Stabilität von Maschine und Vorrichtungen ist die Grundlage für optimale Qualität und Leistung.

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

5 APPLICATION AND USE OF THREADING TAPS
FEHLER UND ABHILFEN BEIM GEWINDESCHNEIDEN

Problem / FEHLER	Causes / URSACHEN	Solutions / LOSUNGEN
Tapped hole oversize **Gewinde zu groß**	Incorrect tap in use (cutting geometry unsuitable for application) Falscher Gewindebohrer im Einsatz (Schneidengeometrie ungeeignet)	Use tap selected from the relevant material group Einen fur den Werkstoff geeigneten Gewindebohrer auswahlen
	Faulty alignment Fehlerhafte Fluchtung	Ensure that the tap is correctly aligned with the core hole axis Dafur sorgen, daß Gewindebohrer und Kernloch axial genau fluchten
	Cold welding Kaltaufschweißung	Improve lubrication and direction of coolant Adjust cutting speed Schmierung und Ausrichtung des Kuhlstrahls verbessern Schnittgeschwindigkeit korrigieren
	Re-ground tap (lead-in is not concentric) Nachgescharfter Gewindebohrer (Anschnitt nicht konzentrisch)	Regrind tap lead correctly on a suitable tap grinding machine Anschnitt fehlerfrei auf geeigneter Schleifmaschine nachschleifen
Stripped threads **Gewinde verschnitten**	Incorrect tap in use (cutting geometry incorrect for application) Falscher Gewindebohrer im Einsatz (Schneidengeometrie ungeeignet)	Use a tap from the relevant material group. Einen fur den Werkstoff geeigneten Gewindebohrer auswahlen
	Spindle speed and feed rate not synchronized Spindelgeschwindigkeit und Vorschub sind nicht aufeinander abgestimmt	Check feed rate programming and / or pitch of leading spindle Use a tapping spindle with axial float Vorschub und / oder Steigung der Spindel uberprufen Gewindeschneidspindel mit axialem Ausgleich verwenden
	Insufficient start pressure exerted on tap with peel-cut Unzureichender Startdruck auf einen Gewindebohrer mit Schalanschnitt	Increase start pressure Startdruck erhohen
Bell mouthed tapped hole **Gewinde trichterformig**	Incorrect start pressure applied to tap Falscher Gewindebohrer im Einsatz	Use a tapping spindle with axial float Gewindeschneidspindel mit axialem Ausgleich verwenden
Unsatisfactory thread surface finish **Gewinde zu rau**	Incorrect tap in use (Cutting geometry unsuitable for application) Falscher Gewindebohrer im Einsatz (Schneidengeometrie ungeeignet)	Select tap from the relevant material group Einen fur den Werkstoff geeigneten Gewindebohrer auswahlen
	The tap is blunt Die Schneiden sind stumpf	Replace or re-grind tap Neuen oder nachgescharften Gewindebohrer einsetzen
	Tap badly re-ground Der Gewindebohrer ist schlecht nachgescharft	Re-grind tap again. Check that cutting geometry is suitable for material Gewindebohrer korrekt nachschleifen Prufen, ob die Schneidengeometrie fur den Werkstoff geeignet ist
	Coolant lacking in lubricating qualities and / or quantity Kuhlmittel mit unzureichendem Schmiermittelanteil	Ensure the use of a suitable coolant and an ample supply Fur qualitativ und quantitativ gute Kuhlung und Schmierung sorgen

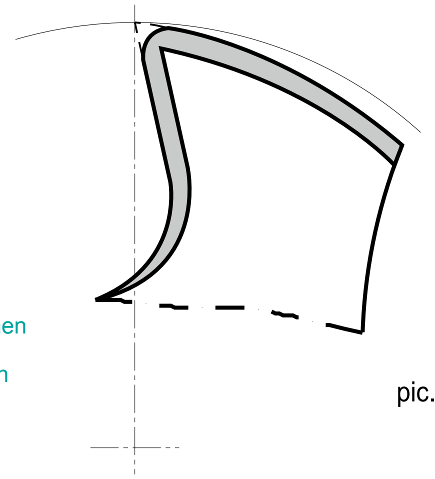
YG TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

Problem / FEHLER	Causes / URSACHEN	Solutions / LOSUNGEN
Partial chipping of tap **Gewinde ist unfertig**	Swarf jamming Spanestau	Check cutting speed Use alternative tap type Schnittgeschwindigkeit prufen Andere Gewindebohrertype wahlen
	Tap has jammed against bottom of core hole Gewindebohrer ist auf den Grund des Kernlochs gefahren	Check hole and thread depths Drill core hole deeper Kernlochtiefe und Gewindelange prufen Kernloch tiefer bohren
	Tap incorrectly re-ground (lead-in diameter too small therefore too few cutting teeth) Gewindebohrer ist schlecht nachgescharft (Anschnittdurchmesser zu klein, deshalb zu wenige schneidende Zahne)	Ensure that original values ore maintained when regrinding Beim Nachscharfen auf originale Geometrie achten
	Irregular workpiece material structure Materialfehler im Werkstuck	Adjust cutting speed Improve lubricating quality of coolant Schnittgeschwindigkeit anpassen Die Schmierfahigkeit des Kuhlmittels verbessern
Excessive tap wear **Ubermaßiger Verschleiß des Gewindebohrers**	Incorrect cutting speed Falsche Schnittgeschwindigkeit	Adjust cutting speed to suit workpiece material Schnittgeschwindigkeit dem Werkstoff anpassen
	Coolant lacking in lubricating qualities and / or quantity Kuhlmittel mit unzureichender Schmierqualitat oder ?menge	Ensure the use of a suitable coolant and an ample supply Fur qualitative und quantitative gute Kuhlung und Schmierung sorgen Check that coolant is reaching the cutting zone Prufen, ob das Kuhlmittel den Schnittbereich erreicht
	Surface of the core hole is compacted Verfestigte Bohrungswand des Kernlochs	Check core hole drilling conditions (drill carefully to reduce risk of surface compacting) Einsatzwerte beim Kernlochbohren prufen (vorsichtig bohren um eine Aufhartung der Bohrungswand zu vermeiden) Check drill cutting edges Bohrerschneiden uberprufen
Tap breakage **Bruch des Gewindebohrers**	Incorrect tap in use (cutting geometry unsuitable for application) Falscher Gewindebohrer im Einsatz (Schneidengeometrie ungeeignet)	Use tap from the relevant material group Einen fur den Werkstoff geeigneten Gewindebohrer auswahlen
	Centering error Fehlerhafte Fluchtung	Ensure that axes of tap and core hole are aligned Dafur sorgen, daß Gewindebohrer und Kernloch axial genau fluchten
	Blunt tap Schneiden sind stumpf	Re-grind tap Neuen oder nachgescharften Gewindebohrer einsetzen Ensure that taps are stored carefully Auf sorgfaltige Lagerung der Gewindebohrer achten
	Tap has reached bottom of core hole Gewindebohrer ist auf den Grund des Kernlochs gefahren	Use tapping spindle with axial float and slipping clutch Gewindeschneidspindel mit axialem Ausgleich und Rutschkupplung verwenden
	Core hole too small Kernloch ist zu klein	Select core hole as per chart, pages 583~584 of this catalogue Kernloch Durchmesser auf der Tabelle Seite 583 u. 584 auswahlen

6 RESHARPENING
NACHSCHARFEN

The resharpening on taps is done for regenerating the active hedges weared by the destructive action of cutting and of friction, it has high importance for an economical exploitation of the tool and so far has to be made rationally, keeping away from wrong operations which can heavily compromise the accuracy and the life.
In order to execute the tap resharpening quickly and accurately we recommend the use of proper resharpening machines having all necessary equipments for this operation.
The tap resharpening take place in two steps:
a) resharpening of (relieved) chamfer;
b) resharpening of flutes. (See picture 1)

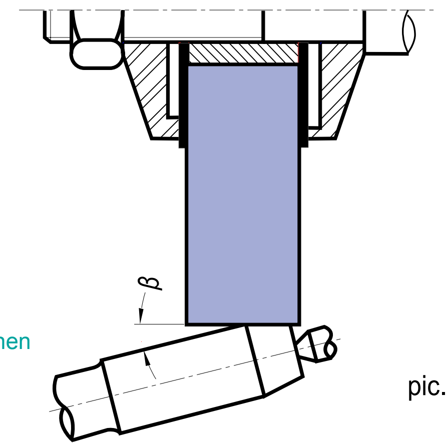
Das Nachscharfen der Gewindebohrer dient der Erneuerung der verschlissenen Schneidkanten.
Es ist wichtig, um das Leistungsvermogen des Werkzeugs voll auszuschopfen und muss daher prazise durchgefuhrt werden, um Fehler zu vermeiden, die die Prazision des Gewindes und die Standzeit beeintrachtigen.
Um das Nachscharfen schnell und prazise durchzufuhren, empfehlen wir den Einsatz von geeigneten Schleifmaschinen mit dem notwendigen Zubehor.
Das Nachscharfen der Gewindebohrer erfolgt in zwei Stufen :
a) scharfen der Freiflachen im Anschnitt;
b) scharfen der Nuten (Spanflache) (siehe Abb. 1)


pic. 1

RESHARPENING OF (RELIEVED) CHAMFER
RESHARPENING OF (RELIEVED) CHAMFER

The chamfer resharpening must be executed both on specific for taps machines or on conventional resharpening machines equipped with an auxiliary system proper to generate the circular relief on back.
The picture 2 shows the resharpening made with the cylindrical surface of a grinding wheel.
Before resharpening, verify that the tap, fixed between points or on pincer, runs concentrical; verify also the angle β which has to be correct in order to keep the same number of threads on chamfer.

Das Scharfen des Anschnitts muss entweder auf besonderen Gewindeschleifmaschinen erfolgen, oder auf konventionellen Schleifmaschinen mit entsprechenden Vorrichtungen fur einen genauen Hinterschliff.
Abb. 2 zeigt das Nachscharfen mit einer zylindrischen Schleifscheibe.
Vor dem Schleifen uberprufen, ob der Gewindebohrer, zwischen Spitzen oder in einer Spannzange gehalten, rund lauft;
prufen Sie auch den Winkel b, der korrekt sein muss, um die gleiche Anzahl Gange im Anschnitt zu haben

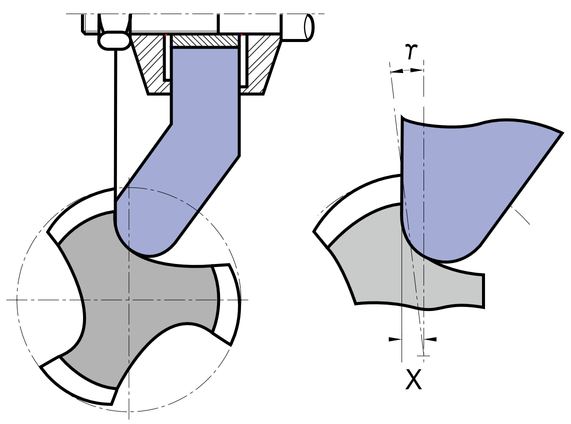


pic. 2

RESHARPENING OF FLUTES
NACHSCHARFEN DER NUTEN

This operation must be done on a specific resharpening machine for taps, equipped with:
deviding head, lead screw of "barrasinus" for executing the helix and cooling equipment.
The rake angle τ is obtained moving the tap axis, in relation to the resharpening surface, of an amount X to be calculated with the formula: $X = \frac{1}{2} d_1 \sin \tau$ (see picture 3).
(d_1=tap major diameter)

Dieser Arbeitsgang muss auf einer speziellen Gewindebohrer ? Schleifmaschine erfolgen, die ausgerestet ist mit :
Teilkopf, Leitspindel zum Schleifen entlang gedrallter Nuten und Kuhlmittelversorgung. Den Spanwinkel g bei Gewindebohrern mit geraden Nuten erhalt man durch Verstellen der Bohrerachse im Verhaltnis zu der zu schleifenden Oberflache um den Einstellwert X, der nach folgender Formel errechnet wird :
X = ? d1 sin g (siehe Abb. 3).
(d1 = Gewindebohrerdurchmesser)



pic. 3

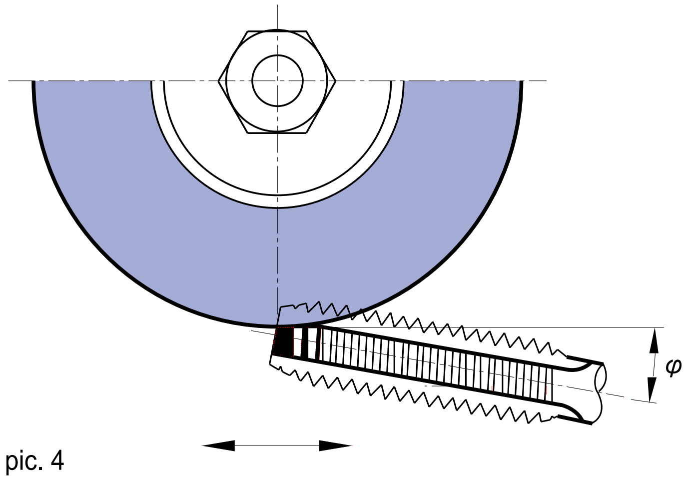
Example:
Tap 10 × 1,5 to cut on steel strength = 600 N/mm^2
d_1 = 10mm ; τ = 15° ; sin τ = 0,25882;

$$X = \frac{0{,}25882 \times 10}{2} \text{ ; } X = 1{,}29\text{mm}$$

TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

On all taps having spiral-flutes, in addition to the trade mark and identification of the dimension and type, it is possible to find also the pitch of the spiral refered to the lead screw necessary for the resharpening.
In case of employment of taps equipped with deburring tool **Burr-Bit** it is necessary to extend the flutes following what suggested by the supplier.
Because the wear on a tap is mainly on the chamfer area, on taps having "gun nose"the resharpening of the flutes can be made on the front area only (see picture 4).

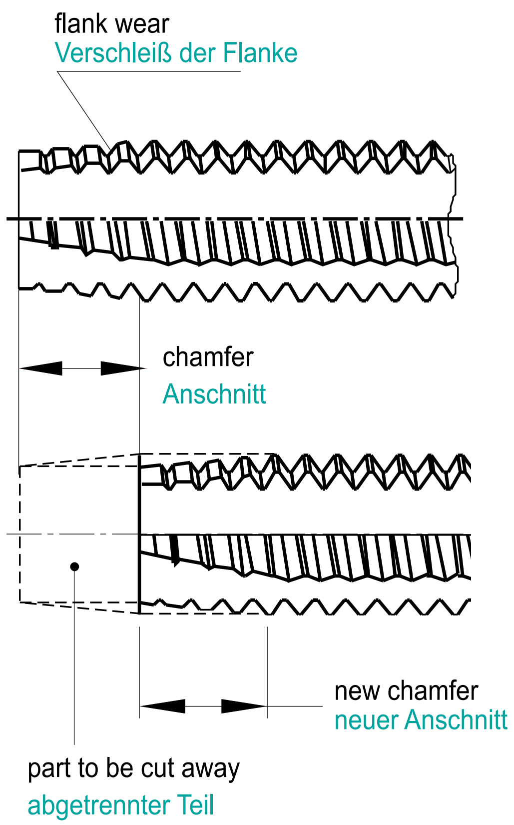
Bei allen Gewindebohrern mit gedrallten Nuten werden allgemein spezielle Schleifmaschinen eingesetzt, die die Drallsteigung messen und selbstandig einstellen konnen.
Beim Einsatz von Gewindebohrern mit dem Entgratwerkzeug Burr-Bit ist es notwenig, die Nuten entsprechend den Vorgaben des Herstellers zu verlangern.
Da der Verschleiß eines Gewindebohrers hauptsachlich im Anschnitt und dem erstenvollen Gewindezahn liegt, konnen Gewindebohrer mit Schalanschnitt und gerader Nute auch nur im vorderen Gewindeteil nachgeschliffen werden (siehe Abb. 4).



pic. 4

It is very important to pay attention that, when also the thread flanks are worn(in addition to the active heges) the resharpening as above described is practically useless.
In this case the "regeneration" is made, by means of cutting completely the chamfer away(this means a shorter tap) and reproducing then the chamfer with same angle and relief.
(see picture 5)
The regeneration is also advisable on taps with spiral flutes, because that way the flutes grinding is not necessary, in absence of special resharpening machines with lead screw with proper angle.

Es ist wichtig zu wissen, daß beim Verschleiß der Gewindezahnflanken (zusatzlich zur Hauptschneidenkante) das oben beschriebene Nachschleifen praktisch nutzlos ist !
In diesem Fall wird die ?Erneuerung" dadurch erreicht, daß der Anschnitt komplett abgetrennt wird (das bedeutet eine Kurzung des Gewindebohrers und Verlust der entrierung) und neu angeschliffen wird, mit gleichen Winkeln und Hinterschliff (siehe Abb. 5).
Diese ?Erneuerung" ist auch fur drallgenutete Gewindebohrer zu empfehlen, weil dann das Nutenschleifen entfallt, wenn keine geeignete Schleifmaschine mit Leitspindel vorhanden ist



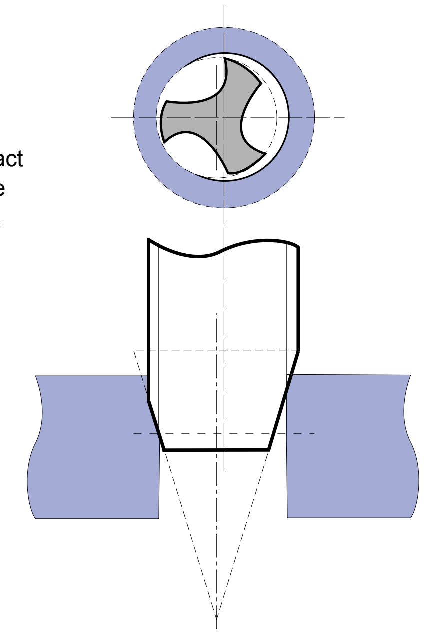
pic. 5

7 IMPORTANT RECOMMENDATIONS
WICHTIGE EMPFEHLUNGEN

RESHARPEN TIMELY
RECHTZEITIGES NACHSCHARFEN

It is important to resharpen timely the weared tap. In these conditions in fact defective threads can be produced, risking to brake the tool;in addition the wear is increasing quickly, damaging a wide area of the cutter and rapidly.

Es ist wichtig, den Gewindebohrer rechtzeitig nachzuscharfen. Stumpfe Gewindebohrer konnen defekte Gewinde schneiden, die Bruchgefahr ist erhoht; zudem nimmt der Verschleiß schnell zu und zerstort weite Bereiche der Schneiden



pic. 6

chamfer out of center
unrund geschliffener Anschnitt

PROPER GRINDING WHEELS
RICHTIGE SCHLEIFSCHEIBEN

The structure and grain of grinding wheels must be the right one for the tap to be resharpened. Our technicians are at complete disposal to give the proper recommendations.

Bindung und Korn der Schleifscheiben mussen auf die Gewindebohrer abgestimmt sein.
Unsere Techniker sind bereit, Ihnen die geeignete Empfehlung zu geben

TAPS FOR CAST IRONS
GEWINDEBOHRER FUR GUSS

On these taps the resharpening is rarely possible because, due to cast iron is abrasive, the tap is wearing on flank of the thread and so far out of tolerance.

Bei diesen Gewindebohrern ist Nachscharfen kaum moglich. Der verschleißfordernde Guss greift die Schneidenflanken an, wodurch die Toleranz verloren geht.

TAPS FOR ALUMINIUM
GEWINDEBOHRER FUR ALUMINIUM

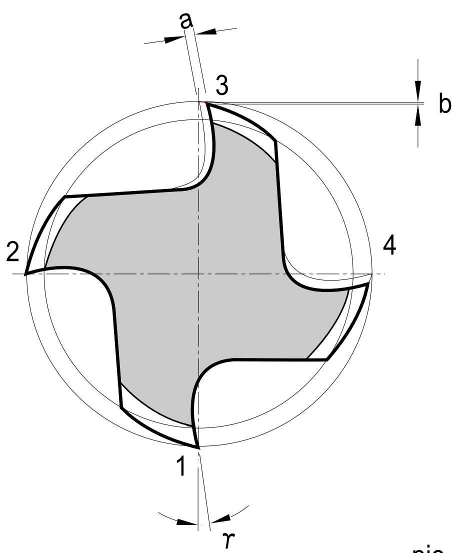
It is advisable, after resharpening as above described, to remove steel burrs from the grinding wheel action.
This operation, easy with iron brushes, avoid the danger of boring or over tolerance tapping instead of accurate tapping.

Es ist empfehlenswert nach dem oben beschriebenen Nachscharfen Schleifgrate vom Gewindebohrer mit Stahlbursten zu entfernen.
Dadurch wird die Gefahr vermieden, Gewinde zu groß zu schneiden.

CONTROLS (TESTS)
KONTROLLEN (TESTS)

Once resharpened the tap, it is always better to make some tests to obtain correct threads same as when the tap was new.
- The chamfer must be perfectly on axis to avoid the effects of picture 6.
- The cutters must have correct divisions. The results of a resharpening with a wrong division is shown on picture 7.
- The length and number of threads on chamfer must be rigorously identical to those of the new tap.

Nach dem Nachscharfen sollte der Gewindebohrer genau kontrolliert werden um sicher zu stellen, daß er genauso gut schneidet, wie ein neuer Bohrer.
- Der Anschnitt muss genau axial sein, um den Effekt wie in Abb. 7 zu vermeiden.
- Die Schneiden mussen eine genaue Teilung haben. Das Ergebnis des Nachschleifens mit falscher Teilung ist in Abb. 7 zu sehen.
- Die Lange und Anzahl der Gewindegange im Anschnitt muss absolut genau so sein, wie bei einem neuen Gewindebohrer.



pic. 7

incorrect division
Teilungsfehler
cutters not concentric
Schneiden nicht konzentrisch

YG TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

8 ORDERS / INQUIRIES SPECIAL TAPS
Bestellungen / Anfragen ; SONDERGEWINDEBOHRER

For photocopying

Orders / Inquiries

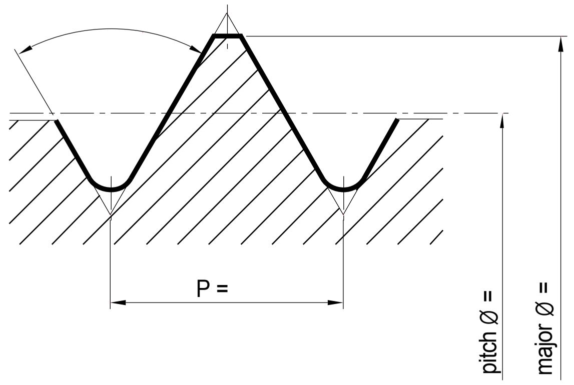
This form may be returned to your local YG-1 distributor or to YG-1.

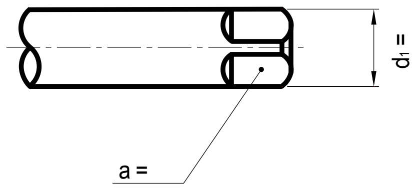
Company ____________
Address ____________
____
Department ____________
Phone ____________

Tool

Thread Ø and pitch ____________

________ Degrees R.H. L.H.

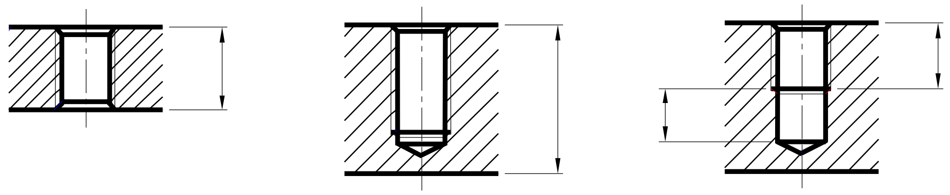




Tolerance class

Overall length ____________ mm

Hole



Unusual characteristics of the threaded product or of the tapping method,
e.g. counterbore, tapping on an angle, etc. ____________
____

Material to be tapped

Material No. or designation ____________
Tensile strength ________ N/mm² ________ HB ________ HRc
Chip form short long
Annealed steel Hardened steel Heat treated steel

Special requirements : ____________
____
____
____
____

Person to be contacted within the company ____________
Date ____________ Signature ____________

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

9 SEND US YOUR TAPPING PROBLEMS
SENDEN SIE UNS IHR GEWINDESCHNEIDPROBLEM

For photocopying

This form may be returned to your local YG-1 distributor or to YG-1.	Company ______ Address ______ ______ Department ______ Phone ______

Tool	Description of the tap being used at present Make ______ Type ______ ______ Thread Ø and pitch ______ Class of tolerance ______ ○ right-hand cutting ○ left-hand cutting ○ fluteless ○ right hand spiral flutes ______degrees ○ straight flutes ○ left hand spiral flutes ______degrees ○ spiral point ○ length of chamfer ______ thread chamfer Additional information for special pitches or thread forms pitch Ø ______ major Ø ______ minor Ø ______ flank angle ______degrees
Hole	Tap drill Ø ______ length of hole ______ depth of full thread ______ ○ through hole ○ bottoming hole Special requirements or unusual characteristics of the threaded product ______ ______
Tapping speed	______ meters per minute ______ revolutions per minute
Lubricant	○ without ○ emulsion ______% ○ cutting oil ○ other ______ Application ○ under pressure ○ vaporization ○ other ______
Machine	Type ______ ○ horizontal tapping ○ vertical tapping
Driving	○ tap revolves Number of ○ work revolves spindles ______
Feed	○ without ○ power ○ CNC ______%
Tool holder	○ rigid ○ floating ○ with safety clutch Make ______ Type ______
Material to be tapped	Material No. or designation ______ Composition, if possible ______ Tensile strength or hardness ______ N/mm2 ______ HB ______ HRc Chip form ○ short ○ long

Short description of problem : ______
______
______
______
______

Person to be contacted within the company ______
Date ______ Signature ______

YG TECHNICAL DATA
SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

10 MAIN THREAD SYMBOLS
HAUFIGE GEWINDEARTE

AMERICAN STANDARD

Cylindrical threads

UNC	Unified Coarse-Thread Series
UNF	Unified Fine-Thread Series
UNEF	Unified Extra-Fine-Thread Series
UN	Constant Pitch Series-Threads with constant pitch of T.P.I. 4,6,8,12,16, 20,28,32
UNS	Selected combinations-Threads with special dia-pitch combinations
UNJ	Unified threads with constant pitch with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
UNJC	Unified coarse thread with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
UNJEF	Unified extra fine thread with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
UNJF	Unified fine threads with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch

Pipe cylindrical threads

NPS	Cylindrical threads for pipe
NPSC	American Standard for pipe coupling
NPSF	American Standard for internal thread on pipe, dryseal
NPSH	American Standard for cylindrical threads for pipe, joints and nipples
NPSI	American Standard for internal cylindrical threads on pipe(dryseal)
NPSL	American Standard for cylindrical threads on pipe for nuts
NPSM	American Standard for cylindrical threads on pipe for mechanical joints
NGO	American National pipe threads for gas exhaust
NGS	American National pipe threads for gas

Taper pipe threads

ANPT	Taper pipe threads for Army, Navy and Airforce
F-PTE	Taper pipe fine threads(dryseal)
NPT	Taper pipe thread
NPTF	Taper pipe thread (dryseal)
NPTR	Taper pipe thread for railways equipments
PTF-SAE SHORT	Taper pipe short thread(dryseal)-SAE
PTF-SPL SHORT	Taper pipe special thread(dryseal)-SAE
PTF-SPL EXTRA SHORT	Extra short special thread(dryseal)-SAE
SPL-PTF	Special taper pipe dryseal thread
NGT	National American taper pipe thread
SGT	Special taper pipe thread
API	American petroleum Institute taper pipe thread

Trapezoidal and saw tooth threads

ACME-C	ACME selfcentering thread
ACME-G	ACME generical application
STUB-ACME	ACME flat thread with reduced thread depth
60° STUB-ACME	ACME flat thread with 60° flank angle
N BUTT	American National Saw tooth thread

BRITISH STANDARD

BSW	Whitworth British Standard coarse pitch
BSF	Whitworth British Standard fine pitch
WHIT	Whitworth Standard special pitch
R	British Standard external threading for taper pipe(dryseal)(already BSP-Tr)
Rc	British Standard internal threading taper thread for pipe(BSP-Tr)
Rp	British Standard cylindrical thread for pipe(already BSP.PI)
BA	British Standard Association thread
BSC	British Standard thread for bicycle
CEI	British Standard for bicycle

CARBIDE
HSS
THREAD MILLS
SYNCHRO TAPS
PRIME 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

TECHNICAL DATA

SUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

11 COMPARISON CHART SCALE FOR HARDNESS
VERGLEICHSTABELLE FÜR HÄRTESKALEN

Rockwell Hardness C Scale 150kg Brale (HRc)	Diamond Pyramid Hardness Number. Vickers (HV)	Brinell Hardness Standard 10mm Ball 29.42kN (HB)	Rockwell Hardness A Scale 60kg Brale (HRA)	Shore Scleroscope Hardness Number (HS)	Approx. Tensile Strength N/mm^2
68	940	-	85.6	97	-
67	900	-	85.5	95	-
66	865	-	84.5	92	-
65	832	-	83.9	91	-
64	800	-	83.4	88	-
63	772	-	82.8	87	-
62	746	-	82.3	85	-
61	720	-	81.8	83	-
60	697	-	81.2	81	-
59	674	-	80.7	80	-
58	653	-	80.1	78	-
57	633	-	79.6	76	-
56	613	-	79.0	75	-
55	595	-	78.5	74	2079
54	577	-	78.0	72	2010
53	560	-	77.4	71	1952
52	544	500	76.8	69	1883
51	528	487	76.3	68	1824
50	513	475	75.9	67	1755
49	498	464	75.2	66	1687
48	484	451	74.7	64	1639
47	471	442	74.1	63	1578
46	458	432	73.6	62	1530
45	446	421	73.1	60	1481
44	434	409	72.5	58	1432
43	423	400	72.0	57	1383
42	412	390	71.5	56	1334
41	402	381	70.9	55	1294
40	392	371	70.4	54	1245
39	382	362	69.9	52	1216
38	372	353	69.4	51	1177
37	363	344	68.9	50	1157
36	354	336	68.4	49	1118
35	345	327	67.9	48	1079
34	336	319	67.4	47	1059
33	327	311	66.8	46	1030
32	318	301	66.3	44	1000
31	310	294	65.8	43	981
30	302	286	65.3	42	952
29	294	279	64.7	41	932
28	285	271	64.3	41	912
27	279	264	63.8	40	883
26	272	258	63.3	38	863
25	266	253	62.8	38	843
24	260	247	62.4	37	824
23	254	243	62.0	36	804
22	248	237	61.5	35	785
21	243	231	61.0	35	775
20	238	226	60.5	34	755
(18)	230	219	-	33	736
(16)	222	212	-	32	706
(14)	213	203	-	31	677
(12)	204	194	-	29	647
(10)	196	187	-	28	618
(8)	188	179	-	27	598
(6)	180	171	-	26	579
(4)	173	165	-	25	549
(2)	166	158	-	24	530
(0)	160	152	-	24	520

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