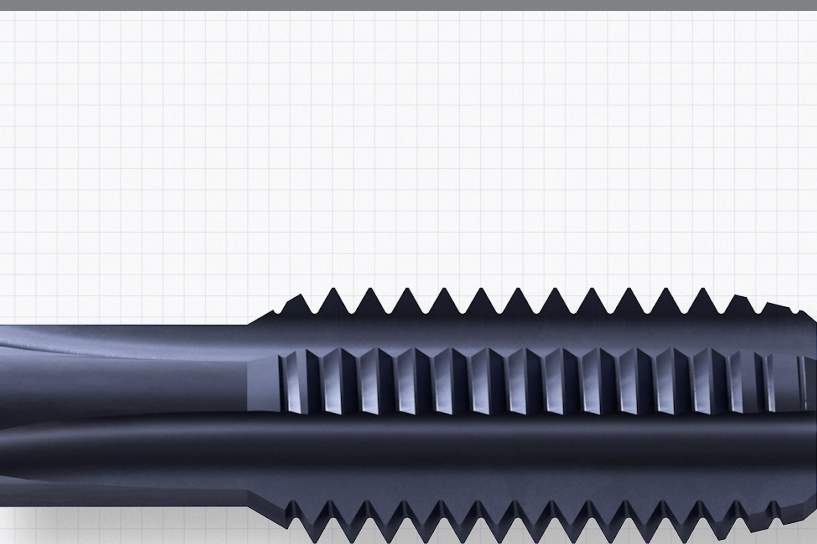
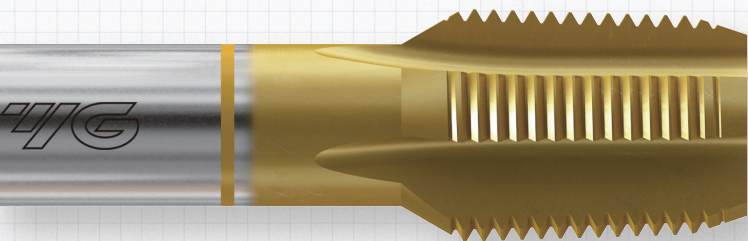
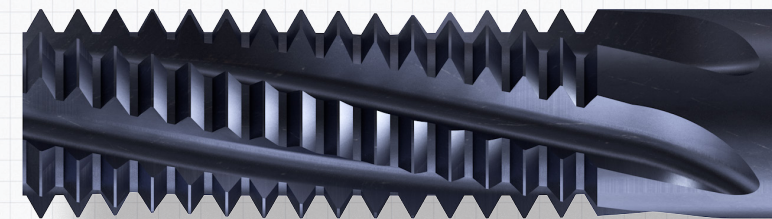


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YG-1 THREADING TOOLS



THREADING TOOLS

YG-1 CO., LTD.

HEAD OFFICE

13-40, Songdogwahak-ro 16beon-gil, Yeonsu-gu, Incheon 21984, South Korea

Phone: +82-32-526-0909

E-mail: yg1@yg1.solutions

www.yg1.solutions

Note The information is provided for reference only. Tool specifications are subject to change without prior notice.
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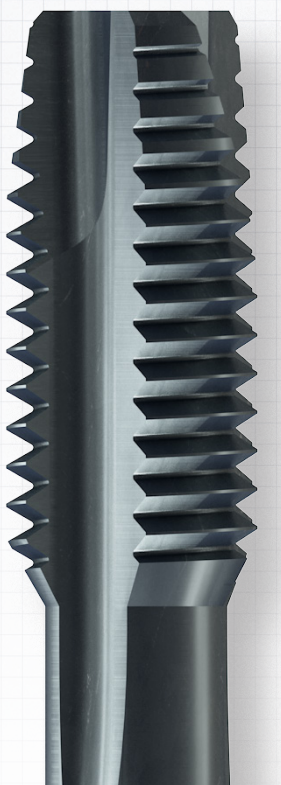


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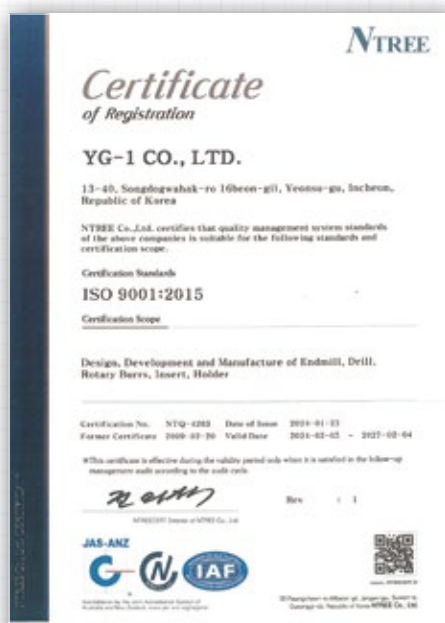
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THREADING TOOLS

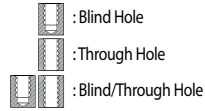


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TAP SELECTION GUIDE

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TAP SELECTION GUIDE

YG TAP INOX		YG TAP CAST IRON	YG TAP HARDENED STEEL		YG TAP TI NI		YG TAP ALU		YG TAP FORMING	PRIME TAP FORMING	SYNCHRO TAP FORMING	SOLID CARBIDE FORMING TAP FOR ALU
p.227		p.251	p.283		p.299		p.315		p.329	p.117	p.86	p.332-333
A		A	A		A		A		A	C	C	S
												
Spiral Flute	Spiral Point	Straight Flute	Spiral Flute	Spiral Point	Spiral Flute	Spiral Point	Spiral Flute	Spiral Point	FORMING	FORMING	FORMING	FORMING
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												
												

 : Blind Hole
 : Through Hole
 : Blind/Through Hole



No.1 Choice for Threading

For Multi-Purpose



Combo AOS Tap

FSH-Coated HSS-E Taps
for Multi-Purpose



p.143



TAP PRIME

HSS-PM,
Premium Spiral Flute,
Spiral Point and
Forming Taps



p.95

For Synchronized Tapping



Synchro TAP

TiCN, TiN-Coated HSS-PM Taps
for High-Speed Synchronous
Tapping



p.77

*For Stainless Steel
and Soft Steel*



YG TAP INOX

For Stainless Steels with
Lamellar, Irregular Chip
Formation where the
Cutting Forces are Higher



p.227

For Steel from 25 to 45 HRc



YG TAP HARDENED

For Hardened Steels
Applications to Control the
Continuous
and Red-glowing Chips



p.283

*For Cast Iron and
Cast Aluminum*



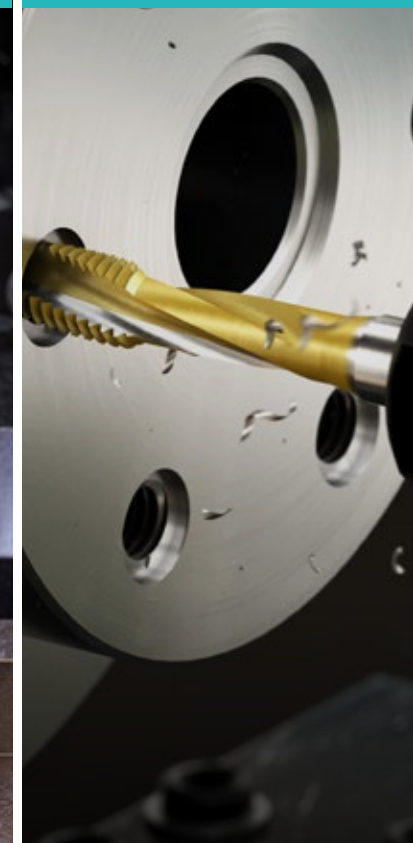
YG TAP CAST IRON

High-Performance Taps
for Mass Production
Cast Iron & Cast Aluminum



p.251

Solution for Long Chips



YG TAP CHIP BREAKER "The Trouble-Shooter"



Short Chip Obtained
With
YG Tap Chip Breaker



p.217

Tool Material

CARBIDE	Carbide
HSS PM	YG-1 Premium Powder Metallurgy HSS
HSS-E	5% Cobalt HSS
HSS	High Speed Steel

Thread Angle



Helix Angle



Taps

Cutting Condition



Taps

Standard of Tools

DIN 371/376	DIN 374	DIN 5157	Number of DIN Standard
DIN 5156	DIN 351	DIN 352	
DIN 2181	DIN 2182	DIN 2183	

Surface Treatment

FSH Coating	FSH Coating
X Coating	YG-1 X-Coating
TiAlN	Titanium Aluminum Nitride Coating
Uncoated	Non-coated
Hardslick	TiAlN + WC/C Coating
TiN	Titanium Nitride Coating
TiCN	Titanium Carbon Nitride Coating
Vap	Steam Tempered (Black Oxide finish)
Bright	Bright Finish
Nitride	Nitride
Nitride + Vap	Nitride+Vap

Chamfer Lead Acc. to DIN2197

I/II/III	I/III	Set of Hand Taps
LONG		Long Chamfer Lead for Nut Tap
B		Form B (with Gun-nose and Chamfer Lead 4-5 Thread)
C		Form C (Chamfer Lead 2-3 Thread)
E		Form E (Chamfer Lead 1.5-2 Thread)

Class of Thread

6H	6H+0.1	6HX
2B	2BX	3B
4H	6G	6GX
7G	7GX	

Working Material

GS	Steels with good machinability Rm<850N/mm2
VG	Heat treated and heat-resistant steels 850N/mm2 ≤Rm≤1,200N/mm2
HR	High alloyed steels Rm>1,200N/mm2
VA	Stainless steels
NW	Carbon steels with low contents of alloys Rm<700N/mm2
Ti	Titanium alloys
Ni	Nickel alloys
GV	Any material with at least 8~10% elongation
AI	Aluminum & Aluminum alloys
GG	Grey Cast Iron
Ms	Brass
MU	Multi-Purpose

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



Global Cutting Tool Leader **YG-1**

THREADING TOOLS

SOLID CARBIDE THREAD MILL (with & without Coolant Holes)

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

HSS-PM PRIME TAP (Spiral Flute, Spiral Point & Forming)

HSS-E COMBO TAP (Spiral Flute & Spiral Point)

HSS-E & HSS-PM YG TAP STEEL (Spiral Flute & Spiral Point)

HSS-E YG TAP CHIP BREAKER

HSS-E & HSS-PM YG TAP INOX (Spiral Flute & Spiral Point)

SOLID CARBIDE & HSS-PM & HSS-E YG TAP CAST IRON

SOLID CARBIDE & HSS-PM & HSS-E YG TAP HARDENED

HSS-PM YG TAP Ti Ni

HSS-E YG TAP ALU

SOLID CARBIDE & HSS-PM & HSS-E YG TAP FORMING

HSS & HSS-E YG TAP GENERAL

HSS & HSS-E PIPE TAP

HSS-E SCREW THREAD INSERT TAP

HSS-E NUT TAP

TECHNICAL DATA

	SOLID CARBIDE THREAD MILL (with & without Coolant Holes) Threading Large Diameter in High Quality / Available with Chamfer	THREAD MILL
SOLID CARBIDE THREAD MILL	HSS-PM SYNCHRO TAP (Spiral Flute, Spiral Point, Straight Flute & Cold Forming) For High Speed Tapping on Rigid CNC Machine	SYNCHRO TAP
	HSS-PM PRIME TAP (Spiral Flute & Spiral Point & Forming) Excellent Performance on Various Work Materials	PRIME TAP / FORMING
	HSS-E COMBO TAP (Spiral Flute & Spiral Point) For Multi Purpose Tapping	COMBO TAP
HSS-PM & HSS-E MACHINE TAP	HSS-E & HSS-PM YG TAP STEEL For Steel Materials but also other Long Chip Forming Materials	YG TAP STEEL
HSS MACHINE TAP	HSS-E YG TAP CHIP BREAKER TiN Coated Tap with Chip Breaker for Steel Materials	YG TAP CHIP BREAKER
	HSS-E & HSS-PM YG TAP INOX For Stainless Steels with Lamellar, Irregular Chip Formation where the Cutting Forces are Higher	YG TAP INOX
SOLID CARBIDE & HSS MACHINE TAP	SOLID CARBIDE & HSS-PM & HSS-E YG TAP CAST IRON For Cast Iron or Similar Work Materials	YG TAP CAST IRON
	SOLID CARBIDE & HSS-PM & HSS-E YG TAP HARDENED For Hardened Steels Applications to Control the Continuous and Red-glowing Chips	YG TAP HARDENED STEEL
HSS MACHINE TAP	HSS-PM YG TAP Ti Ni For Heat Resistent Super Alloys and Titanium Alloys Applied with Cutting Edge Rake Angles and Thread Relief	YG TAP Ti Ni
	HSS-E YG TAP ALU For long-chipping Aluminum Wrought Alloys with Large Chip Gullets to Avoid Clogging in the Threading Operations	YG TAP ALU
HSS MACHINE & HAND TAP	SOLID CARBIDE & HSS-PM & HSS-E YG TAP FORMING Tapping by Forming Soft Materials	YG TAP FORMING
HSS PIPE TAP	HSS & HSS-E YG TAP GENERAL Suitable for Tapping Blind / Through Holes due to Flute Geometry and Excellent Chip Evacuation	YG TAP GENERAL / HAND TAP
HSS MACHINE TAP	HSS & HSS-E PIPE TAP Tapping Whitworth Pipe threads	PIPE TAP
	HSS-E SCREW THREAD INSERT TAP Tapping STI Threads of Soft Materials	STI TAP
TECHNICAL DATA	HSS-E NUT TAP Nut Tapping Machines	NUT TAP
	TECHNICAL DATA	TECHNICAL DATA

SELECTION GUIDE



THREAD MILL

TYPE		THREAD MILLS with Coolant Hole & Chamfer			
THREAD FORM		M	MF	UNC	UNF
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
TOOL MATERIAL		CARBIDE			
FLUTE TYPE		Helix			
HELIX ANGLE		R15			
SERIES NO.		L4271 (p.63)	L4272 (p.64)	L4273 (p.65)	L4274 (p.66)
SURFACE TREATMENT		TiAIN	TiAIN	TiAIN	TiAIN
MODEL					
HB	HRc				
125		◎	◎	◎	◎
190	13	◎	◎	◎	◎
250	25	◎	◎	◎	◎
270	28	◎	◎	◎	◎
300	32	◎	◎	◎	◎
180	10	◎	◎	◎	◎
275	29	◎	◎	◎	◎
300	32	◎	◎	◎	◎
350	38	◎	◎	◎	◎
200	15	◎	◎	◎	◎
325	35	◎	◎	◎	◎
200	15	○	○	○	○
240	23	○	○	○	○
180	10	○	○	○	○
180	10	◎	◎	◎	◎
260	26	◎	◎	◎	◎
160	3	◎	◎	◎	◎
250	25	◎	◎	◎	◎
130		◎	◎	◎	◎
230	21	◎	◎	◎	◎
60		◎	◎	◎	◎
100		◎	◎	◎	◎
75		◎	◎	◎	◎
90		◎	◎	◎	◎
130		◎	◎	◎	◎
110		◎	◎	◎	◎
90		◎	◎	◎	◎
100		◎	◎	◎	◎
		◎	◎	◎	◎
		◎	◎	◎	◎
200	15	○	○	○	○
280	30	○	○	○	○
250	25	○	○	○	○
350	38	○	○	○	○
320	34	○	○	○	○
400 Rm		○	○	○	○
1050 Rm		○	○	○	○
550	55				
630	60				
400	42				
550	55				

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THREAD MILL

THREAD MILLS with Coolant Hole & Chamfer	Miniature THREAD MILLS		Miniature THREAD MILLS for Hard Materials		Miniature THREAD MILLS for Dental	Drill & THREAD MILLS with Chamfer	
	NPT	M	UNC	M	UNC		
-		Max. 2.0xD Blind/Through Hole	Max. 2.0xD Blind/Through Hole	Max. 2.0xD Blind/Through Hole	Max. 2.0xD Blind/Through Hole	 Blind/Through Hole	A drill thread mill is used for machining without holes.
CARBIDE							
Helix			Straight		Helix		
R15	R15		-		R15	R25	
L4276 (p.67)	L12D1 (p.68)	L12D3 (p.69)	L19E1 (p.70)	L19E3 (p.71)	L1AG1 (p.72)	L41A1 (p.73)	L42A1 (p.73)
TiAIN	TiAIN	TiAIN	AlTiN	AlTiN	Y-Coating	Bright	TiAIN
◎	◎	◎			◎		
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			◎	◎			

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SELECTION GUIDE



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ISO	VDI 3323	Material Description	HB	HRC						
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 INOX

<div>Max. 2.5xD Blind Hole</div>				<div>Max. 3.0xD Blind Hole</div>			
HSS-E				HSS-PM		HSS-E	
C	C	C	C	B	B	B	B
Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point
R40	R40	R40	R40	-	-	-	-
TBE16 (p.235)	TBE17 (p.236)	TBE18 (p.237)	TCH14 (p.238)	TQ853 (p.239)	TR853 (p.240)	TB623 (p.241)	TCH23 (p.242)
						TB123 (p.246)	
						TB264 (p.247)	
						TB274 (p.248)	



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YG TAP CAST IRON

YG-1 CO., LTD.

SELECTION GUIDE



YG TAP HARDENED STEEL

<div></div> <div>THREADING TOOLS</div>		HOLE TYPE		 Max. 2.0xD Blind / Through Hole		 Max. 2.0xD Blind Hole		 Max. 2.5xD Blind Hole			 Max. 3.0xD Through Hole			
		TOOL MATERIAL		CARBIDE		HSS-PM		HSS-E			HSS-PM		HSS-E	
		CHAMFER LEAD ACC. TO DIN2197		C	D	C	C	C	C	C	B	B	B	
		FLUTE TYPE		Straight Flute	Straight Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point		
		SPIRAL FLUTE ANGLE		-	-	R15	R40	R40	R40	-	-	-		
SERIES	M	DIN371/376	T0997-TIC (p.286)	T0999-TIC (p.287)	TKE43 (p.288)	TC313 (p.289)	TB313 (p.290)	TY313 (p.291)	TKJ26 (p.292)	TC283 (p.293)	TY283 (p.294)			
		DIN352												
		DIN357/LONG												
	MF	DIN374			TKE44 (p.295)				TKJ27 (p.296)					
		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		TiCN	TiCN	TiCN	Bright	VAP	TiAlN	TiCN	Bright	TiAlN				
MODEL														
ISO	VDI 3323	Material Description	HB	HRc			<div>NEW</div>							
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	Nodular cast iron	260	26										
	17		160	3										
	18		250	25										
	19	Malleable cast iron	130											
20	230		21											
N	21	Aluminum-wrought alloy	60											
	22		100											
	23		75											
	24	Aluminum-cast, alloyed	90											
	25		130											
	26		110											
	27	Copper and Copper Alloys (Bronze / Brass)	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										

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◎ : Excellent ○ : Good

YG TAP Ti Ni

Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole	
HSS-PM				HSS-PM							
C	C	B	B	C	C	B	B	C	C	B	B
Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point
R25	R25	-	-	R40	R40	-	-	R40	R40	-	-
TM903 (p.302)	TZ903 (p.303)	TM293 (p.304)	TZ293 (p.305)	TM933 (p.306)	TZ933 (p.307)	TM923 (p.308)	TZ923 (p.309)	TQ833 (p.310)	TR833 (p.311)	TQ873 (p.312)	TR873 (p.313)

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

[illegible][illegible]



ISO	VDI 3323	Material Description	HB	HRc									
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-1 CO., LTD.

SELECTION GUIDE



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◎ : Excellent ○ : Good

ISO	VDI 3323	Material Description	HB	HRC							
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	110								
	27		90								
	28	(Bronze / Brass)	100								
	29	Non Metallic									
	30	Materials									
S	31	Heat Resistant Super Alloys	200	15							
	32		280	30							
	33		250	25							
	34		350	38							
	35		320	34							
	36	Titanium Alloys	400 Rm								
	37		1050 Rm								
H	38	Hardened steel	550	55							
	39		630	60							
	40	Chilled Cast Iron	400	42							
	41	Hardened Cast Iron	550	55							

PIPE TAP

PIPE TAP										SCREW THREAD INSERT				NUT		
Tapered				Tapered						 Max. 2.5xD Blind Hole		 Max. 3.0xD Through Hole		 Max. 2.0xD Through Hole		
HSS-E										HSS-E				HSS-E		
C		C		C		C		C		C		B		Long		
Straight Flute				Spiral Flute						Spiral Flute		Spiral Point		Straight Flute		
-		-		R25		R25		R25		R40		-		-		
										M	DIN371/376				TC803 (p.419)	
											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.411)			TC973 (p.412)
TCM02 (p.402)		TDM02 (p.402)				TBM04 (p.404)		TCM04-HAR (p.404)				TC944 (p.413)		TC934 (p.414)		

CUTTING SPEED TABLE

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

TOOL RPM (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%).

NITRIDE + VAP

Combined surface treatment of nitriding and steam oxide.
It improves wear resistance while reducing friction and material loading, especially in high production tapping and poor lubrication conditions.

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

FSH-COATING

Combining the advantages of all current coating technologies, it features high hardness, high toughness, and an extremely smooth surface.
These characteristics provide highly reliable performance in threading processes.

X-COATING

YG-1's High Performance Coating for high heat and wear resistance

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)

TiAlN-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. TiAlN 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 TiAlN-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)

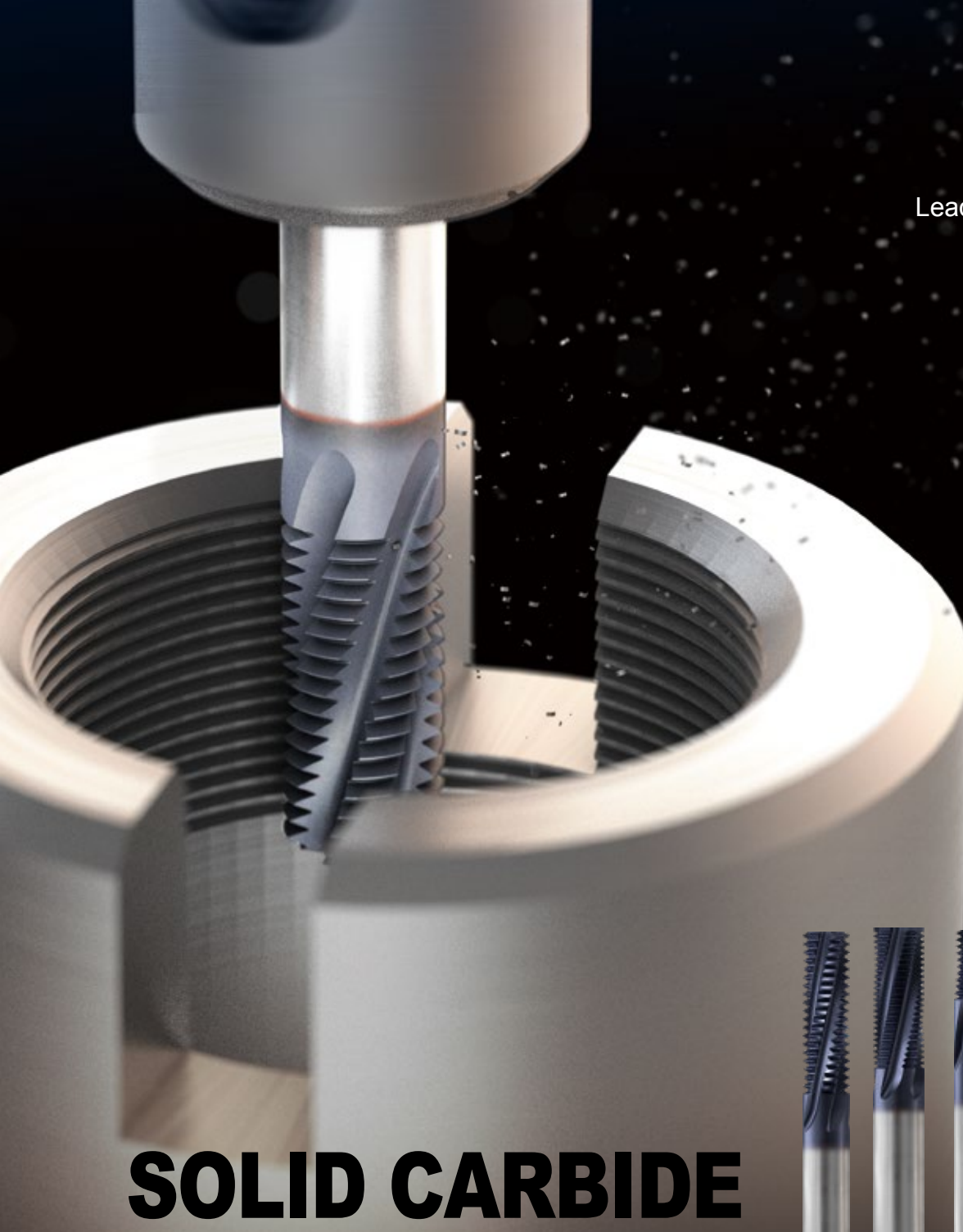


Global Cutting Tool Leader **YG-1**

THREADING



Leading Through Innovation



SOLID CARBIDE

THREAD MILL

GEWINDEFRÄSER

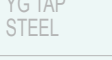
- Threading Large Diameter in High Quality
Available with Chamfer
- Zur Fertigung von Gewinden mit großen Durchmessern in hoher Qualität,
verfügbar mit Fase

THREAD
MILL



PRIME TAP / FORMING

COMBO
TAP



TO TAP CHIEF BREAKER

HARDENED
STEEL

THREADING
TOOLS

- Carbide Thread Mill for Precision Thread
- Covering Wide Range of Materials / Produce Full Threads to the Bottom

- Covering Wide Range of Materials / Produce Full Threads to the Bottom



THREAD MILLS with Coolant Hole & Chamfer	Miniature THREAD MILLS		Miniature THREAD MILLS for Hard Materials		Miniature THREAD MILLS for Dental	Drill & THREAD MILLS with Chamfer	
NPT	M	UNC	M	UNC	M	M	M
-	Max. 2.0xD  Blind /Through Hole	Max. 2.0xD  Blind /Through Hole	Max. 2.0xD  Blind /Through Hole	Max. 2.0xD  Blind /Through Hole	 Blind /Through Hole	A drill thread mill is used for machining without holes.	
CARBIDE							
Helix			Straight		Helix		
R15			-		R15	R25	
L4276 (p.67)	L12D1 (p.68)	L12D3 (p.69)	L19E1 (p.70)	L19E3 (p.71)	L1AG1 (p.72)	L41A1 (p.73)	L42A1 (p.73)
TiAlN			AlTiN		Y-Coating	Bright	TiAlN
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							

 THREAD MILL

L1211 SERIES

M

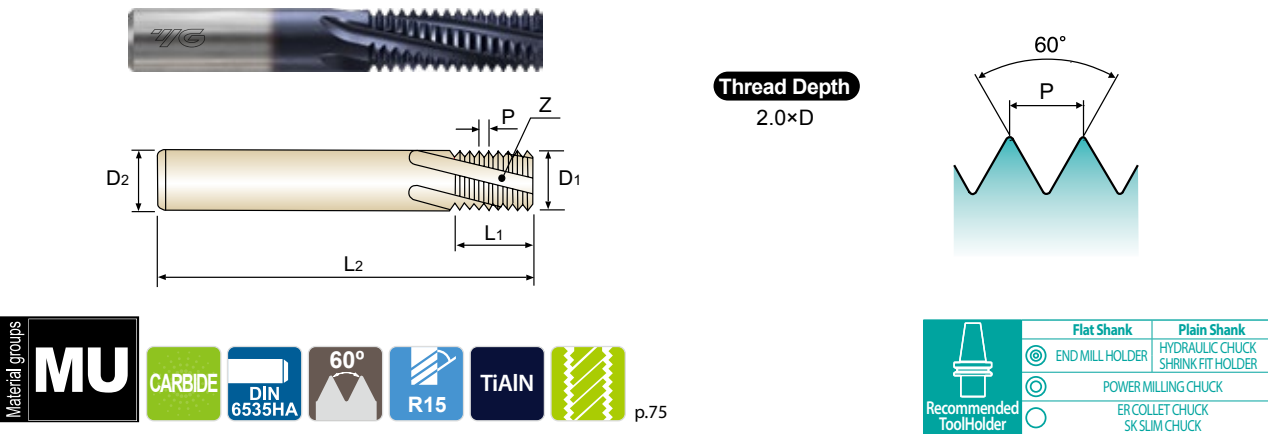
Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13

🇩🇪 **VOLLHARTMETALL GEWINDEFÄßER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	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.

ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB		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				
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 MILL

L121H SERIES

M

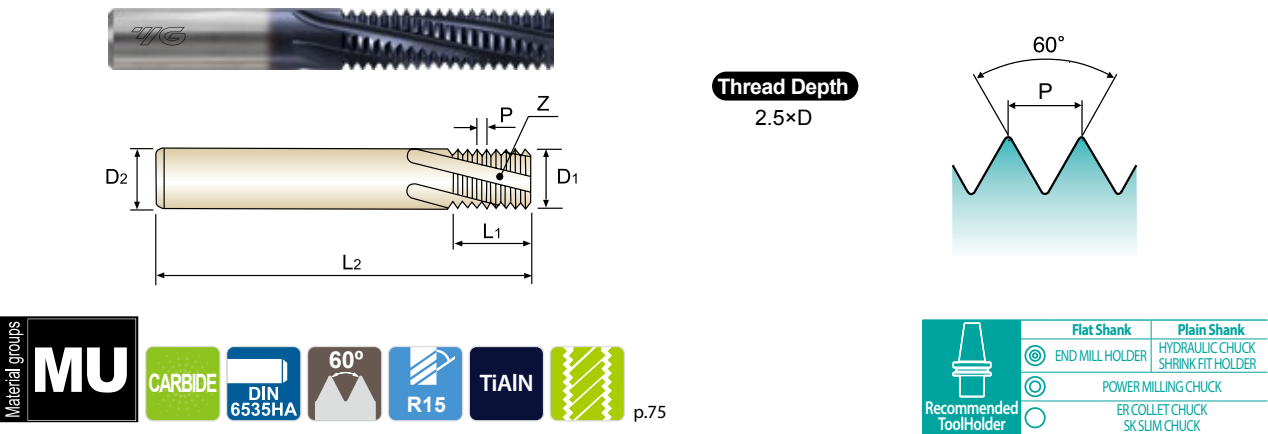
Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13

🇩🇪 **VOLLHARTMETALL GEWINDEFÄßER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
L121H310	M6	1.0	4.5	6	16	60	3
L121H360	M8	1.25	6	6	21.25	69	3
L121H420	M10	1.5	7.5	8	27	78	4
L121H500	M12	1.75	9.5	10	31.5	85	4
L121H540	M14	2.0	10	10	38	91	4
L121H600	M16	2.0	12	12	42	100	4
L121H650	M18	2.5	14	14	47.5	102	5
L121H700	M20	2.5	16	16	52.5	115	5

► Other coatings are available on your request.

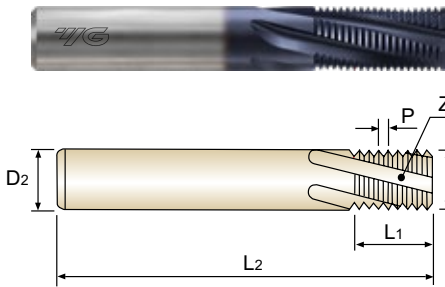
ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB		190	250	270	300	180	275	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				
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 MILL

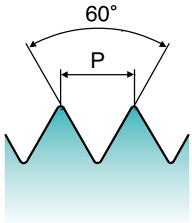
L1212 SERIES

MF **Solid Carbide Thread Mill for ISO Metric Internal Thread - DIN 13**
● **VOLLHARTMETALL GEWINDEFÄßER 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

p.75

	Flat Shank	Plain Shank
	END MILL HOLDER	HYDRAULIC CHUCK SHRINK FIT HOLDER
	POWER MILLING CHUCK	
	ER COLLET CHUCK	SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	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.

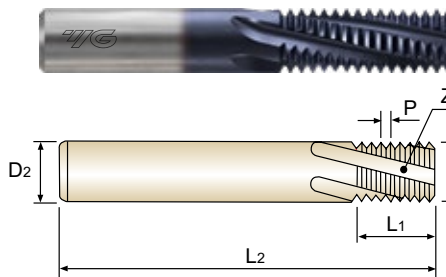
ISO	P										M					K				
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	13	25	28	32	30	10	29	32	38	15	35	15	23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

 THREAD MILL

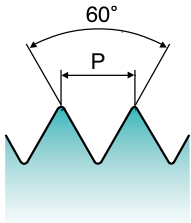
L1213 SERIES

UNC **Solid Carbide Thread Mill for UNC Internal Thread - ANSI B 1.1**
● **VOLLHARTMETALL GEWINDEFÄßER 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
2.0×D



Material groups

p.75

	Flat Shank	Plain Shank
	END MILL HOLDER	HYDRAULIC CHUCK SHRINK FIT HOLDER
	POWER MILLING CHUCK	
	ER COLLET CHUCK	SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	TPI	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.

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

 THREAD MILL

L1214 SERIES

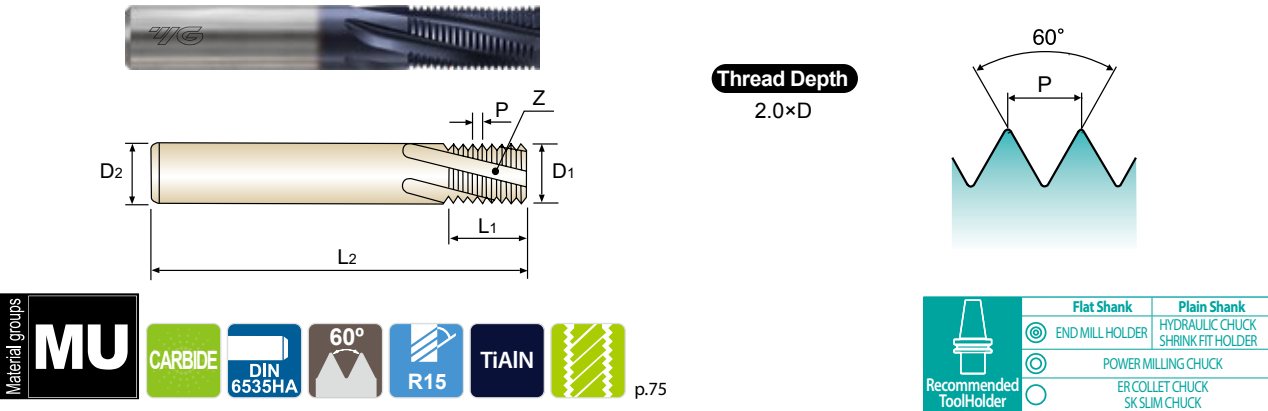
UNF

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

- VOLLHARTMETALL GEWINDEFÄßER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	TPI	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.

ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	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				
VDI 3323		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB		60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

 THREAD MILL

NEW
L3215 SERIES

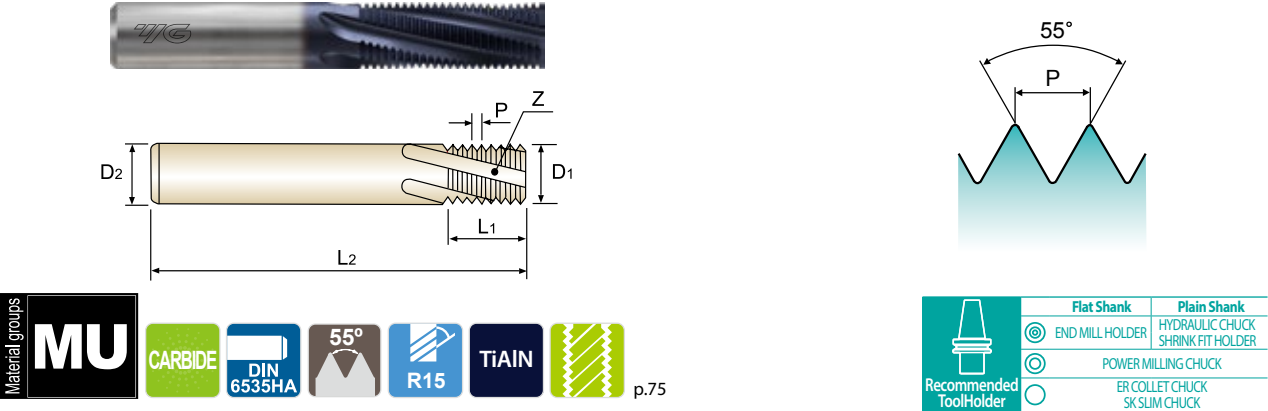
BSP(G)

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

- VOLLHARTMETALL GEWINDEFÄßER für BSP (G) INNEN- /AUSSENGEWINDE
- Fraises à fileter en carbure monobloc pour filetage intérieur & extérieur BSP (G)
- Frese a filettare in MD per 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L3215020	BSP(G) 1/16	28	5.9	6	16.3	65	3
L3215200	BSP(G) 1/8	28	7.9	8	20	70	4
L3215400	BSP(G) 1/4	19	9.9	10	26.7	80	4
L3215480	BSP(G) 3/8	19	13.9	14	33.4	92	4
L3215560	BSP(G) 1/2	14	15.9	16	43.5	104	5
L3215700	BSP(G) 3/4	14	17.9	18	34.5	100	5
L3215780	BSP(G) 1"	11	19.9	20	34.6	100	5

► Other coatings are available on your request.

ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	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				
VDI 3323		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB		60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

THREAD MILL

NEW

L3218 SERIES

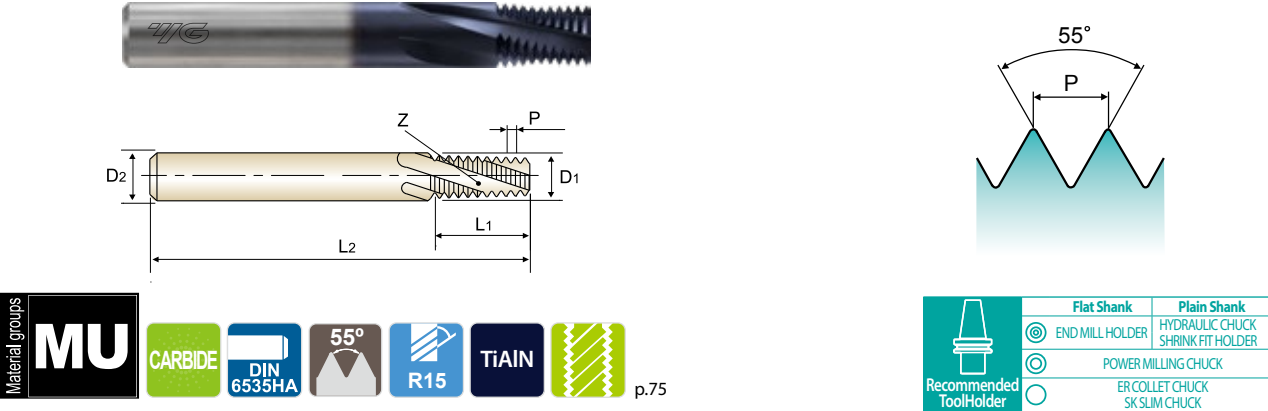
Rc(BSPT)

Solid Carbide Thread Mill Tapered for Rc(BSPT) Internal Thread - DIN EN 10226-2 and ISO 7-1

VOLLHARTMETALL GEWINDEFÄßER KONISCH für Rc (BSPT) INNENGWINDE - DIN EN 10226-2 und ISO 7-1

Fraises à fileter en carbure monobloc pour filetage intérieur Conique Rc (BSPT) - DIN EN 10226-2 ET ISO 7-1

Fresse a filettare in MD per Filettature interne, coniche, Rc(BSPT) - DIN EN 10226-2 e ISO 7-1



Unit : mm							
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L3218200	Rc(BSPT) 1/8	28	7.65	8	9.1	63	4
L3218400	Rc(BSPT) 1/4	19	9.9	10	14.7	73	4
L3218480	Rc(BSPT) 3/8	19	11.15	12	14.7	80	4
L3218560	Rc(BSPT) 1/2	14	13.9	14	21.8	85	5
L3218780	Rc(BSPT) 1"	11	15.9	16	27.7	95	5

► Other coatings are available on your request.

ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		125	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				
VDI 3323		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB		60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○

THREAD MILL

NEW

L3216 SERIES

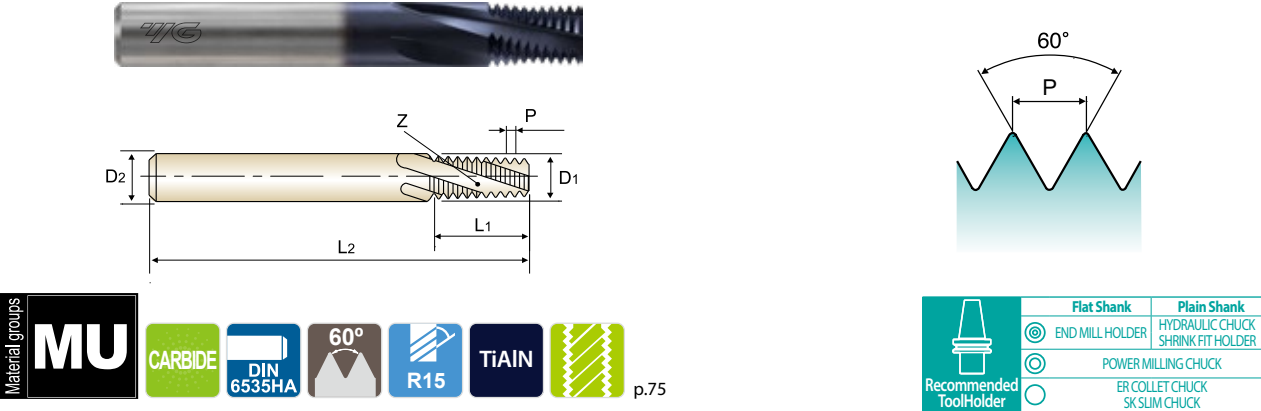
NPT

Solid Carbide Thread Mill for NPT Internal Thread - ANSI/ASME B 1.20.1

VOLLHARTMETALL GEWINDEFÄßER für NPT INNENGWINDE, ANSI/ASME B 1.20.1

Fraises à fileter en carbure Monobloc pour filetage interieur & exterieur NPT - ANSI/ASME B 1.20.1

Fresse a filettare in MD per Filettature interne, coniche NPT - ANSI/ASME B 1.20.1



Unit : mm							
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L3216020	NPT 1/16	27	5.9	6	9.4	57	3
L3216200	NPT 1/8	27	7.9	8	9.4	63	4
L3216400	NPT 1/4	18	9.9	10	14.1	73	4
L3216480	NPT 3/8	18	11.9	12	14.1	80	4
L3216560	NPT 1/2	14	13.9	14	18.1	85	5
L3216780	NPT 1"	11.5	15.9	16	22.1	95	5

► Other coatings are available on your request.

ISO		P										M					K				
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		125	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				
VDI 3323		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB		60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○

 THREAD MILL

L4211 SERIES

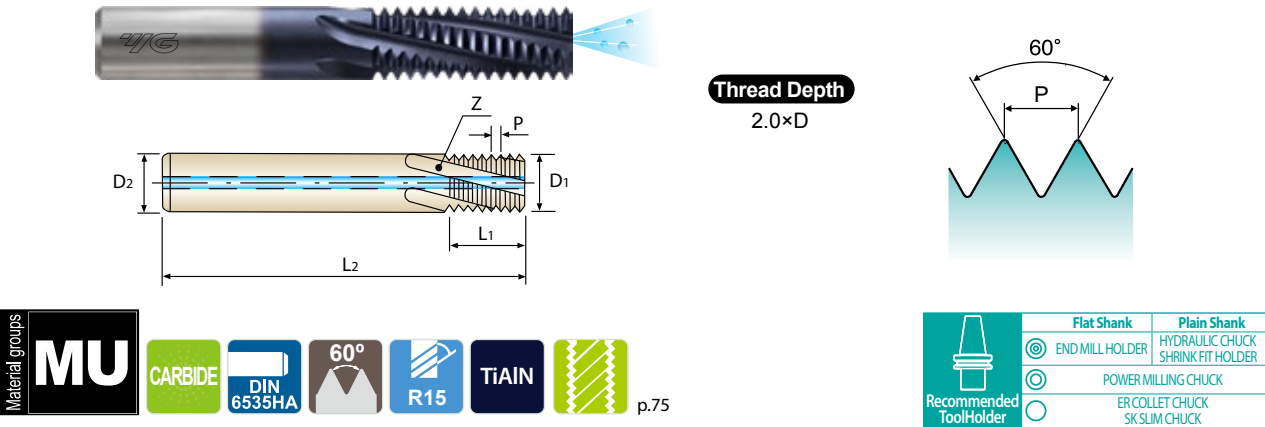
M Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13

🇩🇪 VOLLHARTMETALL GEWINDEFÄHRER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN	P	D1	D2	L1	L2	Z	
L4211310	M6	1.0	4.5	6	13	57	3
L4211360	M8	1.25	6.0	6	17.5	65	3
L4211420	M10	1.5	7.5	8	21	72	4
L4211500	M12	1.75	9.5	10	26.25	80	4
L4211540	M14	2.0	10.0	10	30	83	4
L4211600	M16	2.0	12.0	12	34	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 MILL

L4212 SERIES

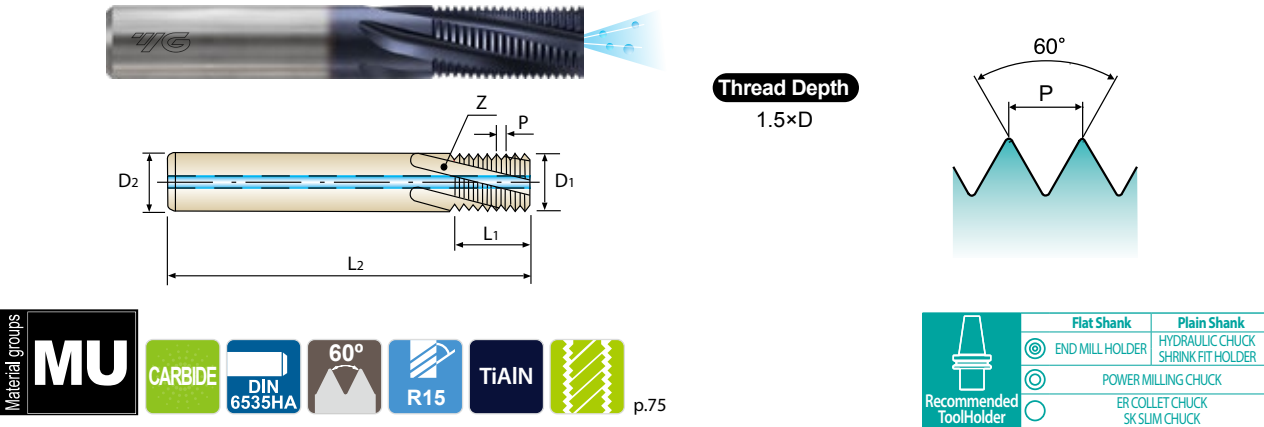
MF Solid Carbide Thread Mill with Coolant Hole for ISO Metric Internal Thread - DIN 13

🇩🇪 VOLLHARTMETALL GEWINDEFÄHRER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN	P	D1	D2	L1	L2	Z	
L4212370	M8	1.0	6.0	6	13	57	3
L4212380	M8	0.75	6.0	6	12.75	57	3
L4212440	M10	1.0	8.0	8	16	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	72	4
L4212550	M14	1.5	10.0	10	22.5	83	4
L4212570	M14	1.0	10.0	10	22	83	4
L4212610	M16	1.5	12.0	12	25.5	83	4
L4212620	M16	1.0	12.0	12	25	83	4
L4212670	M18	1.5	14.0	14	28.5	92	5
L4212680	M18	1.0	14.0	14	28	92	5
L4212720	M20	1.5	16.0	16	31.5	92	5
L4212730	M20	1.0	16.0	16	31	92	5

► Other coatings are available on your request.

		P										M					K						
ISO	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	Material Description	N					S				H												
		Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron			
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400	37	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 MILL

NEW

L4213 SERIES

UNC

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

- 

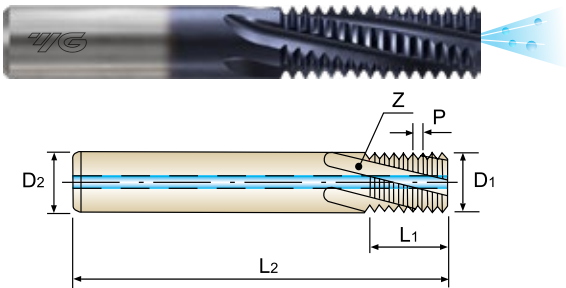
VOLLHARTMETALL GEWINDEFÄßER mit Innenkühlung für UNC INNENGWINDE, ANSI B 1.1
- 

Fraises à fileter en carbure monobloc avec arrosage central pour filetage intérieur UNC - ANSI B 1.1
- 

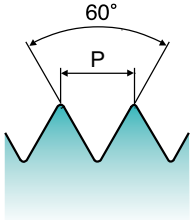
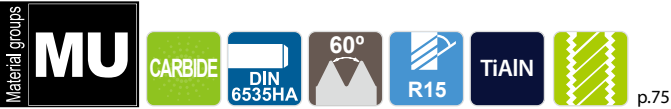
Frese a filettare in MD Con fori di lubrificazione, per Filettature interne, UNC - ANSI B 1.1

► 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
2.0×D



Recommended ToolHolder	Flat Shank		Plain Shank	
		END MILL HOLDER		HYDRAULIC CHUCK SHRINK FIT HOLDER
		POWER MILLING CHUCK		ER COLLET CHUCK SK SLIM CHUCK
		ER COLLET CHUCK SK SLIM CHUCK		

Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
			D1	D2	L1	L2	
TiAlN							Z
L4213400	1/4	20	4.5	6	14	57	3
L4213440	5/16	18	5.8	6	16.9	65	3
L4213480	3/8	16	7	8	20.6	72	4
L4213520	7/16	14	8	8	23.6	72	4
L4213560	1/2	13	9.5	10	27.4	80	4
L4213600	9/16	12	10	10	31.8	83	4
L4213640	5/8	11	12	12	34.6	92	4
L4213700	3/4	10	14	14	40.6	104	5

► Other coatings are available on your request.

THREAD MILL

NEW

L4214 SERIES

UNF

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

- 

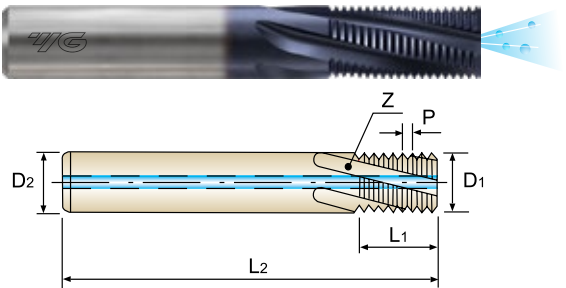
VOLLHARTMETALL GEWINDEFÄßER mit Innenkühlung für UNF INNENGWINDE, ANSI B 1.1
- 

Fraises à fileter en carbure monobloc avec arrosage central pour filetage intérieur UNF - ANSI B 1.1
- 

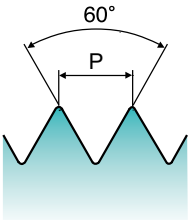
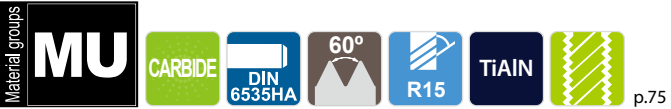
Frese a filettare in MD Con fori di lubrificazione, per Filettature interne, UNF - ANSI B 1.1

► 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
2.0×D



Recommended ToolHolder	Flat Shank		Plain Shank	
		END MILL HOLDER		HYDRAULIC CHUCK SHRINK FIT HOLDER
		POWER MILLING CHUCK		ER COLLET CHUCK SK SLIM CHUCK
		ER COLLET CHUCK SK SLIM CHUCK		

Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
			D1	D2	L1	L2	
TiAlN							Z
L4214420	1/4	28	5	6	13.6	57	3
L4214460	5/16	24	6	6	16.9	65	3
L4214500	3/8	24	8	8	20.1	72	4
L4214540	7/16	20	8	8	24.1	72	4
L4214580	1/2	20	10	10	26.7	80	4
L4214620	9/16	18	12	12	29.6	83	4
L4214660	5/8	18	12	12	33.9	92	4
L4214720	3/4	16	14	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	125	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

◎ : 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	125	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

 THREAD MILL

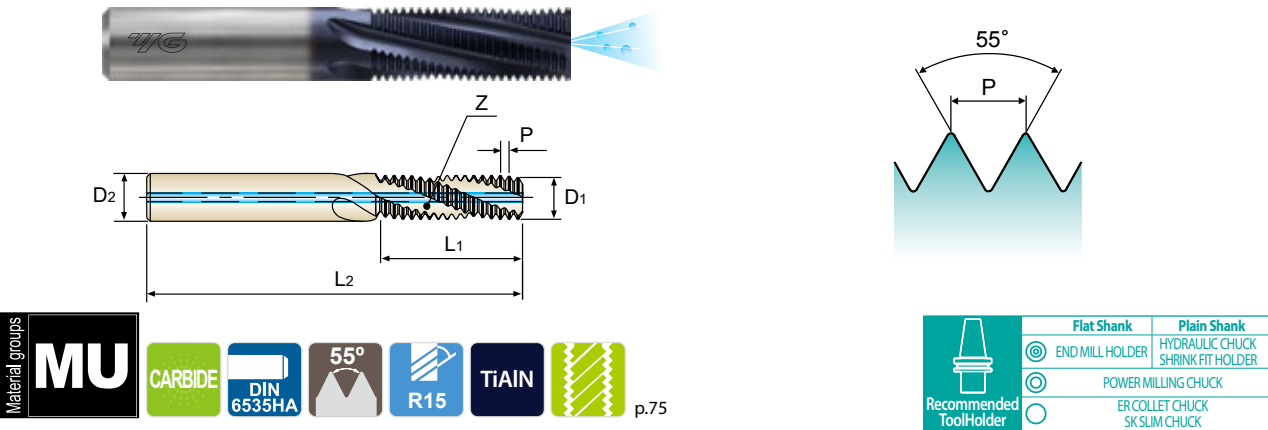
L6215 SERIES

BSP(G)

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

● **VOLLHARTMETALL GEWINDEFÄSER 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.



Unit : mm							
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L6215020	BSP(G) 1/16	28	5.9	6	16.3	65	3
L6215200	BSP(G) 1/8	28	7.9	8	20	70	4
L6215400	BSP(G) 1/4	19	9.9	10	26.7	80	4
L6215480	BSP(G) 3/8	19	13.9	14	33.4	92	4
L6215560	BSP(G) 1/2	14	15.9	16	43.5	104	5
L6215700	BSP(G) 3/4	14	17.9	18	34.5	100	5
L6215780	BSP(G) 1"	11	19.9	20	34.6	100	5

► Other coatings are available on your request.

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		21	22	23	24	25	26	27	28	29	30	15	30	25	38	34	36	37	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 MILL

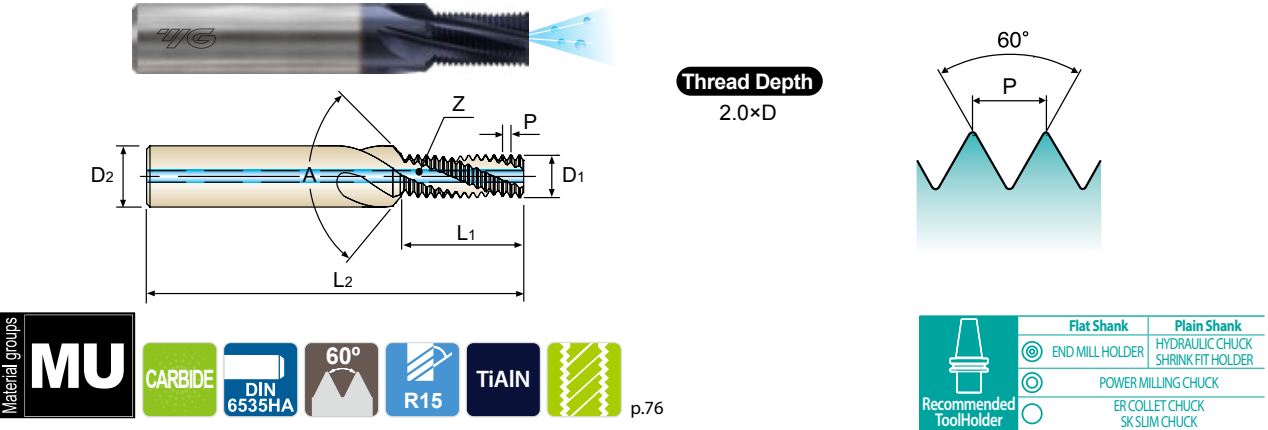
L4271 SERIES

M

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

● **VOLLHARTMETALL GEWINDEFÄSER 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.



Unit : mm								
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN		P	D1	D2	L1	L2	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.

		P										M				K									
ISO		Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron				
Material Description		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
VDI 3323																									
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	36	37	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		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○	○			

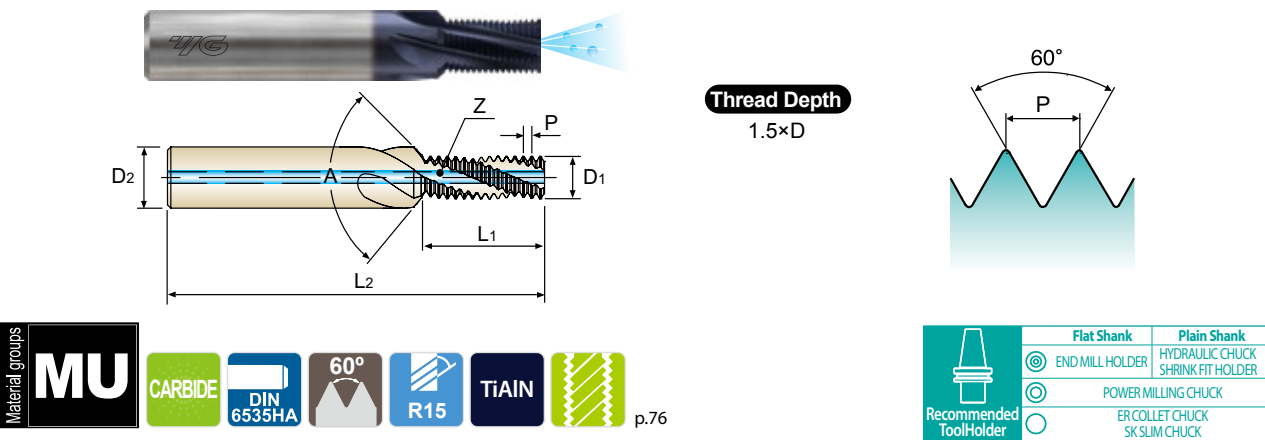
 THREAD MILL

L4272 SERIES

MF

Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13
● **VOLLHARTMETALL GEWINDEFÄRER 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.



Unit : mm								
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN		P	D1	D2	L1	L2	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.

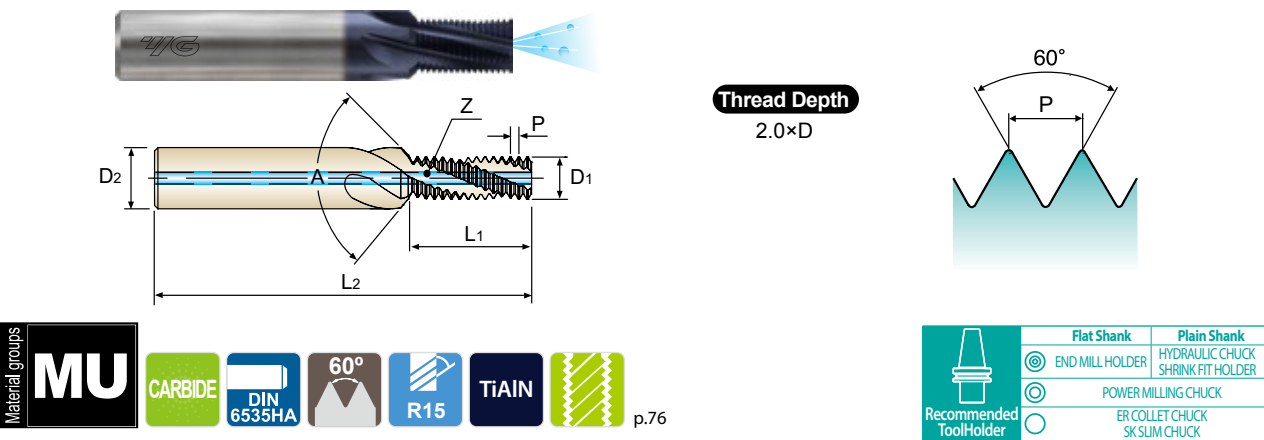
 THREAD MILL

L4273 SERIES

UNC

Solid Carbide Thread Mill with Coolant Hole & Chamfer for UNC Internal Thread - ANSI B 1.1
● **VOLLHARTMETALL GEWINDEFÄRER 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.



Unit : mm								
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D1	D2	L1	L2	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.

		P										M			K					
		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron		
ISO	Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
VDI 3323	HRc	1	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
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
		N										S					H			
ISO	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	HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
HB		60	100	75	90	130	110	90	100			15	30	25	38	34			55	60
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

		P										M			K					
		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron		
ISO	Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
VDI 3323	HRc	1	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
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
		N										S					H			
ISO	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	HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
HB		60	100	75	90	130	110	90	100			15	30	25	38	34			55	60
Recommended		◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

 THREAD MILL

L4274 SERIES

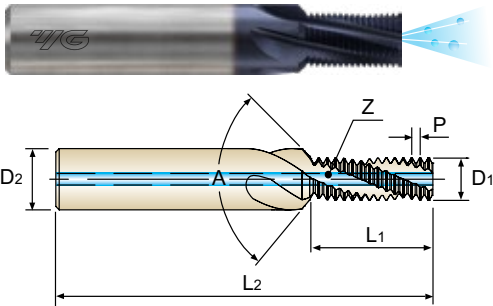
UNF

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

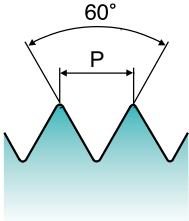
-  VOLLHARTMETALL GEWINDEFÄßER mit KÜHLKANAL & FASE für UNF INNENGWINDE - ANSI B 1.1
-  FRAISES A FILETER CARBURE MONOBLOC AVEC ARROSAGE CENTRAL ET CHANFREIN POUR FILETAGE INTER UNC - ANSI B 1.1
-  Con fori di lubrificazione e taglienti per smussi, filettature interne, unificato, passo fine - ANSI B 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
2.0xD



p.76



	Flat Shank	Plain Shank
⊙	END MILL HOLDER	HYDRAULIC CHUCK SHRINK FIT HOLDER
⊙	POWER MILLING CHUCK	
○	ER COLLET CHUCK	SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
			D1	D2	L1	L2	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.

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

 THREAD MILL

L4276 SERIES

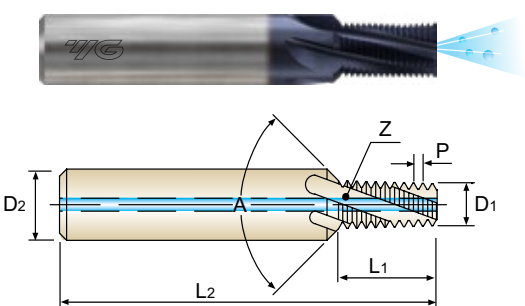
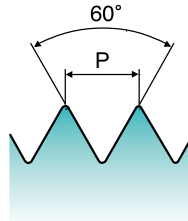
NPT

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

-  VOLLHARTMETALL GEWINDEFÄßER mit KÜHLKANAL & FASE für NPT INNENGWINDE - 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.



p.76



	Flat Shank	Plain Shank
⊙	END MILL HOLDER	HYDRAULIC CHUCK SHRINK FIT HOLDER
⊙	POWER MILLING CHUCK	
○	ER COLLET CHUCK	SK SLIM CHUCK

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
			D1	D2	L1	L2	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.

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

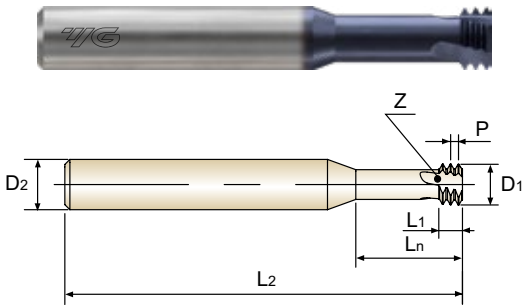
 THREAD MILL

L12D1 SERIES

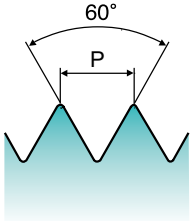
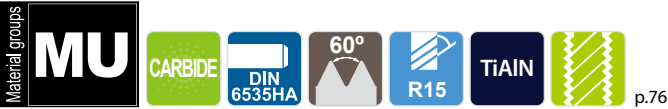
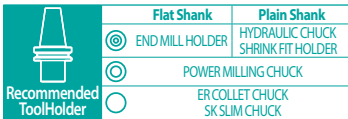
M **Solid Carbide Miniature Thread Mill for ISO Metric Internal Thread - DIN 13**
● **VOLLHARTMETALL MINI-GEWINDEFÄßER für ISO METRISCHE INNENGEWINDE - DIN 13**
● **FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13**
● **Mini frese per filettature interne ISO metriche passo grosso - DIN 13**

► Short thread length

► Kurze Gewindelänge



Thread Depth
2.0×D



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	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
HRc											15	30	25	38	34			55	60	42
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎

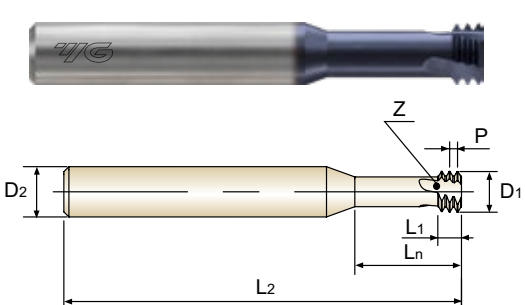
 THREAD MILL

L12D3 SERIES

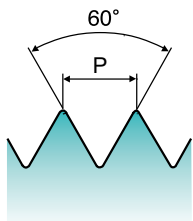
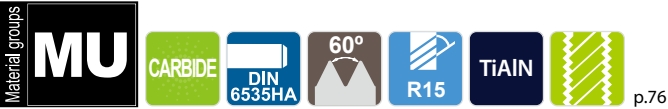
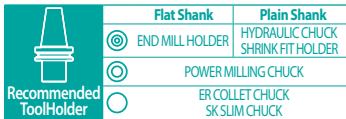
UNC **Solid Carbide Miniature Thread Mill for UNC Internal Thread - ANSI B 1.1**
● **VOLLHARTMETALL MINI-GEWINDEFÄßER für UNC INNENGEWINDE - ANSI B 1.1**
● **FRAISES A FILETER À TOURBILLONNER CARBURE MONOBLOC POUR FILETAGE ISO INTER MÉTRIQUE - DIN13**
● **Mini frese per filettature interne unificato passo grosso - ANSI B 1.1**

► Short thread length

► Kurze Gewindelänge



Thread Depth
2.0×D



Unit : mm								
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
TiAlN	P	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.

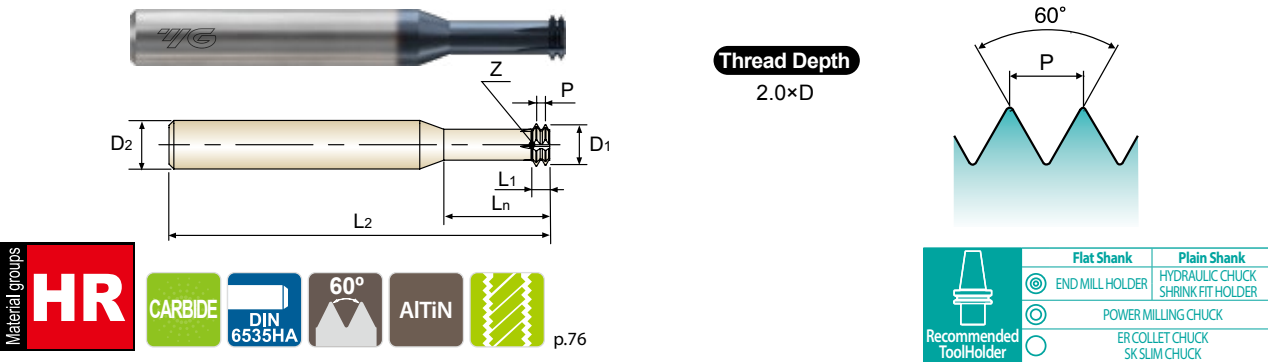
◎ : Excellent ○ : Good																							
ISO	P										M				K								
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎		

 THREAD MILL

L19E1 SERIES

M **Solid Carbide Miniature Thread Mill for Hard Materials, ISO Metric Internal Thread - DIN 13**
● **VOLLHARTMETALL MINI-GEWINDEFÄßER für GEHÄRTETE MATERIALIEN, ISO METRISCHE INNENGEWINDE - DIN 13**
● **FRAISES À TOURBILLONNER CARBURE MONOBLOC POUR MATÉRIAUX DURS, FILETAGE ISO INTER MÉTRIQUE - DIN13**
● **Mini frese per acciai temprati ISO metriche passo grosso - DIN 13**

- ▶ **Left hand Cut (CNC code : M04)**
▶ Short thread length
▶ Straight Flute
▶ The work direction is from top to bottom (Climb Milling)
▶ For hard materials up to HRC62
- ▶ **Linksschneidend (CNC Befehl : M04)**
▶ Kurze Gewindelänge
▶ Linksschneidend, geradegenutet
▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
▶ Für gehärtete Materialien bis zu HRC62



Unit : mm								
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AITiN	P	D1	D2	L1	Ln	L2	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	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	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	21.0	73	6
L19E1500	M12	1.75	9.9	10	3.5	25.2	73	6

▶ Other coatings are available on your request.

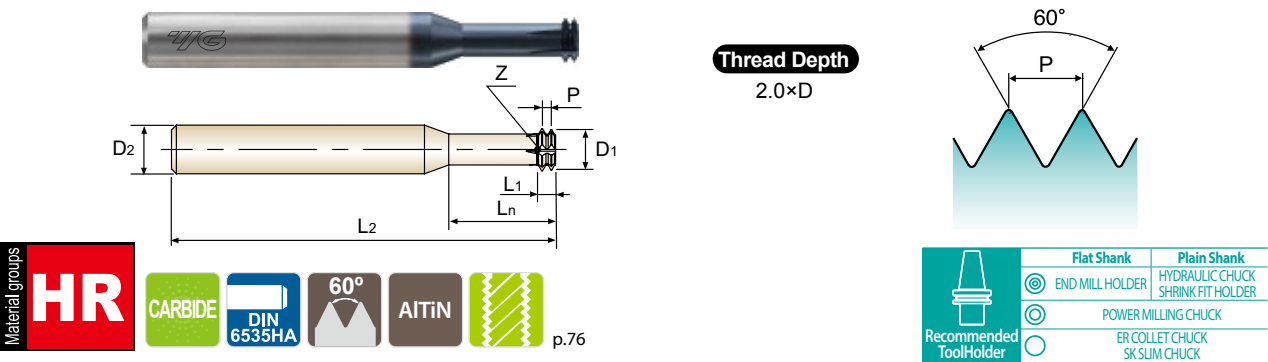
◎ : Excellent ○ : Good																							
ISO	P										M				K								
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	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											◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

 THREAD MILL

L19E3 SERIES

UNC **Solid Carbide Miniature Thread Mill for Hard Materials, UNC Internal Thread - ANSI B 1.1**
● **VOLLHARTMETALL MINI-GEWINDEFÄßER 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**

- ▶ **Left hand Cut (CNC code : M04)**
▶ Short thread length
▶ Straight Flute
▶ The work direction is from top to bottom (Climb Milling)
▶ For hard materials up to HRC62
- ▶ **Linksschneidend (CNC Befehl : M04)**
▶ Kurze Gewindelänge
▶ Linksschneidend, geradegenutet
▶ Die Fräsrichtung ist von oben nach unten (Gleichlauf)
▶ Für gehärtete Materialien bis zu HRC62



Unit : mm								
EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AITiN	D1	D2	L1	Ln	L2	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.

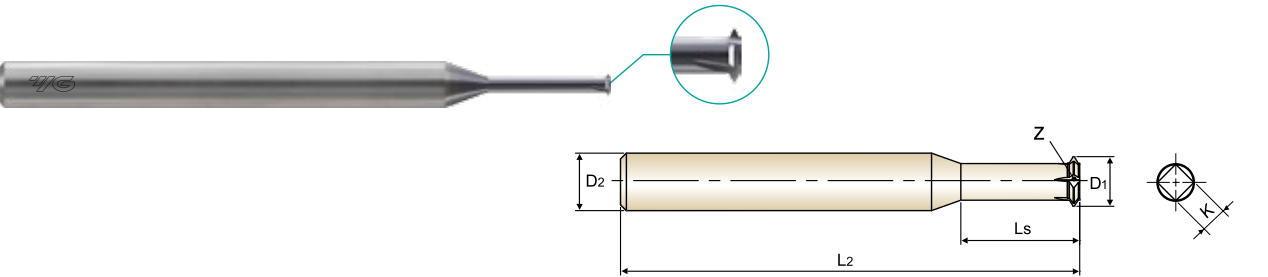
◎ : Excellent ○ : Good																							
ISO	P										M					K							
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	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 CopperAlloys (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											◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎		

Y G **THREAD MILL**

NEW
L1AG1 SERIES

M **Solid Carbide Miniature Thread Mill for Dental, ISO Metric Internal Thread - DIN 13**
● **VOLLHARTMETALL MINI-GEWINDEFÄßER für Dental, ISO METRISCHES INNENGEWINDE - DIN 13**
● **Mini-fraise à fileter en carbure monobloc pour le secteur dentaire, filetage ISO Interieur Metrique - DIN13**
● **Micro - Fresa a filettare in MD-filettature interne per dentale, ISO metriche - DIN 13**

- Single thread applied to reduce cutting force.
- Suitable for machining implants (medical device components), Titanium, and Stainless Steel.



Material groups

MU

CARBIDE

DIN 6535HA

60°

R15

Y Coating

p.76

Recommended ToolHolder

Flat Shank

END MILL HOLDER

Plain Shank

HYDRAULIC CHUCK SHRINK FIT HOLDER

POWER MILLING CHUCK

ER COLLET CHUCK SK SLM CHUCK

Unit : mm							
EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Effective Length	Overall Length	No. of Flute
Y-Coating		P	D1	D2	Ln	L2	Z
L1AG1055	M1.2	0.25	0.90	3	5.0	40	3
L1AG1056	M1.2	0.25	0.90	3	6.0	40	3
L1AG1058	M1.2	0.25	0.90	3	8.0	40	3
L1AG1075	M1.4	0.3	1.05	3	5.0	40	3
L1AG1076	M1.4	0.3	1.05	3	6.0	40	3
L1AG1078	M1.4	0.3	1.05	3	8.0	40	3
L1AG1095	M1.6	0.35	1.20	3	5.0	40	3
L1AG1096	M1.6	0.35	1.20	3	6.0	40	3
L1AG1098	M1.6	0.35	1.20	3	8.0	40	3
L1AG1115	M1.8	0.35	1.40	3	5.0	40	3
L1AG1116	M1.8	0.35	1.40	3	6.0	40	3
L1AG1118	M1.8	0.35	1.40	3	8.0	40	3
L1AG1135	M2	0.4	1.50	3	5.0	40	3
L1AG1136	M2	0.4	1.50	3	6.0	40	3
L1AG1138	M2	0.4	1.50	3	8.0	40	3
L1AG1135-6	M2	0.4	1.50	6	5.0	57	3
L1AG1136-6	M2	0.4	1.50	6	6.0	57	3
L1AG1138-6	M2	0.4	1.50	6	8.0	57	3
L1AG1175	M2.5	0.45	1.95	3	5.0	40	3
L1AG1176	M2.5	0.45	1.95	3	6.0	40	3
L1AG1178	M2.5	0.45	1.95	3	8.0	40	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	21	22	23	24	25	26	27	28	29	30	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

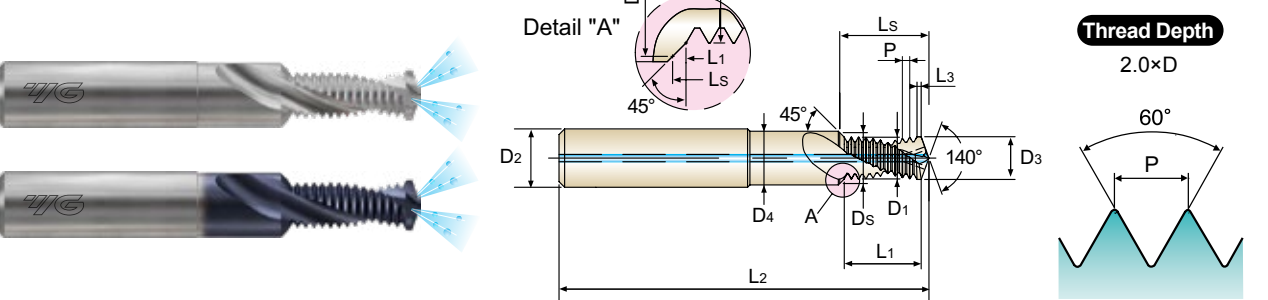
Y G **THREAD MILL**

BRIGHT **L41A1** SERIES
TiAlN **L42A1** SERIES

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



Material groups

GG

AI

CARBIDE

DIN 6535HA

60°

R25

Bright

TiAlN

p.76

Recommended ToolHolder

Flat Shank

END MILL HOLDER

Plain Shank

HYDRAULIC CHUCK SHRINK FIT HOLDER

POWER MILLING CHUCK

ER COLLET CHUCK SK SLM CHUCK

Unit : mm												
EDP No.		Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter D2	Effect. Diameter Ds	Drill Diameter D3	Max. C'sink D4	Thread Length L1	Effect. Length Ls	Drill Length L3	Overall Length L2
Bright	TiAlN											
L41A1310	L42A1310	M6	1.0	4.75	8	6.3	5.00	6.6	13	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 CopperAlloys (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	34	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

For THREAD MILL

Materials	Hardness (HB)	Strength (N/mm ²)	Feed per Tooth (Fz)	
			Cutter Diameter ≤Ø8.0	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

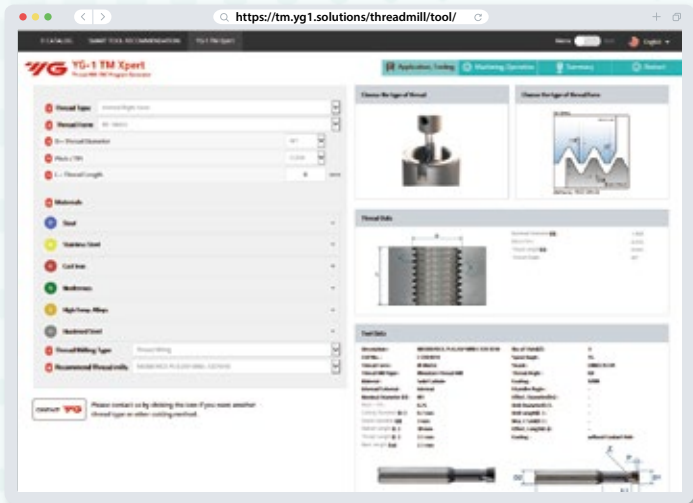
For Drill and THREAD MILL

Material	Hardness (HB)	Strength (N/mm ²)	Fz (Thread Milling) - Feed per Tooth		Fdr (Drilling) - Feed per Revolution	
			Cutter Diameter ≤Ø8.0	Cutter Diameter >Ø8.0	Cutter Diameter ≤Ø8.0	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 MILL

Material	Hardness (HB)	Strength (N/mm ²)	Feed (mm/tooth)	
			Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0
Alloy Steel	HB295 - 415	1000 - 1400	0.02 - 0.04	0.04 - 0.06
Stainless Steel	HB280 - 415	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	HRc45 - 50	-	0.03 - 0.05	0.05 - 0.07
	HRc51 - 55	-	0.02 - 0.04	0.04 - 0.06
	HRc56 - 62	-	0.01 - 0.03	0.03 - 0.05

YG-1 TM Xpert provides user-oriented data and display with user friendly Interface



<https://tm.yg1.solutions/threadmill/tool/>



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

					L1211, L121H, L1212, L1213, L1214, L3215 L3218, L3216, L4211, L4212, L4213, L4214, L6215
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)
P	1	Non-alloy steel	125		80-120
	2		190	13	80-120
	3		250	25	80-120
	4		270	28	80-120
	5		300	32	80-120
	6	Low alloy steel	180	10	80-120
	7		275	29	80-120
	8		300	32	80-120
	9		350	38	80-120
	10	High alloyed steel, and tool steel	200	15	80-120
	11		325	35	80-120
M	12	Stainless steel	200	15	40-80
	13		240	23	40-80
	14		180	10	40-80
K	15	Grey cast iron	180	10	50-100
	16		260	26	50-100
	17	Nodular cast iron	160	3	50-100
	18		250	25	50-100
	19	Malleable cast iron	130		50-100
	20		230	21	50-100
N	21	Aluminum-wrought alloy	60		100-130
	22		100		100-130
	23	Aluminum-cast, alloyed	75		100-130
	24		90		100-130
	25		130		100-130
	26	Copper and Copper Alloys (Bronze / Brass)	110		100-130
	27		90		100-130
	28		100		100-130
	29	Non Metallic Materials			100-130
	30				100-130
S	31	Heat Resistant Super Alloys	200	15	20-60
	32		280	30	20-60
	33		250	25	20-60
	34		350	38	20-60
	35		320	34	20-60
	36	Titanium Alloys	400Rm		20-60
	37		1050Rm		20-60
H	38	Hardened steel	550	55	
	39		630	60	
	40	Chilled Cast Iron	400	42	
	41	Hardened Cast Iron	550	55	



THREAD MILL					L4271, L4272, L4273, L4274, L4276, L12D1, L12D3	L19E1 L19E3	L1AG1	L41A1 L42A1
SYNCHRO TAP	ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)		
PRIME TAP / FORMING	P	1	Non-alloy steel	125		80-120		80-120
COMBO TAP		2		190	13	80-120		80-120
YG TAP STEEL		3		250	25	80-120		80-120
YG TAP CHIP BREAKER		4		270	28	80-120		80-120
YG TAP INOX		5		300	32	80-120		80-120
YG TAP CAST IRON		6	Low alloy steel	180	10	80-120	80-120	80-120
YG TAP HARDENED STEEL		7		275	29	80-120	80-120	80-120
YG TAP Ti Ni		8		300	32	80-120	80-120	80-120
YG TAP ALU		9		350	38	80-120	80-120	80-120
YG TAP FORMING		10	High alloyed steel, and tool steel	200	15	80-120	80-120	80-120
YG TAP GENERAL / HAND TAP		11		325	35	80-120	80-120	80-120
PIPE TAP	M	12	Stainless steel	200	15	40-80	40-80	40-80
STI TAP		13		240	23	40-80	40-80	40-80
NUT TAP		14		180	10	40-80	40-80	40-80
TECHNICAL DATA	K	15	Grey cast iron	180	10	50-100	50-100	50-100
		16		260	26	50-100	50-100	50-100
		17	Nodular cast iron	160	3	50-100	50-100	50-100
		18		250	25	50-100	50-100	50-100
		19	Malleable cast iron	130		50-100	50-100	50-100
		20		230	21	50-100	50-100	50-100
	N	21	Aluminum-wrought alloy	60		100-130		100-130
		22		100		100-130		100-130
		23	Aluminum-cast, alloyed	75		100-130		100-130
		24		90		100-130		100-130
		25		130		100-130		100-130
		26	Copper and Copper Alloys (Bronze / Brass)	110		100-130		100-130
		27		90		100-130		100-130
		28		100		100-130		100-130
		29	Non Metallic Materials			100-130		100-130
		30				100-130		100-130
	S	31	Heat Resistant Super Alloys	200	15	20-60	20-60	20-60
		32		280	30	20-60	20-60	20-60
		33		250	25	20-60	20-60	20-60
		34		350	38	20-60	20-60	20-60
		35		320	34	20-60	20-60	20-60
		36	Titanium Alloys	400Rm		20-60	20-60	20-60
		37		1050Rm		20-60	20-60	20-60
	H	38	Hardened steel	550	55		25-60	
		39		630	60		25-50	
		40	Chilled Cast Iron	400	42		25-70	
		41	Hardened Cast Iron	550	55		25-60	

TO CALCULATE SPEED & FEED RATES

SCHNITTGESCHWINDIGKEIT & VORSCHUB KALKULIEREN

Calculate RPM of Cutter	Calculate Feed per Revolution	Finally Calculate Feed at Tool Center Line
$n = \frac{1000 \times V}{d \times \pi}$	$F_1 = F_z \times Z \times N$	$F_2 = \frac{F_1 \times (D - d)}{D}$

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



Leading Through Innovation

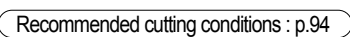
HSS-PM

SYNCHRO TAP

Synchro Gewindebohrer

- For High Speed Tapping on Rigid CNC Machine
- Spiral Point, Spiral Flute Taps and Forming Taps for CNC Machines
- Für Hochgeschwindigkeits-Gewindebohren auf starren CNC-Maschinen
- Gerade- und Spiralgenutete Gewindebohrer, Gewindeformer

For High Speed Tapping on Rigid CNC Machine



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC				
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	Cutting Alloys, PB>1%		110					
	27	Copper Alloys	CuZn, CuSnZn (Brass)		90					
	28	(Bronze / Brass)	CuSn, lead-free copper and electrolytic copper		100					
	29	Non Metallic	Duroplastic, Fiber Reinforced Plastic							
	30	Materials	Rubber, Wood, etc.							
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15				
	32			Cured	280	30				
	33			Annealed	250	25				
	34		Ni or Co Based	Cured	350	38				
	35			Cast	320	34				
	36	Titanium Alloys	Pure Titanium		400 Rm					
	37		Alpha + Beta Alloys	Hardened	1050 Rm					
H	38	Hardened steel		Hardened	550	55				
	39			Hardened	630	60				
	40	Chilled Cast Iron		Cast	400	42				
	41	Hardened Cast Iron		Hardened	550	55				

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SYNCHRO TAP

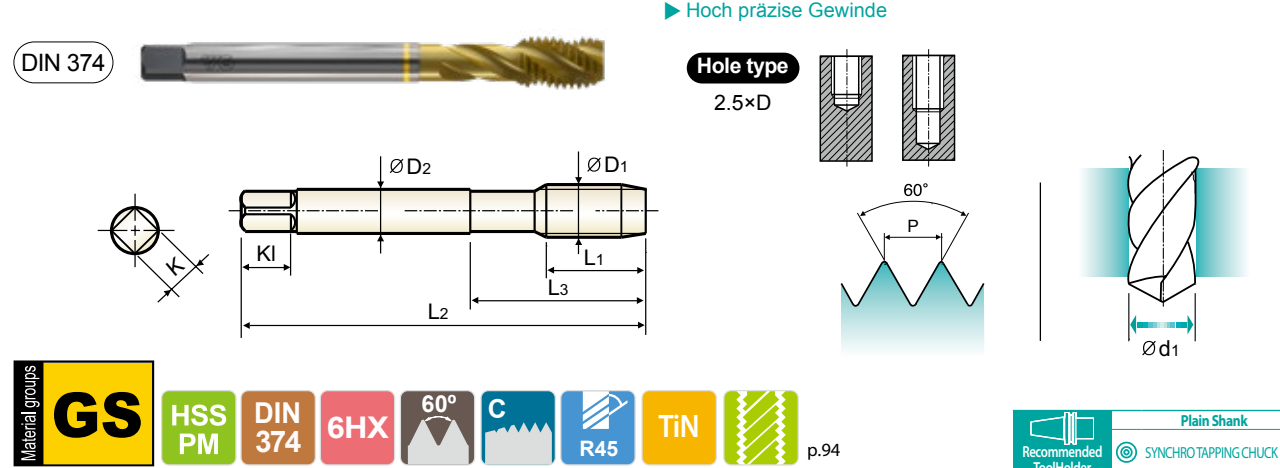
TTS32 SERIES

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

- | | |
|--|---|
| <ul style="list-style-type: none"> ▶ 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 | <ul style="list-style-type: none"> ▶ 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 |
|--|---|



										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
M8	× 1.0	TTS32376	10	90	36	6	4.9	8	3	7.0
M10	× 1.25	TTS32436	13	100	40	7	5.5	8	3	8.75
M10	× 1.0	TTS32446	10	90	40	7	5.5	8	3	9.0
M12	× 1.25	TTS32526	13	100	40	9	7	10	3	10.75
M12	× 1.5	TTS32516	15	100	40	9	7	10	3	10.5
M14	× 1.5	TTS32556	15	100	40	11	9	12	3	12.5
M16	× 1.5	TTS32616	15	100	40	12	9	12	3	14.5
M18	× 1.5	TTS32676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TTS32726	17	125	50	16	12	15	4	18.5

► Coating (TiAlN) is available on your request.

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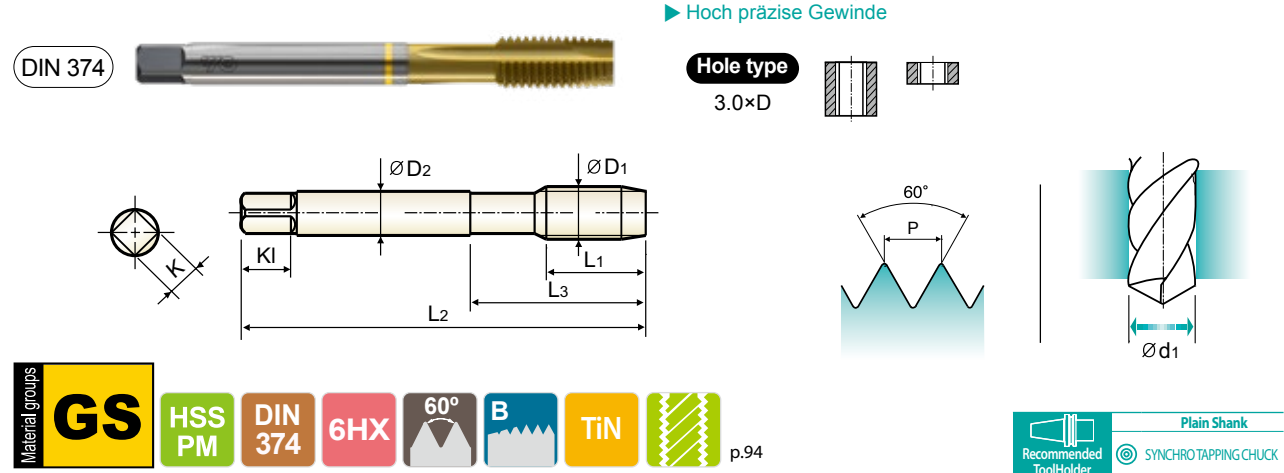


SYNCHRO TAP

TTS34 SERIES

MF **ISO Metric Fine Threads DIN 13**
 🇩🇪 Metrisches ISO-Feingewinde DIN 13
 🇫🇷 ISO MÉTRIQUE PAS FINS DIN13
 🇮🇹 ISO Metrico passo fine DIN 13

- | | |
|--|---|
| <ul style="list-style-type: none"> ▶ 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 | <ul style="list-style-type: none"> ▶ 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 |
|--|---|



Unit : mm										
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiN	L ₁	L ₂	L ₃	ØD ₂	K	Kl	Z	Ød ₁
M8	× 1.0	TTS34376	10	90	36	6	4.9	8	3	7.0
M10	× 1.25	TTS34436	13	100	40	7	5.5	8	3	8.75
M10	× 1.0	TTS34446	10	90	40	7	5.5	8	3	9.0
M12	× 1.5	TTS34516	15	100	40	9	7	10	4	10.5
M12	× 1.25	TTS34526	13	100	40	9	7	10	4	10.75
M14	× 1.5	TTS34556	15	100	40	11	9	12	4	12.5
M16	× 1.5	TTS34616	15	100	40	12	9	12	4	14.5
M18	× 1.5	TTS34676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TTS34726	17	125	50	16	12	15	4	18.5

► Coating (TiAlN) is available on your request.

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SYNCHRO TAP

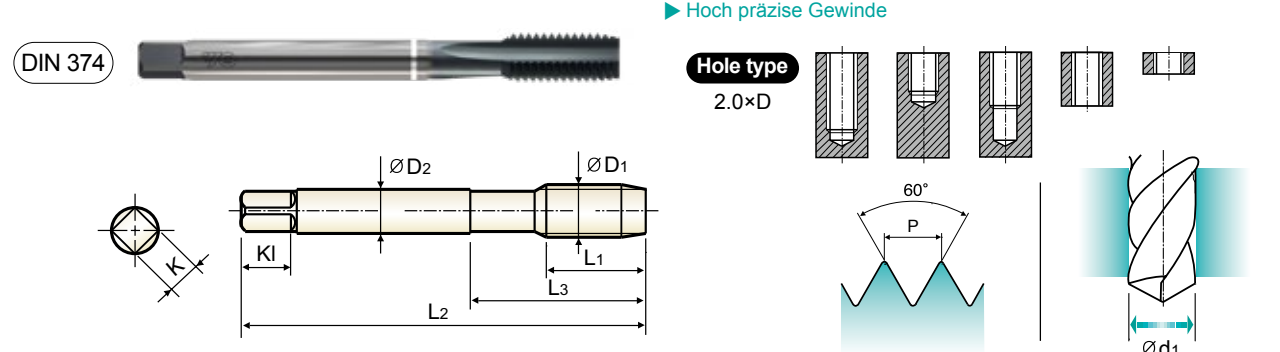
TKS36 SERIES

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

- ▶ 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



Material groups

GG

HSS PM

DIN 374

6HX

60°

C

TiCN

p.94

Recommended ToolHolder.

Plain Shank

SYNCHRO TAPPING CHUCK

										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	KI	Z	Ød1
M8	× 1.0	TKS36376	10	90	36	6	4.9	8	3	7.0
M10	× 1.25	TKS36436	13	100	40	7	5.5	8	4	8.75
M10	× 1.0	TKS36446	10	90	40	7	5.5	8	4	9.0
M12	× 1.25	TKS36526	13	100	40	9	7	10	4	10.75
M12	× 1.5	TKS36516	15	100	40	9	7	10	4	10.5
M14	× 1.5	TKS36556	15	100	40	11	9	12	4	12.5
M16	× 1.5	TKS36616	15	100	40	12	9	12	4	14.5
M18	× 1.5	TKS36676	17	110	44	14	11	14	4	16.5
M20	× 1.5	TKS36726	17	125	50	16	12	15	4	18.5

► Coating (TiAlN) is available on your request.

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Non-alloy steel

125

190

250

270

300

Low alloy steel

180

275

300

350

High alloyed steel, and tool steel

200

325

Stainless steel

200

240

180

Grey cast iron

180

260

Nodular cast iron

160

250

Malleable cast iron

130

230

◎ : Excellent

○ : Good

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Aluminum-wrought alloy

21

22

60

Aluminum-cast, alloyed

23

24

75

90

Copper and Copper Alloys (Bronze / Brass)

26

27

28

90

100

Non Metallic Materials

29

30

Heat Resistant Super Alloys

31

32

33

25

38

34

200

280

250

350

320

Titanium Alloys

36

37

400Rm

1050Rm

Hardened steel

38

39

55

630

Chilled Cast Iron

40

42

400

Hardened Cast Iron

41

55

550



SYNCHRO TAP

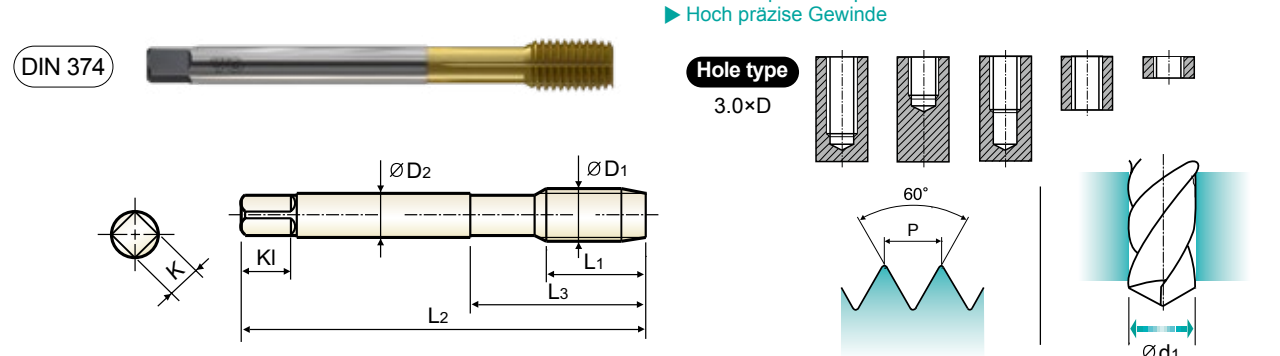
TTS38 SERIES

MF **ISO Metric Fine Threads DIN 13**

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

Machine forming tap
Maschinengewindeformer

- | | |
|--|---|
| <ul style="list-style-type: none"> ▶ 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 | <ul style="list-style-type: none"> ▶ 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 |
|--|---|



Material groups **GV** HSS PM DIN 374 6HX 60° C TiN  p.94

 Recommended ToolMinisor  Plain Shank SYNCHRO TAPPING CHUCK

										Unit : mm
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Number of Oil Groove	Tapping Drill Diameter
ØD ₁	P	TiN	L ₁	L ₂	L ₃	ØD ₂	K	Kl	Z	Ød ₁
M8	× 1.0	TTS38376	10	90	36	6	4.9	8	6	7.5
M10	× 1.25	TTS38436	13	100	40	7	5.5	8	6	9.4
M10	× 1.0	TTS38446	10	90	40	7	5.5	8	6	9.5
M12	× 1.25	TTS38526	13	100	40	9	7	10	6	11.4
M12	× 1.5	TTS38516	15	100	40	9	7	10	6	11.25
M14	× 1.5	TTS38556	15	100	40	11	9	12	8	13.25
M16	× 1.5	TTS38616	15	100	40	12	9	12	8	15.25
M18	× 1.5	TTS38676	17	110	44	14	11	14	8	17.25
M20	× 1.5	TTS38726	17	125	50	16	12	15	8	19.25

► Coating (TiAlN) is available on your request.

[illegible]



SYNCHRO TAP

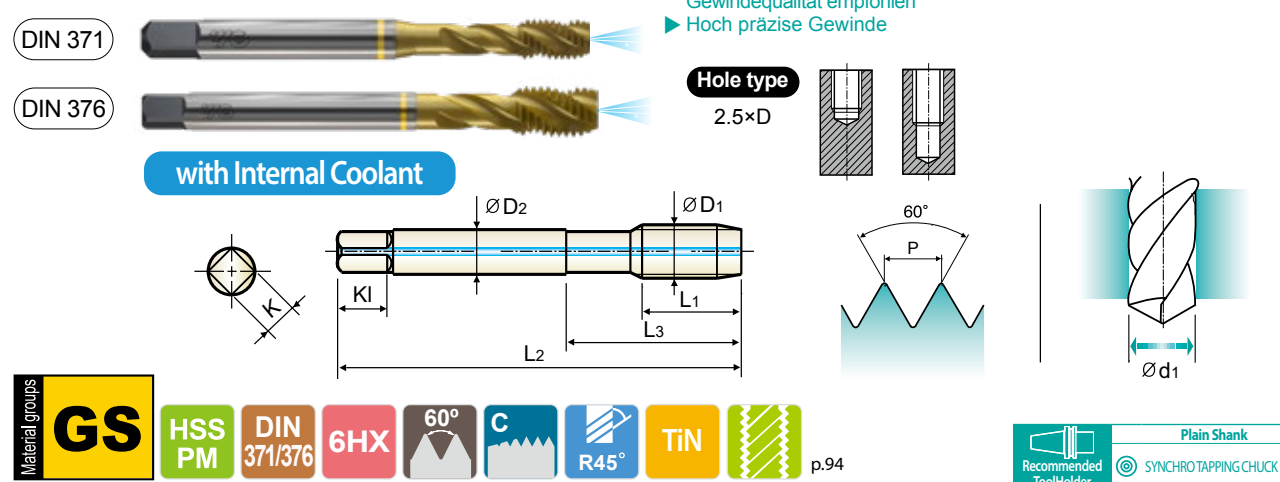
TTS41-IC SERIES

M **ISO Metric Coarse Threads DIN 13**

- 🇩🇪 **Metrisches ISO-Gewinde DIN 13**
- 🇫🇷 **ISO MÉTRIQUE DIN13**
- 🇮🇹 **ISO Metrico passo grosso DIN 13**

Machine taps
Maschinengewindebohrer

- ▶ 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



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
M6	× 1.0	TTS41316IC	10	80	30	6	4.9	8	3	5.0
M8	× 1.25	TTS41366IC	13	90	35	8	6.2	9	3	6.8
M10	× 1.25	TTS41426IC	15	100	39	10	8	11	3	8.5
M12	× 1.75	TTS41506IC	18	110	44	9	7	10	3	10.2
M14	× 2.0	TTS41546IC	20	110	52	11	9	12	3	12.0
M16	× 2.0	TTS41606IC	20	110	52	12	9	12	3	14.0
M18	× 2.5	TTS41656IC	25	125	66	14	11	14	4	15.5
M20	× 2.5	TTS41706IC	25	140	72	16	12	15	4	17.5

- DIN 371 (M3-M10) and DIN 376 (M12-M20)
- Coating (TiAlN) is available on your request.

[illegible]

M ISO Metric Coarse Threads DIN 13

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

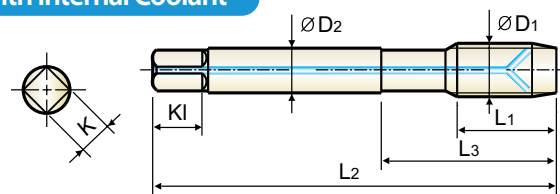
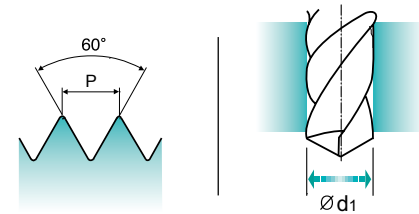
Machine taps
Maschinengewindebohrer

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- ▶ 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



with Internal Coolant



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M6	× 1.0	TTS42316RCP	10	80	30	6	4.9	8	3	5.0
M8	× 1.25	TTS42366RCP	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TTS42426RCP	15	100	39	10	8	11	3	8.5
M12	× 1.75	TTS42506RCP	18	110	44	9	7	10	4	10.2
M14	× 2.0	TTS42546RCP	20	110	52	11	9	12	4	12.0
M16	× 2.0	TTS42606RCP	20	110	52	12	9	12	4	14.0
M18	× 2.5	TTS42656RCP	25	125	66	14	11	14	4	15.5
M20	× 2.5	TTS42706RCP	25	140	72	16	12	15	4	17.5

- ▶ DIN 371 (M6-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request.

M ISO Metric Coarse Threads DIN 13

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

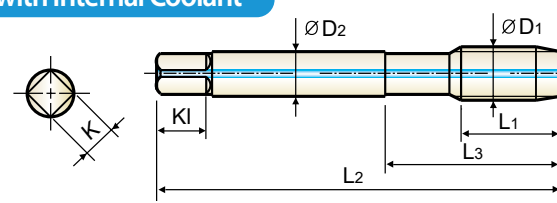
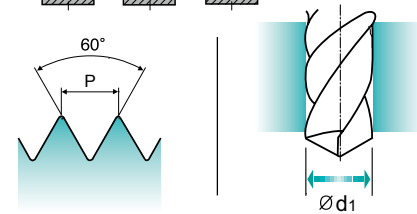
Machine taps
Maschinengewindebohrer

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- ▶ 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



with Internal Coolant



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	KI	Z	Ød1
M6	× 1.0	TKS43316IC	10	80	30	6	4.9	8	3	5.0
M8	× 1.25	TKS43366IC	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TKS43426IC	15	100	39	10	8	11	4	8.5
M12	× 1.75	TKS43506IC	18	110	44	9	7	10	4	10.2
M14	× 2.0	TKS43546IC	20	110	52	11	9	12	4	12.0
M16	× 2.0	TKS43606IC	20	110	52	12	9	12	4	14.0
M18	× 2.5	TKS43656IC	25	125	66	14	11	14	4	15.5
M20	× 2.5	TKS43706IC	25	140	72	16	12	15	4	17.5

- ▶ DIN 371 (M6-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request.

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloy steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloy steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



SYNCHRO TAP

TTS45-RCP

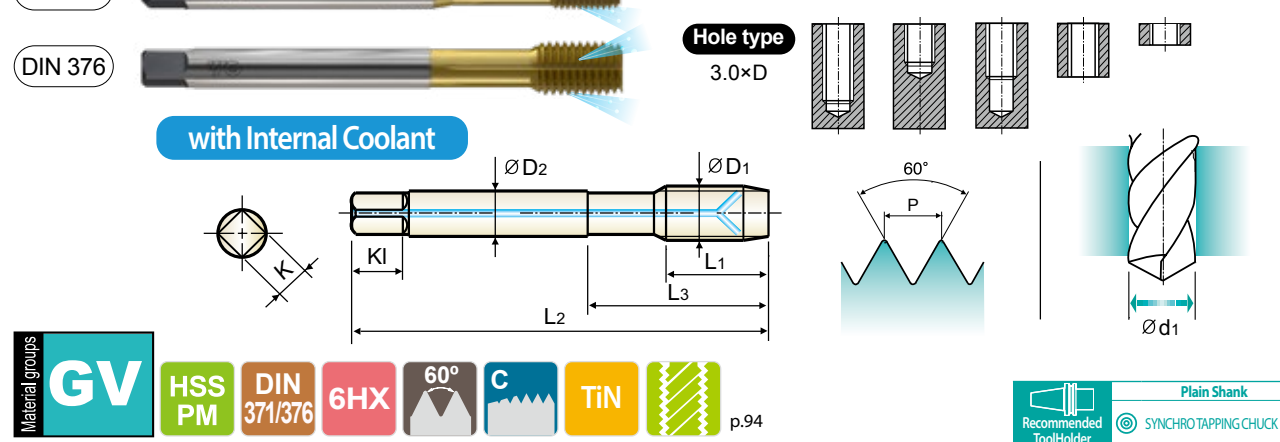
SERIES

M ISO Metric Coarse Threads DIN 13

- 🇩🇪 **Metrisches ISO-Gewinde DIN 13**
- 🇫🇷 **ISO MÉTRIQUE DIN13**
- 🇮🇹 **ISO Metrico passo grosso DIN 13**

Machine forming tap
Maschinengewindeformer

- ▶ 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



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Number of Oil Groove	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M5	× 0.8	TTS45286RCP	8	70	25	6	4.9	8	5	4.65
M6	× 1.0	TTS45316RCP	10	80	30	6	4.9	8	5	5.55
M8	× 1.25	TTS45366RCP	13	90	35	8	6.2	9	6	7.4
M10	× 1.5	TTS45426RCP	15	100	39	10	8	11	6	9.3
M12	× 1.75	TTS45506RCP	18	110	44	9	7	10	6	11.2
M14	× 2.0	TTS45546RCP	20	110	52	11	9	12	8	13.0
M16	× 2.0	TTS45606RCP	20	110	52	12	9	12	8	15.0
M18	× 2.5	TTS45656RCP	25	125	66	14	11	14	8	16.8
M20	× 2.5	TTS45706RCP	25	140	72	16	12	15	8	18.8

- ▶ DIN 371 (M5-M10) and DIN 376 (M12-M20)
- ▶ Coating (TiAlN) is available on your request.

[illegible]



					TTS31,TTS32	TTS33,TTS34	TKS35,TKS36	TTS37,TTS38	TTS39
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)				
P	1	Non-alloy steel	125		41-46	41-46	41-46	41-46	30-35
	2		190	13	41-46	41-46	41-46	41-46	41-46
	3		250	25	35-40	35-40	35-40	35-40	35-40
	4		270	28	28-33	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	28-33
	7		275	29	28-33	28-33	28-33	28-33	28-33
M	12	Stainless steel	200	15	18-23	18-23		18-23	18-23
	13		240	23	13-18	13-18		13-18	13-18
	14		180	10	10-14	10-14		10-14	10-14
K	15	Grey cast iron	180	10	28-33	28-33	28-33		
	16		260	26			28-33		
	17	Nodular cast iron	160	3	28-33	28-33	28-33		
	18		250	25			28-33		
	19	Malleable cast iron	130				28-33		
	20		230	21			28-33		
N	21	Aluminum-wrought alloy	60					28-33	28-33
	22		100					28-33	28-33
	23	Aluminum-cast, alloyed	75		41-46	41-46	30-35	41-46	41-46
	24		90		41-46	41-46	30-35	41-46	41-46
	25		130		30-35	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	25-30

					TTS41-IC	TTS42-RCP	TKS43-IC	TKS44-RCP	TTS45-RCP
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)				
P	1	Non-alloy steel	125		41-57	41-57	41-57	41-57	41-57
	2		190	13	41-57	41-57	41-57	41-57	41-57
	3		250	25	35-50	35-50	35-50	35-50	35-50
	4		270	28	28-41	28-41	28-41	28-41	28-41
	5		300	32					
	6	Low alloy steel	180	10	28-41	28-41	28-41	28-41	28-41
	7		275	29	28-41	28-41	28-41	28-41	28-41
M	12	Stainless steel	200	15	18-28	18-28			18-28
	13		240	23	13-22	13-22			13-22
	14		180	10	10-17	10-17			10-17
K	15	Grey cast iron	180	10	28-41	28-41	28-41	28-41	
	16		260	26			28-41	28-41	
	17	Nodular cast iron	160	3	28-41	28-41	28-41	28-41	
	18		250	25			28-41	28-41	
	19	Malleable cast iron	130				28-41	28-41	
	20		230	21			28-41	28-41	
N	21	Aluminum-wrought alloy	60						28-41
	22		100						28-41
	23	Aluminum-cast, alloyed	75		41-57	41-57	30-43	30-43	41-57
	24		90		41-57	41-57	30-43	30-43	41-57
	25		130		30-43	30-43	30-43	30-43	30-43
	26	Copper and Copper Alloys (Bronze / Brass)	110		45-62	45-62			
	27		90						
	28		100		25-37	25-37			25-37



Leading Through Innovation

HSS-PM



PRIME TAP

PRIME GEWINDEBOHRER

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

SELECTION GUIDE



HSS-PM
PRIME TAP

Please visit
global.yg1.com/mat
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.141

SELECTION GUIDE				HOLE TYPE		 Max. 2.5xD Blind Hole						
<div> THREADING TOOLS</div> <div>HSS-PM PRIME TAP</div>				TOOL MATERIAL		HSS-PM						
				CHAMFER LEAD ACC. TO DIN2197		C	C	E	C	C	E	
				FLUTE TYPE		Spiral Flute						
				SPIRAL FLUTE ANGLE		R45						
				CLASS OF THREAD		6HX	6GX	6HX	2BX	-	-	
SERIES	M	DIN371/376	TRE30 (p.99)	TRE35 (p.100)	TRE34 (p.101)							
	MF	DIN374	TRE31 (p.102)	TRE36 (p.104)								
	UNC	DIN371/376				TRE32 (p.105)						
	UNF	DIN371/374				TRE33 (p.106)						
G(BSP)		DIN5156						TRE37 (p.107)	TRE38 (p.108)			
SURFACE TREATMENT / COATING		X-Coating										
MODEL												
ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	Recommended cutting conditions Vc (m/min.)					
P	1	Non-alloy steel	About 0.15% C	Annealed	125		○	○	○	○	○	○
	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						

Max. 3.0xD Through Hole				Max. 3.0xD Blind / Through Hole						Max. 2.5xD Blind Hole	
HSS-PM											
B	B	B	B	C	C	C	E	C	C	C	
Spiral Point				Forming						Spiral Flute	
-	-	-	-	-	-	-	-	-	-	R45	
6HX	6GX	2BX	-	6HX	6GX	7GX	6HX	2BX	-	6HX	
TRJ15 (p.109)	TRJ10 (p.110)	TRJ17 (p.114) TRJ18 (p.115)		TRQ10 (p.117)	TRQ14 (p.118)	TRQ16 (p.119)	TRQ12 (p.120)	TRQ18 (p.124) TRQ19 (p.125)		TRE39 (p.127)	
TRJ16 (p.111)	TRJ11 (p.113)			TRQ11 (p.121)	TRQ15 (p.122)		TRQ13 (p.123)			TRE40 (p.129)	
		TRJ12 (p.116)								TRQ17 (p.126)	
X-Coating											
											
Recommended cutting conditions Vc (m/min.)											
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	1
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	2
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	3
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	4
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	5
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	6
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	7
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	8
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	9
○	○	○	○	◎	◎	◎	◎	◎	◎	○	10
○	○	○	○	◎	◎	◎	◎	◎	◎	○	11
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	12
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	13
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	14
◎	◎	◎	◎							○	15
◎	◎	◎	◎							○	16
◎	◎	◎	◎							◎	17
◎	◎	◎	◎							◎	18
											19
											20
○	○	○	○	◎	◎	◎	◎	◎	◎	○	21
○	○	○	○	◎	◎	◎	◎	◎	◎	○	22
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	23
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	24
○	○	○	○	◎	◎	◎	◎	◎	◎	○	25
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	26
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	27
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	28
											29
											30
											31
											32
											33
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											35
											36
											37
											38
											39
											40
											41

PRIME TAP

Unit : mm

◎ : Excellent ○ : Good

phone:+82-32-526-0909, www.yq1.solutions, E-mail:yq1@yq1.solutions


PRIME TAP

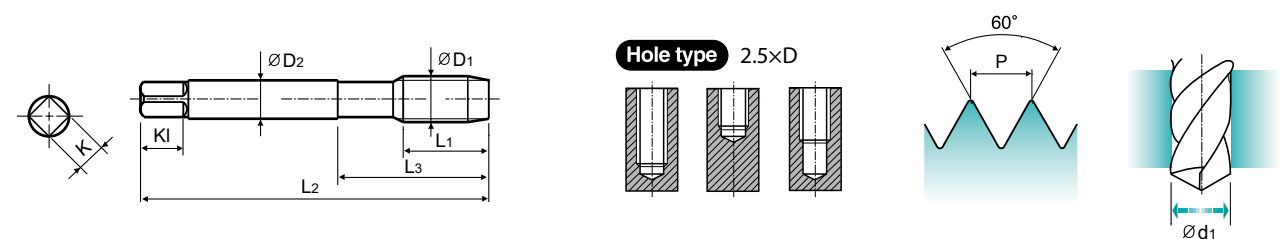
TRE34
SERIES

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



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	13	2.8	2.1	5	2	1.6
M3	x 0.5	TRE34206GS	4	56	18	3.5	2.7	6	3	2.5
M4	x 0.7	TRE34246GS	5.6	63	21	4.5	3.4	6	3	3.3
M5	x 0.8	TRE34286GS	6.4	70	25	6	4.9	8	3	4.2
M6	x 1.0	TRE34316GS	8	80	30	6	4.9	8	3	5
M8	x 1.25	TRE34366GS	13	90	35	8	6.2	9	3	6.8
M10	x 1.5	TRE34426GS	15	100	39	10	8	11	3	8.5
M12	x 1.75	TRE34506GS	18	110	44	9	7	10	3	10.3
M14	x 2.0	TRE34546GS	20	110	44	11	9	12	3	12
M16	x 2.0	TRE34606GS	20	110	44	12	9	12	3	14
M20	x 2.5	TRE34706GS	25	140	54	16	12	15	4	17.5

► DIN 371(M2~M10) and DIN 376(M12~M20)

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PRIME TAP

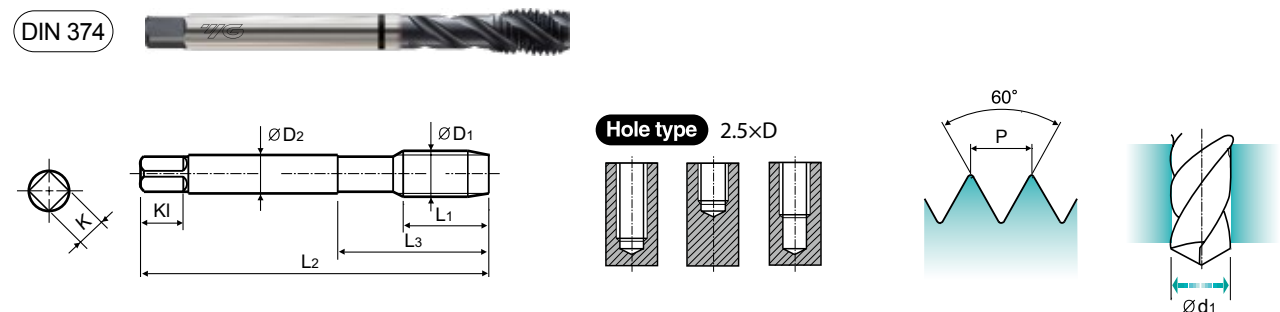
TRE31 SERIES

MF ISO Metric Fine Threads DIN 13

- 🇩🇪 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.**



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	125	50	14	11	14	4	16
M18	x 1.5	TRE31676GS	15	110	44	14	11	14	4	16.5
M18	x 1.0	TRE31686GS	15	110	44	14	11	14	4	17
M20	x 2.0	TRE31716GS	20	140	54	16	12	15	4	18
M20	x 1.5	TRE31726GS	15	125	50	16	12	15	4	18.5
M20	x 1.0	TRE31736GS	15	125	50	16	12	15	4	19
M22	x 2.0	TRE31756GS	20	140	54	18	14.5	17	4	20
M22	x 1.5	TRE31766GS	15	125	50	18	14.5	17	4	20.5
M22	x 1.0	TRE31776GS	15	125	50	18	14.5	17	4	21
M24	x 2.0	TRE31796GS	20	140	54	18	14.5	17	4	22
M24	x 1.5	TRE31806GS	15	140	54	18	14.5	17	4	22.5
M24	x 1.0	TRE31816GS	15	140	54	18	14.5	17	4	23

◎: Excellent ○: Good

[illegible]


PRIME TAP

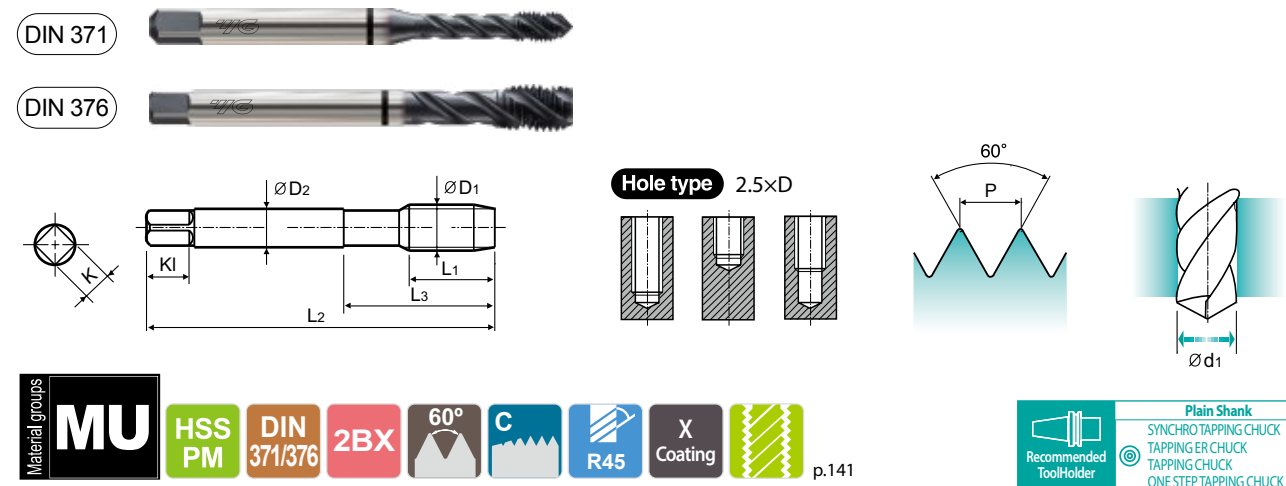
TRE32 SERIES

UNC Unified Coarse Threads

- 🇩🇪 Unified Grobgewinde
- 🇫🇷 UNC
- 🇮🇹 Unificato passo grosso

Machine taps
Maschinengewindebohrer

- High performance on various ductile materials
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- Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



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	KI	Z	Ød1
#4 - 40 UNC		TRE32162GS	5.1	56	18	3.5	2.7	6	2	2.3
#5 - 40 UNC		TRE32202GS	5.1	56	18	3.5	2.7	6	3	2.6
#6 - 32 UNC		TRE32242GS	6.4	56	20	4	3	6	3	2.8
#8 - 32 UNC		TRE32282GS	6.4	63	21	4.5	3.4	6	3	3.4
#10 - 24 UNC		TRE32322GS	8.5	70	25	6	4.9	8	3	3.9
#12 - 24 UNC		TRE32362GS	8.5	80	30	6	4.9	8	3	4.5
1/4 - 20 UNC		TRE32402GS	10.2	80	30	7	5.5	8	3	5.1
5/16 - 18 UNC		TRE32442GS	14.2	90	35	8	6.2	9	3	6.6
3/8 - 16 UNC		TRE32482GS	15.9	100	39	9	7	10	3	8
7/16 - 14 UNC		TRE32522GS	18.2	100	40	8	6.2	9	3	9.4
1/2 - 13 UNC		TRE32562GS	19.6	110	44	9	7	10	3	10.8
9/16 - 12 UNC		TRE32602GS	21.2	110	44	11	9	12	3	12.2
5/8 - 11 UNC		TRE32642GS	23.1	110	44	12	9	12	3	13.6
3/4 - 10 UNC		TRE32702GS	25.4	125	50	14	11	14	4	16.5
7/8 - 9 UNC		TRE32742GS	28.3	140	54	18	14.5	17	4	19.5
1 - 8 UNC		TRE32782GS	31.8	160	60	20	16	19	4	22.2

► DIN 371(#4~3/8) and DIN 376(7/16~1")

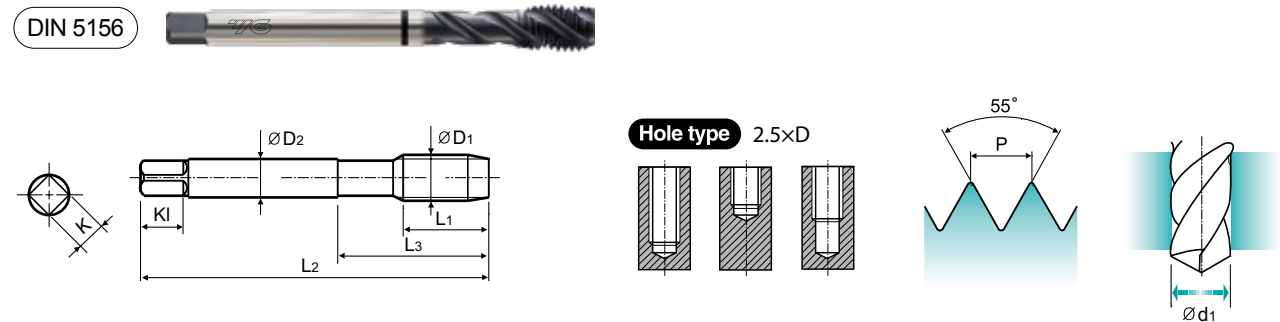
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PRIME TAP



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

- 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.










 p.141
 

Plain Shank	
	SYNCHRO TAPPING CHUCK
	TAPPING ER CHUCK
	TAPPING CHUCK
	ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
G1/16	- 28	TRE37020GS	10	90	36	6	4.9	7.8	3	6.8
G1/8	- 28	TRE37200GS	12	90	36	7	5.5	7.8	3	8.8
G1/4	- 19	TRE37400GS	14	100	48	11	9	11.8	3	11.8
G3/8	- 19	TRE37480GS	16	100	52	12	9	11.8	4	15.25
G1/2	- 14	TRE37560GS	18	125	70	16	12	14.8	4	19
G3/4	- 14	TRE37700GS	22	140	82	20	16	19	4	24.5
G1"	- 11	TRE37780GS	24	160	95	25	20	23	4	30.75

◎: Excellent ○: Good

[illegible]

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 376

60°

P

ØD1

ØD2

L1

L2

L3

KI

Hole type 3×D

60°

P

ØD1

ØD2

L1

L2

L3

KI

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

MU

HSS PM

DIN 371/376

6GX

60°

B

X Coating

p.141

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M2	x 0.4	TRJ10136GS	8	45	13	2.8	2.1	5	3	1.6
M3	x 0.5	TRJ10206GS	11	56	18	3.5	2.7	6	3	2.5
M4	x 0.7	TRJ10246GS	13	63	21	4.5	3.4	6	3	3.3
M5	x 0.8	TRJ10286GS	15	70	25	6	4.9	8	3	4.2
M6	x 1.0	TRJ10316GS	17	80	30	6	4.9	8	3	5
M8	x 1.25	TRJ10366GS	20	90	35	8	6.2	9	3	6.75
M10	x 1.5	TRJ10426GS	22	100	39	10	8	11	3	8.5
M12	x 1.75	TRJ10506GS	24	110	44	9	7	9.8	3	10.25
M14	x 2.0	TRJ10546GS	26	110	44	11	9	11.8	3	12
M16	x 2.0	TRJ10606GS	27	110	44	12	9	11.8	3	14

► DIN 371(M2~M10) and DIN 376(M12~M16)

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374

60°

P

ØD1

ØD2

L1

L2

L3

KI

Hole type 3×D

60°

P

ØD1

ØD2

L1

L2

L3

KI

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

MU

HSS PM

DIN 374

6HX

60°

B

X Coating

p.141

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M4	x 0.5	TRJ16256GS	10	63	21	2.8	2.1	5	3	3.5
M4	x 0.35	TRJ16696GS	10	63	21	2.8	2.1	5	3	3.7
M5	x 0.5	TRJ16296GS	11	70	25	3.5	2.7	6	3	4.5
M6	x 0.75	TRJ16326GS	13	80	30	4.5	3.4	6	3	5.3
M6	x 0.5	TRJ16336GS	13	80	30	4.5	3.4	6	3	5.5
M8	x 1.0	TRJ16376GS	17	90	36	6	4.9	8	3	7
M8	x 0.75	TRJ16386GS	14	80	30	6	4.9	8	3	7.3
M9	x 1.0	TRJ16406GS	20	90	36	7	5.5	8	3	8
M9	x 0.75	TRJ16416GS	17	80	36	7	5.5	8	3	8.3
M10	x 1.25	TRJ16436GS	22	100	40	7	5.5	8	3	8.8
M10	x 1.0	TRJ16446GS	18	90	36	7	5.5	8	3	9
M10	x 0.75	TRJ16456GS	18	90	36	7	5.5	8	3	9.3
M12	x 1.5	TRJ16516GS	22	100	40	9	7	10	3	10.5
M12	x 1.25	TRJ16526GS	22	100	40	9	7	10	3	10.8
M12	x 1.0	TRJ16536GS	18	100	40	9	7	10	3	11
M14	x 1.5	TRJ16556GS	22	100	40	11	9	12	3	12.5
M14	x 1.25	TRJ16566GS	22	100	40	11	9	12	3	12.8
M14	x 1.0	TRJ16576GS	18	100	40	11	9	12	3	13
M16	x 1.5	TRJ16616GS	22	100	40	12	9	12	3	14.5
M16	x 1.0	TRJ16626GS	18	100	40	12	9	12	3	15

► NEXT PAGE

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

CARBIDE

HSS

PRIME TAP

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

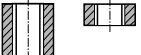
Ausgezeichnete Leistung bei verschiedenen Werkstoffen.

Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

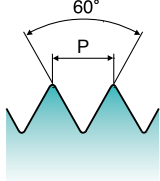
DIN 374



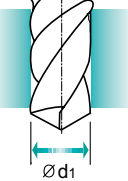
Hole type 3×D



60°



ØD1



MU

HSS PM

DIN 374

6HX

60°

B

X Coating



p.141

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M18 x 2.0		TRJ16666GS	26	125	50	14	11	14	3	16
M18 x 1.5		TRJ16676GS	25	110	44	14	11	14	3	16.5
M18 x 1.0		TRJ16686GS	20	110	44	14	11	14	3	17
M20 x 2.0		TRJ16716GS	27	140	54	16	12	15	3	18
M20 x 1.5		TRJ16726GS	25	125	50	16	12	15	3	18.5
M20 x 1.0		TRJ16736GS	20	125	50	16	12	15	3	19
M22 x 2.0		TRJ16756GS	27	140	54	18	14.5	17	3	20
M22 x 1.5		TRJ16766GS	25	125	50	18	14.5	17	3	20.5
M22 x 1.0		TRJ16776GS	20	125	50	18	14.5	17	3	21
M24 x 2.0		TRJ16796GS	27	140	54	18	14.5	17	3	22
M24 x 1.5		TRJ16806GS	27	140	54	18	14.5	17	3	22.5
M24 x 1.0		TRJ16816GS	20	140	54	18	14.5	17	3	23

ISO

	P					M					K				
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	17
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	260
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

	N					S					H				
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙			⊙	⊙	⊙	⊙	⊙

	Titanium Alloys					Heat Resistant Super Alloys					Hardened steel				
	Titanium Alloys					Heat Resistant Super Alloys					Hardened steel				
VDI 3323	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
HRc	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
HB	400Rm	1050Rm	550	630	400	550	630	400	550	630	550	630	400	550	630
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

112

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CARBIDE

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PRIME TAP

TRJ11 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

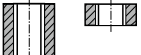
Ausgezeichnete Leistung bei verschiedenen Werkstoffen.

Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

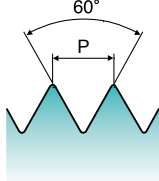
DIN 374



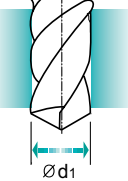
Hole type 3×D



60°



ØD1



MU

HSS PM

DIN 374

6GX

60°

B

X Coating



p.141

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M6 x 0.75		TRJ11326GS	13	80	30	4.5	3.4	5.8	3	5.25
M6 x 0.5		TRJ11336GS	13	80	30	4.5	3.4	5.8	3	5.5
M8 x 1.0		TRJ11376GS	17	90	36	6	4.9	7.8	3	7
M8 x 0.75		TRJ11386GS	14	80	30	6	4.9	7.8	3	7.25
M10 x 1.25		TRJ11436GS	22	100	40	7	5.5	7.8	3	8.75
M10 x 1.0		TRJ11446GS	18	90	36	7	5.5	7.8	3	9
M12 x 1.5		TRJ11516GS	22	100	40	9	7	9.8	3	10.5
M12 x 1.25		TRJ11526GS	22	100	40	9	7	9.8	3	10.75
M12 x 1.0		TRJ11536GS	18	100	40	9	7	9.8	3	11
M14 x 1.5		TRJ11556GS	22	100	40	11	9	11.8	3	12.5
M14 x 1.25		TRJ11566GS	22	100	40	11	9	11.8	3	12.75
M16 x 1.5		TRJ11616GS	22	100	40	12	9	11.8	3	14.5

ISO

	P					M					K				
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	17
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	260
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

	N					S					H				
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙			⊙	⊙	⊙	⊙	⊙

	Titanium Alloys					Heat Resistant Super Alloys					Hardened steel				
	Titanium Alloys					Heat Resistant Super Alloys					Hardened steel				
VDI 3323	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
HRc	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
HB	400Rm	1050Rm	550	630	400	550	630	400	550	630	550	630	400	550	630
Recommended	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

113

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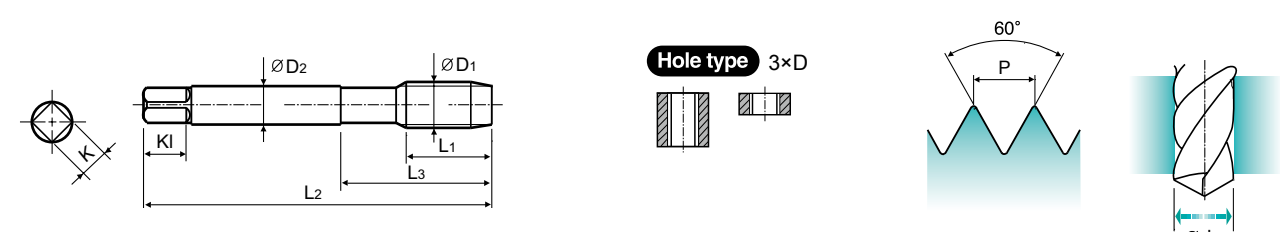
TRJ18 SERIES

THREAD
MILL

THREAD
MILL

SYNCHRO
TAPSYNCHRO
TAP

- ▶ 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



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	TRJ18182GS	11	56	18	3.5	2.7	6	2	2.4
#5	- 44 UNF	TRJ18222GS	11	56	18	3.5	2.7	6	3	2.7
#6	- 40 UNF	TRJ18262GS	12	56	20	4	3	6	3	2.9
#8	- 36 UNF	TRJ18302GS	13	63	21	4.5	3.4	6	3	3.5
#10	- 32 UNF	TRJ18342GS	15	70	25	6	4.9	8	3	4.1
#12	- 28 UNF	TRJ18382GS	16	80	30	6	4.9	8	3	4.6
1/4	- 28 UNF	TRJ18422GS	17	80	30	7	5.5	8	3	5.5
5/16	- 24 UNF	TRJ18462GS	17	90	35	8	6.2	9	3	6.9
3/8	- 24 UNF	TRJ18502GS	18	100	39	9	7	10	3	8.5
7/16	- 20 UNF	TRJ18542GS	22	100	40	8	6.2	9	3	9.9
1/2	- 20 UNF	TRJ18582GS	22	100	40	9	7	10	3	11.5
9/16	- 18 UNF	TRJ18622GS	22	100	40	11	9	12	3	12.9
5/8	- 18 UNF	TRJ18662GS	22	100	40	12	9	12	3	14.5
3/4	- 16 UNF	TRJ18722GS	25	110	44	14	11	14	3	17.5
7/8	- 14 UNF	TRJ18762GS	26	125	50	18	14.5	17	3	20.5
1"	- 12 UNF	TRJ18802GS	28	140	54	20	16	19	3	23.2

► DIN 371(#4~3/8) and DIN374(7/16~1")

◎: Excellent ○: Good

[illegible]

NEW
TRQ10 SERIES

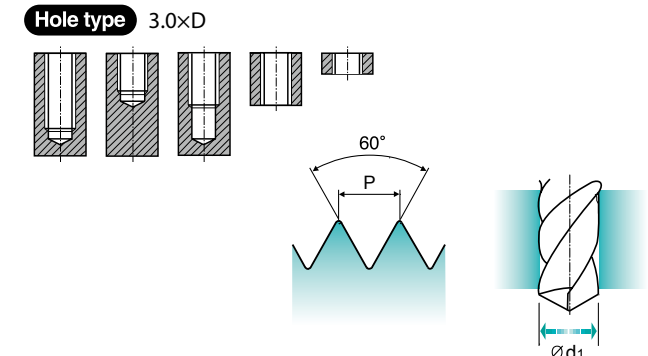
M **ISO Metric Coarse Threads DIN 13**

- 🇩🇪 **Metrisches ISO-Gewinde DIN 13**
- 🇫🇷 **ISO MÉTRIQUE DIN13**
- 🇮🇹 **ISO Metrico passo grosso DIN 13**

Machine forming tap
Maschinengewindeformer

- 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



Material groups **MU** HSS PM DIN 371/376 6HX 60° C X Coating  p.142

Plain Shank	
 Recommended Toolholder	SYNCHRO TAPPING CHUCK
	TAPPING ER CHUCK
	TAPPING CHUCK
	ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M3	x 0.5	TRQ10206GS	6	56	18	3.5	2.7	6	4	2.8
M3.5	x 0.6	TRQ10226GS	7.2	56	20	4	3	6	4	3.25
M4	x 0.7	TRQ10246GS	8.4	63	21	4.5	3.4	6	4	3.7
M5	x 0.8	TRQ10286GS	9.6	70	25	6	4.9	8	5	4.65
M6	x 1.0	TRQ10316GS	10	80	30	6	4.9	8	5	5.55
M7	x 1.0	TRQ10346GS	10	80	30	7	5.5	8	5	6.55
M8	x 1.25	TRQ10366GS	12	90	35	8	6.2	9	5	7.4
M9	x 1.25	TRQ10396GS	12	90	35	9	7	10	5	8.4
M10	x 1.5	TRQ10426GS	15	100	39	10	8	11	8	9.3
M12	x 1.75	TRQ10506GS	17	110	44	9	7	9.8	8	11.2
M14	x 2.0	TRQ10546GS	20	110	44	11	9	11.8	8	13
M16	x 2.0	TRQ10606GS	20	110	44	12	9	11.8	8	15
M18	x 2.5	TRQ10656GS	20	125	50	14	11	13.8	8	16.8
M20	x 2.5	TRQ10706GS	20	140	54	16	12	14.8	8	18.8
M22	x 2.5	TRQ10746GS	20	140	54	18	14.5	16.8	8	20.8
M24	x 3.0	TRQ10786GS	24	160	60	18	14.5	17	8	22.5

► DIN 371(M3~M10) and DIN 376(M12~M24)

[illegible]

CARBIDE

HSS

PRIME TAP

NEW

TRQ14

SERIES

M

ISO Metric Coarse Threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine forming tap
Maschinengewindeformer

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 376

Hole type 3.0×D

60°

P

ØD1

Ød1

ØD2

ØD1

L1

L2

L3

KI

MU

HSS PM

DIN 371/376

6GX

60°

C

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M3	x 0.5	TRQ14206GS	6	56	18	3.5	2.7	6	4	2.8
M3.5	x 0.6	TRQ14226GS	7.2	56	20	4	3	6	4	3.25
M4	x 0.7	TRQ14246GS	8.4	63	21	4.5	3.4	6	4	3.7
M5	x 0.8	TRQ14286GS	9.6	70	25	6	4.9	8	5	4.65
M6	x 1.0	TRQ14316GS	10	80	30	6	4.9	8	5	5.55
M7	x 1.0	TRQ14346GS	10	80	30	7	5.5	8	5	6.55
M8	x 1.25	TRQ14366GS	12	90	35	8	6.2	9	5	7.4
M9	x 1.25	TRQ14396GS	12	90	35	9	7	10	5	8.4
M10	x 1.5	TRQ14426GS	15	100	39	10	8	11	8	9.3
M12	x 1.75	TRQ14506GS	17	110	44	9	7	9.8	8	11.2
M14	x 2.0	TRQ14546GS	20	110	44	11	9	11.8	8	13
M16	x 2.0	TRQ14606GS	20	110	44	12	9	11.8	8	15
M18	x 2.5	TRQ14656GS	20	125	50	14	11	13.8	8	16.8
M20	x 2.5	TRQ14706GS	20	140	54	16	12	14.8	8	18.8
M22	x 2.5	TRQ14746GS	20	140	54	18	14.5	16.8	8	20.8
M24	x 3.0	TRQ14786GS	24	160	60	18	14.5	17	8	22.5

► DIN 371(M3~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	15	16	17	18	19	20	21	22	23	24	25	26			
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	10	26	3	25	21	10	26	3	25	21	10	26				
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	180	260	160	250	130	230	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34			55	60	42	55	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

118

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CARBIDE

HSS

PRIME TAP

NEW

TRQ16

SERIES

M

ISO Metric Coarse Threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine forming tap
Maschinengewindeformer

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Ausgezeichnete Leistung bei verschiedenen Werkstoffen.

Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 376

Hole type 3.0×D

60°

P

ØD1

Ød1

ØD2

ØD1

L1

L2

L3

KI

MU

HSS PM

DIN 371/376

7GX

60°

C

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M3	x 0.5	TRQ16206GS	6	56	18	3.5	2.7	6	4	2.8
M3.5	x 0.6	TRQ16226GS	7.2	56	20	4	3	6	4	3.25
M4	x 0.7	TRQ16246GS	8.4	63	21	4.5	3.4	6	4	3.7
M5	x 0.8	TRQ16286GS	9.6	70	25	6	4.9	8	5	4.65
M6	x 1.0	TRQ16316GS	10	80	30	6	4.9	8	5	5.55
M7	x 1.0	TRQ16346GS	10	80	30	7	5.5	8	5	6.55
M8	x 1.25	TRQ16366GS	12	90	35	8	6.2	9	5	7.4
M9	x 1.25	TRQ16396GS	12	90	35	9	7	10	5	8.4
M10	x 1.5	TRQ16426GS	15	100	39	10	8	11	8	9.3
M12	x 1.75	TRQ16506GS	17	110	44	9	7	9.8	8	11.2
M14	x 2.0	TRQ16546GS	20	110	44	11	9	11.8	8	13
M16	x 2.0	TRQ16606GS	20	110	44	12	9	11.8	8	15

► DIN 371(M3~M10) and DIN 376(M12~M16)

© : 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	15	16	17	18	19	20	21	22	23	24	25	26			
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	10	26	3	25	21	10	26	3	25	21	10	26				
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	180	260	160	250	130	230	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34			55	60	42	55	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎		

119

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YG-1 CO., LTD.



NEW
TRQ11 SERIES

M

ISO Metric Fine Threads DIN 13

🇩🇪 **Metrisches ISO-Feingewinde DIN 13**

🇫🇷 **ISO MÉTRIQUE PAS FINS DIN13**

🇮🇹 **ISO Metrico passo grosso DIN 13**

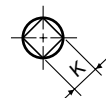
Machine forming tap
Maschinengewindeformer

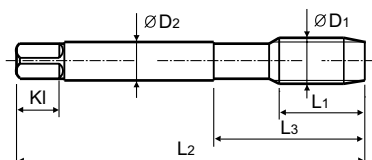
- ▶ High performance on various ductile materials
- ▶ Specially designed to prevent oversized threads and reduce gauging problems

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

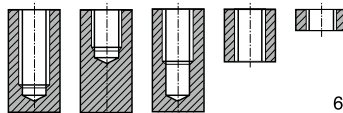
DIN 374

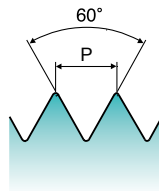


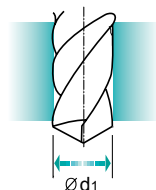




Hole type 3.0xD







Material groups
MU

HSS PM

DIN 374

6HX

60°

C

X Coating



p.142

Recommended Toolholder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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
M6	x 0.75	TRQ11326GS	10	80	30	4.5	3.4	5.8	5	5.65
M6	x 0.5	TRQ11336GS	10	80	30	4.5	3.4	5.8	5	5.75
M8	x 1.0	TRQ11376GS	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ11386GS	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ11436GS	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ11446GS	15	90	36	7	5.5	7.8	8	9.5
M10	x 0.75	TRQ11456GS	15	90	36	7	5.5	7.8	8	9.65
M12	x 1.5	TRQ11516GS	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ11526GS	17	100	40	9	7	9.8	8	11.4
M12	x 1.0	TRQ11536GS	17	100	40	9	7	9.8	8	11.5
M14	x 1.5	TRQ11556GS	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ11566GS	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ11576GS	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ11616GS	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ11626GS	20	100	40	12	9	11.8	8	15.5
M18	x 2.0	TRQ11666GS	20	125	50	14	11	13.8	8	17
M18	x 1.5	TRQ11676GS	15	110	44	14	11	13.8	8	17.25
M18	x 1.0	TRQ11686GS	10	110	44	14	11	13.8	8	17.5
M20	x 2.0	TRQ11716GS	20	140	54	16	12	14.8	8	19
M20	x 1.5	TRQ11726GS	15	125	50	16	12	14.8	8	19.25
M20	x 1.0	TRQ11736GS	10	125	50	16	12	14.8	8	19.5
M22	x 1.5	TRQ11766GS	15	125	50	18	14.5	16.8	8	21.25
M24	x 1.5	TRQ11806GS	15	140	54	18	14.5	17	8	23.25

◎: Excellent ○: Good

[illegible]

CARBIDE

HSS

PRIME TAP

NEW

TRQ15 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 forming tap

Maschinengewindeformer

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374

Hole type 3.0xD

MU

HSS PM

DIN 374

6GX

60°

C

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

ONE STEP TAPPING CHUCK

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
M6	x 0.75	TRQ15326GS	10	80	30	4.5	3.4	5.8	5	5.65
M6	x 0.5	TRQ15336GS	10	80	30	4.5	3.4	5.8	5	5.75
M8	x 1.0	TRQ15376GS	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ15386GS	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ15436GS	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ15446GS	15	90	36	7	5.5	7.8	8	9.5
M10	x 0.75	TRQ15456GS	15	90	36	7	5.5	7.8	8	9.65
M12	x 1.5	TRQ15516GS	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ15526GS	17	100	40	9	7	9.8	8	11.4
M12	x 1.0	TRQ15536GS	17	100	40	9	7	9.8	8	11.5
M14	x 1.5	TRQ15556GS	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ15566GS	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ15576GS	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ15616GS	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ15626GS	20	100	40	12	9	11.8	8	15.5
M18	x 2.0	TRQ15666GS	20	125	50	14	11	13.8	8	17
M18	x 1.5	TRQ15676GS	15	110	44	14	11	13.8	8	17.25
M18	x 1.0	TRQ15686GS	10	110	44	14	11	13.8	8	17.5
M20	x 2.0	TRQ15716GS	20	140	54	16	12	14.8	8	19
M20	x 1.5	TRQ15726GS	15	125	50	16	12	14.8	8	19.25
M20	x 1.0	TRQ15736GS	10	125	50	16	12	14.8	8	19.5
M22	x 1.5	TRQ15766GS	15	125	50	18	14.5	16.8	8	21.25
M24	x 1.5	TRQ15806GS	15	140	54	18	14.5	17	8	23.25

© : 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	125	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	60	100	75	90	130	110	90	100										55	60	42	55
HB	60	100	75	90	130	110	90	100										550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎													

CARBIDE

HSS

PRIME TAP

NEW

TRQ13 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 forming tap

Maschinengewindeformer

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374

Hole type 3.0xD

MU

HSS PM

DIN 374

6HX

60°

E

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

ONE STEP TAPPING CHUCK

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
M8	x 1.0	TRQ13376GS	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ13386GS	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ13436GS	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ13446GS	15	90	36	7	5.5	7.8	8	9.5
M12	x 1.5	TRQ13516GS	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ13526GS	17	100	40	9	7	9.8	8	11.4
M14	x 1.5	TRQ13556GS	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ13566GS	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ13576GS	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ13616GS	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ13626GS	20	100	40	12	9	11.8	8	15.5

© : 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	125	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	60	100	75	90	130	110	90	100										55	60	42	55
HB	60	100	75	90	130	110	90	100										550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎													

122

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123

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PRIME TAP

NEW

TRQ18 SERIES

UNC

Unified Coarse Threads

Unified Grobgewinde

UNC

Unificato passo fine

Machine forming tap
Maschinengewindeformer

► High performance on various ductile materials

► Specially designed to prevent oversized threads and reduce gauging problems

DIN 371

DIN 376

Hole type 3.0×D

60°

P

ØD1

ØD2

ØD1

L1

L2

L3

KI

K

Material groups

MU

HSS PM

DIN 371/376

2BX

60°

C

X Coating

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

p.142

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	KI	Z	Ød1
#4 - 40 UNC		TRQ18162GS	7.6	56	18	3.5	2.7	6	4	2.6
#5 - 40 UNC		TRQ18202GS	7.6	56	18	3.5	2.7	6	4	2.9
#6 - 32 UNC		TRQ18242GS	9.5	56	20	4	3	6	4	3.15
#8 - 32 UNC		TRQ18282GS	9.5	63	21	4.5	3.4	6	4	3.8
#10 - 24 UNC		TRQ18322GS	12.7	70	25	6	4.9	8	5	4.3
#12 - 24 UNC		TRQ18362GS	12.7	80	30	6	4.9	8	5	4.95
1/4 - 20 UNC		TRQ18402GS	12.7	80	30	7	5.5	8	5	5.7
5/16 - 18 UNC		TRQ18442GS	14.1	90	35	8	6.2	9	5	7.2
3/8 - 16 UNC		TRQ18482GS	15.9	100	39	9	7	10	8	8.7
7/16 - 14 UNC		TRQ18522GS	18.1	100	40	8	6.2	8.8	8	10.2
1/2 - 13 UNC		TRQ18562GS	19.5	110	44	9	7	9.8	8	11.7
9/16 - 12 UNC		TRQ18602GS	21.2	110	44	11	9	11.8	8	13.2
5/8 - 11 UNC		TRQ18642GS	23.1	110	44	12	9	11.8	8	14.7
3/4 - 10 UNC		TRQ18702GS	20.3	125	50	14	11	13.8	8	17.8
7/8 - 9 UNC		TRQ18742GS	22.6	140	54	18	14.5	16.8	8	20.8
1" - 8 UNC		TRQ18782GS	25.4	160	60	20	16	19	8	23.8

► DIN 371(#4~3/8) and DIN376(7/16~1")

124

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ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎						

◎ : Excellent ○ : Good

	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	200	280	250	350	320
Recommended	◎	◎	◎	◎	◎	◎	◎	◎												

124

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YG

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CARBIDE

HSS

PRIME TAP

NEW

TRQ19 SERIES

UNF

Unified Fine Threads

Unified Feingewinde

UNF

Unificato passo fine

Machine forming tap
Maschinengewindeformer

► High performance on various ductile materials

► Specially designed to prevent oversized threads and reduce gauging problems

DIN 371

DIN 374

Hole type 3.0×D

60°

P

ØD1

ØD2

ØD1

L1

L2

L3

KI

K

Material groups

MU

HSS PM

DIN 371/374

2BX

60°

C

X Coating

Recommended ToolHolder

Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

p.142

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	KI	Z	Ød1
#4 - 48 UNF		TRQ19182GS	7.6	56	18	3.5	2.7	6	4	2.6
#5 - 44 UNF		TRQ19222GS	7.6	56	18	3.5	2.7	6	4	2.9
#6 - 40 UNF		TRQ19262GS	9.5	56	20	4	3	6	4	3.25
#8 - 36 UNF		TRQ19302GS	9.5	63	21	4.5	3.4	6	4	3.9
#10 - 32 UNF		TRQ19342GS	12.7	70	25	6	4.9	8	5	4.45
#12 - 28 UNF		TRQ19382GS	12.7	80	30	6	4.9	8	5	5.05
1/4 - 28 UNF		TRQ19422GS	12.7	80	30	7	5.5	8	5	5.9
5/16 - 24 UNF		TRQ19462GS	14.1	90	35	8	6.2	9	5	7.4
3/8 - 24 UNF		TRQ19502GS	15.9	100	39	9	7	10	8	9
7/16 - 20 UNF		TRQ19542GS	18.1	100	40	8	6.2	8.8	8	10.5
1/2 - 20 UNF		TRQ19582GS	19.5	100	40	9	7	9.8	8	12.1
9/16 - 18 UNF		TRQ19622GS	21.2	100	40	11	9	11.8	8	13.6
5/8 - 18 UNF		TRQ19662GS	23.1	100	40	12	9	11.8	8	15.2
3/4 - 16 UNF		TRQ19722GS	15.9	110	44	14	11	13.8	8	18.3
7/8 - 14 UNF		TRQ19762GS	18.1	125	50	18	14.5	16.8	8	21.3
1" - 12 UNF		TRQ19802GS	21.2	140	54	20	16	19	8	24.3

► DIN 371(#4~3/8) and DIN374(7/16~1")

125

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ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎						

◎ : Excellent ○ : Good

	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	200	280	250	350	320
Recommended	◎	◎	◎	◎	◎	◎	◎	◎												

125

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PRIME TAP



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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

Hole type	2.5xD
Through hole	Recommended ToolHolder
Blind hole	Recommended ToolHolder
Through hole	Recommended ToolHolder

with Internal Coolant

60°

P

$\varnothing d_1$

Material groups

MU

HSS PM

DIN 371/376

6HX

60°

C

R45

X Coating

Recommended ToolHolder

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

p.142

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
M6	x 1.0	TRE39316GS	10	80	30	6	4.9	8	3	5
M8	x 1.25	TRE39366GS	13	90	35	8	6.2	9	3	6.75
M10	x 1.5	TRE39426GS	15	100	39	10	8	11	3	8.5
M12	x 1.75	TRE39506GS	18	110	44	9	7	9.8	3	10.25
M14	x 2.0	TRE39546GS	20	110	52	11	9	11.8	3	12
M16	x 2.0	TRE39606GS	20	110	52	12	9	11.8	3	14
M18	x 2.5	TRE39656GS	25	125	66	14	11	13.8	4	15.5
M20	x 2.5	TRE39706GS	25	140	72	16	12	14.8	4	17.5
M22	x 2.5	TRE39746GS	25	140	78	18	14.5	16.8	4	19.5
M24	x 3.0	TRE39786GS	30	160	85	18	14.5	17	4	21
M27	x 3.0	TRE39866GS	30	160	92	20	16	19	4	24
M30	x 3.5	TRE39946GS	35	180	102	22	18	21	4	26.5

▶ DIN 371(M6~M10) and DIN 376(M12~M30)

[illegible]


PRIME TAP

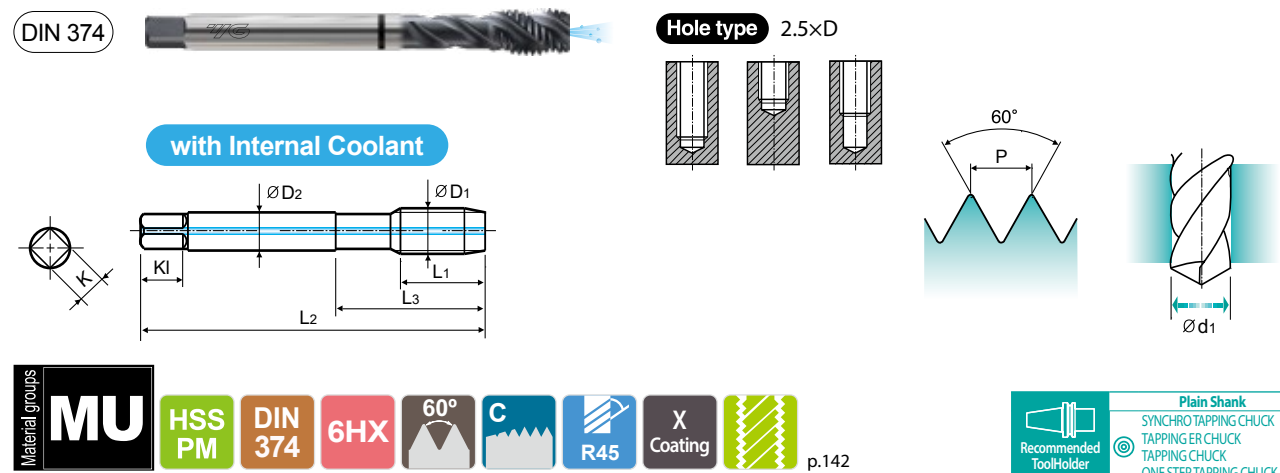


 ISO Metric Fine Threads DIN 13

 **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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	Kl	Z	Ød ₁
M6	x 0.75	TRE40326GS	8	80	30	4.5	3.4	5.8	3	5.25
M6	x 0.5	TRE40336GS	8	80	30	4.5	3.4	5.8	3	5.5
M8	x 1.0	TRE40376GS	10	90	36	6	4.9	7.8	3	7
M8	x 0.75	TRE40386GS	10	80	30	6	4.9	7.8	3	7.25
M10	x 1.25	TRE40436GS	13	100	40	7	5.5	7.8	3	8.75
M10	x 1.0	TRE40446GS	10	90	36	7	5.5	7.8	3	9
M10	x 0.75	TRE40456GS	10	90	36	7	5.5	7.8	3	9.25
M12	x 1.5	TRE40516GS	15	100	40	9	7	9.8	3	10.5
M12	x 1.25	TRE40526GS	15	100	40	9	7	9.8	3	10.75
M12	x 1.0	TRE40536GS	15	100	40	9	7	9.8	3	11
M14	x 1.5	TRE40556GS	15	100	47	11	9	11.8	3	12.5
M14	x 1.25	TRE40566GS	15	100	47	11	9	11.8	3	12.75
M14	x 1.0	TRE40576GS	15	100	47	11	9	11.8	3	13
M16	x 1.5	TRE40616GS	15	100	49	12	9	11.8	3	14.5
M16	x 1.0	TRE40626GS	15	100	49	12	9	11.8	3	15
M18	x 2.0	TRE40666GS	20	125	66	14	11	13.8	4	16
M18	x 1.5	TRE40676GS	15	110	55	14	11	13.8	4	16.5
M18	x 1.0	TRE40686GS	15	110	55	14	11	13.8	4	17

▶ NEXT PAGE

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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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

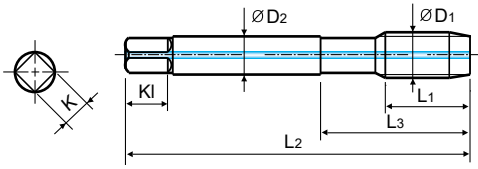
DIN 374



Hole type

2.5×D

with Internal Coolant



Material groups

MU

HSS PM

DIN 374

6HX

60°

C

R45

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K _l	Z	Ød ₁
M20	x 2.0	TRE40716GS	20	140	72	16	12	14.8	4	18
M20	x 1.5	TRE40726GS	15	125	60	16	12	14.8	4	18.5
M20	x 1.0	TRE40736GS	15	125	60	16	12	14.8	4	19
M22	x 2.0	TRE40756GS	20	140	78	18	14.5	16.8	4	20
M22	x 1.5	TRE40766GS	15	125	65	18	14.5	16.8	4	20.5
M22	x 1.0	TRE40776GS	15	125	65	18	14.5	16.8	4	21
M24	x 2.0	TRE40796GS	20	140	70	18	14.5	17	4	22
M24	x 1.5	TRE40806GS	15	140	70	18	14.5	17	4	22.5
M24	x 1.0	TRE40816GS	15	140	70	18	14.5	17	4	23

ISO	P										M	K												
Material Description	Non-alloy steel					Low alloy steel					High alloy 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	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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	60	100	75	90	130	110	90	100			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	○	○	◎	◎	○	◎	◎	◎																

130

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HSS

PRIME TAP

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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

▶ 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

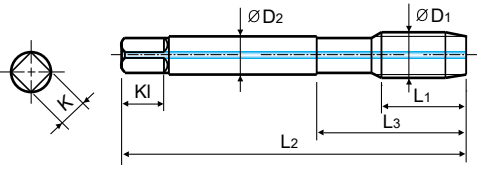
DIN 5156



Hole type

2.5×D

with Internal Coolant



Material groups

MU

HSS PM

DIN 5156

55°

C

R45

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁		X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K _l	Z	Ød ₁
G1/16	- 28	TRE42020GS	10	90	36	6	4.9	7.8	3	6.8
G1/8	- 28	TRE42200GS	12	90	36	7	5.5	7.8	3	8.8
G1/4	- 19	TRE42400GS	14	100	48	11	9	11.8	3	11.8
G3/8	- 19	TRE42480GS	16	100	52	12	9	11.8	4	15.25
G1/2	- 14	TRE42560GS	18	125	70	16	12	14.8	4	19
G3/4	- 14	TRE42700GS	22	140	82	20	16	19	4	24.5
G1"	- 11	TRE42780GS	24	160	95	25	20	23	4	30.75

ISO	P										M	K												
Material Description	Non-alloy steel					Low alloy steel					High alloy 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	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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	60	100	75	90	130	110	90	100			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	○	○	◎	◎	○	◎	◎	◎																

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131

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 376

with Internal Coolant

Hole type 3×D

60°

P

ØD₁

ØD₂

KI

L₁

L₂

L₃

Ød₁

MU

HSS PM

DIN 371/376

6HX

60°

B

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M6	x 1.0	TRJ24316GSP	17	80	30	6	4.9	8	3	5
M8	x 1.25	TRJ24366GSP	20	90	35	8	6.2	9	3	6.75
M10	x 1.5	TRJ24426GSP	22	100	39	10	8	11	3	8.5
M12	x 1.75	TRJ24506GSP	24	110	44	9	7	9.8	3	10.25
M14	x 2.0	TRJ24546GSP	26	110	52	11	9	11.8	3	12
M16	x 2.0	TRJ24606GSP	27	110	52	12	9	11.8	3	14
M18	x 2.5	TRJ24656GSP	30	125	66	14	11	13.8	3	15.5
M20	x 2.5	TRJ24706GSP	32	140	72	16	12	14.8	3	17.5
M22	x 2.5	TRJ24746GSP	32	140	78	18	14.5	16.8	3	19.5
M24	x 3.0	TRJ24786GSP	34	160	85	18	14.5	17	3	21
M27	x 3.0	TRJ24866GSP	36	160	92	20	16	19	4	24
M30	x 3.5	TRJ24946GSP	40	180	102	22	18	21	4	26.5

► DIN 371(M6~M10) and DIN 376(M12~M30)

CARBIDE

HSS

PRIME TAP

NEW

TRJ25 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374

with Internal Coolant

Hole type 3×D

60°

P

ØD₁

ØD₂

KI

L₁

L₂

L₃

Ød₁

MU

HSS PM

DIN 374

6HX

60°

B

X Coating

p.142

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

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

► 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	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25					
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	60	100	75	90	130	110	90	100										55	60	42	55				
HB	60	100	75	90	130	110	90	100										200	280	250	350	320	400 Rm	1050 Rm	550
Recommended	○	○	◎	◎	○	◎	◎	◎																	

132

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YG-1 CO., LTD.

◎ : 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	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25					
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	60	100	75	90	130	110	90	100										55	60	42	55				
HB	60	100	75	90	130	110	90	100										200	280	250	350	320	400 Rm	1050 Rm	550
Recommended	○	○	◎	◎	○	◎	◎	◎																	

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133

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 374

with Internal Coolant

Hole type 3×D

Material groups

MU

HSS PM

DIN 374

6HX

60°

B

X Coating

p.142

Recommended ToolHolder

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K _l	Z	Ød ₁
M20	x 2.0	TRJ25716GSP	27	140	72	16	12	14.8	3	18
M20	x 1.5	TRJ25726GSP	25	125	60	16	12	14.8	3	18.5
M20	x 1.0	TRJ25736GSP	20	125	60	16	12	14.8	3	19
M22	x 2.0	TRJ25756GSP	27	140	78	18	14.5	16.8	3	20
M22	x 1.5	TRJ25766GSP	25	125	65	18	14.5	16.8	3	20.5
M22	x 1.0	TRJ25776GSP	20	125	65	18	14.5	16.8	3	21
M24	x 2.0	TRJ25796GSP	27	140	70	18	14.5	17	3	22
M24	x 1.5	TRJ25806GSP	27	140	70	18	14.5	17	3	22.5
M24	x 1.0	TRJ25816GSP	20	140	70	18	14.5	17	3	23

Unit : mm

M

ISO Metric Coarse Threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine forming tap
Maschinengewindeformer

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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

DIN 371

DIN 376

with Internal Coolant

Hole type 3.0×D

Material groups

MU

HSS PM

DIN 371/376

6HX

60°

C

X Coating

p.142

Recommended ToolHolder

Plain Shank

SYNCHRO TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K _l	Z	Ød ₁
M5	x 0.8	TRQ20286GSP	9.6	70	25	6	4.9	8	5	4.65
M6	x 1.0	TRQ20316GSP	10	80	30	6	4.9	8	5	5.55
M8	x 1.25	TRQ20366GSP	12	90	35	8	6.2	9	5	7.4
M10	x 1.5	TRQ20426GSP	15	100	39	10	8	11	8	9.3
M12	x 1.75	TRQ20506GSP	17	110	44	9	7	9.8	8	11.2
M14	x 2.0	TRQ20546GSP	20	110	44	11	9	11.8	8	13
M16	x 2.0	TRQ20606GSP	20	110	44	12	9	11.8	8	15
M18	x 2.5	TRQ20656GSP	20	125	50	14	11	13.8	8	16.8
M20	x 2.5	TRQ20706GSP	20	140	54	16	12	14.8	8	18.8
M22	x 2.5	TRQ20746GSP	20	140	54	18	14.5	16.8	8	20.8
M24	x 3.0	TRQ20786GSP	24	160	60	18	14.5	17	8	22.5

Unit : mm

► DIN 371(M5~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
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	130
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
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm
Recommended	○	○	◎	◎	○	◎	◎	◎									

◎ : 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
HRC	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	130
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
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm
Recommended	◎	◎	◎	◎	◎	◎	◎	◎									


PRIME TAP

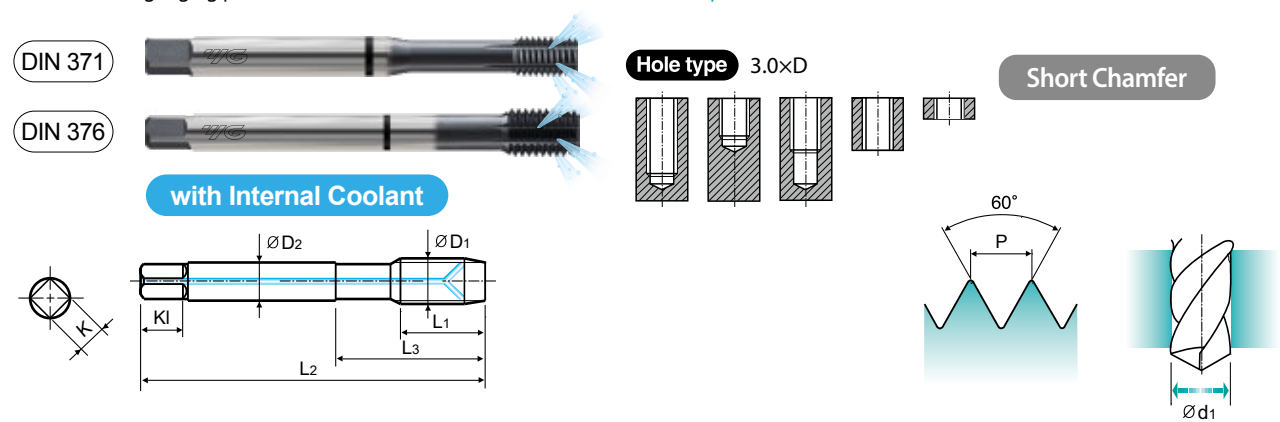

TRQ22 SERIES

ISO Metric Coarse Threads DIN 13

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

Machine forming tap
Maschinengewindeformer

- ▶ 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



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
M5	x 0.8	TRQ22286GSP	9.6	70	25	6	4.9	8	5	4.65
M6	x 1.0	TRQ22316GSP	10	80	30	6	4.9	8	5	5.55
M8	x 1.25	TRQ22366GSP	12	90	35	8	6.2	9	5	7.4
M10	x 1.5	TRQ22426GSP	15	100	39	10	8	11	8	9.3
M12	x 1.75	TRQ22506GSP	17	110	44	9	7	9.8	8	11.2
M14	x 2.0	TRQ22546GSP	20	110	44	11	9	11.8	8	13
M16	x 2.0	TRQ22606GSP	20	110	44	12	9	11.8	8	15

► DIN 371(M5~M10) and DIN 376(M12~M16)

[illegible]

CARBIDE

HSS

PRIME TAP

NEW

TRQ21

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 forming tap
Maschinengewindeformer

High performance on various ductile materials

Specially designed to prevent oversized threads and reduce gauging problems

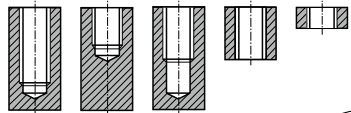
Ausgezeichnete Leistung bei verschiedenen Werkstoffen.

Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

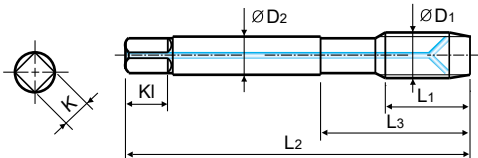
DIN 374

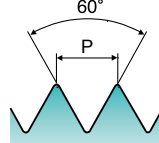


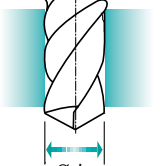
Hole type 3.0×D



with Internal Coolant







MU

HSS PM

DIN 374

6HX

60°

C

X Coating



p.142



Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K ₁	Z	Ød ₁
M6	x 0.75	TRQ21326GSP	10	80	30	4.5	3.4	5.8	5	5.65
M6	x 0.5	TRQ21336GSP	10	80	30	4.5	3.4	5.8	5	5.75
M8	x 1.0	TRQ21376GSP	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ21386GSP	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ21436GSP	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ21446GSP	15	90	36	7	5.5	7.8	8	9.5
M10	x 0.75	TRQ21456GSP	15	90	36	7	5.5	7.8	8	9.65
M12	x 1.5	TRQ21516GSP	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ21526GSP	17	100	40	9	7	9.8	8	11.4
M12	x 1.0	TRQ21536GSP	17	100	40	9	7	9.8	8	11.5
M14	x 1.5	TRQ21556GSP	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ21566GSP	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ21576GSP	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ21616GSP	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ21626GSP	20	100	40	12	9	11.8	8	15.5
M18	x 2.0	TRQ21666GSP	20	125	50	14	11	13.8	8	17
M18	x 1.5	TRQ21676GSP	15	110	44	14	11	13.8	8	17.25
M18	x 1.0	TRQ21686GSP	10	110	44	14	11	13.8	8	17.5
M20	x 2.0	TRQ21716GSP	20	140	54	16	12	14.8	8	19
M20	x 1.5	TRQ21726GSP	15	125	50	16	12	14.8	8	19.25
M20	x 1.0	TRQ21736GSP	10	125	50	16	12	14.8	8	19.5
M22	x 1.5	TRQ21766GSP	15	125	50	18	14.5	16.8	8	21.25
M24	x 1.5	TRQ21806GSP	15	140	54	18	14.5	17	8	23.25

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	15	16	17	18	19	20	17	18	19	20	21				
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21		10	26	3	25	21	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	180	260	160	250	130	230	160	250	130	230					
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎																					

	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	15	30	25	38	34	36	37	38	39	40	41			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
Recommended	◎	◎	◎	◎	◎	◎	◎	◎																											

138

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YG-1 CO., LTD.

CARBIDE

HSS

PRIME TAP

NEW

TRQ25

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 forming tap
Maschinengewindeformer

High performance on various ductile materials

Specially designed to prevent oversized threads and reduce gauging problems

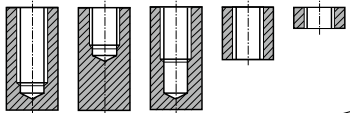
Ausgezeichnete Leistung bei verschiedenen Werkstoffen.

Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.

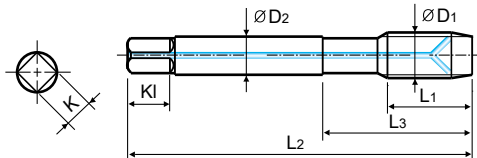
DIN 374

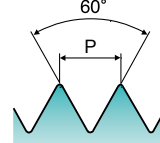


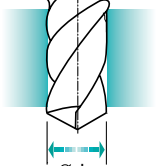
Hole type 3.0×D



with Internal Coolant







MU

HSS PM

DIN 374

6GX

60°

C

X Coating



p.142



Plain Shank
SYNCHRO TAPPING CHUCK
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K ₁	Z	Ød ₁
M6	x 0.75	TRQ25326GSP	10	80	30	4.5	3.4	5.8	5	5.65
M6	x 0.5	TRQ25336GSP	10	80	30	4.5	3.4	5.8	5	5.75
M8	x 1.0	TRQ25376GSP	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ25386GSP	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ25436GSP	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ25446GSP	15	90	36	7	5.5	7.8	8	9.5
M10	x 0.75	TRQ25456GSP	15	90	36	7	5.5	7.8	8	9.65
M12	x 1.5	TRQ25516GSP	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ25526GSP	17	100	40	9	7	9.8	8	11.4
M12	x 1.0	TRQ25536GSP	17	100	40	9	7	9.8	8	11.5
M14	x 1.5	TRQ25556GSP	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ25566GSP	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ25576GSP	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ25616GSP	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ25626GSP	20	100	40	12	9	11.8	8	15.5

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	15	16	17	18	19	20	17	18	19	20	21				
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21		10	26	3	25	21	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	180	260	160	250	130	230	160	250	130	230					
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎																					

	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	15	30	25	38	34	36	37	38	39	40	41			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550			
Recommended	◎	◎	◎	◎	◎	◎	◎	◎																											

139

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YG-1 CO., LTD.

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

MF

ISO Metric Fine Threads DIN 13

Metrisches ISO-Feingewinde DIN 13

ISO MÉTRIQUE PAS FINS DIN13

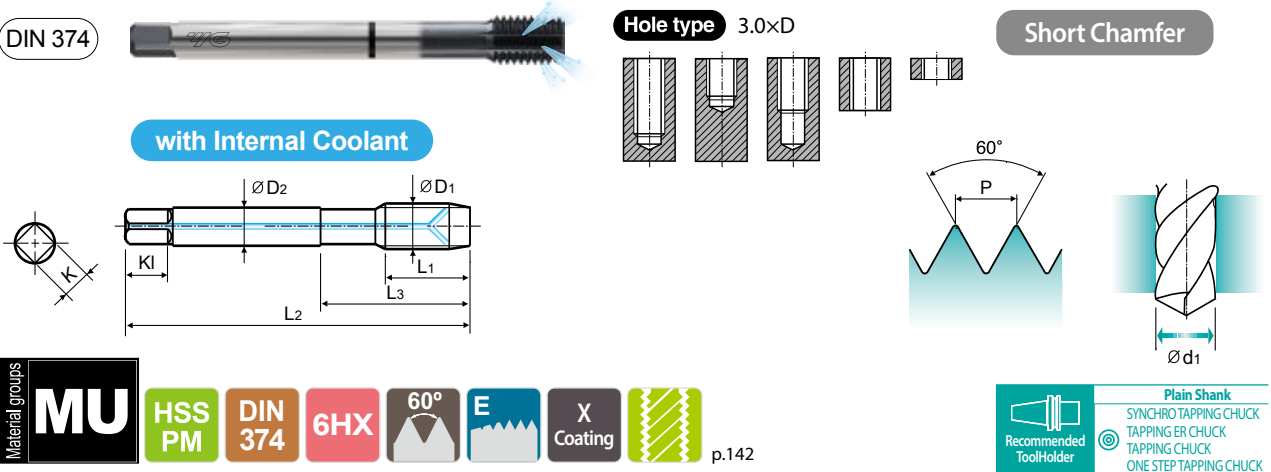
ISO Metrico passo grosso DIN 13

Machine forming tap
Maschinengewindeformer

- 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 große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	X-Coating	L ₁	L ₂	L ₃	ØD ₂	K	K ₁	Z	Ød ₁
M8	x 1.0	TRQ23376GSP	12	90	36	6	4.9	7.8	5	7.5
M8	x 0.75	TRQ23386GSP	12	80	30	6	4.9	7.8	5	7.65
M10	x 1.25	TRQ23436GSP	15	100	40	7	5.5	7.8	8	9.4
M10	x 1.0	TRQ23446GSP	15	90	36	7	5.5	7.8	8	9.5
M12	x 1.5	TRQ23516GSP	17	100	40	9	7	9.8	8	11.25
M12	x 1.25	TRQ23526GSP	17	100	40	9	7	9.8	8	11.4
M12	x 1.0	TRQ23536GSP	17	100	40	9	7	9.8	8	11.5
M14	x 1.5	TRQ23556GSP	20	100	40	11	9	11.8	8	13.25
M14	x 1.25	TRQ23566GSP	20	100	40	11	9	11.8	8	13.4
M14	x 1.0	TRQ23576GSP	20	100	40	11	9	11.8	8	13.5
M16	x 1.5	TRQ23616GSP	20	100	40	12	9	11.8	8	15.25
M16	x 1.0	TRQ23626GSP	20	100	40	12	9	11.8	8	15.5

◎ : 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		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						
HRC											15	30	25	38	34			55	60	42						
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400						
Recommended	◎	◎	◎	◎	◎	◎	◎	◎																		

					TRE30, TRE31, TRE32 TRE33, TRE34, TRE35 TRE36, TRE37, TRE38	TRJ10, TRJ11, TRJ12 TRJ15, TRJ16, TRJ17 TRJ18	THREAD MILL
							SYNCHRO TAP
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)		PRIME TAP / FORMING
P	1	Non-alloy steel	125		5-20	15-45	COMBO TAP
	2		190	13	10-50	10-55	
	3		250	25	10-50	10-55	YG TAP STEEL
	4		270	28	15-40	15-50	
	5		300	32	15-40	15-50	YG TAP CHIP BREAKER
	6	Low alloy steel	180	10	8-30	8-30	YG TAP INOX
	7		275	29	8-30	8-30	
	8		300	32	8-30	8-30	YG TAP CAST IRON
	9		350	38	8-30	8-30	
	10	High alloyed steel, and tool steel	200	15	8-30	8-30	YG TAP HARDENED STEEL
	11		325	35	8-30	8-30	YG TAP Ti Ni
M	12	Stainless steel	200	15	5-15	8-20	YG TAP ALU
	13		240	23	5-15	8-20	
	14		180	10	5-15	8-20	YG TAP FORMING
K	15	Grey cast iron	180	10	15-35	15-35	YG TAP GENERAL / HAND TAP
	16		260	26	15-35	15-35	PIPE TAP
	17	Nodular cast iron	160	3	15-35	15-35	
	18		250	25	15-35	15-35	STI TAP
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	

CARBIDE

HSS

THREAD
MILL

SYNCHRO
TAP

PRIME TAP /
FORMING

COMBO
TAP

YG TAP
STEEL

YG TAP CHIP
BREAKER

YG TAP
INOX

YG TAP
CAST IRON

YG TAP
HARDENED
STEEL

YG TAP
Ti Ni

YG TAP
ALU

YG TAP
FORMING

YG TAP
GENERAL
/ HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

					TRQ10, TRQ11, TRQ12 TRQ13, TRQ14, TRQ15 TRQ16, TRQ17 TRQ18, TRQ19	TRE39 TRE40 TRE41 TRE42	TRJ24 TRJ25	TRQ20, TRQ21 TRQ22, TRQ23 TRQ24, TRQ25
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)			
P	1	Non-alloy steel	125		15-40	5-25	15-50	15-45
	2		190	13	15-30	10-55	10-60	15-35
	3		250	25	15-30	10-55	10-60	15-35
	4		270	28	15-30	15-45	15-55	15-35
	5		300	32	15-30	15-45	15-55	15-35
	6	Low alloy steel	180	10	15-30	8-35	8-35	15-35
	7		275	29	15-30	8-35	8-35	15-35
	8		300	32	5-20	8-35	8-35	5-22
	9		350	38	5-20	8-35	8-35	5-22
	10	High alloyed steel, and tool steel	200	15	5-15	8-35	8-35	5-17
	11		325	35	5-15	8-35	8-35	5-17
M	12	Stainless steel	200	15	5-15	5-17	8-25	5-17
	13		240	23	5-15	5-17	8-25	5-17
	14		180	10	3-9	5-17	8-25	3-10
K	15	Grey cast iron	180	10		15-40	15-40	
	16		260	26		15-40	15-40	
	17	Nodular cast iron	160	3		15-40	15-40	
	18		250	25		15-40	15-40	
N	21	Aluminum- wrought alloy	60		20-50	15-40	15-40	20-55
	22		100		20-50	15-40	15-40	20-55
	23	Aluminum- cast, alloyed	75		20-40	15-40	15-40	20-45
	24		90		20-40	15-40	15-40	20-45
	25		130		20-40	15-40	15-40	20-45
	26	Copper and Copper Alloys (Bronze / Brass)	110		10-30	15-40	15-40	10-35
	27		90		10-30	15-40	15-40	10-35
	28		100		10-30	15-40	15-40	10-35



Leading Through Innovation



HSS-E

COMBO TAP

COMBO GEWINDEBOHRER

- For Multi Purpose Tapping
- Für Mehrbereichs-Gewindebohren

SELECTION GUIDE



HSS-E COMBO TAPS

HSS-E Taps for Multi-Purpose

Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.186

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc				
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			Annealed	250	25				
	34		Ni or Co Based	Cured	350	38				
	35			Cast	320	34				
	36	Titanium Alloys	Pure Titanium		400 Rm					
	37		Alpha + Beta Alloys	Hardened	1050 Rm					
H	38	Hardened steel		Hardened	550	55				
	39			Hardened	630	60				
	40	Chilled Cast Iron		Cast	400	42				
	41	Hardened Cast Iron		Hardened	550	55				



Max. 2.5xD Blind Hole

HSS-E

C

Spiral Flute

R40

2B	6H	2B	4H	6G	3B	4H	6G	3B	4H	
	TB804 (p.150)		TCE05 (p.152)			TDE05 (p.152)			TBE05 (p.152)	M
	TB844 (p.156)			TCE09 (p.159)			TDE09 (p.159)			MF
TD824 (p.164)		TB824 (p.164)			TCE01 (p.165)			TDE01 (p.165)		UNC
TD864 (p.166)		TB864 (p.166)			TCE02 (p.167)				TDE02 (p.167)	UNF
TIN	VAP	VAP	Bright	Bright	Bright	TIN	TIN	TIN	VAP	
○	○	○	○	○	○	○	○	○	○	1
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	2
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	3
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	4
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	5
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	6
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	7
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	8
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	9
○	○	○	○	○	○	○	○	○	○	10
										11
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	12
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	13
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	14
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	15
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	16
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	17
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										22
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										24
										25
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	26
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	27
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										40
										41

[illegible]

HSS

THREAD
MILL

SYNCHRO
TAP

PRIME TAP /
FORMING

COMBO
TAP

YG TAP
STEEL

YG TAP CHIP
BREAKER

YG TAP
INOX

YG TAP
CAST IRON

YG TAP
HARDENED
STEEL

YG TAP
Ti Ni

YG TAP
ALU

YG TAP
FORMING

YG TAP
GENERAL
/ HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA

ISO	VDI 3323	Material Description
P	1	Non-alloy steel
	2	
	3	
	4	
	5	
	6	Low alloy steel
	7	
	8	
	9	
	10	
	11	High alloyed steel, and tool steel
M	12	Stainless steel
	13	
	14	
K	15	Grey cast iron
	16	
	17	Nodular cast iron
	18	
	19	Malleable cast iron
	20	
N	21	Aluminum-wrought alloy
	22	
	23	Aluminum-cast, alloyed
	24	
	25	
	26	Copper and Copper Alloys (Bronze / Brass)
	27	
	28	
	29	Non Metallic Materials
	30	
S	31	Heat Resistant Super Alloys
	32	
	33	
	34	
	35	
	36	Titanium Alloys
	37	
H	38	Hardened steel
	39	
	40	Chilled Cast Iron
	41	Hardened Cast Iron

Max. 3.0xD
Through Hole

HSS-E

B

Spiral Point

6H+0.1	6G	6G	6G	7G	7G	7G	6H	6H
TBJ06 (p.171)	TCJ07 (p.172)	TDJ07 (p.172)	TBJ07 (p.172)	TCJ08 (p.173)	TDJ08 (p.173)	TBJ08 (p.173)	TC814-IC (p.179)	
							TC445 (p.180)	
VAP	Bright	TiN	VAP	Bright	TiN	VAP	Bright	Bright



○	○	○	○	○	○	○	○	○	1
◎	◎	◎	◎	◎	◎	◎	◎	◎	2
◎	◎	◎	◎	◎	◎	◎	◎	◎	3
◎	◎	◎	◎	◎	◎	◎	◎	◎	4
◎	◎	◎	◎	◎	◎	◎	◎	◎	5
◎	◎	◎	◎	◎	◎	◎	◎	◎	6
◎	◎	◎	◎	◎	◎	◎	◎	◎	7
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◎	◎	◎	◎	◎	◎	◎	◎	◎	9
○	○	○	○	○	○	○	○	○	10
									11

◎	◎	◎	◎	◎	◎	◎	◎	◎	12
◎	◎	◎	◎	◎	◎	◎	◎	◎	13
◎	◎	◎	◎	◎	◎	◎	◎	◎	14
◎	◎	◎	◎	◎	◎	◎	◎	◎	15
◎	◎	◎	◎	◎	◎	◎	◎	◎	16
◎	◎	◎	◎	◎	◎	◎	◎	◎	17
◎	◎	◎	◎	◎	◎	◎	◎	◎	18
									19
									20

									21
									22
◎	◎	◎	◎	◎	◎	◎	◎	◎	23
									24
									25
◎	◎	◎	◎	◎	◎	◎	◎	◎	26
◎	◎	◎	◎	◎	◎	◎	◎	◎	27
◎	◎	◎	◎	◎	◎	◎	◎	◎	28
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									40
									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.191

HSS

THREAD
MILL

SYNCHRO
TAP

PRIME TAP /
FORMING

COMBO
TAP

YG TAP
STEEL

YG TAP CHIP
BREAKER

YG TAP
INOX

YG TAP
CAST IRON

YG TAP
HARDENED
STEEL

YG TAP
Ti Ni

YG TAP
ALU

YG TAP
FORMING

YG TAP
GENERAL
/ HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA

CARBIDE

HSS

COMBO TAP

SERIES

VapTB804

TINTD804

BrightTC804

FSH TC804-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

<

CARBIDE

HSS

COMBO TAP

TCE05

TDE05

TBE05

TDE05

TCE05

TDE05

TBE05

TDE05

TCE05

TDE05

TBE05

TDE05

TCE05

TDE05

TBE05

TDE05

CARBIDE

HSS

COMBO TAP

TCE06

TDE06

TBE06

TDE06

TCE06

TDE06

TBE06

TDE06

TCE06

TDE06

TBE06

TDE06

M

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

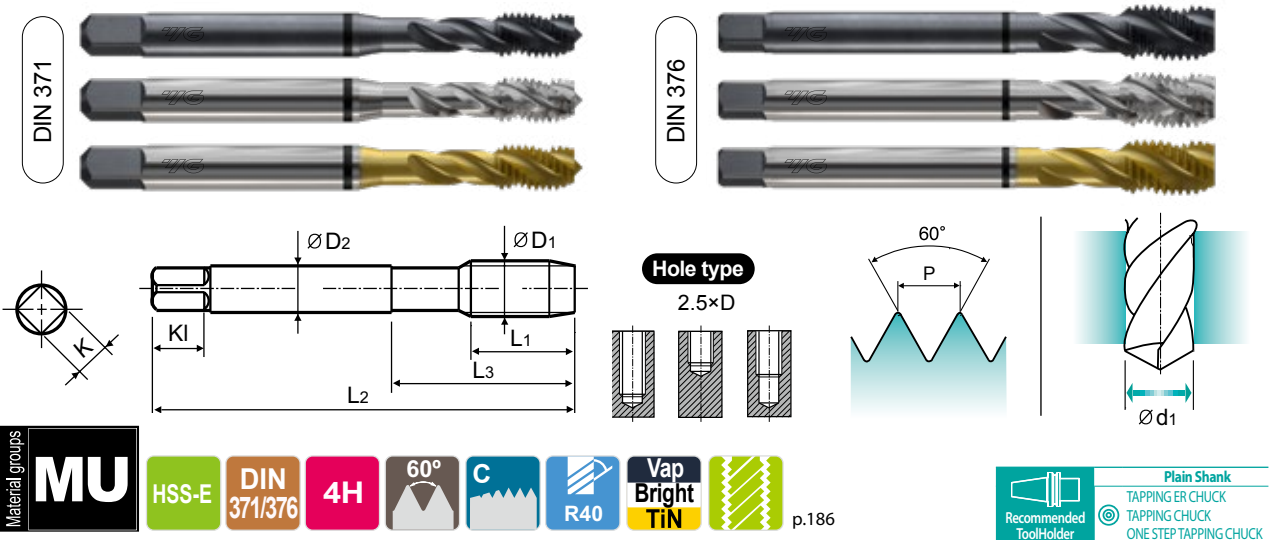
ISO MÉTRIQUE DIN13

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.



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	KI	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	2.15
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	3.8
M5	× 0.8	TBE05286	TCE05286	TDE05286	8	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBE05316	TCE05316	TDE05316	10	80	30	6	4.9	8	3	5.0
M7	× 1.0	TBE05346	TCE05346	TDE05346	10	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBE05546	TCE05546	TDE05546	20	110	52	11	9	12	3	12.0
M16	× 2.0	TBE05606	TCE05606	TDE05606	20	110	52	12	9	12	3	14.0
M18	× 2.5	TBE05656	TCE05656	TDE05656	25	125	66	14	11	14	4	15.5
M20	× 2.5	TBE05706	TCE05706	TDE05706	25	140	72	16	12	15	4	17.5
M22	× 2.5	TBE05746	TCE05746	TDE05746	25	140	78	18	14.5	17	4	19.5
M24	× 3.0	TBE05786	TCE05786	TDE05786	30	160	85	18	14.5	17	4	21.0
M27	× 3.0	TBE05866	TCE05866	TDE05866	30	160	92	20	16	19	4	24.0
M30	× 3.5	TBE05946	TCE05946	TDE05946	35	180	102	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

P												
M												
K												
H												
ISO	Material Description											
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12
HRc	125	13	25	28	32	10	29	32	38	15	35	15
HB	125	190	250	270	300	180	275	300	350	200	325	200
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
ISO	Material Description											
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32
HRc	60	100	75	90	130	110	90	100			200	280
HB	60	100	75	90	130	110	90	100			200	280
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎

M

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

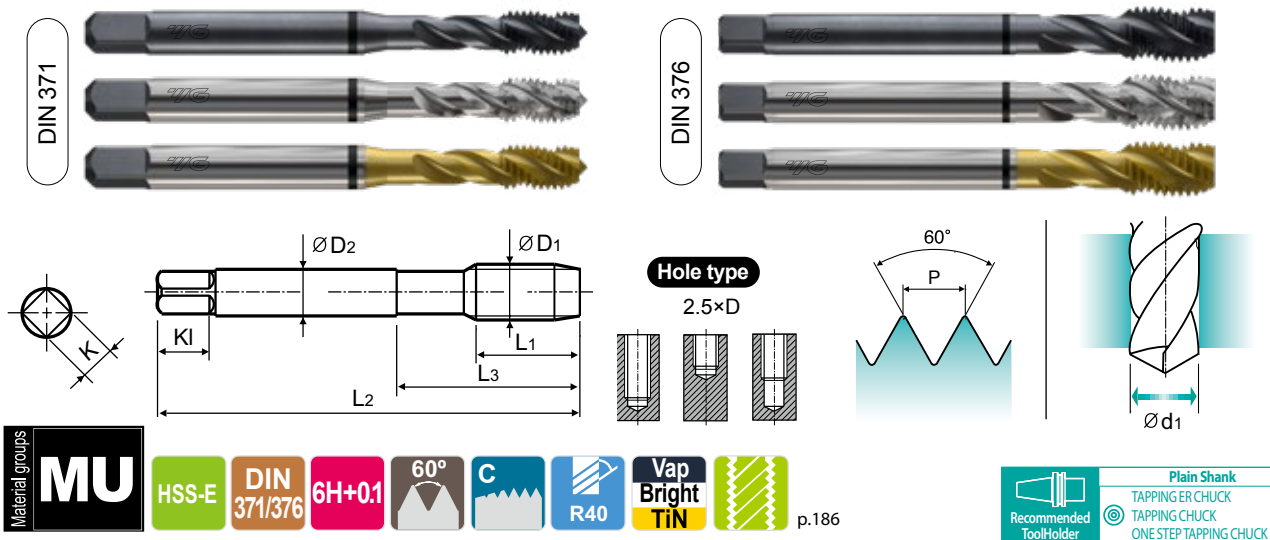
ISO MÉTRIQUE DIN13

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.



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	KI	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	2.0
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	2.25
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	3.0
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	3.9
M5	× 0.8	TBE06286	TCE06286	TDE06286	8	70	25	6	4.9	8	3	4.3
M6	× 1.0	TBE06316	TCE06316	TDE06316	10	80	30	6	4.9	8	3	5.1
M7	× 1.0	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	10.4
M14	× 2.0	TBE06546	TCE06546	TDE06546	20	110	52	11	9	12	3	12.1
M16	× 2.0	TBE06606	TCE06606	TDE06606	20	110	52	12	9	12	3	14.1
M18	× 2.5	TBE06656	TCE06656	TDE06656	25	125	66	14	11	14	4	15.6
M20	× 2.5	TBE06706	TCE06706	TDE06706	25	140	72	16	12	15	4	17.6
M22	× 2.5	TBE06746	TCE06746	TDE06746	25	140	78	18	14.5	17	4	19.6
M24	× 3.0	TBE06786	TCE06786	TDE06786	30	160	85	18	14.5	17	4	21.1
M27	× 3.0	TBE06866	TCE06866	TDE06866	30	160	92	20	16	19	4	24.1
M30	× 3.5	TBE06946	TCE06946	TDE06946	35	180	102	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

P												
M												
K												
H												
ISO	Material Description											
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12
HRc	125	13	25	28	32	10	29	32	38	15	35	15
HB	125	190	250	270	300	180	275	300	350	200	325	200
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
ISO	Material Description											
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32
HRc	60	100	75	90	130	110	90	100			200	280
HB	60	100	75	90	130	110	90	100			200	280
Recommended	◎	◎	◎	◎	◎	◎	◎	◎			◎	◎

CARBIDE

HSS

COMBO TAP

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

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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Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

CARBIDE

HSS

COMBO TAP

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

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Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

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Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

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Machine taps
Maschinengewindebohrer

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Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

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Machine taps
Maschinengewindebohrer

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Machine taps
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Machine taps
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ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

ISO Metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

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	KI	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	2.15
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	3.8
M5	× 0.8	TBE07286	TCE07286	TDE07286	8	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBE07316	TCE07316	TDE07316	10	80	30	6	4.9	8	3	5.0
M7	× 1.0	TBE07346	TCE07346	TDE07346	10	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBE07546	TCE07546	TDE07546	20	110	52	11	9	12	3	12.0
M16	× 2.0	TBE07606	TCE07606	TDE07606	20	110	52	12	9	12	3	14.0
M18	× 2.5	TBE07656	TCE07656	TDE07656	25	125	66	14	11	14	4	15.5
M20	× 2.5	TBE07706	TCE07706	TDE07706	25	140	72	16	12	15	4	17.5
M22	× 2.5	TBE07746	TCE07746	TDE07746	25	140	78	18	14.5	17	4	19.5
M24	× 3.0	TBE07786	TCE07786	TDE07786	30	160	85	18	14.5	17	4	21.0
M27	× 3.0	TBE07866	TCE07866	TDE07866	30	160	92	20	16	19	4	24.0
M30	× 3.5	TBE07946	TCE07946	TDE07946	35	180	102	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.

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	125	13	25	28	32	60	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41				
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400	550				
Recommended			◎			◎	◎	◎																	

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	KI	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	2.15
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	3.8
M5	× 0.8	TBE08286	TCE08286	TDE08286	8	70	25	6	4.9	8	3	4.2
M6	× 1.0	TBE08316	TCE08316	TDE08316	10	80	30	6	4.9	8	3	5.0
M7	× 1.0	TBE08346	TCE08346	TDE08346	10	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBE08546	TCE08546	TDE08546	20	110	52	11	9	12	3	12.0
M16	× 2.0	TBE08606	TCE08606	TDE08606	20	110	52	12	9	12	3	14.0
M18	× 2.5	TBE08656	TCE08656	TDE08656	25	125	66	14	11	14	4	15.5
M20	× 2.5	TBE08706	TCE08706	TDE08706	25	140	72	16	12	15	4	17.5
M22	× 2.5	TBE08746	TCE08746	TDE08746	25	140	78	18	14.5	17	4	19.5
M24	× 3.0	TBE08786	TCE08786	TDE08786	30	160	85	18	14.5	17	4	21.0
M27	× 3.0	TBE08866	TCE08866	TDE08866	30	160	92	20	16	19	4	24.0
M30	× 3.5	TBE08946	TCE08946	TDE08946	35	180	102	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.

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	125	130	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

COMBO TAP

SERIES

Vap

TB844

TiN

TD844

Bright

TC844

FSH

TC844-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

2.5×D

MU

HSS-E

DIN 374

6H

60°

C

R40

Vap Bright

TiN

FSH Coating

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
ØD1	P					L1	L2	L3	ØD2	K	KI	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	5.3
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	6.3
M8 × 1.0		TB844376	TC844376	TD844376	TC844376U	10	90	36	6	4.9	8	3	7.0
M8 × 0.75		TB844386	TC844386	TD844386	TC844386U	8	80	30	6	4.9	8	3	7.3
M10 × 1.25		TB844436	TC844436	TD844436	TC844436U	16	100	40	7	5.5	8	3	8.8
M10 × 1.0		TB844446	TC844446	TD844446	TC844446U	10	90	36	7	5.5	8	3	9.0
M10 × 0.75		TB844456	TC844456	TD844456	TC844456U	10	90	36	7	5.5	8	3	9.3
M12 × 1.5		TB844516	TC844516	TD844516	TC844516U	15	100	40	9	7	10	3	10.5
M12 × 1.25		TB844526	TC844526	TD844526	TC844526U	15	100	40	9	7	10	3	10.8
M12 × 1.0		TB844536	TC844536	TD844536	TC844536U	11	100	40	9	7	10	3	11.0
M14 × 1.5		TB844556	TC844556	TD844556	TC844556U	15	100	47	11	9	12	3	12.5
M14 × 1.25		TB844566	TC844566	TD844566	TC844566U	15	100	47	11	9	12	3	12.8
M14 × 1.0		TB844576	TC844576	TD844576	TC844576U	11	100	47	11	9	12	3	13.0
M16 × 1.5		TB844616	TC844616	TD844616	TC844616U	15	100	49	12	9	12	3	14.5
M16 × 1.0		TB844626	TC844626	TD844626	TC844626U	12	100	49	12	9	12	3	15.0
M18 × 1.5		TB844676	TC844676	TD844676	TC844676U	17	110	55	14	11	14	4	16.5
M18 × 1.0		TB844686	TC844686	TD844686	TC844686U	13	110	55	14	11	14	4	17.0
M20 × 1.5		TB844726	TC844726	TD844726	TC844726U	17	125	60	16	12	15	4	18.5
M20 × 1.0		TB844736	TC844736	TD844736	TC844736U	14	125	60	16	12	15	4	19.0
M22 × 1.5		TB844766	TC844766	TD844766	TC844766U	17	125	65	18	14.5	17	4	20.5
M22 × 1.0		TB844776	TC844776	TD844776	TC844776U	14	125	65	18	14.5	17	4	21.0

* 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	36	37	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

COMBO TAP

SERIES

Vap

TB844

TiN

TD844

Bright

TC844

FSH

TC844-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

2.5×D

MU

HSS-E

DIN 374

6H

60°

C

R40

Vap Bright

TiN

FSH Coating

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
ØD1	P					L1	L2	L3	ØD2	K	KI	Z	Ød1
M24 × 2.0		TB844796	TC844796	TD844796	TC844796U	20	140	70	18	14.5	17	4	22.0
M24 × 1.5		TB844806	TC844806	TD844806	TC844806U	20	140	70	18	14.5	17	4	22.5
M26 × 1.5		TB844856	TC844856	TD844856	-	20	140	75	18	14.5	17	4	24.5
M27 × 2.0		TB844876	TC844876	TD844876	-	20	140	77	20	16	19	4	25.0
M27 × 1.5		TB844886	TC844886	TD844886	-	20	140	77	20	16	19	4	25.5
M28 × 1.5		TB844916	TC844916	TD844916	-	20	140	77	20	16	19	4	26.5
M30 × 2.0		TB844966	TC844966	TD844966	-	22	150	78	22	18	21	4	28.0
M30 × 1.5		TB844976	TC844976	TD844976	-	22	150	78	22	18	21	4	28.5
M32 × 2.0		-	TC844A16	TD844A16	-	22	150	78	22	18	21	4	30.0
M32 × 1.5		-	TC844A26	TD844A26	-	22	150	78	22	18	21	4	30.5
M33 × 2.0		-	TC844A66	TD844A66	-	24	160	85	25	20	23	4	31.0
M33 × 1.5		-	TC844A76	TD844A76	-	24	160	85	25	20	23	4	31.5
M34 × 1.5		-	TC844A96	TD844A96	-	24	170	95	28	22	25	4	32.5
M35 × 1.5		-	TC844B16	TD844B16	-	24	170	95	28	22	25	4	33.5
M36 × 3.0		-	TC844B46	TD844B46	-	30	200	120	28	22	25	4	33.0
M36 × 2.0		-	TC844B56	TD844B56	-	24	170	90	28	22	25	4	34.0
M36 × 1.5		-	TC844B66	TD844B66	-	24	170	90	28	22	25	4	34.5
M38 × 1.5		-	TC844B86	TD844B86	-	24	170	90	28	22	25	4	36.5
M39 × 1.5		-	TC844C36	TD844C36	-	25	170	90	32	24	27	4	37.5
M40 × 1.5		-	TC844C66	TD844C66	-	25	170	90	32	24	27	4	38.5
M42 × 3.0		-	TC844D06	TD844D06	-	30	200	120	32	24	27	4	39.0
M42 × 2.0		-	TC844D16	TD844D16	-	25	170	90	32	24	27	4	40.0

* 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

COMBO TAP

SERIES

VapTB844

TINTD844

BrightTC844

FSH TC844-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

2.5×D

MU

HSS-E

DIN 374

6H

60°

C

R40

Vap Bright TiN

FSH Coating

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
ØD1	P					L1	L2	L3	ØD2	K	KI	Z	Ød1
M42 x 1.5	-	-	TC844D26	TD844D26	-	25	170	90	32	24	27	4	40.5
M45 x 1.5	-	-	TC844D96	TD844D96	-	26	180	80	36	29	32	4	43.5
M48 x 3.0	-	-	TC844E56	TD844E56	-	36	225	115	36	29	32	4	45.0
M48 x 2.0	-	-	TC844E66	TD844E66	-	28	190	90	36	29	32	4	46.0
M48 x 1.5	-	-	TC844E76	TD844E76	-	28	190	90	36	29	32	4	46.5
M50 x 1.5	-	-	TC844F16	TD844F16	-	28	190	90	36	29	32	4	48.5
M52 x 3.0	-	-	TC844F56	TD844F56	-	36	225	115	40	32	35	4	49.0
M52 x 2.0	-	-	TC844F66	TD844F66	-	28	190	90	40	32	35	4	50.0
M52 x 1.5	-	-	TC844F76	TD844F76	-	28	190	90	40	32	35	4	50.5

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

ISO	P										M					K				
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	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				
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			◎			◎	◎	◎												

CARBIDE

HSS

COMBO TAP

SERIES

BrightTCE09

TINTDE09

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

2.5×D

MU

HSS-E

DIN 374

6G

60°

C

R40

Bright TiN

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter		
		Bright	TiN										
ØD1	P			L1	L2	L3	ØD2	K	KI	Z	Ød1		
M4 x 0.5		TCE09256	TDE09256	5	63	21	2.8	2.1	5	3	3.5		
M5 x 0.5		TCE09296	TDE09296	5	70	25	3.5	2.7	6	3	4.5		
M6 x 0.75		TCE09326	TDE09326	8	80	30	4.5	3.4	6	3	5.3		
M6 x 0.5		TCE09336	TDE09336	5	80	30	4.5	3.4	6	3	5.5		
M7 x 0.75		TCE09356	TDE09356	10	80	30	5.5	4.3	7	3	6.3		
M8 x 1.0		TCE09376	TDE09376	10	90	36	6	4.9	8	3	7.0		
M8 x 0.75		TCE09386	TDE09386	8	80	30	6	4.9	8	3	7.3		
M10 x 1.25		TCE09436	TDE09436	16	100	40	7	5.5	8	3	8.8		
M10 x 1.0		TCE09446	TDE09446	10	90	36	7	5.5	8	3	9.0		
M10 x 0.75		TCE09456	TDE09456	10	90	36	7	5.5	8	3	9.3		
M12 x 1.5		TCE09516	TDE09516	15	100	40	9	7	10	3	10.5		
M12 x 1.25		TCE09526	TDE09526	15	100	40	9	7	10	3	10.8		
M12 x 1.0		TCE09536	TDE09536	11	100	40	9	7	10	3	11.0		
M14 x 1.5		TCE09556	TDE09556	15	100	47	11	9	12	3	12.5		
M14 x 1.25		TCE09566	TDE09566	15	100	47	11	9	12	3	12.8		
M14 x 1.0		TCE09576	TDE09576	11	100	47	11	9	12	3	13.0		
M16 x 1.5		TCE09616	TDE09616	15	100	49	12	9	12	3	14.5		
M16 x 1.0		TCE09626	TDE09626	12	100	49	12	9	12	3	15.0		
M18 x 1.5		TCE09676	TDE09676	17	110	55	14	11	14	4	16.5		
M18 x 1.0		TCE09686	TDE09686	13	110	55	14	11	14	4	17.0		
M20 x 1.5		TCE09726	TDE09726	17	125	60	16	12	15	4	18.5		
M20 x 1.0		TCE09736	TDE09736	14	125	60	16	12	15	4	19.0		
M22 x 1.5		TCE09766	TDE09766	17	125	65	18	14.5	17	4	20.5		
M22 x 1.0		TCE09776	TDE09776	14	125	65	18	14.5	17	4	21.0		

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

ISO	P										M					K				
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	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				
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			◎			◎	◎	◎												

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

2.5×D

ØD2

ØD1

L1

L2

L3

KI

60°

P

Ød1

60°

P

Ød1

MU

HSS-E

DIN 374

6G

60°

C

R40

Bright

TiN

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M24 × 2.0		TCE09796	TDE09796	20	140	70	18	14.5	17	4	22.0
M24 × 1.5		TCE09806	TDE09806	20	140	70	18	14.5	17	4	22.5
M26 × 1.5		TCE09856	TDE09856	20	140	75	18	14.5	17	4	24.5
M27 × 2.0		TCE09876	TDE09876	20	140	77	20	16	19	4	25.0
M27 × 1.5		TCE09886	TDE09886	20	140	77	20	16	19	4	25.5
M28 × 1.5		TCE09916	TDE09916	20	140	77	20	16	19	4	26.5
M30 × 2.0		TCE09966	TDE09966	22	150	78	22	18	21	4	28.0
M30 × 1.5		TCE09976	TDE09976	22	150	78	22	18	21	4	28.5

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

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

2.5×D

with Internal Coolant

ØD2

ØD1

L1

L2

L3

KI

60°

P

Ød1

60°

P

Ød1

MU

HSS-E

DIN 371/376

6H

60°

C

R40

Bright

p.186

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
M6 × 1.0		TC804316IC	10	80	30	6	4.9	8	3	5.0
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	10.3
M14 × 2.0		TC804546IC	20	110	52	11	9	12	3	12.0
M16 × 2.0		TC804606IC	20	110	52	12	9	12	3	14.0
M18 × 2.5		TC804656IC	25	125	66	14	11	14	4	15.5
M20 × 2.5		TC804706IC	25	140	72	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	15	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		90	130	110	90	100			200	280	250	350	320			400Rm	1050Rm	550	630	400	550
Recommended			◎			◎	◎	◎															

◎ : 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	36	37	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 TAP

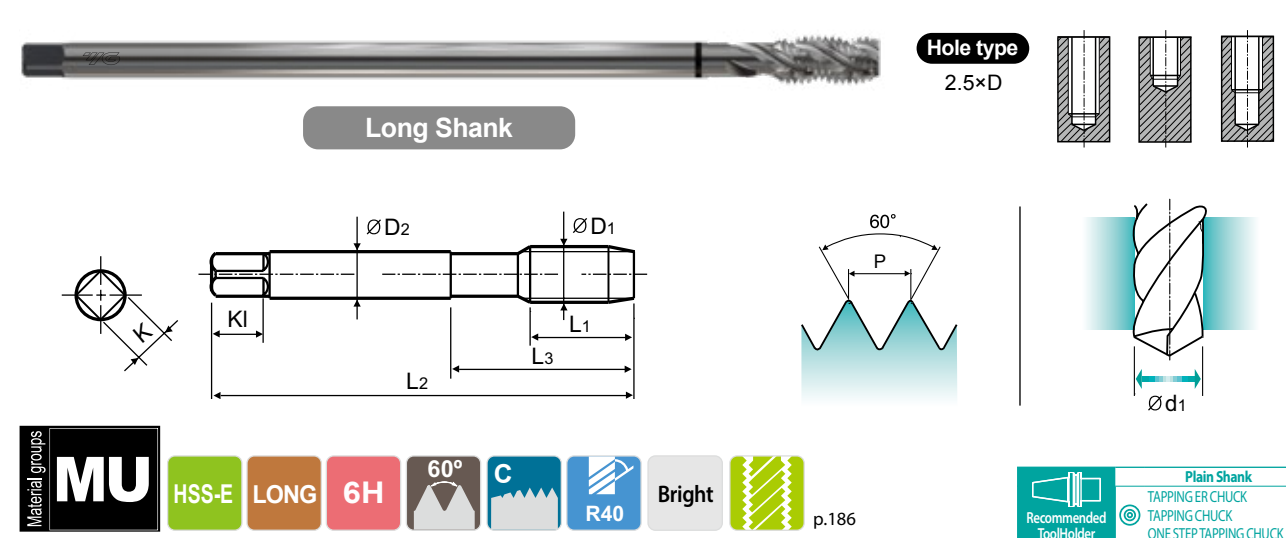
TC633 SERIES

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.



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		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 × 1.0		TC633316	17	160	30	6	4.9	8	3	5.0
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	10.3
M14 × 2.0		TC633546	26	220	52	11	9	12	3	12.0
M16 × 2.0		TC633606	27	220	52	12	9	12	3	14.0
M20 × 2.5		TC633706	32	280	72	16	12	15	4	17.5

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

◎: Excellent ○: Good

[illegible]

CARBIDE

HSS

COMBO TAP

SERIES

Bright

TC824

Vap

TB824

TiN

TD824

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeit dank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

2.5×D

MU

HSS-E

DIN 371/376

2B

60°

C

R40

Vap

Bright

TiN

p.186

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 40UNC		TB824162	TC824162	TD824162	6	56	18	3.5	2.7	6	3	2.3
#5 - 40UNC		TB824202	TC824202	TD824202	7	56	18	3.5	2.7	6	3	2.6
#6 - 32UNC		TB824242	TC824242	TD824242	7	56	20	4	3	6	3	2.8
#8 - 32UNC		TB824282	TC824282	TD824282	8	63	21	4.5	3.4	6	3	3.4
#10 - 24UNC		TB824322	TC824322	TD824322	10	70	25	6	4.9	8	3	3.9
#12 - 24UNC		TB824362	TC824362	TD824362	10	80	30	6	4.9	8	3	4.5
1/4 - 20UNC		TB824402	TC824402	TD824402	13	80	30	7	5.5	8	3	5.1
5/16 - 18UNC		TB824442	TC824442	TD824442	14	90	35	8	6.2	9	3	6.6
3/8 - 16UNC		TB824482	TC824482	TD824482	16	100	39	9	7	10	3	8.0
7/16 - 14UNC		TB824522	TC824522	TD824522	17	100	40	8	6.2	9	3	9.4
1/2 - 13UNC		TB824562	TC824562	TD824562	20	110	46	9	7	10	3	10.8
9/16 - 12UNC		TB824602	TC824602	TD824602	20	110	54	11	9	12	3	12.2
5/8 - 11UNC		TB824642	TC824642	TD824642	22	110	59	12	9	12	3	13.6
3/4 - 10UNC		TB824702	TC824702	TD824702	25	125	69	14	11	14	4	16.5
7/8 - 9UNC		TB824742	TC824742	TD824742	27	140	80	18	14.5	17	4	19.5
1" - 8UNC		TB824782	TC824782	TD824782	30	160	90	20	16	19	4	22.3

► 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	36	37	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

COMBO TAP

Bright

TC824

TiN

TD824

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeit dank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

2.5×D

MU

HSS-E

DIN 371/376

3B

60°

C

R40

Bright

TiN

p.186

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Bright	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 40UNC		TCE01162	TDE01162	6	56	18	3.5	2.7	6	3	2.3
#5 - 40UNC		TCE01202	TDE01202	7	56	18	3.5	2.7	6	3	2.6
#6 - 32UNC		TCE01242	TDE01242	7	56	20	4	3	6	3	2.8
#8 - 32UNC		TCE01282	TDE01282	8	63	21	4.5	3.4	6	3	3.4
#10 - 24UNC		TCE01322	TDE01322	10	70	25	6	4.9	8	3	3.9
#12 - 24UNC		TCE01362	TDE01362	10	80	30	6	4.9	8	3	4.5
1/4 - 20UNC		TCE01402	TDE01402	13	80	30	7	5.5	8	3	5.1
5/16 - 18UNC		TCE01442	TDE01442	14	90	35	8	6.2	9	3	6.6
3/8 - 16UNC		TCE01482	TDE01482	16	100	39	9	7	10	3	8.0
7/16 - 14UNC		TCE01522	TDE01522	17	100	40	8	6.2	9	3	9.4
1/2 - 13UNC		TCE01562	TDE01562	20	110	46	9	7	10	3	10.8
9/16 - 12UNC		TCE01602	TDE01602	20	110	54	11	9	12	3	12.2
5/8 - 11UNC		TCE01642	TDE01642	22	110	59	12	9	12	3	13.6
3/4 - 10UNC		TCE01702	TDE01702	25	125	69	14	11	14	4	16.5
7/8 - 9UNC		TCE01742	TDE01742	27	140	80	18	14.5	17	4	19.5
1" - 8UNC		TCE01782	TDE01782	30	160	90	20	16	19	4	22.3

► 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 alloy 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

COMBO TAP

Unified Feingewinde

UNF

Unificato passo fine

Machine taps

Maschinengewindebohrer

SERIES

Vap

TC864

TiN

TB864

TD864

CARBIDE

HSS

COMBO TAP

Unified Feingewinde

UNF

Unificato passo fine

Machine taps

Maschinengewindebohrer

Bright

TCE02

TiN

TDE02

SERIES

UNF

Unified fine threads

Unified Feingewinde

UNF

Unificato passo fine

Machine taps

Maschinengewindebohrer

► For using multi-purpose and correct thread profiles & long tool life due to special tap geometry.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 374

MU

HSS-E

DIN 371/374

2B

60°

C

R40

Vap Bright

TiN

p.186

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.			Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	L1	L2	L3	ØD2	K	KI	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	2.9
#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	4.6
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	42	9	7	10	3	11.5
9/16 - 18UNF		TB864622	TC864622	TD864622	15	100	44	11	9	12	3	12.9
5/8 - 18UNF		TB864662	TC864662	TD864662	15	100	48	12	9	12	3	14.5
3/4 - 16UNF		TB864722	TC864722	TD864722	17	110	57	14	11	14	4	17.5
7/8 - 14UNF		TB864762	TC864762	TD864762	17	125	65	18	14.5	17	4	20.5
1" - 12UNF		TB864802	TC864802	TD864802	20	140	74	20	16	19	4	23.3

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

UNF

Unified fine threads

Unified Feingewinde

UNF

Unificato passo fine

Machine taps

Maschinengewindebohrer

► For using multi-purpose and correct thread profiles & long tool life due to special tap geometry.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 374

MU

HSS-E

DIN 371/374

3B

60°

C

R40

Bright

TiN

p.186

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Bright	TiN	L1	L2	L3	ØD2	K	KI	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	2.9
#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	4.6
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	42	9	7	10	3	11.5
9/16 - 18UNF		TCE02622	TDE02622	15	100	44	11	9	12	3	12.9
5/8 - 18UNF		TCE02662	TDE02662	15	100	48	12	9	12	3	14.5
3/4 - 16UNF		TCE02722	TDE02722	17	110	57	14	11	14	4	17.5
7/8 - 14UNF		TCE02762	TDE02762	17	125	65	18	14.5	17	4	20.5
1" - 12UNF		TCE02802	TDE02802	20	140	74	20	16	19	4	23.3

► 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	36	37	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			◎			◎	◎	◎	◎																						

◎ : 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	34	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

COMBO TAP

SERIES

VapTB814

TINTD814

BrightTC814

FSH TC814-U

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.

Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0xD

MU

HSS-E

DIN 371/376

6H

60°

B

Vap Bright

TiN

FSH Coating

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	FSH	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2	× 0.4	TB814136	TC814136	TD814136	TC814136U	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	2.15
M3	× 0.5	TB814206	TC814206	TD814206	TC814206U	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	TC814246U	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	3.8
M5	× 0.8	TB814286	TC814286	TD814286	TC814286U	15	70	25	6	4.9	8	3	4.2
M6	× 1.0	TB814316	TC814316	TD814316	TC814316U	17	80	30	6	4.9	8	3	5.0
M7	× 1.0	TB814346	TC814346	TD814346	-	17	80	30	7	5.5	8	3	6.0
M8	× 1.25	TB814366	TC814366	TD814366	TC814366U	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	TC814426U	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	TC814506U	24	110	44	9	7	10	3	10.3
M14	× 2.0	TB814546	TC814546	TD814546	TC814546U	26	110	44	11	9	12	3	12.0
M16	× 2.0	TB814606	TC814606	TD814606	TC814606U	27	110	44	12	9	12	3	14.0
M18	× 2.5	TB814656	TC814656	TD814656	TC814656U	30	125	50	14	11	14	4	15.5
M20	× 2.5	TB814706	TC814706	TD814706	TC814706U	32	140	54	16	12	15	4	17.5
M22	× 2.5	TB814746	TC814746	TD814746	TC814746U	32	140	54	18	14.5	17	4	19.5

► DIN 371(M2~M10) and DIN 376(M11~M52)

► NEXT PAGE

* 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	36	37	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

COMBO TAP

SERIES

VapTB814

TINTD814

BrightTC814

FSH TC814-U

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.

Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0xD

MU

HSS-E

DIN 371/376

6H

60°

B

Vap Bright

TiN

FSH Coating

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	FSH	L1	L2	L3	ØD2	K	KI	Z	Ød1
M24	× 3.0	TB814786	TC814786	TD814786	TC814786U	34	160	60	18	14.5	17	4	21.0
M27	× 3.0	TB814866	TC814866	TD814866	TC814866U	36	160	60	20	16	19	4	24.0
M30	× 3.5	TB814946	TC814946	TD814946	TC814946U	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	36	37	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

COMBO TAP

TCJ05

TBJ05

TDJ05

SERIES

Vap

TiN

Bright

TCJ05

TiN

TBJ05

TDJ05

CARBIDE

HSS

COMBO TAP

TCJ06

TBJ06

TDJ06

SERIES

Vap

TiN

Bright

TCJ06

TiN

TBJ06

TDJ06

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP TiNi

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0×D

60°

P

Ød1

MU

HSS-E

DIN 371/376

4H

60°

B

Vap Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP TiNi

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0×D

60°

P

Ød1

MU

HSS-E

DIN 371/376

6H+0.1

60°

B

Vap Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	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	2.15
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	3.8
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	5.0
M7	× 1.0	TBJ05346	TCJ05346	TDJ05346	17	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBJ05546	TCJ05546	TDJ05546	26	110	44	11	9	12	3	12.0
M16	× 2.0	TBJ05606	TCJ05606	TDJ05606	27	110	44	12	9	12	3	14.0
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	21.0
M27	× 3.0	TBJ05866	TCJ05866	TDJ05866	36	160	60	20	16	19	4	24.0
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	15	16	17	18	19	20	15	16	17	18	19	20			
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21		10	26	3	25	21		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	180	260	160	250	130	230	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400	550	200	280	250	350	320	400Rm	1050Rm	550	630	400	550			
Recommended			◎			◎	◎	◎																											

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	KI	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	2.0
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	2.25
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	3.0
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	3.9
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	10.4
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	15	16	17	18	19	20	15	16	17	18	19	20			
HRC	125	13	25																																

CARBIDE

HSS

COMBO TAP

TCJ07

TBJ07

TDJ07

Bright

SERIES

CARBIDE

HSS

COMBO TAP

TCJ08

TBJ08

TDJ08

Bright

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0×D

MU

HSS-E

DIN 371/376

6G

60°

B

Vap Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	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	2.15
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	3.8
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	5.0
M7	× 1.0	TBJ07346	TCJ07346	TDJ07346	17	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBJ07546	TCJ07546	TDJ07546	26	110	44	11	9	12	3	12.0
M16	× 2.0	TBJ07606	TCJ07606	TDJ07606	27	110	44	12	9	12	3	14.0
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	21.0
M27	× 3.0	TBJ07866	TCJ07866	TDJ07866	36	160	60	20	16	19	4	24.0
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	15	16	17	18	19	20	15	16	17	18	19	20			
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21		10	26	3	25	21		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	180	260	160	250	130	230	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400	550	200	280	250	350	320	400Rm	1050Rm	550	630	400	550			
Recommended			◎			◎	◎	◎																											

172

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YG-1 CO., LTD.

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0×D

MU

HSS-E

DIN 371/376

7G

60°

B

Vap Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	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	2.15
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	3.8
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	5.0
M7	× 1.0	TBJ08346	TCJ08346	TDJ08346	17	80	30	7	5.5	8	3	6.0
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	10.3
M14	× 2.0	TBJ08546	TCJ08546	TDJ08546	26	110	44	11	9	12	3	12.0
M16	× 2.0	TBJ08606	TCJ08606	TDJ08606	27	110	44	12	9	12	3	14.0
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	21.0
M27	× 3.0	TBJ08866	TCJ08866	TDJ08866	36	160	60	20	16	19	4	24.0
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	15	16	17	18	19	20	15	16	17	18	19	20			
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21		10	26	3	25	21		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	180	260	160	250	130	230</									

CARBIDE

HSS

COMBO TAP

SERIES

VapTB854

TINTD854

BrightTC854

FSH TC854-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeit dank einer besonderen Schneidengeometrie.

DIN 374

Hole type

3.0×D

60°

P

ØD2

ØD1

KI

L2

L1

L3

60°

P

ØD2

ØD1

KI

L2

L1

L3

Material groups

MU

HSS-E

DIN 374

6H

60°

B

Vap Bright

TiN

FSH Coating

p.187

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
ØD1	P					L1	L2	L3	ØD2	K	KI	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	5.3
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	6.3
M8	× 1.0	TB854376	TC854376	TD854376	TC854376U	17	90	36	6	4.9	8	3	7.0
M8	× 0.75	TB854386	TC854386	TD854386	TC854386U	14	80	30	6	4.9	8	3	7.3
M10	× 1.25	TB854436	TC854436	TD854436	TC854436U	22	100	40	7	5.5	8	3	8.8
M10	× 1.0	TB854446	TC854446	TD854446	TC854446U	18	90	36	7	5.5	8	3	9.0
M10	× 0.75	TB854456	TC854456	TD854456	TC854456U	18	90	36	7	5.5	8	3	9.3
M12	× 1.5	TB854516	TC854516	TD854516	TC854516U	22	100	40	9	7	10	3	10.5
M12	× 1.25	TB854526	TC854526	TD854526	TC854526U	22	100	40	9	7	10	3	10.8
M12	× 1.0	TB854536	TC854536	TD854536	TC854536U	18	100	40	9	7	10	3	11.0
M14	× 1.5	TB854556	TC854556	TD854556	TC854556U	22	100	40	11	9	12	3	12.5
M14	× 1.25	TB854566	TC854566	TD854566	TC854566U	22	100	40	11	9	12	3	12.8
M14	× 1.0	TB854576	TC854576	TD854576	TC854576U	22	100	40	11	9	12	3	13.0
M16	× 1.5	TB854616	TC854616	TD854616	TC854616U	22	100	40	12	9	12	3	14.5
M16	× 1.0	TB854626	TC854626	TD854626	TC854626U	18	100	40	12	9	12	3	15.0
M18	× 1.5	TB854676	TC854676	TD854676	TC854676U	25	110	44	14	11	14	4	16.5
M18	× 1.0	TB854686	TC854686	TD854686	TC854686U	20	110	44	14	11	14	4	17.0
M20	× 1.5	TB854726	TC854726	TD854726	TC854726U	25	125	50	16	12	15	4	18.5
M20	× 1.0	TB854736	TC854736	TD854736	TC854736U	20	125	50	16	12	15	4	19.0

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

► NEXT PAGE

◎ : Excellent ○ : Good

ISO	P										M					K				
	Non-alloy steel					Low alloy steel					Stainless steel					Grey cast iron				
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	
HRC	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
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				
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400
Recommended			◎			◎	◎	◎												

CARBIDE

HSS

COMBO TAP

SERIES

VapTB854

TINTD854

BrightTC854

FSH TC854-U

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeit dank einer besonderen Schneidengeometrie.

DIN 374

Hole type

3.0×D

60°

P

ØD2

ØD1

KI

L2

L1

L3

60°

P

ØD2

ØD1

KI

L2

L1

L3

Material groups

MU

HSS-E

DIN 374

6H

60°

B

Vap Bright

TiN

FSH Coating

p.187

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm													
SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
ØD1	P					L1	L2	L3	ØD2	K	KI	Z	Ød1
M22	× 1.5	TB854766	TC854766	TD854766	TC854766U	25	125	50	18	14.5	17	4	20.5
M22	× 1.0	TB854776	TC854776	TD854776	TC854776U	20	125	50	18	14.5	17	4	21.0
M24	× 2.0	TB854796	TC854796	TD854796	TC854796U	27	140	54	18	14.5	17	4	22.0
M24	× 1.5	TB854806	TC854806	TD854806	TC854806U	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	25.0
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	28.0
M30	× 1.5	TB854976	TC854976	TD854976	-	30	150	57	22	18	21	4	28.5
M32	× 2.0	-	TC854A16	TD854A16	-	30	150	57	22	18	21	4	30.0
M32	× 1.5	-	TC854A26	TD854A26	-	30	150	57	22	18	21	4	30.5
M33	× 2.0	-	TC854A66	TD854A66	-	33	160	60	25	20	23	4	31.0
M33	× 1.5	-	TC854A76	TD854A76	-	32	160	60	25	20	23	4	31.5
M34	× 1.5	-	TC854A96	TD854A96	-	33	170	70	28	22	25	4	32.5
M35	× 1.5	-	TC854B16	TD854B16	-	33	170	70	28	22	25	4	33.5
M36	× 3.0	-	TC854B46	TD854B46	-	45	200	80	28	22	25	4	33.0
M36	× 2.0	-	TC854B56	TD854B56	-	33	170	70	28	22	25	4	34.0
M36	× 1.5	-	TC854B66	TD854B66	-	33	170	70	28	22	25	4	34.5
M38	× 1.5	-	TC854B86	TD854B86	-	33	170	70	28	22	25	4	36.5
M39	× 1.5	-	TC854C36	TD854C36	-	33	170	70	32	24	27	4	37.5
M40	× 1.5	-	TC854C66	TD854C66	-	33	170	70	32	24	27	4	38.5

* 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	36	37	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

COMBO TAP

SERIES

Vap

TIN

Bright

TC854

FSH

TC854-U

TB854

TD854

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

3.0×D

60°

P

ØD2

ØD1

KI

L2

L3

L1

NEW

Material groups

MU

HSS-E

DIN 374

6H

60°

B

Vap Bright

TiN

FSH Coating

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.				Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Bright	TiN	FSH								
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.

176

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177

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CARBIDE

HSS

COMBO TAP

SERIES

Bright

TiN

TCJ09

TDJ09

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

3.0×D

60°

P

ØD2

ØD1

KI

L2

L3

L1

Material groups

MU

HSS-E

DIN 374

6G

60°

B

Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Bright	TiN								
M4 x 0.5		TCJ09256	TDJ09256	10	63	21	2.8	2.1	5	3	3.5
M5 x 0.5		TCJ09296	TDJ09296	11	70	25	3.5	2.7	6	3	4.5
M6 x 0.75		TCJ09326	TDJ09326	13	80	30	4.5	3.4	6	3	5.3
M6 x 0.5		TCJ09336	TDJ09336	13	80	30	4.5	3.4	6	3	5.5
M7 x 0.75		TCJ09356	TDJ09356	14	80	30	5.5	4.3	7	3	6.3
M8 x 1.0		TCJ09376	TDJ09376	17	90	36	6	4.9	8	3	7.0
M8 x 0.75		TCJ09386	TDJ09386	14	80	30	6	4.9	8	3	7.3
M10 x 1.25		TCJ09436	TDJ09436	22	100	40	7	5.5	8	3	8.8
M10 x 1.0		TCJ09446	TDJ09446	18	90	36	7	5.5	8	3	9.0
M10 x 0.75		TCJ09456	TDJ09456	18	90	36	7	5.5	8	3	9.3
M12 x 1.5		TCJ09516	TDJ09516	22	100	40	9	7	10	3	10.5
M12 x 1.25		TCJ09526	TDJ09526	22	100	40	9	7	10	3	10.8
M12 x 1.0		TCJ09536	TDJ09536	18	100	40	9	7	10	3	11.0
M14 x 1.5		TCJ09556	TDJ09556	22	100	40	11	9	12	3	12.5
M14 x 1.25		TCJ09566	TDJ09566	22	100	40	11	9	12	3	12.8
M14 x 1.0		TCJ09576	TDJ09576	22	100	40	11	9	12	3	13.0
M16 x 1.5		TCJ09616	TDJ09616	22	100	40	12	9	12	3	14.5
M16 x 1.0		TCJ09626	TDJ09626	18	100	40	12	9	12	3	15.0
M18 x 1.5		TCJ09676	TDJ09676	25	110	44	14	11	14	4	16.5
M18 x 1.0		TCJ09686	TDJ09686	20	110	44	14	11	14	4	17.0
M20 x 1.5		TCJ09726	TDJ09726	25	125	50	16	12	15	4	18.5
M20 x 1.0		TCJ09736	TDJ09736	20	125	50	16	12	15	4	19.0

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

177

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YG-1 CO., LTD.

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 374

Hole type

3.0×D

Material groups

MU

HSS-E

DIN 374

6G

60°

B

Bright

TiN

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm											
SIZE	Pitch	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	Bright	TiN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M22 × 1.5		TCJ09766	TDJ09766	25	125	50	18	14.5	17	4	20.5
M22 × 1.0		TCJ09776	TDJ09776	20	125	50	18	14.5	17	4	21.0
M24 × 2.0		TCJ09796	TDJ09796	27	140	54	18	14.5	17	4	22.0
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 × 2.0		TCJ09876	TDJ09876	28	140	54	20	16	19	4	25.0
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 × 2.0		TCJ09966	TDJ09966	30	150	57	22	18	21	4	28.0
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	36	37	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			◎			◎	◎	◎															

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.

► Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

DIN 371

DIN 376

Hole type

3.0×D

with Internal Coolant

Material groups

MU

HSS-E

DIN 371/376

6H

60°

B

Bright

p.187

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm											
SIZE	Pitch	EDP No.		Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	Bright		L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M6 × 1.0		TC814316IC		17	80	30	6	4.9	8	3	5.0
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	10.3
M14 × 2.0		TC814546IC		26	110	44	11	9	12	3	12.0
M16 × 2.0		TC814606IC		27	110	44	12	9	12	3	14.0
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			◎			◎	◎	◎													

CARBIDE

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP TiNi

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

COMBO TAP

TC445

SERIES

ISO Metric coarse threads DIN 13

Machine taps
Maschinengewindebohrer

For using multi-purpose and correct thread profiles & long tool life due to special tap geometry.

Für vielfältigen Einsatz, genaue Gewindeprofile und lange Standzeitendank einer besonderen Schneidengeometrie.

Long Shank

Hole type
3.0xD

60°

Ød1

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCKMaterial groups
MU
HSS-E
LONG
6H
60°
B
Bright
p.187

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	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	× 1.0	TC445316	17	160	30	6	4.9	8	3	5.0
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	10.3
M14	× 2.0	TC445546	26	220	44	11	9	12	3	12.0
M16	× 2.0	TC445606	27	220	44	12	9	12	3	14.0
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.

ISO

Material Description

VDI 3323

HRC

HB

Recommended

ISO

Material Description

VDI 3323

HRC

HB

Recommended

ISO

Material Description

VDI 3323

HRC

HB

Recommended

ISO

Material Description

VDI 3323

HRC

HB

Recommended

ISO

Material Description

VDI 3323

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Material Description

VDI 3323

HRC

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Recommended

ISO

Material Description

VDI 3323

HRC

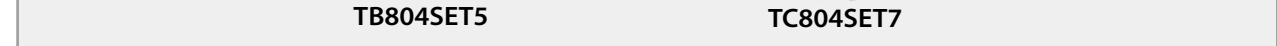
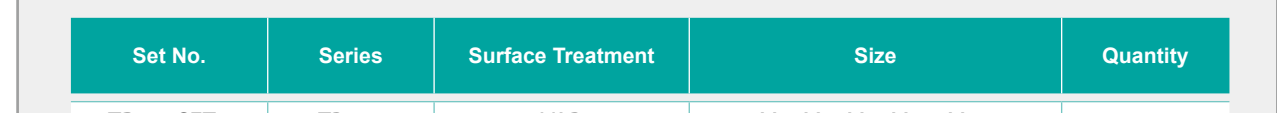
HB

Recommended

ISO



Combo Spiral Flute Tap Set



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



CARBIDE													
HSS													
THREAD MILL													
SYNCHRO TAP													
PRIME TAP / FORMING													
COMBO TAP													
YG TAP STEEL													
YG TAP CHIP BREAKER													
YG TAP INOX													
YG TAP CAST IRON													
YG TAP HARDENED STEEL													
YG TAP Ti Ni													
YG TAP ALU													
YG TAP FORMING													
YG TAP GENERAL / HAND TAP													
PIPE TAP													
STI TAP													
NUT TAP													
TECHNICAL DATA													
					RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN								
					TC804 TC844 TC824 TC864	TC804-U TC844-U TD804, TD844 TD824, TD864	TB804 TB844 TB824 TB864	TCE05 TCE09 TCE01 TCE02	TDE05 TDE09 TDE01 TDE02	TBE05 TCE06	TDE06	TBE06	
ISO	VDI 3323	Material Description	HB	HRc	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	
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	18-24	12-18	
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10	
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10	
	9		350	38	3-5	5-7	3-5	3-5	5-7	3-5	5-7	3-5	
	10		High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	5-7	3-5
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	10-15	7-10	
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	
	14		180	10	4-6	6-8	4-6	4-6	6-8	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	15-20	10-15	
	16		260	26	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	
	18		250	25	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	
N	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	35-40	25-35	
	27		90		8-12	12-17	8-12	8-12	12-17	8-12	12-17	8-12	
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	
					TCE07	TDE07	TBE07	TCE08	TDE08	TBE08	TC804-IC	TC633	TC807
ISO	VDI 3323	Material Description	HB	HRc	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
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18	12-18
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10	6-10
	9		350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5	3-5
	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
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
	14		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
	16		260	26	5-8	8-11	5-8	5-8	8-11	5-8	5-8	5-8	5-8
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15	10-15
	18		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
	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
	27		90		8-12	12-17	8-12	8-12	12-17	8-12	8-12	8-12	8-12
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	15-20

186

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YG YG-1 CO., LTD.

<div><div></div><div>COMBO TAP</div></div>					RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN							CARBIDE		
					TC814 TC854 TC834 TC874	TC814-U TC854-U TD814, TD854 TD834, TD874	TB814 TB854 TB834 TB874	TCJ05 TCJ09 TCJ01 TCJ02	TDJ05 TDJ09 TDJ01 TDJ02	TBJ05 TCJ06	TDJ06	TBJ06	HSS	
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)								THREAD MILL	
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	SYNCHRO TAP	
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	PRIME TAP FORMING	
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	18-24	12-18	COMBO TAP	
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15		
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10		
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	YG TAP STEEL	
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15	YG TAP CHIP BREAKER	
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	10-14	6-10	YG TAP INOX	
	9		350	38	3-5	5-7	3-5	3-5	5-7	3-5	5-7	3-5		
	10	High alloyed steel, and tool steel	200	15	3-5	5-7	3-5	3-5	5-7	3-5	5-7	3-5	YG TAP CAST IRON	
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	10-15	7-10	YG TAP HARDENED STEEL	
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8	YG TAP Ti Ni	
	14		180	10	4-6	6-8	4-6	4-6	6-8	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	15-20	10-15	YG TAP ALU	
	16		260	26	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8		
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	15-20	10-15		YG TAP FORMING
	18		250	25	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8		
N	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20	YG TAP GENERAL / HAND TAP	
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	35-40	25-35		
	27		90		8-12	12-17	8-12	8-12	12-17	8-12	12-17	8-12		
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20		
					TCJ07	TDJ07	TBJ07	TCJ08	TDJ08	TBJ08	TC814-IC	TC445		
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)								PIPE TAP	
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20	STI TAP	
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20	15-20	15-20		
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18	12-18	12-18		
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
	5		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
	6	Low alloy steel	180	10	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		NUT TAP
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10	6-10	6-10		
	9		350	38	3-5	5-7	3-5	3-5	5-7	3-5	3-5	3-5		
	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		TECHNICAL DATA
M	12	Stainless steel	200	15	7-10	10-15	7-10	7-10	10-15	7-10	10-15	7-10		
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8		
	14		180	10	4-6	6-8	4-6	4-6	6-8	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	10-15		
	16		260	26	5-8	8-11	5-8	5-8	8-11	5-8	8-11	5-8		
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15	10-15	10-15		
	18		250	25	5-8	8-11	5-8	5-8	8-11	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	15-20		
	26	Copper and Copper Alloys (Bronze / Brass)	110		25-35	35-40	25-35	25-35	35-40	25-35	35-40	25-35		
	27		90		8-12	12-17	8-12	8-12	12-17	8-12	12-17	8-12		
	28		100		15-20	20-25	15-20	15-20	20-25	15-20	20-25	15-20		
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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



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.215

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc				
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	Cutting Alloys, PB>1%		110					
	27		CuZn, CuSnZn (Brass)		90					
	28	Non Metallic Materials	CuSn, lead-free copper and electrolytic copper		100					
	29		Duroplastic, Fiber Reinforced Plastic							
	30		Rubber, Wood, etc.							
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15	○	○	○	○
	32			Cured	280	30				
	33			Annealed	250	25				
	34		Ni or Co Based	Cured	350	38				
	35			Cast	320	34				
	36	Titanium Alloys	Pure Titanium		400 Rm		○	○	○	○
	37		Alpha + Beta Alloys	Hardened	1050 Rm					
H	38	Hardened steel		Hardened	550	55				
	39			Hardened	630	60				
	40	Chilled Cast Iron		Cast	400	42				
	41	Hardened Cast Iron		Hardened	550	55				

Max. 2.5xD Blind Hole			Max. 3.0xD Through Hole						
HSS-E			HSS-PM		HSS-E				
C	C	C	B	B	B	B	B	B	
Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Point	
R40	R40	R40	-	-	-	-	-	-	
TB312 (p.196)	TY312 (p.197)	TB913 (p.203)	TQ863 (p.204)	TR863 (p.205)	TC422 (p.206)	TD422 (p.207)	TE422 (p.208)	TY422 (p.209)	M
					TC263 (p.210)	TD263 (p.211)			MF
					TC244 (p.212)	TD244 (p.213)			UNC
					TC254 (p.214)				UNF
									BSW
									G(BSP)
									EG-M
									EG-UNC
									EG-UNF
VAP	TiAlN	VAP	VAP	Bright	Bright	TiN	Nitride+Vap	TiAlN	
									
○	○	○	○	○	○	○	○	○	1
○	○	○	○	○	○	○	○	○	2
○	○	○	○	○	○	○	○	○	3
○	○	○	○	○	○	○	○	○	4
◎	◎	◎	◎	◎	◎	◎	◎	◎	5
○	○	○	○	○	○	○	○	○	6
○	○	○	○	○	○	○	○	○	7
◎	◎	◎	◎	◎	◎	◎	◎	◎	8
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			○	○	○	○	○	○	12
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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

60°

P

Ød1

ØD2

ØD1

Kl

L1

L2

L3

60°

P

Ød1

VG

HSS PM

DIN 371/376

6H

60°

C

R40

Vap

p.215

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	× 1.0	TQ823316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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)

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○	○
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

192

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HSS

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

60°

P

Ød1

ØD2

ØD1

Kl

L1

L2

L3

60°

P

Ød1

VG

HSS PM

DIN 371/376

6H

60°

C

R40

Bright

p.215

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	× 1.0	TR823316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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)

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○	○
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

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193



TD312 SERIES

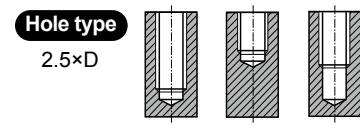
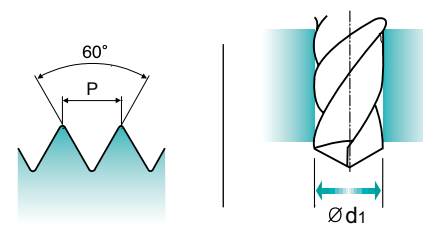
 ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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

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



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	× 1.0	TD312316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TD312546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TD312786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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 3232	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 3232	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											○					○							



TY312 SERIES

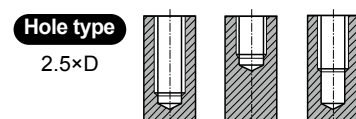
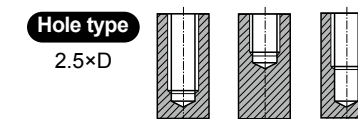
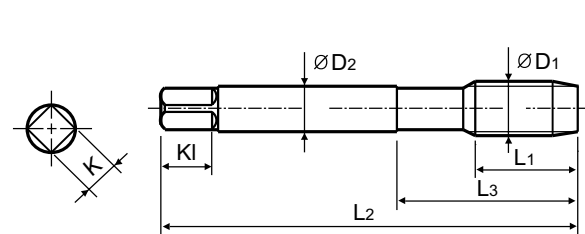
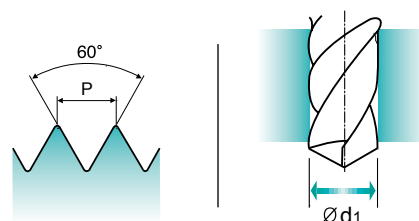
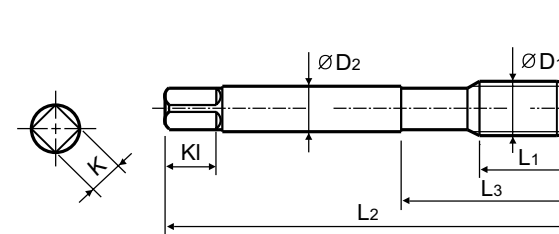
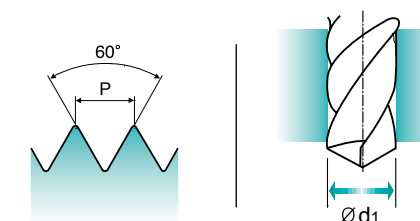
ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

► Geeignet zum Gewinden von Sacklöchern dank ausgezeichneter Spanabfuhr von angelassenen Stählen oder ähnlichen Werkstoffen.

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



Unit : mm

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	× 1.0	TB312316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TB312546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TB312786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

[illegible]

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				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
		VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
		HRc	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	Hardene Cast Iron		
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
		VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
		HRc	60	100	75	90	130	110	90	100			200	280	250	350	320	400	1050Rm	550	630	400	550	
Recommended											○					○								

CARBIDE

HSS

YG

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 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

VG

HSS-E

DIN 374

6H

60°

C

R40

Bright

p.215

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	× 1.0	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	× 1.0	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	× 1.0	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

ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○	○

	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

198

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CARBIDE

HSS

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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 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

VG

HSS-E

DIN 374

6H

60°

C

R40

TiN

p.215

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	× 1.0	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	× 1.0	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	× 1.0	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

ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○	○

	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

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199

YG TAP STEEL

TB913 SERIES

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

6H

p.215

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	× 1.0	TB913316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TB913546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TB913786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

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	14	15	26	3	25	19	20			
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											○					○							

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

6H

60°

B

Vap

p.215

Recommended ToolHolder

Plain Shank TAPPING ER CHUCK TAPPING CHUCK ONE STEP TAPPING CHUCK

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	K1	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	× 1.0	TQ863316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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)

ISO	P										M			K				
Material Description	Non-alloy steel					Low alloy 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
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250
Recommended	○	○	○	◎	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○
ISO	N										S					H		
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

204

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YG-1 CO., LTD.

CARBIDE

HSS

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

6H

60°

B

Bright

p.215

Recommended ToolHolder

Plain Shank TAPPING ER CHUCK TAPPING CHUCK ONE STEP TAPPING CHUCK

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	K1	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	× 1.0	TR863316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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)

ISO	P										M			K				
Material Description	Non-alloy steel					Low alloy 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
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250
Recommended	○	○	○	◎	○	○	◎	◎	○	○	○	○	○	○	○	○	○	○
ISO	N										S					H		
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

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205



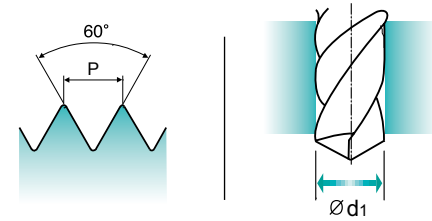
TD422 SERIES

ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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



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	× 1.0	TD422316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TD422546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TD422786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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											○					○						

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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 verschleißfördernder Werkstoffe wegen der Nitrierung; nicht geeignet für das Gewinden zäher oder hochfester Werkstoffe.

DIN 371

DIN 376

Hole type

3.0×D

60°

P

ØD2

ØD1

KI

L2

L3

Ød1

60°

P

ØD2

ØD1

KI

L2

L3

Ød1

VG

HSS-E

DIN 371/376

6H

60°

B

Nitride + Vap

p.215

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	Nitride + Vap	L1	L2	L3	ØD2	K	KI	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	× 1.0	TE422316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TE422546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TE422786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180
Recommended	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○
ISO	N					S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

208

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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

60°

P

ØD2

ØD1

KI

L2

L3

Ød1

60°

P

ØD2

ØD1

KI

L2

L3

Ød1

VG

HSS-E

DIN 371/376

6H

60°

B

TiAIN

p.215

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	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	× 1.0	TY422316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TY422546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TY422786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180
Recommended	○	○	○	◎	○	○	○	◎	◎	○	○	○	○	○	○
ISO	N					S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

209

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YG-1 CO., LTD.



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.215

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

										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	× 1.0	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	× 1.0	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	× 1.0	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		15	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

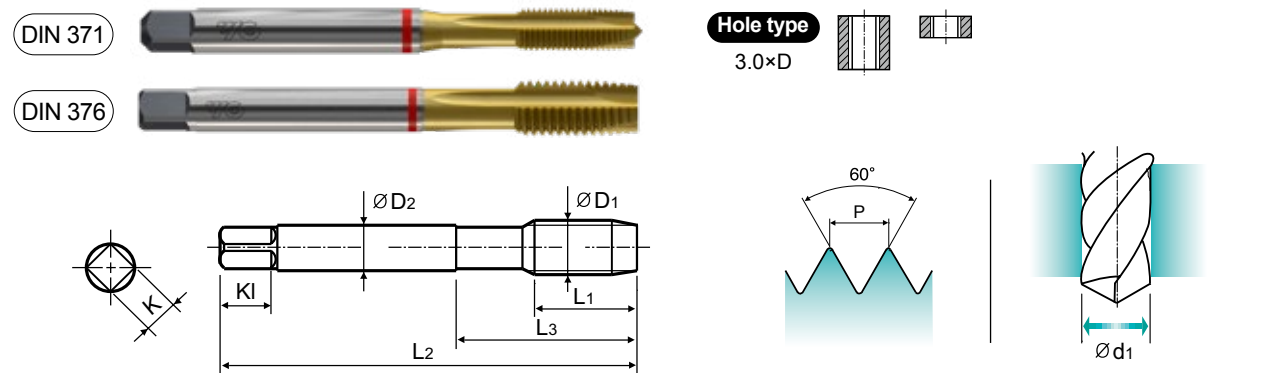
UNC Unified coarse threads

- 🇩🇪 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.



Material groups **VG** HSS-E DIN 371/376 2B 60° B TiN  p.215

 Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

Unit : mm										
SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁		TiN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
#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)

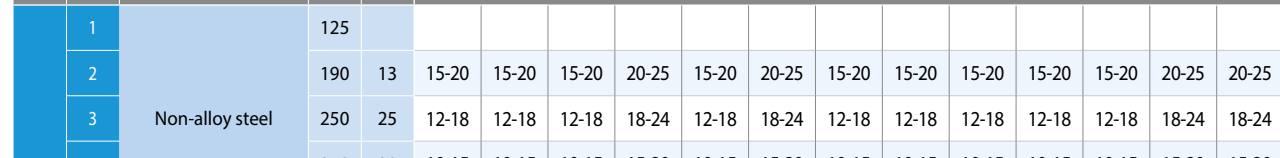
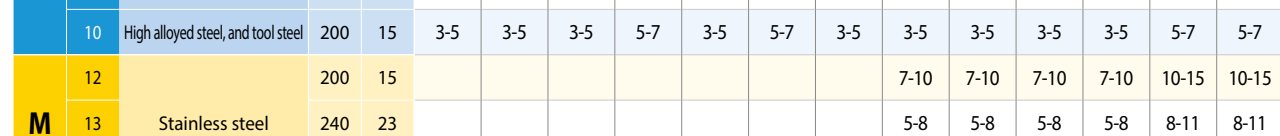
◎ : Excellent ○ : Good

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	15	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

TQ823	TR823	TC312 TC413 TC174 TC184	TD312 TD413 TD174	TB312	TY312	TB913	TQ863	TR863	TC422 TC263 TC244 TC254	TD422 TD263 TD244	TE422	TY422
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ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)
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S	14		180	10	4-6	4-6	4-6	6-8	4-6	6-8	4-6	4-6	4-6	4-6	6-8	6-8
	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	15-20	15-20
	36	Titanium Alloys	400Rm		10-15	10-15	10-15	15-20	10-15	15-20	10-15	10-15	10-15	10-15	15-20	15-20



Global Cutting Tool Leader **YG-1**

THREADING



Leading Through Innovation

HSS-E

YG TAP CHIP BREAKER

YG Gewindebohrer Chip Breaker

- TiN Coated Tap with Chip Breaker for Steel Materials
- TiN-beschichteter Gewindebohrer mit Spanbrecher für Stahlwerkstoffe

218 phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

YG-1 CO., LTD.





YG TAP

CHIP BREAKER

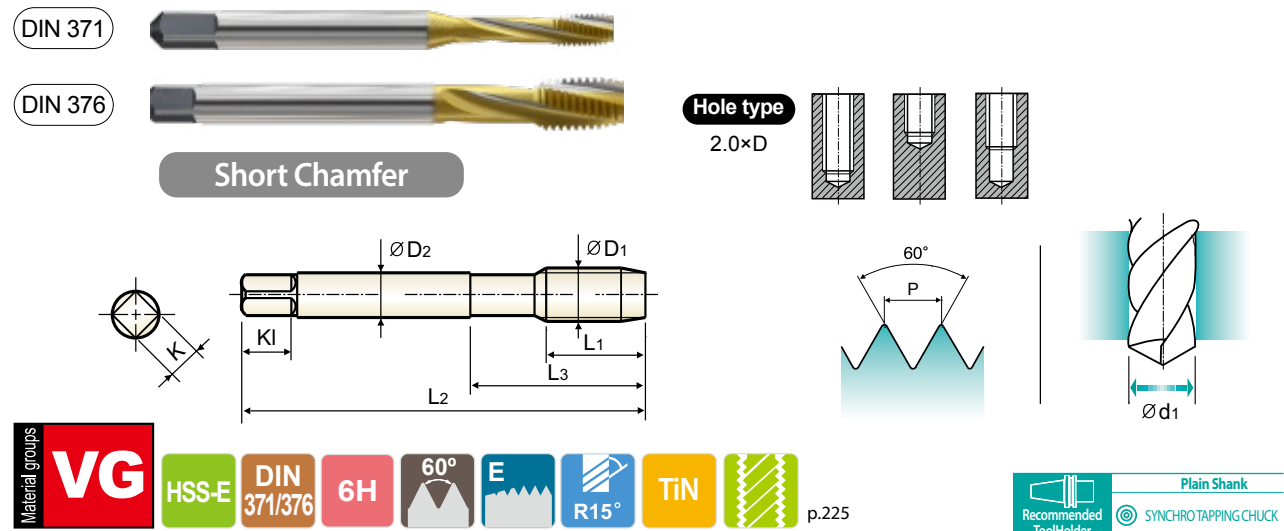
TDE26 SERIES

M ISO Metric Coarse Threads DIN 13

- 🇩🇪 **Metrisches ISO-Gewinde DIN 13**
- 🇫🇷 **ISO MÉTRIQUE DIN13**
- 🇮🇹 **ISO Metrico passo grosso DIN 13**

Machine taps
Maschinengewindebohrer

- ▶ Solving the productivity problem caused by long chips.
- ▶ Particularly suitable for machining non-alloy steel, low alloy steel, high alloy steel, and tool steel



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M4	× 0.7	TDE26246R	7	63	21	4.5	3.4	6	3	3.3
M5	× 0.8	TDE26286R	8	70	25	6	4.9	8	3	4.2
M6	× 1.0	TDE26316R	10	80	30	6	4.9	8	3	5.0
M8	× 1.25	TDE26366R	13	90	35	8	6.2	9	3	6.8
M10	× 1.5	TDE26426R	15	100	39	10	8.0	11	3	8.5
M12	× 1.75	TDE26506R	18	110	44	9	7.0	10	3	10.3
M14	× 2.0	TDE26546R	20	110	44	11	9.0	12	3	12.0
M16	× 2.0	TDE26606R	20	110	44	12	9.0	12	3	14.0
M18	× 2.5	TDE26656R	25	125	50	14	11.0	14	4	15.5
M20	× 2.5	TDE26706R	25	140	54	16	12.0	15	4	17.5

► DIN 371(M4-M10) and DIN 376(M12-M20)

[illegible]



YG TAP

CHIP BREAKER

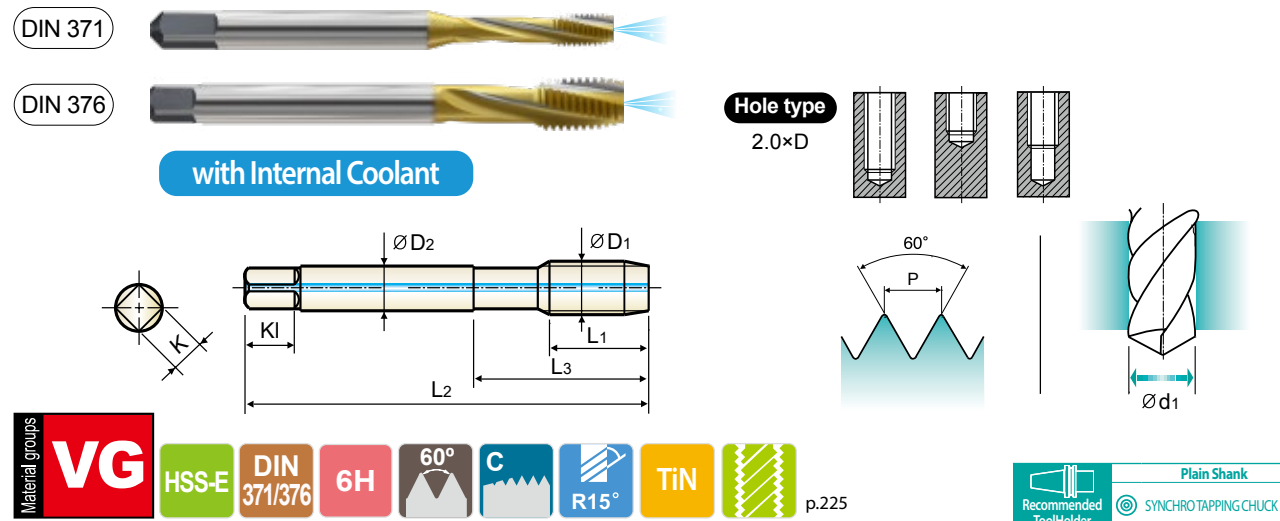
TDE28 SERIES

ISO Metric Coarse Threads DIN 13

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

Machine taps
Maschinengewindebohrer

- Solving the productivity problem caused by long chips.
- Particularly suitable for machining non-alloy steel, low alloy steel, high alloy steel, and tool steel



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M6 × 1.0		TDE28316R	10	80	30	6	4.9	8	3	5.0
M8 × 1.25		TDE28366R	13	90	35	8	6.2	9	3	6.8
M10 × 1.5		TDE28426R	15	100	39	10	8.0	11	3	8.5
M12 × 1.75		TDE28506R	18	110	44	9	7.0	10	3	10.3
M14 × 2.0		TDE28546R	20	110	44	11	9.0	12	3	12.0
M16 × 2.0		TDE28606R	20	110	44	12	9.0	12	3	14.0
M18 × 2.5		TDE28656R	25	125	50	14	11.0	14	4	15.5
M20 × 2.5		TDE28706R	25	140	54	16	12.0	15	4	17.5

► DIN 371(M6-M10) and DIN 376(M12-M20)

[illegible]


**YG TAP
CHIP BREAKER**

					TDE24, TDE25, TDE26, TDE27, TDE28, TDE29
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)
P	1	Non-alloy steel	125		7-12
	2		190	13	7-12
	3		250	25	4-8
	6	Low alloy steel	180	10	7-12
	7		275	29	7-12
	8		300	32	4-8
	9		350	38	4-8
	10	High alloyed steel, and tool steel	200	15	6-9
	11		325	35	4-8

[illegible]



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



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.249

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc				
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				

Max. 2.5xD Blind Hole						Max. 3.0xD Through Hole				
HSS-E						HSS-PM		HSS-E		
C	C	C	C	C	C	B	B	B	B	
Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point	Spiral Point	
R40	R40	R40	R40	R40	R40	-	-	-	-	
Ti914 (p.233)	TBE15 (p.234)	TBE16 (p.235)	TBE17 (p.236)	TBE18 (p.237)	TCH14 (p.238)	TQ853 (p.239)	TR853 (p.240)	TB623 (p.241)	TCH23 (p.242)	M
								TB123 (p.246)		MF
								TB264 (p.247)		UNC
								TB274 (p.248)		UNF
										BSW
										G(BSP)
										EG-M
										EG-UNC
										EG-UNF
TiCN	VAP	VAP	VAP	VAP	HardSlick	VAP	Bright	VAP	HardSlick	
										
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TQ813 SERIES

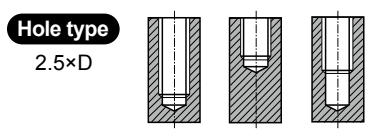
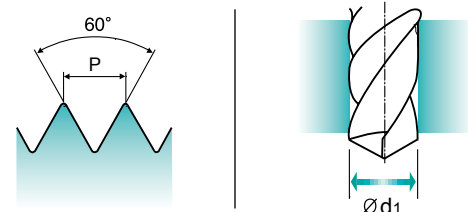
ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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

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



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	KI	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	× 1.0	TQ813316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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

◎: 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	32	60	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	36	37	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

YG

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

60°

P

ØD2

ØD1

KI

L2

L3

L1

Ød1

60°

P

ØD2

ØD1

KI

L2

L3

L1

Ød1

Material groups

VANW

HSS-E

DIN 371/376

4H

60°

C

R40

Vap

p.249

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	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	× 1.0	TBE15316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TBE15546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TBE15786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

ISO

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

ISO

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

234

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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

60°

P

ØD2

ØD1

KI

L2

L3

L1

Ød1

60°

P

ØD2

ØD1

KI

L2

L3

L1

Ød1

Material groups

VANW

HSS-E

DIN 371/376

6H+0.1

60°

C

R40

Vap

p.249

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	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	× 1.0	TBE16316	10	80	30	6	4.9	8	3	5.1
M7	× 1.0	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	× 2.0	TBE16546	20	110	44	11	9	12	3	12.1
M16	× 2.0	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	× 3.0	TBE16786	30	160	60	18	14.5	17	4	21.1
M27	× 3.0	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

ISO

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

ISO

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

235

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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

ØD2

ØD1

L2

L3

L1

KI

K

60°

P

Ød1

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Material groups

VA

NW

HSS-E

DIN 371/376

6G

60°

C

R40

Vap

p.249

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	KI	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	× 1.0	TBE17316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TBE17546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TBE17786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

ISO

Material Description

VDI 3323

HRC

HB

Recommended

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

236

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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

ØD2

ØD1

L2

L3

L1

KI

K

60°

P

Ød1

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Material groups

VA

NW

HSS-E

DIN 371/376

7G

60°

C

R40

Vap

p.249

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	KI	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	× 1.0	TBE18316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TBE18546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TBE18786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

ISO

Material Description

VDI 3323

HRC

HB

Recommended

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

237

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YG TAP INOX

TQ853 SERIES

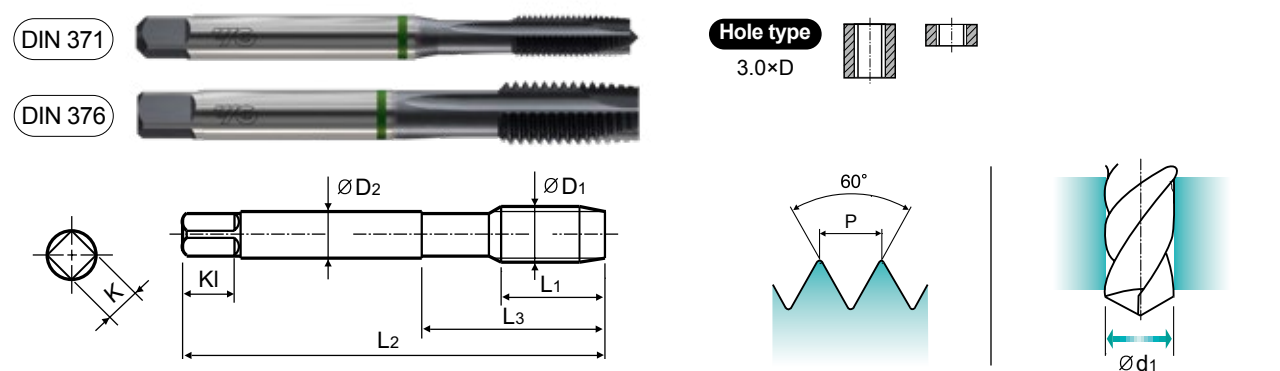
M **ISO metric coarse threads DIN 13**

- 🇩🇪 **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.



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	× 1.0	TQ853316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	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
HRC											15	30	25	38	34			55	60	42
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended											○					○				



TB623 SERIES

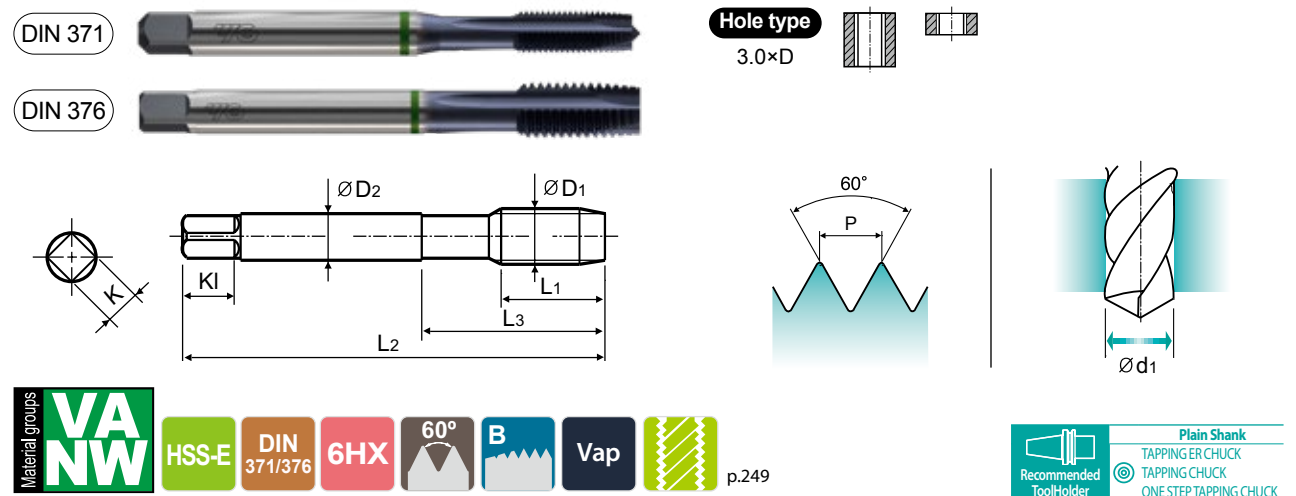
ISO metric coarse threads DIN 13

- 🇩🇪 Metrisches ISO-Gewinde DIN 13
- 🇫🇷 ISO MÉTRIQUE DIN13
- 🇮🇹 ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.

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



Unit : mm

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	× 1.0	TB623316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TB623546	26	110	44	11	9	12	4	12
M16	× 2.0	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	× 3.0	TB623786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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

◎: 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	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											○					○					



TCH23 SERIES

TB183 SERIES

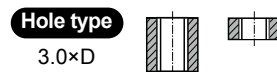
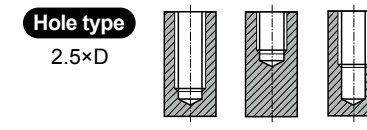
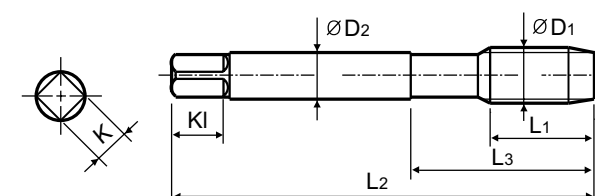
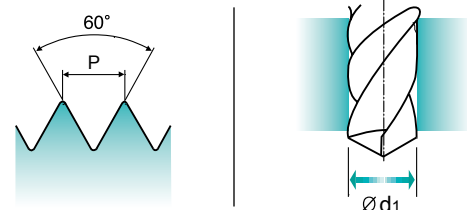
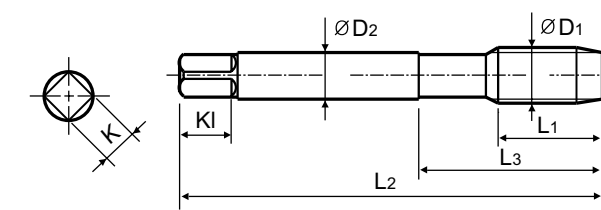
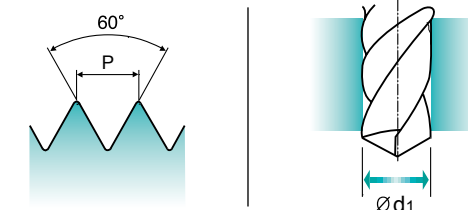
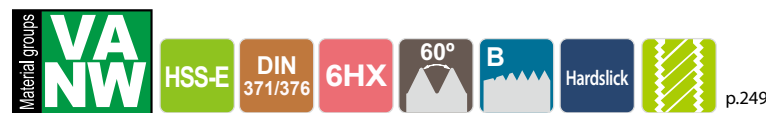
 ISO metric fine threads DIN 13

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

Machine taps
Maschinengewindebohrer

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

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



Unit : mm

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	KI	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	× 1.0	TCH23316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TCH23546	26	110	44	11	9	12	4	12
M16	× 2.0	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	× 3.0	TCH23786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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 alloy 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	Hardene 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											○					○						

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	× 1.0	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	× 1.0	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	× 1.0	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

[illegible]


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

60°

P

ØD1

ØD2

L1

L2

L3

K1

K

Material groups

VA
NW

HSS-E

DIN
371/376

2B

60°

B

Vap

p.249

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	12	13	25	28	32	60	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

YG

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

60°

P

ØD2

ØD1

KL

L1

L2

L3

60°

P

Ød1

Material groups

VANW

HSS-E

DIN 371/374

2B

60°

B

Vap

p.249

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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

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

60°

P

ØD2

ØD1

KL

L1

L2

L3

60°

P

Ød1

Material groups

VANW

HSS-E

DIN 371/374

2B

60°

B

Vap

p.249

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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

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.

248

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YG-1 CO., LTD.

RECOMMENDED CUTTING CONDITIONS

EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	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		
	2		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	20-25			
	3		250	25		12-18	12-18	12-18	18-24	12-18	12-18	12-18	12-18	18-24	12-18	12-18	18-24			
	4		270	28		10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	15-20			
	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		
	13		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	8-11			
	14		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	6-8			
N	21	Aluminum-wrought alloy	60		10-15															
	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		
	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		

249

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YG-1 CO., LTD.

CARBIDE

HSS

YG

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

60°

P

ØD2

ØD1

KL

L1

L2

L3

60°

P

Ød1

Material groups

VANW

HSS-E

DIN 371/374

2B

60°

B

Vap

p.249

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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

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.

248

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YG-1 CO., LTD.

RECOMMENDED CUTTING CONDITIONS

EMPFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRc	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		
	2		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	20-25			
	3		250	25		12-18	12-18	12-18	18-24	12-18	12-18	12-18	12-18	18-24	12-18	12-18	18-24			
	4		270	28		10-15	10-15	10-15	15-20	10-15	10-15	10-15	10-15	15-20	10-15	10-15	15-20			
	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		
	13		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	8-11			
	14		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	6-8			
N	21	Aluminum-wrought alloy	60		10-15															
	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		
	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		

249

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YG-1 CO., LTD.



Global Cutting Tool Leader **YG-1**

THREADING



Leading Through Innovation

SOLID CARBIDE & HSS-PM & HSS-E

YG TAP CAST IRON

HSS YG Gewindebohrer Guss

- For Cast Iron or Similar Work Materials
- Für Gusseisen oder ähnliche Werkstoffe

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 Cast Aluminum.

► VHM-Gewindebohrer bieten aufgrund ihrer höheren Härte eine längere Standzeit als HSS-Gewindebohrer. Geeignet für Gusseisen und Aluminiumguss.

DIN 371

DIN 376

Hole type
2.5×D

Short Chamfer

Material groups

GG CARBIDE DIN 371/376 6HX 60° E TiAlN

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

p.282

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M5	x 0.8	T0B01286TIA	15	70	25	6	4.9	8	3	4.2
M6	x 1.0	T0B01316TIA	17	80	30	6	4.9	8	4	5
M8	x 1.25	T0B01366TIA	20	90	35	8	6.2	9	4	6.75
M10	x 1.5	T0B01426TIA	22	100	39	10	8	11	4	8.5
M12	x 1.75	T0B01506TIA	24	110	44	9	7	10	4	10.25

► DIN 371(up to M10) and DIN 376(above M10)

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended															◎	◎	◎	◎	○	○
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			◎		◎		◎													◎

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 Cast Aluminum.

► VHM-Gewindebohrer bieten aufgrund ihrer höheren Härte eine längere Standzeit als HSS-Gewindebohrer. Geeignet für Gusseisen und Aluminiumguss.

DIN 371

DIN 376

Hole type
2.0×D

Short Chamfer

Material groups

GG CARBIDE DIN 371/376 6HX 60° C Bright

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

p.282

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	Bright	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M3	x 0.5	T0993206	11	56	18	3.5	2.7	6	3	2.5
M3.5	x 0.6	T0993226	12	56	20	4	3	6	3	2.9
M4	x 0.7	T0993246	13	63	21	4.5	3.4	6	3	3.3
M5	x 0.8	T0993286	15	70	25	6	4.9	8	4	4.2
M6	x 1.0	T0993316	17	80	30	6	4.9	8	4	5
M8	x 1.25	T0993366	20	90	35	8	6.2	9	4	6.8
M10	x 1.5	T0993426	22	100	39	10	8	11	4	8.5
M12	x 1.75	T0993506	24	110	44	9	7	10	4	10.2
M14	x 2.0	T0993546	26	110	44	11	9	12	4	12
M16	x 2.0	T0993606	27	110	44	12	9	12	4	14
M18	x 2.5	T0993656	30	125	50	14	11	14	4	15.5
M20	x 2.5	T0993706	32	140	54	16	12	15	4	17.5

► DIN 371(up to M10) and DIN 376(above M10)

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended															◎	◎	◎	◎	○	○
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			◎		◎		◎													◎

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

M

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

► HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

► Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 371

DIN 376

Hole type

2.0×D

CARBIDE

HSS

YG TAP
CAST IRON

NEW
TRB23 SERIES

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 371

DIN 376

Hole type
2.5×D

GG

HSS PM

DIN 371/376

6HX

60°

C

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M5	x 0.8	TRB23286TIAP	15	70	25	6	4.9	8	3	4.2
M6	x 1.0	TRB23316TIAP	17	80	30	6	4.9	8	4	5
M8	x 1.25	TRB23366TIAP	20	90	35	8	6.2	9	4	6.75
M10	x 1.5	TRB23426TIAP	22	100	39	10	8	11	4	8.5
M12	x 1.75	TRB23506TIAP	24	110	44	9	7	10	4	10.25
M14	x 2.0	TRB23546TIAP	26	110	44	11	9	12	5	12
M16	x 2.0	TRB23606TIAP	27	110	44	12	9	12	5	14
M18	x 2.5	TRB23656TIAP	30	125	50	14	11	14	5	15.5
M20	x 2.5	TRB23706TIAP	32	140	54	16	12	15	5	17.5

DIN 371(up to M10) and DIN 376(above M10)

ISO

Material Description

VDI 3323

HRc

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

1

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19

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125

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25

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32

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ISO

Material Description

VDI 3323

HRc

HB

Recommended

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

21

22

23

24

25

26

27

28

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30

31

32

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34

35

36

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40

41

60

100

75

90

130

110

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100

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400Rm

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262

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YG-1 CO., LTD.

CARBIDE

HSS

YG TAP
CAST IRON

TE821 SERIES

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

GG

HSS-E

DIN 371/376

6HX

60°

C

Nitride + Vap

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Nitride + Vap	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2	x 0.4	TE821136	8	45	13	2.8	2.1	5	3	1.6
M2.2	x 0.45	TE821156	8	45	13	2.8	2.1	5	3	1.75
*M2.3	x 0.4	TE821196	8	45	13	2.8	2.1	5	3	1.9
M2.5	x 0.45	TE821176	9	50	15	2.8	2.1	5	3	2.05
*M2.6	x 0.45	TE821496	9	50	15	2.8	2.1	5	3	2.1
M3	x 0.5	TE821206	11	56	18	3.5	2.7	6	3	2.5
M3.5	x 0.6	TE821226	12	56	20	4	3	6	3	2.9
M4	x 0.7	TE821246	13	63	21	4.5	3.4	6	3	3.3
M4.5	x 0.75	TE821266	14	70	25	6	4.9	8	3	3.7
M5	x 0.8	TE821286	15	70	25	6	4.9	8	4	4.2
M6	x 1.0	TE821316	17	80	30	6	4.9	8	4	5
M7	x 1.0	TE821346	17	80	30	7	5.5	8	4	6
M8	x 1.25	TE821366	20	90	35	8	6.2	9	4	6.8
M9	x 1.25	TE821396	20	90	35	9	7	10	4	7.8
M10	x 1.5	TE821426	22	100	39	10	8	11	4	8.5
M11	x 1.5	TE821466	22	100	40	8	6.2	9	4	9.5
M12	x 1.75	TE821506	24	110	44	9	7	10	4	10.2
M14	x 2.0	TE821546	26	110	44	11	9	12	4	12
M16	x 2.0	TE821606	27	110	44	12	9	12	4	14
M18	x 2.5	TE821656	30	125	50	14	11	14	4	15.5
M20	x 2.5	TE821706	32	140	54	16	12	15	4	17.5
M22	x 2.5	TE821746	32	140	54	18	14.5	17	4	19.5
M24	x 3.0	TE821786	34	160	60	18	14.5	17	4	21
M27	x 3.0	TE821866	36	160	60	20	16	19	4	24
M30	x 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

ISO

Material Description

VDI 3323

HRc

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

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ISO

Material Description

VDI 3323

HRc

HB

Recommended

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

21

22

23

24

25

26

27

28

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30

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32

33

34

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36

37

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39

40

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60

100

75

90

130

110

90

100

200

280

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350

320

400Rm

1050Rm

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630

400

550

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YG-1 CO., LTD.

phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

263



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

- Carbide tap can increase tool life longer than HSS taps due to higher hardness. Suitable for Cast Iron and Cast Aluminum.
- VHM-Gewindebohrer bieten aufgrund ihrer höheren Härte eine längere Standzeit als HSS-Gewindebohrer. Geeignet für Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.5×D

Short Chamfer

Material groups

GG

CARBIDE

DIN 374

6HX

60°

E

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TOB02376TIA	17	90	36	6	4.9	8	4	7
M8	x 0.75	TOB02386TIA	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TOB02436TIA	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TOB02446TIA	18	90	36	7	5.5	8	4	9
M12	x 1.5	TOB02516TIA	22	100	40	9	7	10	4	10.5
M12	x 1.25	TOB02526TIA	22	100	40	9	7	10	4	10.75
M12	x 1.0	TOB02536TIA	18	100	40	9	7	10	4	11

Unit : mm

◎ : 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		550		
Recommended			◎		◎		◎													◎			



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

- HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.
- Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.0×D

Material groups

GG

HSS PM

DIN 374

6HX

60°

C

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TRB11376TIA	17	90	36	6	4.9	8	4	7
M8	x 0.75	TRB11386TIA	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TRB11436TIA	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TRB11446TIA	18	90	36	7	5.5	8	4	9
M12	x 1.5	TRB11516TIA	22	100	40	9	7	10	4	10.5
M12	x 1.25	TRB11526TIA	22	100	40	9	7	10	4	10.75
M12	x 1.0	TRB11536TIA	18	100	40	9	7	10	4	11
M14	x 1.5	TRB11556TIA	22	100	40	11	9	12	5	12.5
M14	x 1.25	TRB11566TIA	22	100	40	11	9	12	5	12.75
M14	x 1.0	TRB11576TIA	18	100	40	11	9	12	5	13
M16	x 1.5	TRB11616TIA	22	100	40	12	9	12	5	14.5
M16	x 1.0	TRB11626TIA	18	100	40	12	9	12	5	15
M18	x 1.5	TRB11676TIA	25	110	44	14	11	14	5	16.5
M20	x 1.5	TRB11726TIA	25	125	50	16	12	15	5	18.5
M22	x 1.5	TRB11766TIA	25	125	50	18	14.5	17	5	20.5
M24	x 1.5	TRB11806TIA	27	140	54	18	14.5	17	5	22.5

Unit : mm

◎ : 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			◎		◎		◎																

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.0×D

Short Chamfer

Material groups

GG

HSS PM

DIN 374

6HX

60°

E

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TRB07376TIA	17	90	36	6	4.9	8	4	7
M8	x 0.75	TRB07386TIA	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TRB07436TIA	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TRB07446TIA	18	90	36	7	5.5	8	4	9
M12	x 1.5	TRB07516TIA	22	100	40	9	7	10	4	10.5
M12	x 1.25	TRB07526TIA	22	100	40	9	7	10	4	10.75
M12	x 1.0	TRB07536TIA	18	100	40	9	7	10	4	11
M14	x 1.5	TRB07556TIA	22	100	40	11	9	12	5	12.5
M14	x 1.25	TRB07566TIA	22	100	40	11	9	12	5	12.75
M14	x 1.0	TRB07576TIA	18	100	40	11	9	12	5	13
M16	x 1.5	TRB07616TIA	22	100	40	12	9	12	5	14.5
M16	x 1.0	TRB07626TIA	18	100	40	12	9	12	5	15
M18	x 1.5	TRB07676TIA	25	110	44	14	11	14	5	16.5
M20	x 1.5	TRB07726TIA	25	125	50	16	12	15	5	18.5
M22	x 1.5	TRB07766TIA	25	125	50	18	14.5	17	5	20.5
M24	x 1.5	TRB07806TIA	27	140	54	18	14.5	17	5	22.5

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			⊙		⊙		⊙													

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.5×D

Short Chamfer

Material groups

GG

HSS PM

DIN 374

6HX

60°

C

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TRB20376TIA	17	90	36	6	4.9	8	4	7
M8	x 0.75	TRB20386TIA	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TRB20436TIA	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TRB20446TIA	18	90	36	7	5.5	8	4	9
M12	x 1.5	TRB20516TIA	22	100	40	9	7	10	4	10.5
M12	x 1.25	TRB20526TIA	22	100	40	9	7	10	4	10.75
M12	x 1.0	TRB20536TIA	18	100	40	9	7	10	4	11
M14	x 1.5	TRB20556TIA	22	100	40	11	9	12	5	12.5
M14	x 1.25	TRB20566TIA	22	100	40	11	9	12	5	12.75
M14	x 1.0	TRB20576TIA	18	100	40	11	9	12	5	13
M16	x 1.5	TRB20616TIA	22	100	40	12	9	12	5	14.5
M16	x 1.0	TRB20626TIA	18	100	40	12	9	12	5	15
M18	x 1.5	TRB20676TIA	25	110	44	14	11	14	5	16.5
M20	x 1.5	TRB20726TIA	25	125	50	16	12	15	5	18.5
M22	x 1.5	TRB20766TIA	25	125	50	18	14.5	17	5	20.5
M24	x 1.5	TRB20806TIA	27	140	54	18	14.5	17	5	22.5

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			⊙		⊙		⊙													

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.5×D

Short Chamfer

GG

HSS PM

DIN 374

6HX

60°

E

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TRB14376TIA	17	90	36	6	4.9	8	4	7
M8	x 0.75	TRB14386TIA	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TRB14436TIA	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TRB14446TIA	18	90	36	7	5.5	8	4	9
M12	x 1.5	TRB14516TIA	22	100	40	9	7	10	4	10.5
M12	x 1.25	TRB14526TIA	22	100	40	9	7	10	4	10.75
M12	x 1.0	TRB14536TIA	18	100	40	9	7	10	4	11
M14	x 1.5	TRB14556TIA	22	100	40	11	9	12	5	12.5
M14	x 1.25	TRB14566TIA	22	100	40	11	9	12	5	12.75
M14	x 1.0	TRB14576TIA	18	100	40	11	9	12	5	13
M16	x 1.5	TRB14616TIA	22	100	40	12	9	12	5	14.5
M16	x 1.0	TRB14626TIA	18	100	40	12	9	12	5	15
M18	x 1.5	TRB14676TIA	25	110	44	14	11	14	5	16.5
M20	x 1.5	TRB14726TIA	25	125	50	16	12	15	5	18.5
M22	x 1.5	TRB14766TIA	25	125	50	18	14.5	17	5	20.5
M24	x 1.5	TRB14806TIA	27	140	54	18	14.5	17	5	22.5

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			⊙		⊙		⊙													

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 374

Hole type

2.5×D

Short Chamfer

GG

HSS PM

DIN 374

6HX

60°

C

TiAlN

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
M8	x 1.0	TRB24376TIAP	17	90	36	6	4.9	8	4	7
M8	x 0.75	TRB24386TIAP	14	80	30	6	4.9	8	4	7.25
M10	x 1.25	TRB24436TIAP	22	100	40	7	5.5	8	4	8.75
M10	x 1.0	TRB24446TIAP	18	90	36	7	5.5	8	4	9
M12	x 1.5	TRB24516TIAP	22	100	40	9	7	10	4	10.5
M12	x 1.25	TRB24526TIAP	22	100	40	9	7	10	4	10.75
M12	x 1.0	TRB24536TIAP	18	100	40	9	7	10	4	11
M14	x 1.5	TRB24556TIAP	22	100	40	11	9	12	5	12.5
M14	x 1.25	TRB24566TIAP	22	100	40	11	9	12	5	12.75
M14	x 1.0	TRB24576TIAP	18	100	40	11	9	12	5	13
M16	x 1.5	TRB24616TIAP	22	100	40	12	9	12	5	14.5
M16	x 1.0	TRB24626TIAP	18	100	40	12	9	12	5	15
M18	x 1.5	TRB24676TIAP	25	110	44	14	11	14	5	16.5
M20	x 1.5	TRB24726TIAP	25	125	50	16	12	15	5	18.5
M22	x 1.5	TRB24766TIAP	25	125	50	18	14.5	17	5	20.5
M24	x 1.5	TRB24806TIAP	27	140	54	18	14.5	17	5	22.5

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended			⊙		⊙		⊙													

CARBIDE

HSS

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 + Vap

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Nitride + Vap	L1	L2	L3	ØD2	K	Kl	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	× 1.0	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	× 1.0	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	× 1.0	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	30	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

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

Hole type
2.0×D

Material groups

GG

HSS-E

DIN 371/376

2BX

60°

C

Nitride + Vap

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Nitride + Vap	L1	L2	L3	ØD2	K	Kl	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	30	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																					

274

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YG-1 CO., LTD.

CARBIDE

HSS

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

Hole type
2.0×D

Material groups

GG

HSS-E

DIN 371/376

2BX

60°

C

Nitride + Vap

p.282

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Nitride + Vap	L1	L2	L3	ØD2	K	Kl	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	30	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																					

275

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YG-1 CO., LTD.

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 5156

Hole type

2.0×D

Short Chamfer

Material groups

GG

HSS PM

DIN 5156

55°

E

TiAlN

p.282

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
G1/16 - 28		TRB08020TIA	20	90	36	6	4.9	8	4	6.8
G1/8 - 28		TRB08200TIA	20	90	36	7	5.5	8	4	8.8
G1/4 - 19		TRB08400TIA	22	100	48	11	9	12	5	11.8
G3/8 - 19		TRB08480TIA	22	100	52	12	9	12	5	15.25
G1/2 - 14		TRB08560TIA	25	125	70	16	12	15	5	19
G3/4 - 14		TRB08700TIA	28	140	82	20	16	19	5	24.5

PIPE TAP
STI TAP
NUT TAP
TECHNICAL DATA

◎ : 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	36	37	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			◎		◎		◎														

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

HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

DIN 5156

Hole type

2.5×D

Short Chamfer

Material groups

GG

HSS PM

DIN 5156

55°

C

TiAlN

p.282

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
G1/16 - 28		TRB22020TIA	20	90	36	6	4.9	8	4	6.8
G1/8 - 28		TRB22200TIA	20	90	36	7	5.5	8	4	8.8
G1/4 - 19		TRB22400TIA	22	100	48	11	9	12	5	11.8
G3/8 - 19		TRB22480TIA	22	100	52	12	9	12	5	15.25
G1/2 - 14		TRB22560TIA	25	125	70	16	12	15	5	19

PIPE TAP
STI TAP
NUT TAP
TECHNICAL DATA

◎ : 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	36	37	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**



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

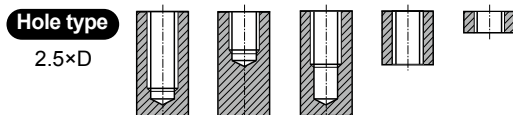
Machine taps Maschinengewindebohrer

► HSS-PM versatile solution with advanced geometry, ensuring stable performance in Cast Iron and Cast Aluminum.

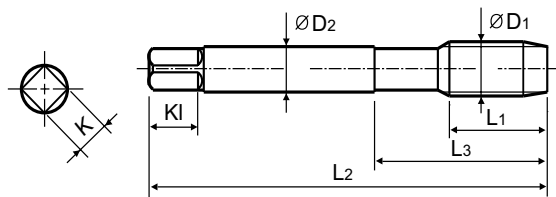
► Vielseitige HSS-PM-Lösung mit fortschrittlicher Geometrie für eine stabile Leistung in Gusseisen und Aluminiumguss.

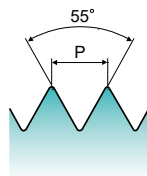


DIN 5156

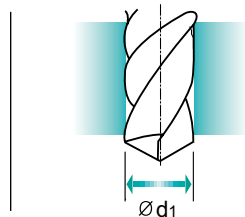


Hole type
2.5xD





55°
P



Ød1















p.282





Unit : mm										
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁	P	TiAlN	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
G1/16 - 28		TRB25020TIAP	20	90	36	6	4.9	8	4	6.8
G1/8 - 28		TRB25200TIAP	20	90	36	7	5.5	8	4	8.8
G1/4 - 19		TRB25400TIAP	22	100	48	11	9	12	5	11.8
G3/8 - 19		TRB25480TIAP	22	100	52	12	9	12	5	15.25
G1/2 - 14		TRB25560TIAP	25	125	70	16	12	15	5	19

[illegible]

THREAD MILL
SYNCHRO TAP
PRIME TAP / FORMING
COMBO TAP
YG TAP STEEL
YG TAP CHIP BREAKER
YG TAP INOX
YG TAP CAST IRON
YG TAP HARDENED STEEL
YG TAP Ti Ni
YG TAP ALU
YG TAP FORMING
YG TAP GENERAL / HAND TAP
PIPE TAP
STI TAP
NUT TAP
TECHNICAL DATA

					T0B04, T0B05 T0B01, T0B02	T0993	TRB10, TRB11 TRB12, TRB06 TRB07, TRB08
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)		
K	15	Grey cast iron	180	10	15-50	10-15	5-20
	16		260	26	10-30	5-8	8-11
	17	Nodular cast iron	160	3	15-50	10-18	15-20
	18		250	25	10-30	5-8	8-11
	19	Malleable cast iron	130		15-50	10-15	15-20
	20		230	21	10-30	5-8	8-11
N	23	Aluminum-cast, alloyed	75		15-50	15-20	15-20
	25		130		10-40	10-15	10-15
	27	Copper and Copper Alloys (Bronze / Brass)	90		12-40	12-16	12-16
H	40	Chilled Cast Iron	400	42	3-15		

					TRB19, TRB20 TRB22, TRB13 TRB14, TRB18 TRB23, TRB24 TRB25	TE821 TE403 TE434 TE454	TD821 TI821 TY821
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)		
K	15	Grey cast iron	180	10	15-30	10-15	15-20
	16		260	26	8-16	5-8	8-11
	17	Nodular cast iron	160	3	15-30	10-15	15-20
	18		250	25	8-16	5-8	8-11
	19	Malleable cast iron	130		15-30	10-15	15-20
	20		230	21	8-16	5-8	8-11
N	23	Aluminum-cast, alloyed	75		15-30		
	25		130		10-20		
	27	Copper and Copper Alloys (Bronze / Brass)	90		12-24	8-12	12-16
H	40	Chilled Cast Iron	400	42			



Leading Through Innovation

SOLID CARBIDE & HSS-E & HSS-PM

YG TAP HARDENED

YG GEWINDEBOHRER FÜR 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

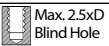


SOLID CARBIDE & HSS-E & HSS PM
YG TAP
HARDENED

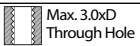
For Hardened Steels Applications
to Control the Continuous and Red-glowing Chips

Please visit globalyg1.com/mat for material search
◎ : Excellent ○ : Good
Recommended cutting conditions : p.297

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc				NEW
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	◎		◎	



Max. 2.5xD
Blind Hole



Max. 3.0xD
Through Hole

HSS-E			HSS-PM	HSS-E	
C	C	C	B	B	B
Spiral Flute	Spiral Flute	Spiral Flute	Spiral Point	Spiral Point	Spiral Point
R40	R40	R40		-	-
TC313 (p.289)	TB313 (p.290)	TY313 (p.291)	TKJ26 (p.292)	TC283 (p.293)	TY283 (p.294)
					M
					MF
			TKJ27 (p.296)		UNC
					UNF
					BSW
					G(BSP)
					EG-M
					EG-UNC
					EG-UNF
Bright	VAP	TIAlN	TiCN	Bright	TIAlN
					P
					7
					8
					9
					10
					11
					12
					M
					13
					14
					15
					16
					17
					K
					18
					19
					20
					21
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					41

THREAD
MILL

SYNCHRO
TAP

PRIME TAP /
FORMING

COMBO
TAP

YG TAP
STEEL

YG TAP CHIP
BREAKER

YG TAP
INOX

YG TAP
CAST IRON

YG TAP
HARDENED
STEEL

YG TAP
Ti Ni

YG TAP
ALU

YG TAP
FORMING

YG TAP
GENERAL
/ HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA



T0997-TIC SERIES

M

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

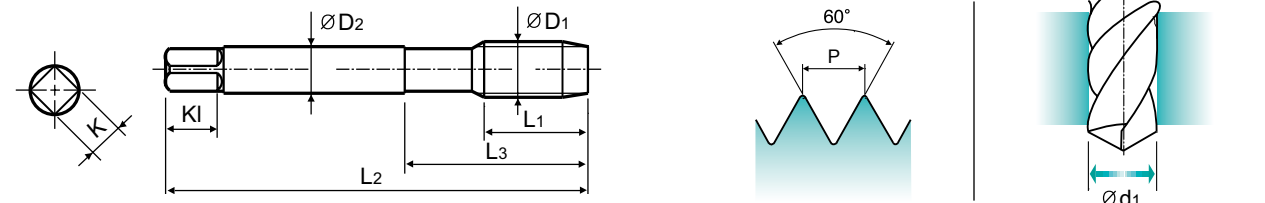
ISO MÉTRIQUE DIN13

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 hardened steels (HRc50~60)

► VHM-Gewindebohrer ermöglichen aufgrund ihrer höheren Härte bessere Standzeiten als HSS-Gewindebohrer. Geeignet für gehärtete Stähle (HRc50~60)



Material groups

HR

CARBIDE

DIN 371/376

6HX

60°

C

TICN

p.297

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	× 1.0	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	× 2.0	T0997546TIC	26	110	—	11	9	12	6	12.2
M16	× 2.0	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)

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	190	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended																				



T0999-TIC SERIES

M

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

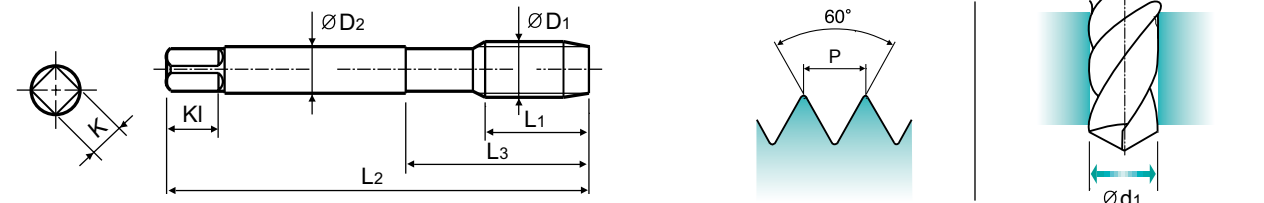
ISO MÉTRIQUE DIN13

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 hardened steels (HRc50~60)

► VHM-Gewindebohrer ermöglichen aufgrund ihrer höheren Härte bessere Standzeiten als HSS-Gewindebohrer. Geeignet für gehärtete Stähle (HRc50~60)



Material groups

HR

CARBIDE

DIN 371/376

6HX

60°

D

TICN

p.297

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	× 1.0	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	× 2.0	T0999546TIC	26	110	—	11	9	12	6	12.2
M16	× 2.0	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)

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	190	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended																				



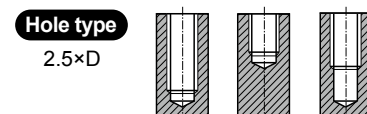
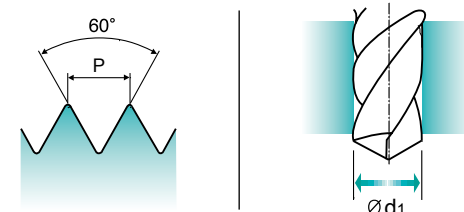
ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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

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



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	× 1.0	TY313316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TY313546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TY313786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

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**YG TAP
HARDENED**

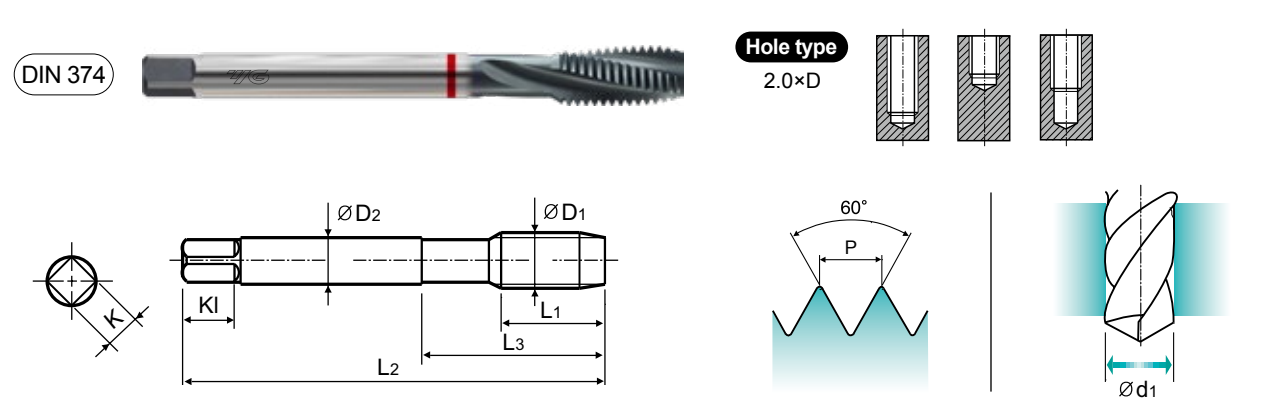


MF **ISO metric fine threads DIN 13**

- 🇩🇪 **Metrisches ISO-Feingewinde DIN 13**
- 🇫🇷 **ISO MÉTRIQUE PAS FINS DIN13**
- 🇮🇹 **ISO Metrico passo fine DIN 13**

Machine taps
Maschinengewindebohrer

► Suitable for blind hole tapping thanks to special flute geometry and excellent chip evacuation, optimized for steels up to **HRC 25 – 45**.



Material groups

HR

HSS PM

DIN 374

6HX

60°

C

R15

TiCN

p.297

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
M4	× 0.5	TKE44256	10	63	21	2.8	2.1	5	3	3.5
M5	× 0.5	TKE44296	11	70	25	3.5	2.7	6	3	4.5
M6	× 0.75	TKE44326	13	80	30	4.5	3.4	6	3	5.3
M6	× 0.5	TKE44336	13	80	30	4.5	3.4	6	3	5.5
M8	× 1.0	TKE44376	17	90	36	6	4.9	8	3	7
M8	× 0.75	TKE44386	14	80	30	6	4.9	8	3	7.3
M10	× 1.25	TKE44436	22	100	40	7	5.5	8	3	8.8
M10	× 1.0	TKE44446	18	90	36	7	5.5	8	3	9
M10	× 0.75	TKE44456	18	90	36	7	5.5	8	3	9.3
M12	× 1.5	TKE44516	22	100	40	9	7	10	3	10.5
M12	× 1.25	TKE44526	22	100	40	9	7	10	3	10.8
M12	× 1.0	TKE44536	18	100	40	9	7	10	3	11
M14	× 1.5	TKE44556	22	100	47	11	9	12	4	12.5
M14	× 1.25	TKE44566	22	100	47	11	9	12	4	12.8
M16	× 1.5	TKE44616	22	100	49	12	9	12	4	14.5
M18	× 1.5	TKE44676	25	110	55	14	11	14	4	16.5
M20	× 1.5	TKE44726	25	125	60	16	12	15	4	18.5
M22	× 1.5	TKE44766	25	125	65	18	14.5	17	4	20.5
M24	× 1.5	TKE44806	27	140	70	18	14.5	17	4	22.5

◎: Excellent ○: Good

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RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

	T0997-TIC	T0999-TIC	TKE43 TKE44	TKJ26 TKJ27	TC313 TB313 TY313	TC283 TY283
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ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)					
P	5	Non-alloy steel	300	32			10-35	10-35		
	7		275	29			10-35	10-35	10-15	10-15
	8		300	32			10-35	10-35	6-10	6-10
	9		350	38	5-8	5-8	10-35	10-35	3-5	3-5
	10		200	15			6-12	6-12		
	11		325	35			6-12	6-12		
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		3-15		
	41	Hardened Cast Iron	550	55	3-7	3-7				



Global Cutting Tool Leader **YG-1**

THREADING



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

THREADING
TOOLS

HSS-PM
YG TAP
Ti Ni

For Heat Resistant Super Alloys and Titanium Alloys
Applied with Cutting Edge Rake Angles and Thread Relief



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC				
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		≤ 12% Si, Not Curable		75					
	24	Aluminum-cast, alloyed	≤ 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			Annealed	250	25			○	○
	34		Ni or Co Based	Cured	350	38			○	○
	35			Cast	320	34			○	○
	36	Titanium Alloys	Pure Titanium		400 Rm		○	○	○	○
	37		Alpha + Beta Alloys	Hardened	1050 Rm		◎	◎	◎	◎
H	38	Hardened steel		Hardened	550	55				
	39			Hardened	630	60				
	40	Chilled Cast Iron		Cast	400	42			○	○
	41	Hardened Cast Iron		Hardened	550	55				

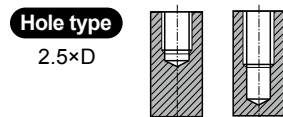
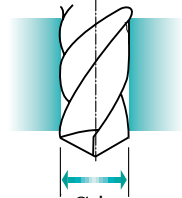
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ISO metric coarse threads DIN 13

Machine taps
Maschinengewindebohrer

► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneten Spanabfuhr.



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	TA1N	L1	L2	L3	ØD2	K	KI	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	× 1.0	TZ903316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TZ903546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TZ903786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

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 Zähnen um die Kontaktzone mit dem Werkstück und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.

DIN 371

DIN 376

Hole type

3.0xD

Material groups

Ti

HSS
PM

DIN
371/376

6H

p.314

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	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	× 1.0	TZ293316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TZ293546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TZ293786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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

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 3232	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HfC		13	25	28	32	16	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 3232	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HfC											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											○	○	○	○	○		◎			○	



TZ933 SERIES

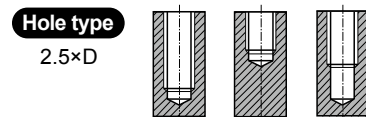
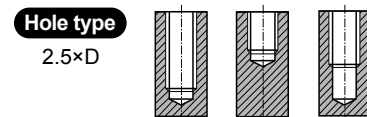
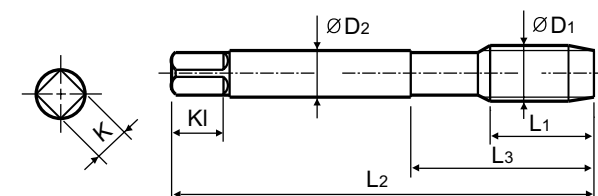
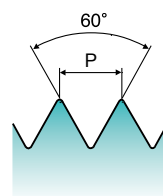
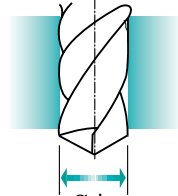
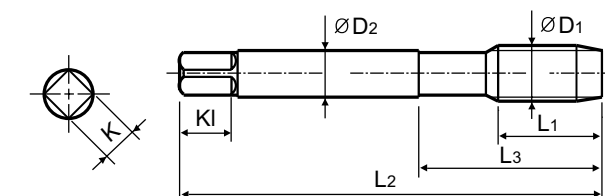
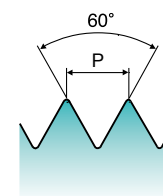
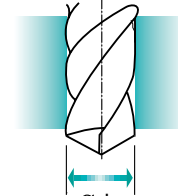
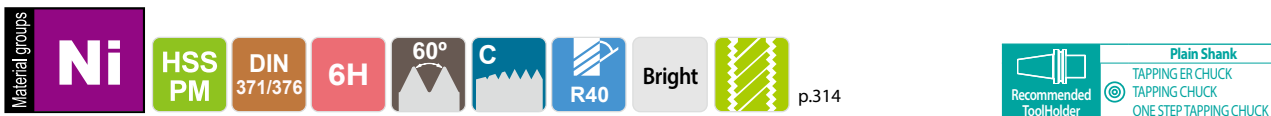
ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

► Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

► Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.



Unit : mm

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	× 1.0	TM933316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TM933546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TM933786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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 3321	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											☉	☉	☉	☉	☉								

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																					
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																					
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

TZ923 SERIES

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 chemical industries.

► Zum Gewindeschneiden von Nickellegierungen und hitzefesten Legierungsstählen, die in der Luftfahrtindustrie und chemischen Industrie verwendet werden.

DIN 371

DIN 376

Hole type

3.0xD

Material groups

Ni

HSS
PM

DIN
371/376

6H

TiAIN

p.314

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	KI	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	× 1.0	TZ923316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TZ923546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TZ923786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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

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			
HfC			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		
HfC												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

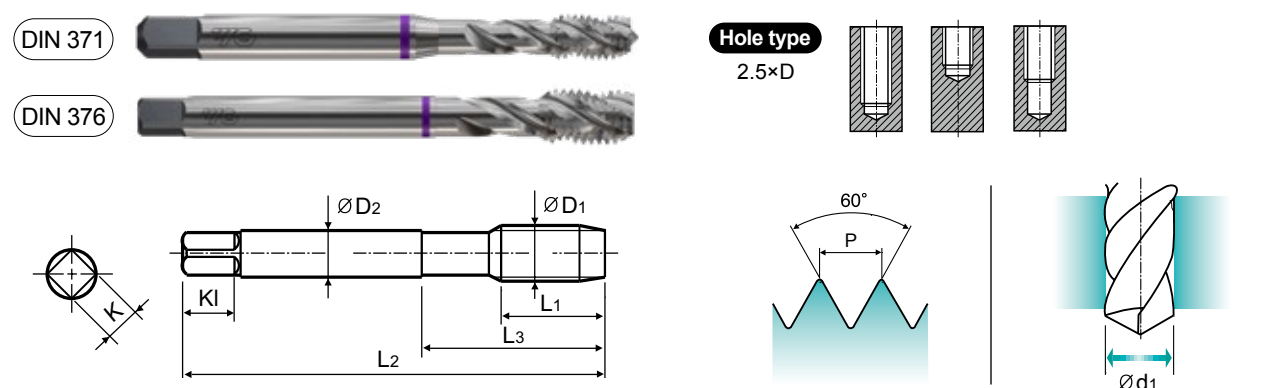
TR833 SERIES

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.



Plain Shank	
	TAPPING ER CHUCK
	TAPPING CHUCK
	ONE STEP TAPPING CHUCK

										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
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	× 1.0	TR833316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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											◎	◎	◎	◎	◎	◎	◎				

CARBIDE

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA



RECOMMENDED CUTTING CONDITIONS

EMPFOHLENE SCHNEIDKONDITIONEN

					TM903 TZ903	TM293 TZ293	TM933 TZ933	TM923	TZ923	TQ833 TR833	TQ873 TR873
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)						
P	6	Low alloy steel	180	10			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
	8		300	32	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
S	31	Heat Resistant Super Alloys	200	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
	33		250	25		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
	35		320	34		2-4	2-4	2-4	2-4	2-4	2-4
	36	Titanium Alloys	400Rm		10-15	10-15				10-15	10-15
	37		1050Rm		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



Leading Through Innovation

A close-up photograph of a YG HSS-E tap being used to drill a hole in a piece of aluminum. The tap is silver with a blue band near the handle. The aluminum workpiece is light gray and has a large, shallow hole already drilled into it. The tap is positioned vertically, and its cutting edges are visible as it enters the metal.

HSS-E

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.

HSS-E
YG TAP
ALU

For long-chipping Aluminum Wrought Alloys with Large Chip Gullets to Avoid Clogging in the Threading Operations



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC		
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			Annealed	250	25		
	34		Ni or Co Based	Cured	350	38		
	35			Cast	320	34		
	36	Titanium Alloys	Pure Titanium		400 Rm			
	37		Alpha + Beta Alloys	Hardened	1050 Rm			
H	38	Hardened steel		Hardened	550	55		
	39			Hardened	630	60		
	40	Chilled Cast Iron		Cast	400	42		
	41	Hardened Cast Iron		Hardened	550	55		

 Max. 3.0xD Through Hole		 Max. 2.0xD Blind/Through Hole		
HSS-E				
B	B	C	C	C
Spiral Point	Spiral Point	Straight Flute	Straight Flute	Straight Flute
-	-	-	-	-
TC622 (p.8323)	TE943 (p.324)	TC433 (p.325)	TE443 (p.326)	TY433 (p.327)
				M
				MF
				UNC
				UNF
				BSW
				GBSP
				EG-M
				EG-UN
				EG-UN
Bright	Nitride	Bright	Nitride+Vap	TIAlN
				
○				1
○				2
○	○			3
				4
				5
				6 P
				7
				8
				9
				10
				11
				12
				13 M
				14
				15
				16
				17 K
				18
				19
				20
◎	○			21
◎	○			22
◎	○			23
◎	○			24
	◎			25 N
		◎	◎	26
○		○	○	27
		○		28
				29
				30
				31
				32
				33
				34 S
				35
				36
				37
				38
				39
				40 H
				41

CARBIDE

HSS

YG

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 374

Hole type
2.5×D

60°

P

ØD2

ØD1

KI

L1

L2

L3

Ød1

60°

P

Ød1

Material groups

AI

HSS-E

DIN 371/376

6H

60°

C

R45

Bright

p.328

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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
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	× 1.0	TC163316	10	80	30	6	4.9	8	2	5
M7	× 1.0	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	× 2.0	TC163546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TC163786	30	160	60	18	14.5	17	3	21
M27	× 3.0	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				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180
Recommended	○	○	○												

ISO	N					S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	◎	◎	◎	◎											

CARBIDE

HSS

YG

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

60°

P

ØD2

ØD1

KI

L1

L2

L3

Ød1

60°

P

Ød1

Material groups

AI

HSS-E

DIN 371/376

6H

60°

C

R40

Nitride

p.328

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	Nitride	L1	L2	L3	ØD2	K	KI	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	× 1.0	TE953316	10	80	30	6	4.9	8	2	5
M7	× 1.0	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	× 2.0	TE953546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TE953786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180
Recommended	○	○	○												

ISO	N					S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
HB	60	100	75	90	130	110	90	100			200	280	250	350	320
Recommended	○	○	○	○	◎										

318

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319

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CARBIDE

HSS

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 fine DIN 13

Machine taps
Maschinengewindebohrer

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

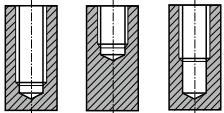
Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

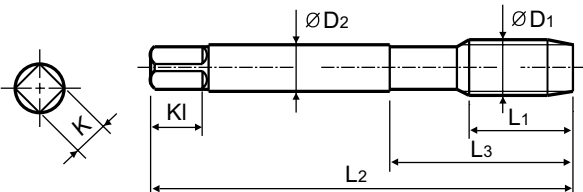
DIN 374

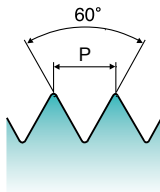


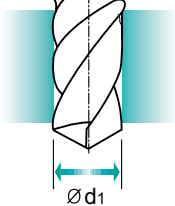
Hole type

2.5×D









Material groups

AI

HSS-E

DIN 374

6H

60°

C

R45

Bright



p.328

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	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	× 1.0	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	× 1.0	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

ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○	○																	

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

320

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CARBIDE

HSS

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.

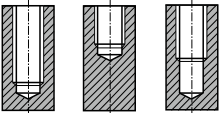
Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 371



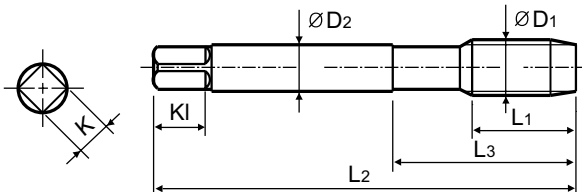
Hole type

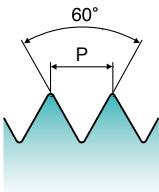
2.5×D

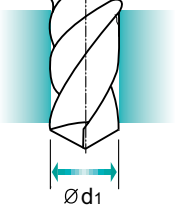


DIN 374









Material groups

AI

HSS-E

DIN 371/376

2B

60°

C

R45

Bright



p.328

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
#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)

ISO

	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○	○																	

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

321

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YG-1 CO., LTD.

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 Werkstück und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.

p.328

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
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 × 1.0		TC622316	17	80	30	6	4.9	8	3	5
M7 × 1.0		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 × 2.0		TC622546	26	110	44	11	9	12	3	12
M16 × 2.0		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 × 3.0		TC622786	34	160	60	18	14.5	17	3	21
M27 × 3.0		TC622866	36	160	60	20	16	19	3	24
M30 × 3.5		TC622946	40	180	70	22	18	21	3	26.5

- ▶ * DIN profile not ISO

◎ : Excellent ○ : Good

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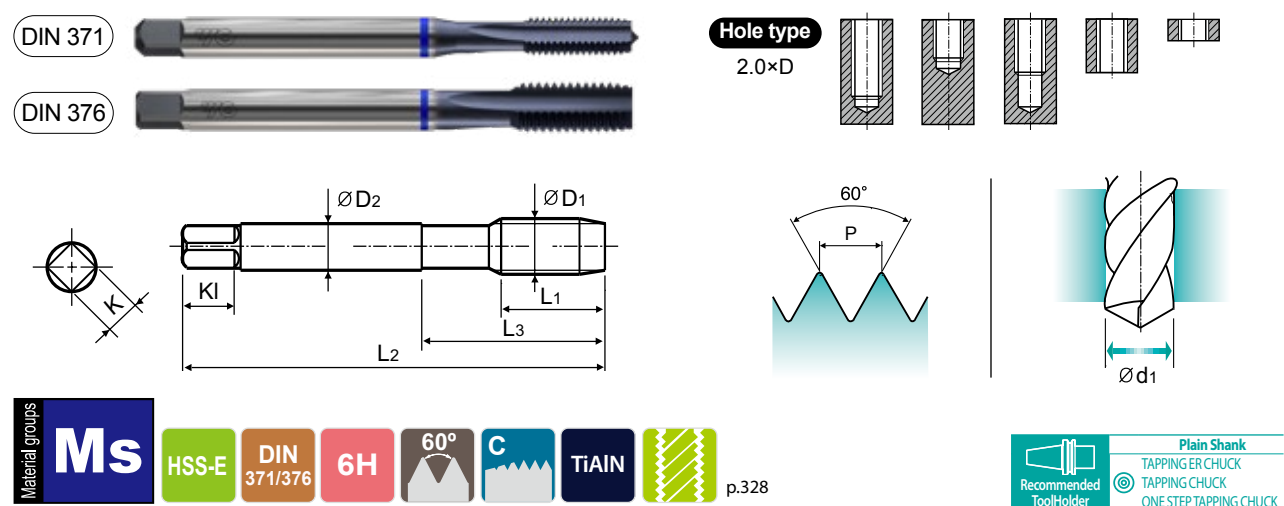


M ISO metric coarse threads DIN 13

- 🇩🇪 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



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	TA1N	L1	L2	L3	ØD2	K	KI	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	× 1.0	TY433316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TY433546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TY433786	34	160	60	18	14.5	17	4	21
M27	× 3.0	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

[illegible]



RECOMMENDED CUTTING CONDITIONS

EMPFOHLENE SCHNEIDKONDITIONEN

					TC163 TC963 TC169 TC170	TE953	TC622	TE943	TC433	TE443	TY433
ISO	VDI 3323	Material Description	HB	HRC	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

SOLID CARBIDE & HSS-E & HSS-PM

YG TAP FORMING

YG INNENGEWINDEFORMER

- Tapping by Forming Soft Materials
- Gewindeherstellung durch Formen von weichen Materialien

Tapping by Forming Soft Materials



HOLE TYPE			 Max. 3.0xD Blind / Through Hole			
TOOL MATERIAL			Carbide		HSS-E	HSS-E
CHAMFER LEAD ACC. TO DIN2197			E	E	C	C
FLUTE TYPE			-	-	-	-
SPIRAL FLUTE ANGLE			-	-	-	-
SERIES	M	DIN371/376	TOQ01 (p.332)		TD703 (p.334)	TE703 (p.335)
		DIN352				
		DIN357/LONG				
	MF	DIN374		TOQ02 (p.333)	TD733 (p.343)	TE733 (p.344)
		DIN2181				
	UNC	DIN371/376			TD704 (p.345)	TE704 (p.346)
		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 / COATING			TiCN	TiCN	TiN	Nitride+Vap
MODEL						
HB	HRC					
125					⊙	⊙
190	13				⊙	⊙
250	25				⊙	⊙
270	28					
300	32					
180	10				⊙	⊙
275	29					
300	32					
350	38					
200	15					
325	35					
200	15				○	○
240	23				○	○
180	10				○	○
180	10					
260	26					
160	3					
250	25					
130						
230	21					
60		⊙	⊙	⊙	⊙	⊙
100		⊙	⊙	⊙	⊙	⊙
75		⊙	⊙	○	○	
90		⊙	⊙	○	○	
130		⊙	⊙			
110		⊙	⊙	○	○	
90		⊙	⊙			
100		⊙	⊙	○	○	
200	15					
280	30					
250	25					
350	38					
320	34					
400 Rm						
1050 Rm						
550	55					
630	60					
400	42					
550	55					

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T0Q01 SERIES

M

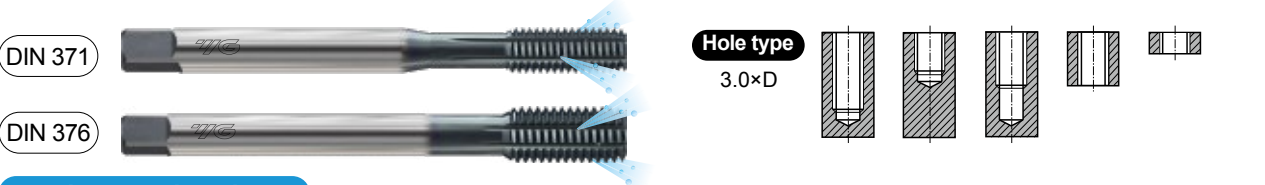
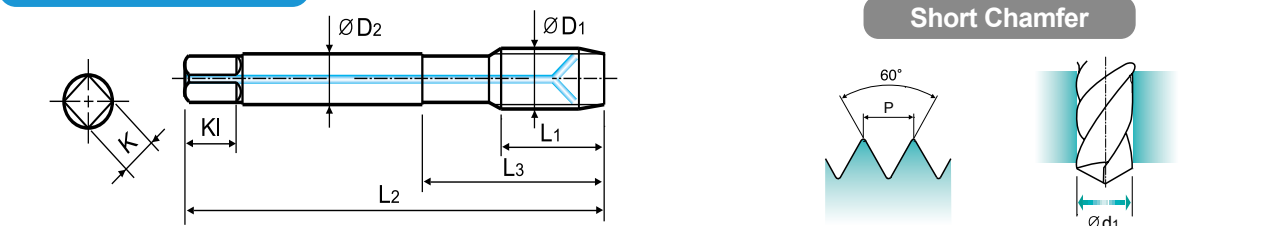
ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

ISO MÉTRIQUE DIN13

ISO Metrico passo grosso DIN 13

Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten



Material groups

AI

CARBIDE

DIN 371/376

6HX

60°

E

TiCN

p.347

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Lobe	Tapping Drill Diameter
ØD1	P	TiCN	L1	L2	L3	ØD2	K	KI	Ød1	Ød1
M4	x 0.7	T0Q01246TiCP	13	63	21	4.5	3.4	6	4	3.7
M5	x 0.8	T0Q01286TiCP	15	70	25	6	4.9	8	4	4.65
M6	x 1.0	T0Q01316TiCP	17	80	30	6	4.9	8	4	5.55
M8	x 1.25	T0Q01366TiCP	20	90	35	8	6.2	9	6	7.4
M10	x 1.5	T0Q01426TiCP	22	100	39	10	8	11	8	9.3
M12	x 1.75	T0Q01506TiCP	24	110	44	9	7	10	8	11.2

► DIN 371(M4~M10) and DIN 376(M12)

Only for Aluminum and Copper

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended																				



T0Q02 SERIES

MF

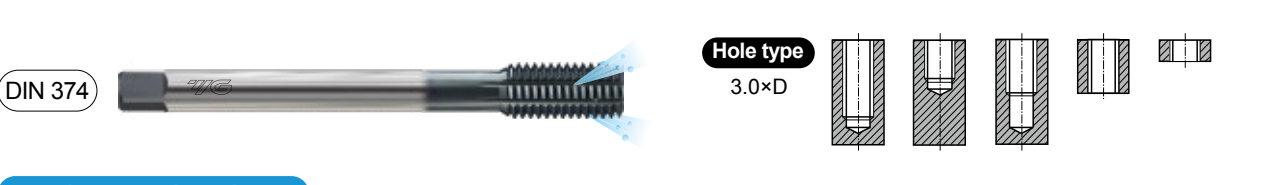
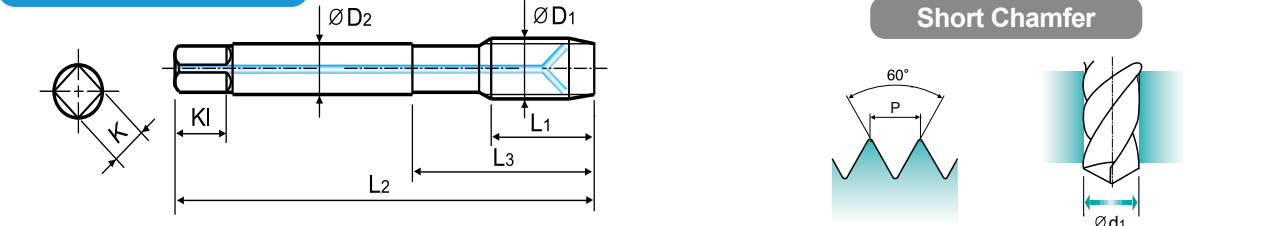
ISO metric fine threads DIN 13

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



Material groups

AI

CARBIDE

DIN 374

6HX

60°

E

TiCN

p.347

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Lobe	Tapping Drill Diameter
ØD1	P	TiCN	L1	L2	L3	ØD2	K	KI	Ød1	Ød1
M6	x 0.75	T0Q02326TiCP	13	80	30	4.5	3.4	6	4	5.7
M6	x 0.5	T0Q02336TiCP	13	80	30	4.5	3.4	6	4	5.8
M8	x 1.0	T0Q02376TiCP	17	90	36	6	4.9	8	6	7.5
M8	x 0.75	T0Q02386TiCP	14	80	30	6	4.9	8	6	7.7
M10	x 1.25	T0Q02436TiCP	22	100	40	7	5.5	8	8	9.4
M10	x 1.0	T0Q02446TiCP	18	90	36	7	5.5	8	8	9.5
M12	x 1.5	T0Q02516TiCP	22	100	40	9	7	10	8	11.3
M12	x 1.25	T0Q02526TiCP	22	100	40	9	7	10	8	11.4
M12	x 1.0	T0Q02536TiCP	18	100	40	9	7	10	8	11.5

Only for Aluminum and Copper

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	190	250	270	300	180	29	275	300	350	200	35	23	10	180	260	160	250	130	230
HB	125	190	250	270	300	180	29	275	300	350	200	35	23	10	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
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

3.0xD

Material groups

GV

HSS-E

DIN 371/376

6HX

60°

C

Nitride + Vap

p.347

Recommended Toolholder

Plain Shank
TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm									
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Nitride + Vap	L1	L2	L3	ØD2	K	KI	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 × 1.0		TE703316	17	80	30	6	4.9	8	5.55
M7 × 1.0		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 × 2.0		TE703546	26	110	44	11	9	12	13
M16 × 2.0		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

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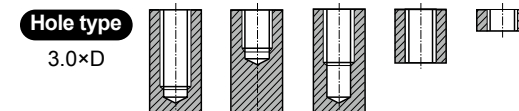
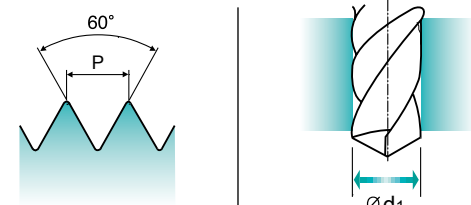
TE713 SERIES

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

- ▶ Aus bestem Werkstoff geeignet zum Gewindeformen weicher Werkstoffe mit mindestens 8-10% Dehnung.
- ▶ Die Kernlochbohrungen sind größer als normale Kernlöcher.



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Nitride + Vap	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	× 1.0	TE713316	17	80	30	6	4.9	8	5.55
M7	× 1.0	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	× 2.0	TE713546	26	110	44	11	9	12	13
M16	× 2.0	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

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**YG TAP
FORMING**

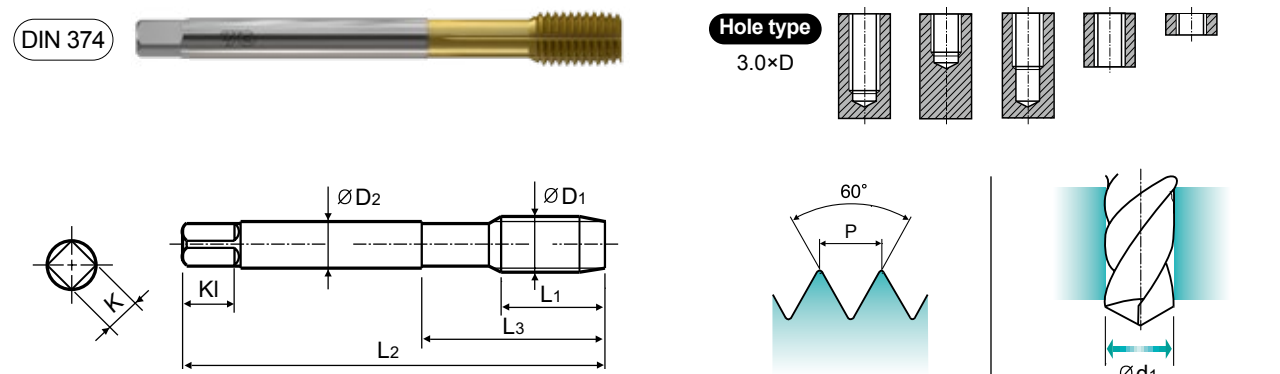
TD733 SERIES

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 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.



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	× 1.0	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	× 1.0	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	× 1.0	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 alloy 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	60	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		◎	◎	○	○		○		○															

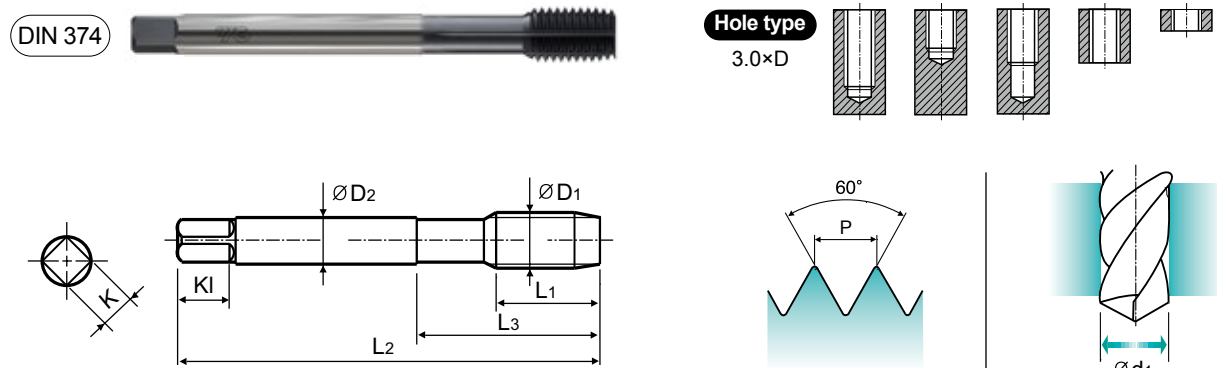
MF ISO metric fine threads DIN 13

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.



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	P	Nitride + Vap	L1	L2	L3	ØD2	K	KI	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	× 1.0	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	× 1.0	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	× 1.0	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 alloy steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

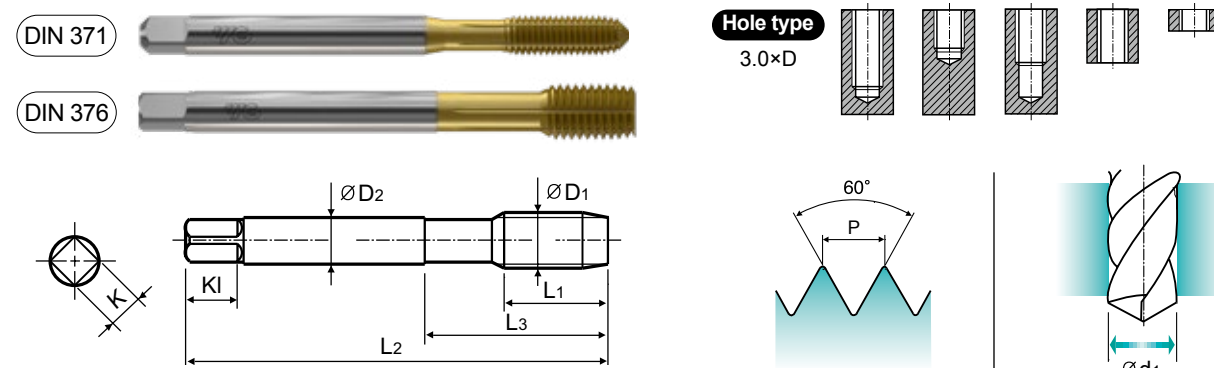
UNC Unified coarse threads

Unified Grobgewinde
UNC
Unificato passo grosso

Cold forming taps with oil grooves
Gewindeformer mit Schmiernuten

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► Die Kernlochbohrungen sind größer als normale Kernlöcher.



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	KI	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 alloy steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
ISO	N										S					H				
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRc	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

CARBIDE

HSS

YG TAP FORMING

TE704 SERIES

UNC

Unified coarse threads

Unified Grobgewinde

UNC

Unificato passo grosso

Cold forming taps with oil grooves

Gewindeformer mit Schmiernuten

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DIN 371

DIN 376

Hole type

3.0×D

60°

P

ØD₂

ØD₁

KI

L₁

L₂

L₃

Ød₁

GV

HSS-E

DIN 371/376

2BX

60°

C

Nitride + Vap

p.347

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD ₁		Nitride + Vap	L ₁	L ₂	L ₃	ØD ₂	K	KI	Ød ₁
#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)

346

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YG-1 CO., LTD.

CARBIDE

HSS

YG TAP FORMING

RECOMMENDED CUTTING CONDITIONS

EMFOHLENE SCHNEIDKONDITIONEN

ISO	VDI 3323	Material Description	HB	HRC	TQ01 TQ02	TD703 TD733 TD704	TE703 TE733 TE704	TY703	TQ703	TD713	TE713	TQ723	TE723	TD723
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		190	13		15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
	3		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		240	23		8-11	5-8	8-11	5-8	8-11	5-8	5-8	5-8	8-11
	14		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		20 - 60	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	22		100		20 - 60	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	23	Aluminum-cast, alloyed	75		20 - 50	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
	24		90		20 - 50	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	25		130		20 - 50									
	26	Copper and Copper Alloys (Bronze / Brass)	110		20 - 60	25-35	25-35	25-35	25-35	25-35	25-35	25-35	25-35	25-35
	27		90		20 - 60									
	28		100		20 - 60	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	125	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									
Material Description	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	55	60	42
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	○	○		○		○												

347

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YG-1 CO., LTD.



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



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YG TAP
GENERAL

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

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◎ : Excellent ○ : Good

Recommended cutting conditions : p.391

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc			
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			
	15	Grey cast iron	Pearlitic / ferritic		180	10			
K	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	Cutting Alloys, PB>1%		110		○	○	○
	27		CuZn, CuSnZn (Brass)		90				
	28	Non Metallic Materials	CuSn, lead-free copper and electrolytic copper		100		◎	◎	◎
	29		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			

Max. 3.0xD Through Hole						Max. 2.0xD Blind/Through Hole
HSS-E						
B	B	B	B	C	C	
Spiral Point	Spiral Point	Spiral Point	Spiral Point	Spiral Flute	Straight Flute	
-	-	-	-	L20	-	
TC127 (p.365) TC122 (p.367)	TD127 (p.366)	TC227 (p.375)	TD227 (p.376)	TC211 (p.377)	TC463 (p.378)	M
TC222 (p.368)	TD222 (p.370)				TC473 (p.379)	MF
TC214 (p.372)					TC424 (p.380)	UNC
TC234 (p.373)						UNF
TC224 (p.374)						BSW
						G(BSP)
						EG-M
						EG-UNC
						EG-UNF
Bright	TIN	Bright	TIN	Bright	Bright	
○	○	○	○	○	○	1
◎	◎	◎	◎	◎	◎	2
◎	◎	◎	◎	◎	○	3
◎	◎	◎	◎	◎	○	4
○	○	○	○	○	○	5
◎	◎	◎	◎	◎	○	6
◎	◎	◎	◎	◎	○	7
○	○	○	○	○	○	8
						9
						10
						11
○	○	○	○	○	○	12
○	○	○	○	○	○	13
						14
					○	15
					○	16
◎	◎	◎	◎	◎	○	17
◎	◎	◎	◎	◎	○	18
						19
						20
○	○	○	○	○		21
						22
○	○	○	○	○		23
○	○	○	○	○		24
◎	◎	◎	◎	◎	○	25
○	○	○	○	○	○	26
◎	◎	◎	◎	◎	○	27
						28
						29
						30
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						40
						41

SELECTION GUIDE



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◎ : Excellent ○ : Good

Recommended cutting conditions : p.391

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC		
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	Non Metallic Materials	CuSn, lead-free copper and electrolytic copper		100			
	29		Duroplastic, Fiber Reinforced Plastic					
	30		Rubber, Wood, etc.					
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15		
	32			Cured	280	30		
	33			Annealed	250	25		
	34		Ni or Co Based	Cured	350	38		
	35			Cast	320	34		
	36	Titanium Alloys	Pure Titanium		400 Rm			
	37		Alpha + Beta Alloys	Hardened	1050 Rm			
H	38	Hardened steel		Hardened	550	55		
	39			Hardened	630	60		
	40	Chilled Cast Iron		Cast	400	42		
	41	Hardened Cast Iron		Hardened	550	55		



Max. 2.0xD
Blind/Through Hole

		HSS		HSS-E		
I / II / III	I / III	I / II / III	I / II / III	I / II / III	I / II / III	
Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	Straight Flute	
-	-	-	Left Hand Cut	-	-	
-	-	-	-	-	-	
			T7343 (p.388)	TB373 (p.389)	TC353 (p.390)	M
						MF
						UNC
						UNF
T7363 (p.385)						BSW
	T7509 (p.386)					G(BSP)
		T7609 (p.387)				EG-M
						EG-UNC
						EG-UNF
Bright	Bright	Bright	Bright	VAP	Bright	
HAND TAP	HAND TAP	HAND TAP	HAND TAP	HAND TAP	HAND TAP	
						
○	○	○	○	○	○	1
○	○	○	○	○	○	2
○	○	○	○	○	○	3
○	○	○	○	○	○	4
						5
○	○	○	○	○	○	6
○	○	○	○	○	○	7
						8
						9
						10
						11
				○		12
				○		13
				○		14
						15
○	○	○	○			16
○	○	○	○			17
						18
						19
						20
						21
						22
						23
○	○	○	○			24
○	○	○	○			25
○	○	○	○			26
						27
						28
						29
						30
						31
						32
						33
						34
						35
						36
						37
						38
						39
						40
						41

THREAD
MILL

SYNCHRO
TAP

PRIME TAP /
FORMING

COMBO
TAP

YG TAP
STEEL

YG TAP CHIP
BREAKER

YG TAP
INOX

YG TAP
CAST IRON

YG TAP
HARDENED
STEEL

YG TAP
Ti Ni

YG TAP
ALU

YG TAP
FORMING

YG TAP
GENERAL
/ HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA


**YG TAP
GENERAL**

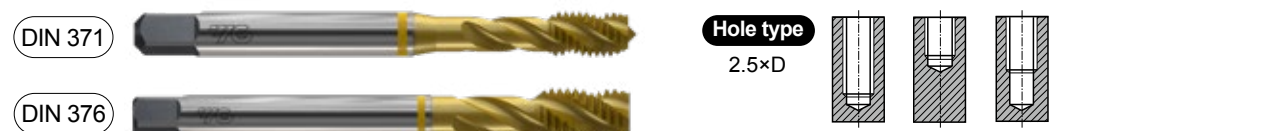
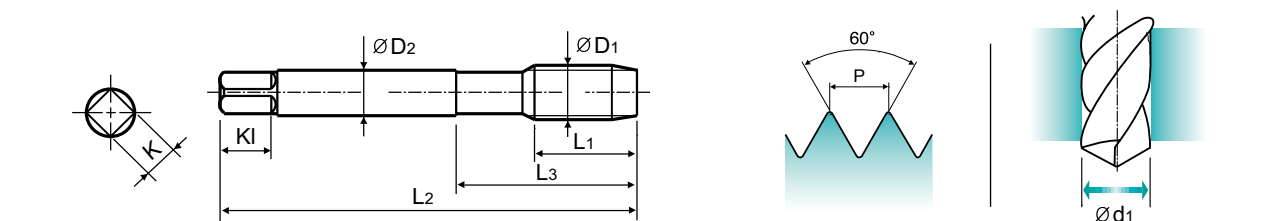
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M **ISO metric coarse threads DIN 13**

- 🇩🇪 **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.



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	× 1.0	TD711316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TD711546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TD711786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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 VDI 3323 HRC HB	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	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 VDI 3323 HRC HB	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	
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	55	60	42	55
Recommended	○		○	○	◎	○		◎			200	280	250	350	320			550	630	400	550

CARBIDE

HSS

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.

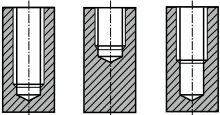
Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

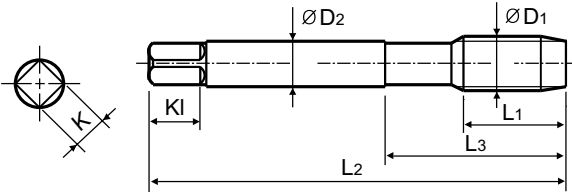
DIN 374

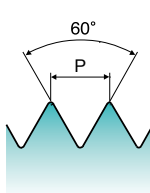


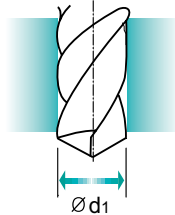
Hole type

2.5×D









Material groups

GS

HSS-E

DIN 374

6H

60°

C

R40

Bright



p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	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	× 1.0	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	× 1.0	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	× 1.0	TC411576	11	100	40	11	9	12	3	13
M16	× 1.5	TC411616	15	100	40	12	9	12	3	14.5
M16	× 1.0	TC411626	12	100	40	12	9	12	3	15
M18	× 1.5	TC411676	17	110	44	14	11	14	4	16.5
M18	× 1.0	TC411686	13	110	44	14	11	14	4	17

▶ NEXT PAGE

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

1

2

3

4

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13

14

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125

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ISO

Material Description

VDI 3323

HRC

HB

Recommended

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

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

60

100

75

90

130

110

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100

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200

280

250

350

320

400Rm

1050Rm

550

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HSS

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.

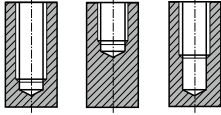
Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

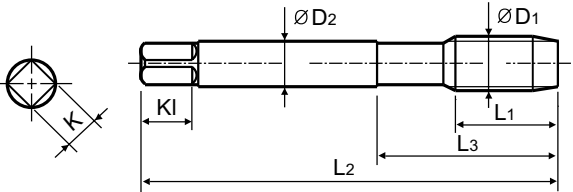
DIN 374

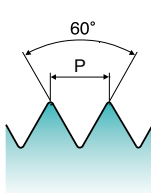


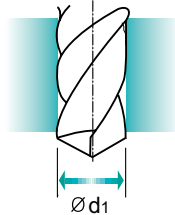
Hole type

2.5×D









Material groups

GS

HSS-E

DIN 374

6H

60°

C

R40

Bright



p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
M20	× 1.5	TC411726	17	125	50	16	12	15	4	18.5
M20	× 1.0	TC411736	14	125	50	16	12	15	4	19
M22	× 1.5	TC411766	17	125	50	18	14.5	17	4	20.5
M22	× 1.0	TC411776	14	125	50	18	14.5	17	4	21
M24	× 2.0	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	× 2.0	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	× 2.0	TC411966	22	150	57	22	18	21	4	28
M30	× 1.5	TC411976	22	150	57	22	18	21	4	28.5

▶ NEXT PAGE

ISO

Material Description

VDI 3323

HRC

HB

Recommended

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

1

2

3

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125

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ISO

Material Description

VDI 3323

HRC

HB

Recommended

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

21

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23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

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39

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41

60

100

75

90

130

110

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100

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400Rm

1050Rm

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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 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

GS

HSS-E

DIN 374

6H

60°

C

R40

TiN

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
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	× 1.0	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	× 1.0	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	× 1.0	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	× 1.0	TD411576	11	100	40	11	9	12	3	13
M16	× 1.5	TD411616	15	100	40	12	9	12	3	14.5

▶ NEXT PAGE

ISO

P

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

M

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

K

1

2

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4

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10

11

12

13

14

15

16

17

18

19

20

VDI 3323

HRc

HB

Recommended

125

13

190

250

270

300

180

275

300

350

200

325

15

35

200

240

180

10

26

160

250

130

230

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ISO

N

Aluminum-wrought alloy

Aluminum-cast, alloyed

Copper and Copper Alloys (Bronze / Brass)

Non Metallic Materials

S

Heat Resistant Super Alloys

Titanium Alloys

H

Hardened steel

Chilled Cast Iron

Hardened Cast Iron

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

VDI 3323

HRc

HB

Recommended

60

100

75

90

130

110

90

100

200

280

250

350

320

400Rm

1050Rm

550

630

400

550

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TD411 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

GS

HSS-E

DIN 374

6H

60°

C

R40

TiN

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M16	× 1.0	TD411626	12	100	40	12	9	12	3	15
M18	× 1.5	TD411676	17	110	44	14	11	14	4	16.5
M18	× 1.0	TD411686	13	110	44	14	11	14	4	17
M20	× 1.5	TD411726	17	125	50	16	12	15	4	18.5
M20	× 1.0	TD411736	14	125	50	16	12	15	4	19
M22	× 1.5	TD411766	17	125	50	18	14.5	17	4	20.5
M22	× 1.0	TD411776	14	125	50	18	14.5	17	4	21
M24	× 2.0	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	× 2.0	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	× 2.0	TD411966	22	150	57	22	18	21	4	28
M30	× 1.5	TD411976	22	150	57	22	18	21	4	28.5

▶ NEXT PAGE

ISO

P

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

M

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

K

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

VDI 3323

HRc

HB

Recommended

125

13

190

250

270

300

180

275

300

350

200

325

15

35

200

240

180

10

26

160

250

130

230

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ISO

N

Aluminum-wrought alloy

Aluminum-cast, alloyed

Copper and Copper Alloys (Bronze / Brass)

Non Metallic Materials

S

Heat Resistant Super Alloys

Titanium Alloys

H

Hardened steel

Chilled Cast Iron

Hardened Cast Iron

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

VDI 3323

HRc

HB

Recommended

60

100

75

90

130

110

90

100

200

280

250

350

320

400Rm

1050Rm

550

630

400

550

○

○

○

◎

○

◎

359

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**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

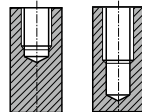
► Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

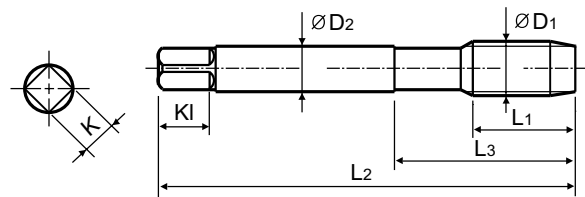
► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

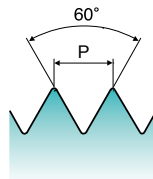


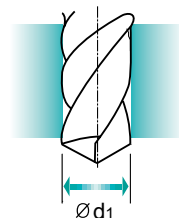
Hole type

2.5×D









Material groups
GS

HSS-E

DIN
371/376

6H

60°

C

R20

Bright



p.391

Recommended
ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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	× 1.0	TC517316	10	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TC517546	20	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TC517786	30	160	60	18	14.5	17	4	21
M27	× 3.0	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

[illegible]

CARBIDE

HSS

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.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
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	× 1.0	TD127316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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

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.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	TC122316	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC122366	20	63	34	8	6.2	9	3	6.8
M10	× 1.5	TC122426	22	70	38	9	7	10	3	8.5
M12	× 1.75	TC122506	24	80	45	11	9	12	3	10.2
M14	× 2.0	TC122546	26	80	45	11	9	12	3	12
M16	× 2.0	TC122606	27	80	45	12	9	12	3	14

366

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CARBIDE

HSS

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.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	TC122316	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC122366	20	63	34	8	6.2	9	3	6.8
M10	× 1.5	TC122426	22	70	38	9	7	10	3	8.5
M12	× 1.75	TC122506	24	80	45	11	9	12	3	10.2
M14	× 2.0	TC122546	26	80	45	11	9	12	3	12
M16	× 2.0	TC122606	27	80	45	12	9	12	3	14

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.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	TC122316	18	56	27	6	4.9	8	3	5
M8	× 1.25	TC122366	20	63	34	8	6.2	9	3	6.8
M10	× 1.5	TC122426	22	70	38	9	7	10	3	8.5
M12	× 1.75	TC122506	24	80	45	11	9	12	3	10.2
M14	× 2.0	TC122546	26	80	45	11	9	12	3	12
M16	× 2.0	TC122606	27	80	45	12	9	12	3	14

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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

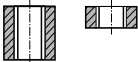
Suitable for through hole in more cutting speed than other taps due to thick web.

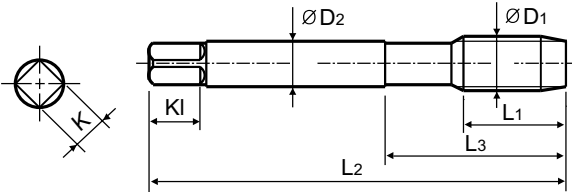
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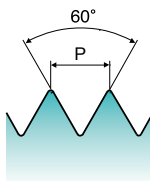
DIN 374

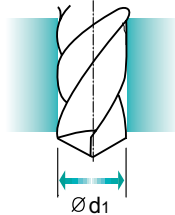


Hole type
3.0×D









GS

HSS-E

DIN 374

6H

60°

B

Bright

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
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	× 1.0	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	× 1.0	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	× 1.0	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	× 1.0	TC222576	18	100	40	11	9	12	3	13

Unit : mm

▶ NEXT PAGE

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	30	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC																				
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○		○	○	◎	○		◎												

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

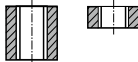
Suitable for through hole in more cutting speed than other taps due to thick web.

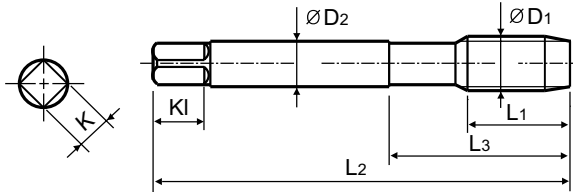
Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

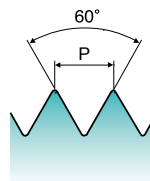
DIN 374

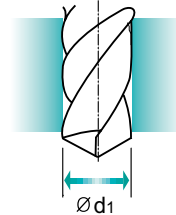


Hole type
3.0×D









GS

HSS-E

DIN 374

6H

60°

B

Bright

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
M16	× 1.5	TC222616	22	100	40	12	9	12	3	14.5
M16	× 1.0	TC222626	18	100	40	12	9	12	3	15
M18	× 1.5	TC222676	25	110	44	14	11	14	4	16.5
M18	× 1.0	TC222686	20	110	44	14	11	14	4	17
M20	× 1.5	TC222726	25	125	50	16	12	15	4	18.5
M20	× 1.0	TC222736	20	125	50	16	12	15	4	19
M22	× 1.5	TC222766	25	125	50	18	14.5	17	4	20.5
M22	× 1.0	TC222776	20	125	50	18	14.5	17	4	21
M24	× 2.0	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	× 2.0	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	× 2.0	TC222966	30	150	57	22	18	21	4	28
M30	× 1.5	TC222976	30	150	57	22	18	21	4	28.5

Unit : mm

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel				
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	30	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
HRC																				
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	○		○	○	◎	○		◎												

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

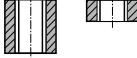
Suitable for through hole in more cutting speed than other taps due to thick web.

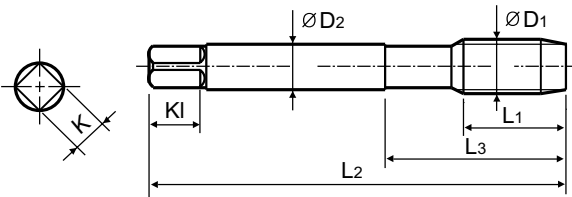
Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

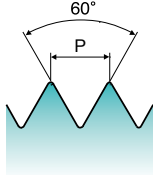
DIN 374

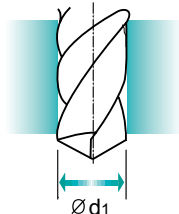


Hole type
3.0×D









Material groups

GS

HSS-E

DIN 374

6H

60°

B

TiN

p.391

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
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	× 1.0	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	× 1.0	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	× 1.0	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	× 1.0	TD222576	18	100	40	11	9	12	3	13
M16	× 1.5	TD222616	22	100	40	12	9	12	3	14.5

► NEXT PAGE

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
HRC	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	160	250	130
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
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm
Recommended	○	○	○	◎	○	○	◎										

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

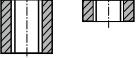
Suitable for through hole in more cutting speed than other taps due to thick web.

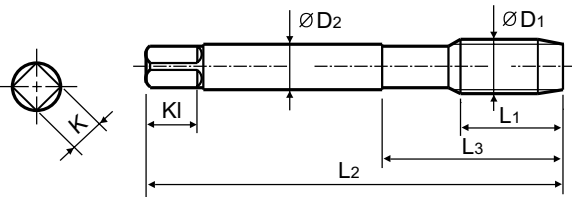
Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke.

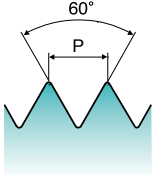
DIN 374

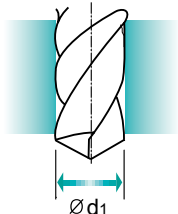


Hole type
3.0×D









Material groups

GS

HSS-E

DIN 374

6H

60°

B

TiN

p.391

Recommended ToolHolder

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M16	× 1.0	TD222626	18	100	40	12	9	12	3	15
M18	× 1.5	TD222676	25	110	44	14	11	14	4	16.5
M18	× 1.0	TD222686	20	110	44	14	11	14	4	17
M20	× 1.5	TD222726	25	125	50	16	12	15	4	18.5
M20	× 1.0	TD222736	20	125	50	16	12	15	4	19
M22	× 1.5	TD222766	25	125	50	18	14.5	17	4	20.5
M22	× 1.0	TD222776	20	125	50	18	14.5	17	4	21
M24	× 2.0	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	× 2.0	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	× 2.0	TD222966	30	150	57	22	18	21	4	28
M30	× 1.5	TD222976	30	150	57	22	18	21	4	28.5

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
HRC	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	160	250	130
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
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm
Recommended	○	○	○	◎	○	○	◎										

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

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

60°

P

ØD1

ØD2

L1

L2

L3

KI

60°

P

Ød1

GS

HSS-E

DIN 371/376

2B

60°

B

Bright

p.391

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

CARBIDE

HSS

YG

YG TAP GENERAL

TC234 SERIES

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

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

60°

P

ØD1

ØD2

L1

L2

L3

KI

60°

P

Ød1

GS

HSS-E

DIN 371/374

2B

60°

B

Bright

p.391

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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
#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)

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
#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)

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

372

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YG-1 CO., LTD.

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

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373

CARBIDE

HSS

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

55°

P

Ø d1

Ø D2

Ø D1

KI

L1

L2

L3

GS

HSS-E

DIN 2182/2183

6H

55°

B

Bright

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Recommended ToolHolder

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)

374

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YG-1 CO., LTD.

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

60°

P

Ø d1

Ø D2

Ø D1

KI

L1

L2

L3

GS

HSS-E

DIN 376

6H

60°

B

Bright

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Recommended ToolHolder

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 × 1.0		TC227316	17	80	30	4.5	3.4	6	3	5
M7 × 1.0		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 × 2.0		TC227546	26	110	44	11	9	12	3	12
M16 × 2.0		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 × 3.0		TC227786	34	160	60	18	14.5	17	4	21
M27 × 3.0		TC227866	36	160	60	20	16	19	4	24
M30 × 3.5		TC227946	40	180	70	22	18	21	4	26.5

© : Excellent ○ : Good

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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

60°

P

Ø d1

Ø D2

Ø D1

KI

L1

L2

L3

GS

HSS-E

DIN 376

6H

60°

B

Bright

p.391

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

Recommended ToolHolder

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 × 1.0		TC227316	17	80	30	4.5	3.4	6	3	5
M7 × 1.0		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 × 2.0		TC227546	26	110	44	11	9	12	3	12
M16 × 2.0		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 × 3.0		TC227786	34	160	60	18	14.5	17	4	21
M27 × 3.0		TC227866	36	160	60	20	16	19	4	24
M30 × 3.5		TC227946	40	180	70	22	18	21	4	26.5

© : Excellent ○ : Good

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YG TAP GENERAL

TD227 SERIES

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

GS

HSS-E

DIN 376

6H

60°

B

TiN

p.392

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	TiN	L1	L2	L3	ØD2	K	KI	Z	Ød1
M3	× 0.5	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	× 1.0	TD227316	17	80	30	4.5	3.4	6	3	5
M7	× 1.0	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	× 2.0	TD227546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TD227786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TD227866	36	160	60	20	16	19	4	24
M30	× 3.5	TD227946	40	180	70	22	18	21	4	26.5

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	15	16	17	18	19	20	17	18	19	20	21				
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	10	26	3	25	130	25	160	250	130	230					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	180	260	160	250	130	230	160	250	130	230					
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎	○	○	○	○	○	◎	◎	◎	◎	◎	◎				

	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	15	30	25	38	34	15	30	25	38	34	15			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	200	280	250	350	320	400Rm	1050Rm	550	630	400	550			
Recommended	○	○	○	○	◎	○	○	◎																											

376

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YG TAP GENERAL

TC211 SERIES

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

Hole type
3.0×D

GS

HSS-E

DIN 371/376

6H

60°

C

Bright

L20

p.392

Plain Shank
TAPPING ER CHUCK
TAPPING CHUCK
ONE STEP TAPPING CHUCK

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
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	× 1.0	TC211316	17	80	30	6	4.9	8	3	5
M7	× 1.0	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	× 2.0	TC211546	26	110	44	11	9	12	3	12
M16	× 2.0	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	× 3.0	TC211786	34	160	60	18	14.5	17	4	21
M27	× 3.0	TC211866	36	160	60	20	16	19	4	24
M30	× 3.5	TC211946	40	180	70	22	18	21	4	26.5

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	15	16	17	18	19	20	17	18	19	20	21				
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	10	26	3	25	130	25	160	250	130	230					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	180	260	160	250	130	230	160	250	130	230					
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎	○	○	○	○	○	◎	◎	◎	◎	◎	◎				

	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				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	31	32	33	34	35	36	37	38	39	40	41			
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	15	30	25	38	34	15	30	25	38	34	15			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	200	280	250	350	320	400Rm	1050Rm	550	630	400	550			
Recommended	○	○	○	○	◎	○	○	◎																											

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CARBIDE

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

377



TC473 SERIES

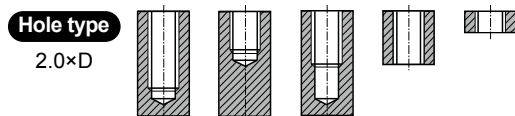
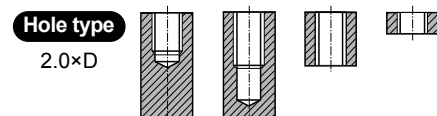
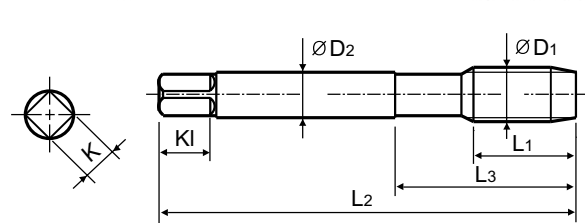
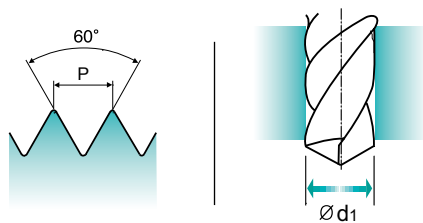
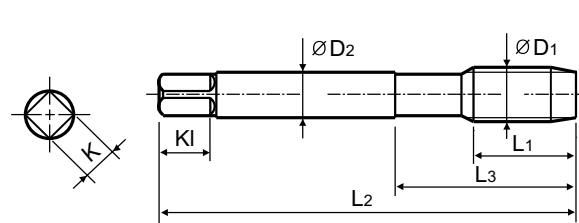
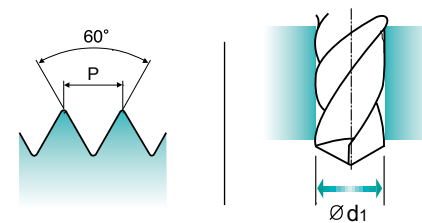
ISO metric fine threads DIN 13

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

Machine taps
Maschinengewindebohrer

► Geeignet zum Schneiden von kurzem Durchgangsgewinde und in Sacklöchern mit ausreichendem Raum für Späne am Bohrungsgrund.

► Geeignet zum Gewindeschneiden flacher Sacklöcher.



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	× 1.0	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	× 1.0	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	× 1.0	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	× 1.0	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

[illegible]

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 × 1.0		T7109319	18	56	27	6	4.9	8	3	5
M7 × 1.0		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 × 2.0		T7109549	26	80	45	11	9	12	4	12
M16 × 2.0		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

▶ NEXT PAGE

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CARBIDE

HSS

YG TAP GENERAL
(HAND TAP)

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

60°

P

Ød1

ØD2

ØD1

KI

L1

L2

L3

GS

HSS

DIN 2181

6H

60°

I/III

Bright

p.392

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
M16 × 1.0		T7309629	18	70	32	12	9	12	4	15
M18 × 2.0		T7309669	22	80	35	14	11	14	4	16
M18 × 1.5		T7309679	22	80	35	14	11	14	4	16.5
M18 × 1.0		T7309689	18	80	35	14	11	14	4	17
M20 × 2.0		T7309719	22	80	35	16	12	15	4	18
M20 × 1.5		T7309729	22	80	35	16	12	15	4	18.5
M20 × 1.0		T7309739	18	80	35	16	12	15	4	19
M22 × 2.0		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 × 1.0		T7309779	18	80	35	18	14.5	17	4	21
M24 × 2.0		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 × 1.0		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 × 1.0		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 × 1.0		T7309N59	18	90	40	18	14.5	17	4	25
M27 × 2.0		T7309879	22	90	40	20	16	19	4	25
M27 × 1.5		T7309889	22	90	40	20	16	19	4	25.5
M27 × 1.0		T7309899	18	90	40	20	16	19	4	26
M28 × 2.0		T7309909	22	90	40	20	16	19	4	26
M28 × 1.5		T7309919	22	90	40	20	16	19	4	26.5
M30 × 2.0		T7309969	22	90	40	22	18	21	4	28
M30 × 1.5		T7309979	22	90	40	22	18	21	4	28.5
M30 × 1.0		T7309989	18	90	40	22	18	21	4	29

Unit : mm

© : Excellent ○ : Good

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

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

384

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CARBIDE

HSS

YG TAP GENERAL
(HAND TAP)

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

60°

P

Ød1

ØD2

ØD1

KI

L1

L2

L3

GS

HSS

DIN 351

2B

60°

I/II/III

Bright

p.392

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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
#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

Unit : mm

© : Excellent ○ : Good

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

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

385

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YG TAP GENERAL

(HAND TAP)

T7609 SERIES


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

Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

Unit : mm										
SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD ₁		Bright	L ₁	L ₂	L ₃	ØD ₂	K	KI	Z	Ød ₁
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		T7609989	56	150	88	32	24	27	4	35.5
W1-3/4 - 5		T7609989	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

[illegible]



YG TAP GENERAL

(HAND TAP)

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.

Technical drawing of a double-flute drill bit showing dimensions: $\varnothing D_2$, $\varnothing D_1$, L_1 , L_2 , L_3 , KI , and K . A table below shows hole types and their corresponding drill bit features:

Hole type	2.0×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	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	× 1.0	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	× 2.0	TB373549	26	80	45	11	9	12	4	12
M16	× 2.0	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

[illegible]

CARBIDE

HSS

YG

YG TAP GENERAL
(HAND TAP)

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

60°

P

Ød1

ØD2

ØD1

KI

L1

L2

L3

VG

HSS-E

DIN 352

6H

60°

I/II/III

Bright

p.392

Plain Shank

TAPPING CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	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	× 1.0	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	× 2.0	TC353549	26	80	45	11	9	12	4	12
M16	× 2.0	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

ISO

Material Description

VDI 3323

HRc

HB

Recommended

ISO

Material Description

VDI 3323

HRc

HB

Recommended

390

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CARBIDE

HSS

YG

YG TAP GENERAL
(HAND TAP)

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

TC711, TC411
TC144, TC124
TC134

TD711
TD411

TC517
TC612

TC127, TC122
TC222, TC214
TC234, TC224

TD127
TD222

TC227

ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)					
P	1	Non-alloy steel	125		15-20	20-25	15-20	15-20	20-25	15-20
	2		190	13	15-20	20-25	15-20	15-20	20-25	15-20
	3		250	25	12-18	18-24	12-18	12-18	18-24	12-18
	4		270	28	10-15	15-20	10-15	10-15	15-20	10-15
	5	Low alloy steel	300	32	6-10	10-14	6-10	6-10	10-14	6-10
	6		180	10	10-15	15-20	10-15	10-15	15-20	10-15
	7		275	29	10-15	15-20	10-15	10-15	15-20	10-15
	8		300	32	6-10	10-14	6-10	6-10	10-14	6-10
M	12	Stainless steel	200	15	7-10	10-13	7-10	7-10	10-13	7-10
	13		240	23	5-8	8-11	5-8	5-8	8-11	5-8
K	15	Grey cast iron	180	10						
	16		260	26						
	17	Nodular cast iron	160	3	10-15	15-20	10-15	10-15	15-20	10-15
	18		250	25	5-8	8-11	5-8	5-8	8-11	5-8
N	21	Aluminum-wrought alloy	60		10-15	15-20	10-15	10-15	15-20	10-15
	23	Aluminum-cast, alloyed	75		15-20	20-25	15-20	15-20	20-25	15-20
	24		90		15-20	20-25	15-20	15-20	20-25	15-20
	25	Copper and Copper Alloys (Bronze / Brass)	130		10-15	15-20	10-15	10-15	15-20	10-15
	26		110		25-35	35-40	25-35	25-35	35-40	25-35
	27		90							
	28		100		15-20	20-25	15-20	15-20	20-25	15-20

◎ : Excellent ○ : Good

ISO

Material Description

VDI 3323

HRc

HB

Recommended

ISO

Material Description

VDI 3323

HRc

HB

Recommended

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CARBIDE

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

YG TAP GENERAL
(HAND TAP)

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

					TD227	TC211	TC463 TC473 TC424	T7109, T7309 T7363, T7509 T7609, T7343	TB373	TC353
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min.)					
P	1	Non-alloy steel	125		20-25	15-20	15-20	15-20	15-20	15-20
	2		190	13	20-25	15-20	15-20	15-20	15-20	15-20
	3		250	25	18-24	12-18	12-18	12-18	12-18	12-18
	4		270	28	15-20	10-15	10-15	10-15	10-15	10-15
	5		300	32	10-14	6-10	6-10			
	6	Low alloy steel	180	10	15-20	10-15	10-15	10-15	10-15	10-15
	7		275	29	15-20	10-15	10-15	10-15	10-15	10-15
	8		300	32	10-14	6-10	6-10			
M	12	Stainless steel	200	15	10-13	7-10	7-10		7-10	
	13		240	23	8-11	5-8	5-8		5-8	
	14		180	10					4-6	
K	15	Grey cast iron	180	10			10-15			
	16		260	26			5-8			
	17	Nodular cast iron	160	3	15-20	10-15	10-15	10-15		
	18		250	25	8-11	5-8	5-8	5-8		
N	21	Aluminum-wrought alloy	60		15-20	10-15				
	23	Aluminum-cast, alloyed	75		20-25	15-20				
	24		90		20-25	15-20				
	25		130		15-20	10-15	10-15	10-15		
	26	Copper and Copper Alloys (Bronze / Brass)	110		35-40	25-35	25-35	25-35		
	27		90				8-12	8-12		
	28		100		20-25	15-20				



Leading Through Innovation



HSS & HSS-E

PIPE TAP

GASGEWINDEBOHRER

- Tapping Whitworth Pipe threads
- Zum Gewindeschneiden von Whitworth-Rohrgewinden

Tapping Whitworth Pipe threads



Max. 2.5xD Blind Hole		Max. 3.0xD Through Hole		Tapered						Tapered					
HSS-E															
C		B		C		C		C		C		C		C	
Spiral Flute		Spiral Point		Straight Flute						Spiral Flute					
R40		-		-		-		-		R25		R25		R25	
TB514 (p.399) TC514-HAR (p.399)		TC727 (p.400) TD727 (p.400)		TCM01 (p.401) TDM01 (p.401)						TBM04 (p.404) TCM04-HAR (p.404)					
						TCM02 (p.402) TDM02 (p.402)						TBM05 (p.405) TCM05-HAR (p.405)			
								TCM03 (p.403) TDM03 (p.403)						TBM06 (p.406) TCM06-HAR (p.406)	
Vap	Hardslick	Bright	TiN	Bright	TiN	Bright	TiN	Bright	TiN	Vap	Hardslick	Vap	Hardslick	Vap	Hardslick
						</									




PIPE TAP

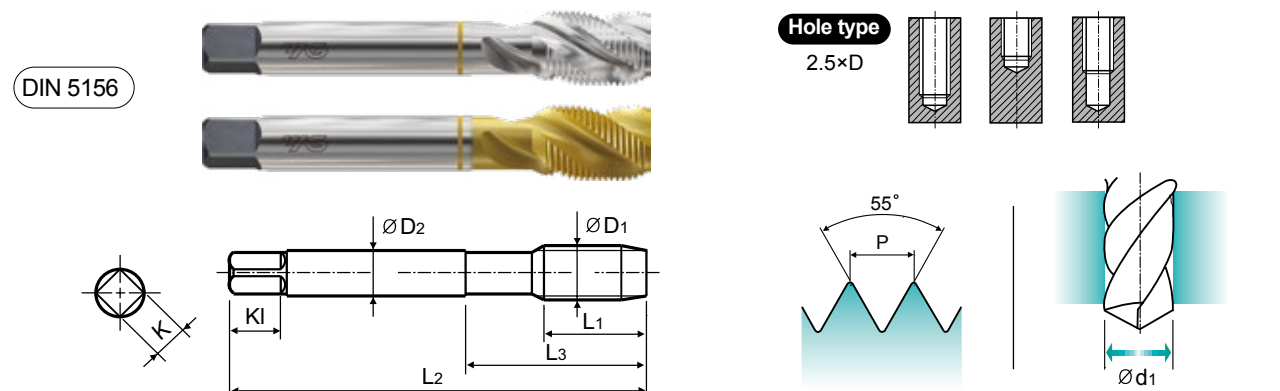
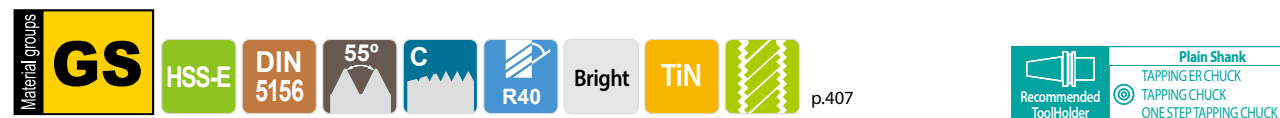
Bright
TIN

TC728 SERIES
TD728 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.



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	KI	Z	Ød1
G1/8 - 28		TC728200	TD728200	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		TC728400	TD728400	22	100	40	11	9	12	3	11.8
G3/8 - 19		TC728480	TD728480	22	100	40	12	9	12	3	15.25
G1/2 - 14		TC728560	TD728560	25	125	50	16	12	15	4	19
G3/4 - 14		TC728700	TD728700	28	140	54	20	16	19	4	24.5
G1 - 11		TC728780	TD728780	30	160	60	25	20	23	4	30.75

[illegible]

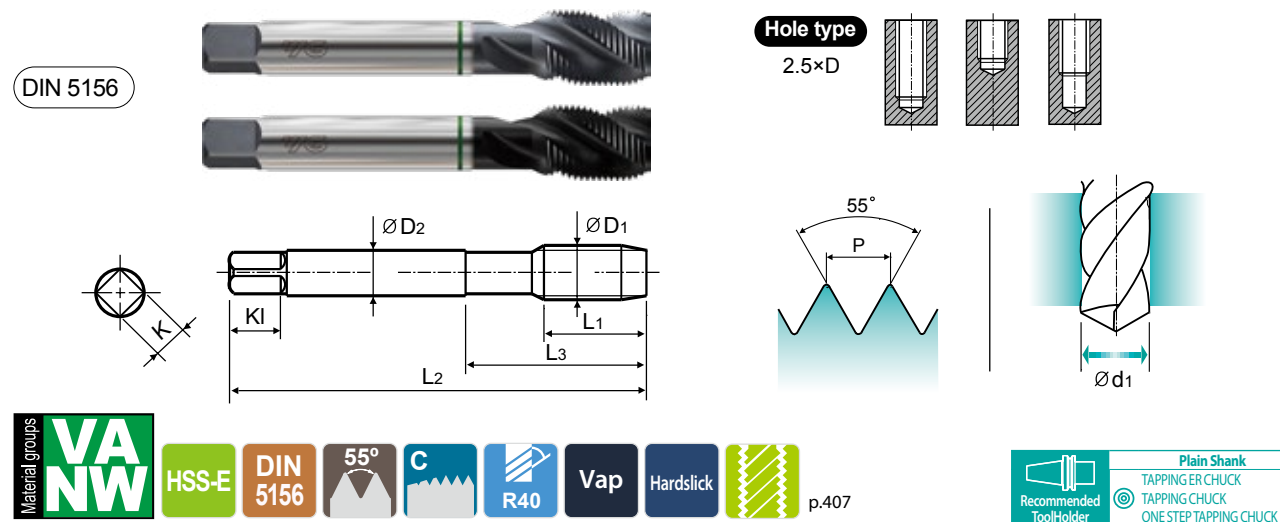

PIPE TAP

Vap
Hardslick

TB514 SERIES
TC514-HAR 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

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



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	Hardslick	L1	L2	L3	ØD2	K	Kl	Z	Ød1
G1/8 - 28		TB514200	TC514200HAR	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		TB514400	TC514400HAR	22	100	40	11	9	12	3	11.8
G3/8 - 19		TB514480	TC514480HAR	22	100	40	12	9	12	3	15.25
G1/2 - 14		TB514560	TC514560HAR	25	125	50	16	12	15	4	19
G3/4 - 14		TB514700	TC514700HAR	28	140	54	20	16	19	4	24.5
G1 - 11		TB514780	TC514780HAR	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

YG PIPE TAP

Bright

TIN

TC727 SERIES

TD727 SERIES

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

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 through holes due to special flute geometry and excellent chip evacuation.

Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 5156

Hole type

3.0×D

55°

P

ØD2

ØD1

L1

L2

L3

KI

GS

HSS-E

DIN 5156

55°

B

Bright

TiN

p.407

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

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	KI	Z	Ød1
G1/8 - 28		TC727200	TD727200	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		TC727400	TD727400	22	100	40	11	9	12	3	11.8
G3/8 - 19		TC727480	TD727480	22	100	40	12	9	12	3	15.25
G1/2 - 14		TC727560	TD727560	25	125	50	16	12	15	4	19
G3/4 - 14		TC727700	TD727700	28	140	54	20	16	19	4	24.5
G1 - 11		TC727780	TD727780	30	160	60	25	20	23	4	30.75

Unit : mm

◎ : Excellent ○ : Good

ISO	P										M			K							
Material Description	Non-alloy steel					Low alloy steel					High alloy 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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎		◎	◎											◎	◎			
ISO	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	21	22	23	24	25	26	27	28	29	30	15	30	25	38	34	55	60	42	55	55	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

YG PIPE TAP

Bright

TiN

TCM01 SERIES

TDM01 SERIES

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

NPT

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

Machine taps

Maschinengewindebohrer

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

Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 2181

Hole type

3.0×D

60°

P

ØD2

ØD1

L1

L2

L4

KI

GS

HSS-E

DIN 2181

60°

C

Bright

TiN

p.407

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.		Thread Length	Overall Length	Projection Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	TiN	L1	L2	L4	ØD2	K	KI	Z	Ød1
NPT1/16 - 27		TCM01020	TDM01020	14	56	12	6	4.9	8	4	6.15
NPT1/8 - 27		TCM01200	TDM01200	14	63	12.05	7	5.5	8	4	8.43
NPT1/4 - 18		TCM01400	TDM01400	21	63	17.45	11	9	12	4	11.13
NPT3/8 - 18		TCM01480	TDM01480	21	70	17.65	12	9	12	4	14.27
NPT1/2 - 14		TCM01560	TDM01560	27	80	22.85	16	12	15	4	17.86
NPT3/4 - 14		TCM01700	TDM01700	27	100	22.95	20	16	19	5	23.01
NPT1 - 11-1/2		TCM01780	TDM01780	32	110	27.4	25	20	23	5	28.98

Unit : mm

◎ : Excellent ○ : Good

ISO	P										M			K							
Material Description	Non-alloy steel					Low alloy steel					High alloy 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	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎		◎	◎											◎	◎			
ISO	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	21	22	23	24	25	26	27	28	29	30	15	30	25	38	34	55	60	42	55	55	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

YG PIPE TAP

Bright

TIN

TCM02 SERIES

TDM02 SERIES

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

ANSI B1.20.3

NPTF

ANSI B1.20.3

ANSI B1.20.3

ANSI B1.20.3

Machine taps

Maschinengewindebohrer

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

Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 2181

GS

HSS-E

DIN 2181

60°

C

Bright

TiN

p.407

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.	Thread Length	Overall Length	Projection Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter	
ØD1		Bright	TiN	L1	L2	L4	ØD2	K	KI	Z	Ød1
NPTF1/16 - 27		TCM02020	TDM02020	14	56	12	6	4.9	8	4	6.15
NPTF1/8 - 27		TCM02200	TDM02200	14	63	12.05	7	5.5	8	4	8.43
NPTF1/4 - 18		TCM02400	TDM02400	21	63	17.45	11	9	12	4	11.13
NPTF3/8 - 18		TCM02480	TDM02480	21	70	17.65	12	9	12	4	14.27
NPTF1/2 - 14		TCM02560	TDM02560	27	80	22.85	16	12	15	4	17.86
NPTF3/4 - 14		TCM02700	TDM02700	27	100	22.95	20	16	19	5	23.01
NPTF1 - 11-1/2		TCM02780	TDM02780	32	110	27.4	25	20	23	5	28.98

Unit : mm

◎ : 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	30	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	○	○	○	○	◎	◎	○														

402

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YG-1 CO., LTD.

CARBIDE

HSS

YG PIPE TAP

Bright

TIN

TCM03 SERIES

TDM03 SERIES

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

DIN EN10226-2, ISO 7-1

BSPT(Rc)

DIN EN10226-2, ISO 7-1

DIN EN10226-2, ISO 7-1

DIN EN10226-2, ISO 7-1

Machine taps

Maschinengewindebohrer

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

Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 2181

GS

HSS-E

DIN 2181

55°

C

Bright

TiN

p.407

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.	Thread Length	Overall Length	Projection Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter	
ØD1		Bright	TiN	L1	L2	L4	ØD2	K	KI	Z	Ød1
Rc1/16 - 28		TCM03020	TDM03020	14	56	10.1	6	4.9	8	4	6.2
Rc1/8 - 28		TCM03200	TDM03200	14	63	10.1	7	5.5	8	4	8.2
Rc1/4 - 19		TCM03400	TDM03400	21	63	15	11	9	12	4	11
Rc3/8 - 19		TCM03480	TDM03480	21	70	15.4	12	9	12	4	14.5
Rc1/2 - 14		TCM03560	TDM03560	27	80	20.5	16	12	15	4	18
Rc3/4 - 14		TCM03700	TDM03700	27	100	21.8	20	16	19	5	23.5
Rc1 - 11		TCM03780	TDM03780	32	110	26	25	20	23	5	29.5

Unit : mm

◎ : 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	30	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	○	○	○	○	◎	◎	○														

403

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YG-1 CO., LTD.

CARBIDE

HSS

YG PIPE TAP

Vap

Hardstick

TBM04 SERIES

TCM04-HAR SERIES

NPT

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

ANSI/ASME B1.20.1

Machine taps

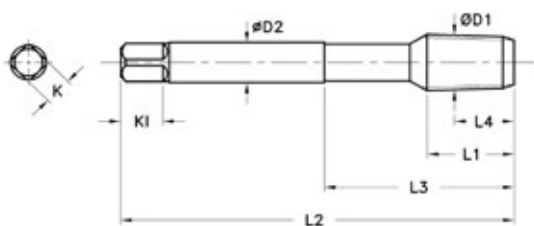
Maschinengewindebohrer

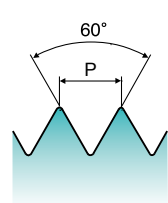
Suitable for tapping tapered holes due to special flute geometry and excellent chip evacuation.

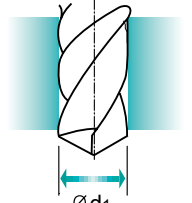
Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 5156









Material groups

VANW

HSS-E

DIN 5156

60°

C

R25

Vap

Hardstick

p.407

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Projection Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Hardstick	L1	L2	L3	L4	ØD2	K	KI	Z	Ød1
NPT1/16 - 27		TBM04020	TCM04020HAR	14	90	45	12	6	4.9	8	3	6.15
NPT1/8 - 27		TBM04200	TCM04200HAR	14	90	45	12.05	7	5.5	8	3	8.43
NPT1/4 - 18		TBM04400	TCM04400HAR	21	100	50	17.45	11	9	12	3	11.13
NPT3/8 - 18		TBM04480	TCM04480HAR	21	110	55	17.65	12	9	12	3	14.27
NPT1/2 - 14		TBM04560	TCM04560HAR	27	125	65	22.85	16	12	15	4	17.86
NPT3/4 - 14		TBM04700	TCM04700HAR	27	140	75	22.95	20	16	19	4	23.01
NPT1 - 11-1/2		TBM04780	TCM04780HAR	32	160	85	27.4	25	20	23	4	28.98

Unit : mm

404

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YG-1 CO., LTD.

CARBIDE

HSS

YG PIPE TAP

Vap

Hardstick

TBM05 SERIES

TCM05-HAR SERIES

NPTF

ANSI B1.20.3

ANSI B1.20.3

ANSI B1.20.3

ANSI B1.20.3

Machine taps

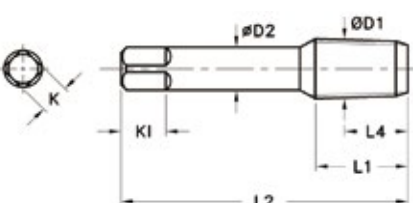
Maschinengewindebohrer

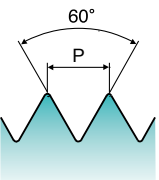
Suitable for tapping tapered holes due to special flute geometry and excellent chip evacuation.

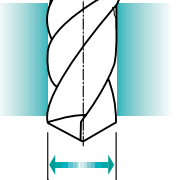
Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.

DIN 2181









Material groups

VANW

HSS-E

DIN 5156

60°

C

R25

Vap

Hardstick

p.407

Recommended ToolHolder

Plain Shank

TAPPING ER CHUCK

TAPPING CHUCK

ONE STEP TAPPING CHUCK

SIZE	TPI	EDP No.		Thread Length	Overall Length	Neck Length	Projection Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
		Vap	Hardstick	L1	L2	L3	L4	ØD2	K	KI	Z	Ød1
NPTF1/16 - 27		TBM05020	TCM05020HAR	14	90	45	12	6	4.9	8	3	6.15
NPTF1/8 - 27		TBM05200	TCM05200HAR	14	90	45	12.05	7	5.5	8	3	8.43
NPTF1/4 - 18		TBM05400	TCM05400HAR	21	100	50	17.45	11	9	12	3	11.13
NPTF3/8 - 18		TBM05480	TCM05480HAR	21	110	55	17.65	12	9	12	3	14.27
NPTF1/2 - 14		TBM05560	TCM05560HAR	27	125	65	22.85	16	12	15	4	17.86
NPTF3/4 - 14		TBM05700	TCM05700HAR	27	140	75	22.95	20	16	19	4	23.01
NPTF1 - 11-1/2		TBM05780	TCM05780HAR	32	160	85	27.4	25	20	23	4	28.98

Unit : mm

405

phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

YG-1 CO., LTD.



PIPE TAP

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

T7709	TC728 TD728	TC729 TY729	TB514 TC514-HAR	TC727 TD727	TCM01 TDM01 TCM02 TDM02 TCM03 TDM03	TBM04 TBM05 TBM06 TCM04-HAR TCM05-HAR TCM06-HAR
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ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)						
P	1	Non-alloy steel	125		15-20			15-20			11-15
	2		190	13	15-20	15-20		15-20	15-20	11-15	11-15
	3		250	25	12-18	12-18			12-18	9-13	
	4		270	28		10-15			10-15	7-11	
	5		300	32							
	6	Low alloy steel	180	10	10-15	10-15	10-15		10-15	7-11	
	7		275	29		10-15	10-15		10-15	7-11	
	8		300	32			6-10				
	9		350	38			3-5				
M	12	Stainless steel	200	15				7-10			5-7
	13		240	23				5-8			4-6
	14		180	10			4-6	4-6			3-4
K	15	Nodular cast iron	180		10-15						
	16		260		5-8						
	17		160	3	10-15	10-15			10-15	10-15	
	18		250	25	5-8	5-8			5-8	5-8	
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	
	25		130			10-15			10-15	10-15	
	26	Copper and Copper Alloys (Bronze / Brass)	110			25-35			25-35	25-35	
	27		90			8-12			8-12	8-12	

YG YG-1 CO., LTD. phone: +82-32-526-0909, www.yg1.solutions, E-mail: yg1@yg1.solutions **407**



Global Cutting Tool Leader **YG-1**

THREADING



Leading Through Innovation

HSS-E

SCREW THREAD INSERT TAP

EINSATZGEWINDE INSERT TAPS

- Tapping STI Threads of Soft Materials
- Gewindeschneiden von STI-Gewinden in weichen Materialien



**SCREW THREAD
INSERT TAP**

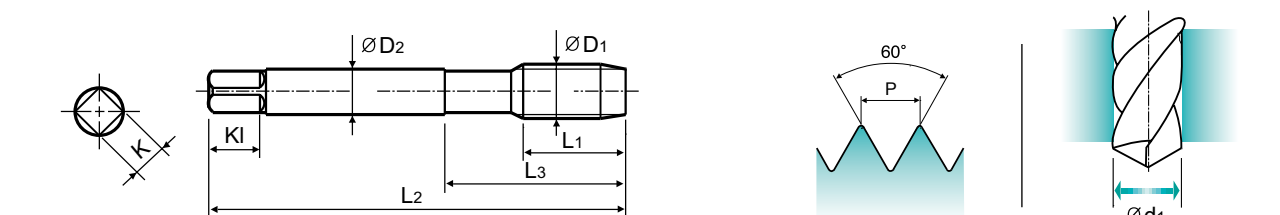
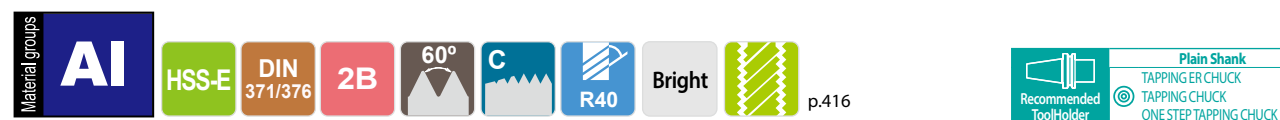
TC944 SERIES

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.



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)

[illegible]



**SCREW THREAD
INSERT TAP**

TC954 SERIES

EG-UNF Unified fine threads for Screw Thread insert

 Unified Feingew.f.Gew.Drahteins
 UNC POUR FILETS RAPPORTÉS
 ISO Metrico passo fine per Helicoil

Machine taps
Maschinengewindebohrer

► Wire insert threads are used for increasing fastening strength in soft materials.

DIN 371  **Hole type**  
3.0xD

DIN 374 

Plain Shank	
	TAPPING ER CHUCK
	TAPPING CHUCK
	ONE STEP TAPPING CHUCK

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)

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																					
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		100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎				◎													

⊙ : Excellent ○ : Good

SCREW THREAD INSERT TAP

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

					TC909 TC944	TC973 TC934 TC954
ISO	VDI 3323	Material Description	HB	HRc	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



HSS-E

NUT TAP
MUTTERGEWINDEBOHRER

- Nut Tapping Machines
- Zum Gewindeschneiden von Muttern



Global Cutting Tool Leader **YG-1**

THREADING



Leading Through Innovation



TAPS



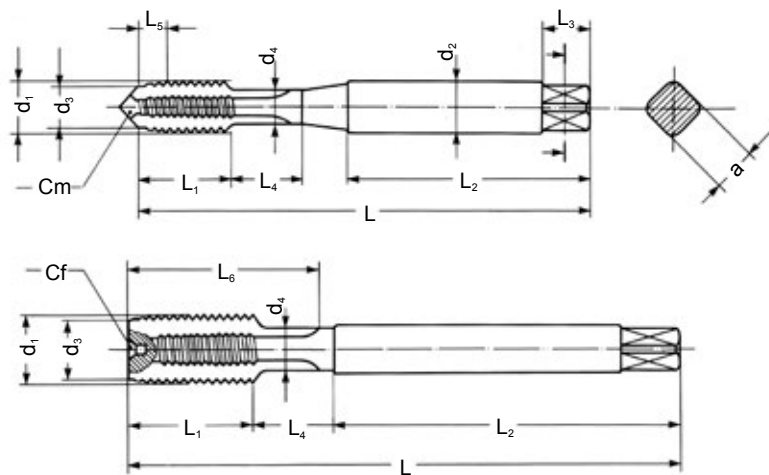
TECHNICAL DATA

TECHNISCHE DATEN

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

TAPS TERMINOLOGY

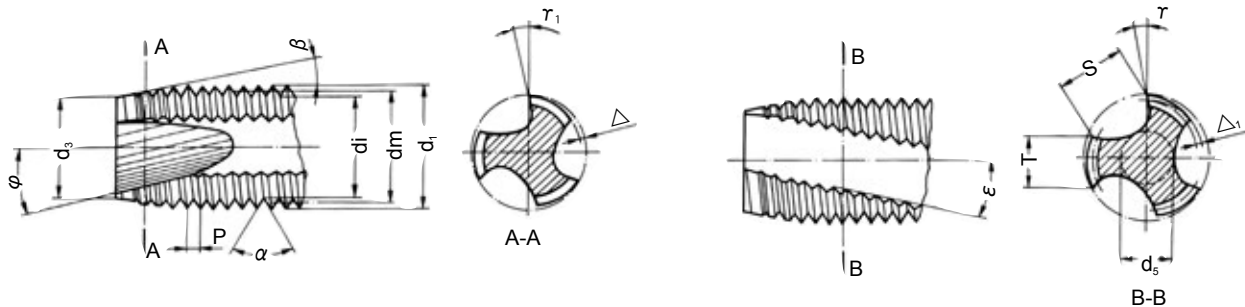
FACHAUSDRÜCKE BEI GEWINDEBOHRERN (Terminologie)



d_1 Major diameter
 d_2 Shank diameter
 d_3 Chamfer diameter
 d_4 Neck diameter
 L Total length
 L_1 Thread length
 L_2 Shank length
 L_3 Square length
 L_4 Neck length
 L_5 Chamfer length
 L_6 Flutes length
 a Square
 Cm Center male
 Cf Center female

d_1 Nenn Aussendurchmesser
 d_2 Schaftdurchmesser
 d_3 Anschnittdurchmesser
 d_4 Bunddurchmesser
 L Gesamtlänge
 L_1 Gewindelänge
 L_2 Schaftlänge
 L_3 Vierkantlänge
 L_4 Bundlänge
 L_5 Anschnittlänge
 L_6 Nutenlänge
 a Vierkantmaß
 Cm Mittelpunkt des Aussengewindes
 Cf Mittelpunkt des Innengewindes

d_1 Diamètre externe nominal
 d_2 Diamètre de la queue
 d_3 Diamètre de l'entrée
 d_4 Diamètre de la collerette de dégagement
 L Longueur totale
 L_1 Longueur de la partie filetée
 L_2 Longueur de la queue
 L_3 Longueur du carré
 L_4 Longueur de la collerette de dégagement
 L_5 Longueur de l'entrée
 L_6 Longueur des goujures
 a Carré
 Cm Centre mâle
 Cf Centre femelle



d_1 Major diameter
 dm Flank diameter
 d_i Minor diameter
 d_3 Chamfer diameter
 P Pitch
 a Flank angle
 β Chamfer angle
 ϕ Gun nose angle
 τ Gun nose rake angle in front
 Δ Chamfer relief
 Δ_1 Pitch diameter relief on the land
 τ Rake angle
 T Width of land
 S Flute width
 d_5 Web thickness
 ϵ Angle of spiral flute

d_1 Nenn Aussendurchmesser
 dm Flankendurchmesser
 d_i Kerndurchmesser
 d_3 Anschnittdurchmesser
 P Steigung
 a Flankenwinkel
 β Anschnittwinkel
 ϕ Schälswinkel
 τ_1 Schälswinkel-Spanwinkel
 Δ Hinterschliff am Anschnitt
 Δ_1 Flankenhinterschliff auf Zahnbreite
 τ Spanwinkel
 T Zahnstollenbreite
 S Nutenbreite
 d_5 Seelendicke
 ϵ Spiralwinkel

d_1 Diamètre externe nominal
 dm Diamètre moyen
 d_i Diamètre interne
 d_3 Diamètre de l'entrée
 P Pas
 a Angle du filet
 β Demi-angle du cône d'entrée
 ϕ Angle de l'entrée GUN
 τ_1 Angle de coupe sur l'entrée GUN
 Δ Détalonnage sur l'entrée
 Δ_1 Détalonnage sur le filet
 τ Angle de coupe frontale
 T Largeur des dents
 S Largeur des goujures
 d_5 Diamètre de l'âme
 ϵ Angle d'hélice des goujures

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRER

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				

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRERMETRIC 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

$$H = 0.86603P$$

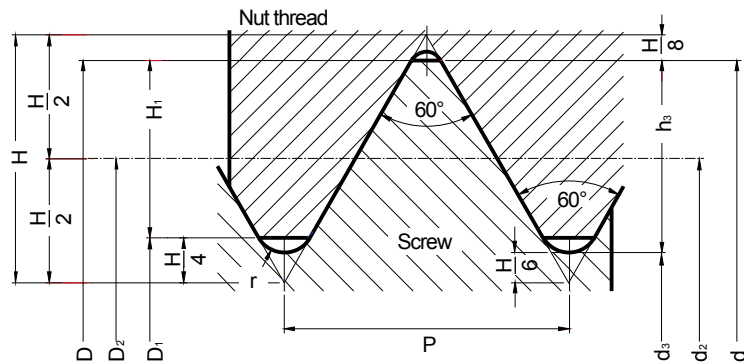
$$H_1 = \frac{5}{8} H = 0.54127P$$

$$h_3 = \frac{17}{24} H = 0.61343P$$

$$d_2 = D_2 = d - H = \frac{3}{4} d - 0.64952P$$

$$d_3 = d - 2h_3 = d - 1.22687P$$

$$r = \frac{H}{6} = 0.14434P$$



Nominal diameter d = D	Pitch P	Pitch diameter d2 = D2	Minor diameter		Thread depth		Radius r	Pitch diameter Tap tolerance 6H		Pitch diameter Nut tolerance 6H	
			Screw d3	Nut D1	Screw h3	Nut H1		min.	max.	min.	max.
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

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRERMETRIC 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

$$H = 0.86603P$$

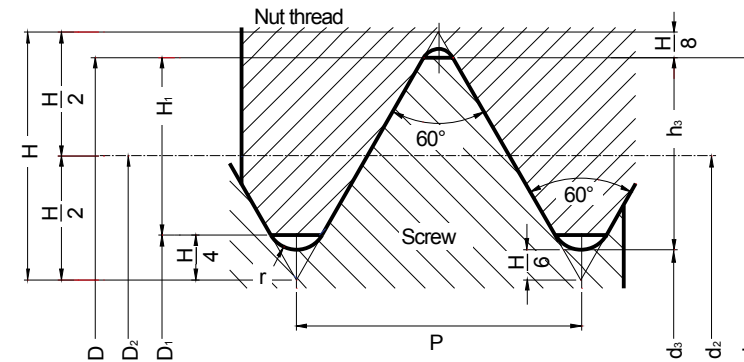
$$H_1 = \frac{5}{8} H = 0.54127P$$

$$h_3 = \frac{17}{24} H = 0.61343P$$

$$d_2 = D_2 = d - \frac{3}{4} H = d - 0.64952P$$

$$d_3 = d - 2h_3 = d - 1.22687P$$

$$r = \frac{H}{6} = 0.14434P$$



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

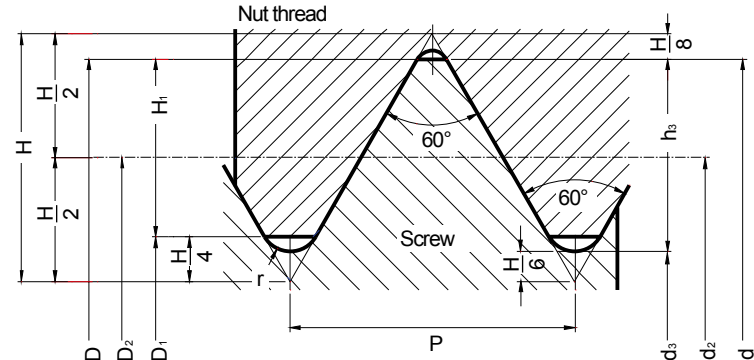
THREAD MILL		Nominal diameter	Pitch	Pitch diameter	Minor diameter		Thread depth		Radius	Pitch diameter Tap tolerance 6H		Pitch diameter Nut tolerance 6H	
					Screw	Nut	Screw	Nut		min.	max.	min.	max.
					d = D	P	d2 = D2	d3		D1	h3	H1	r
SYNCHRO TAP		M 22	2	20.701	19.546	19.835	1.227	1.083	0.289	20.752	20.786	20.701	20.913
PRIME TAP / FORMING		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
COMBO TAP		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
YG TAP STEEL		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
YG TAP CHIP BREAKER		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
YG TAP INOX		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
YG TAP CAST IRON		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
YG TAP HARDENED STEEL		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
YG TAP Ti Ni		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
YG TAP ALU		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
YG TAP FORMING		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
YG TAP GENERAL / HAND TAP		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
PIPE TAP		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
STI TAP		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
NUT TAP		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
TECHNICAL DATA		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

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	TPI	Pitch	External diameter	Flank diameter	Thread depth		Flank diameter Tap tolerance 2B		Flank diameter Nut tolerance		
					Nut	Screw	min.	max.	min. 2B/3B	max. 2B	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

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRERUNIFIED 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

$$H = 0.86603P$$

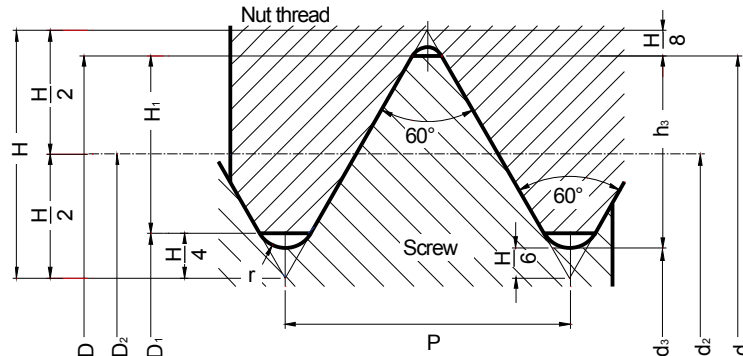
$$H_1 = \frac{5}{8} H = 0.54127P$$

$$h_3 = \frac{17}{24} H = 0.61343P$$

$$d_2 = D_2 = d - \frac{3}{4} H = d - 0.64952P$$

$$d_3 = d - 2h_3 = d - 1.22687P$$

$$r = \frac{H}{6} = 0.14434P$$



Nominal diameter	TPI	Pitch	External diameter d = D	Flank diameter d2 = D2	Thread depth		Flank diameter Tap tolerance 2B		Flank diameter Nut tolerance		
					Nut	Screw					
					D1	d3	min.	max.	min. 2B/3B	max. 2B	max. 3B
#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

TECHNICAL
DATASUPER CUTTING TAPS
HOCHLEISTUNGS GEWINDEBOHRERWHITWORTH PIPE THREADS
WHITWORTH ROHRGEWINDE

Nominal dimensions ISO 228/1-UNI 338-66

Production tolerances on tap flank diameter

Limit dimensions for internal threads

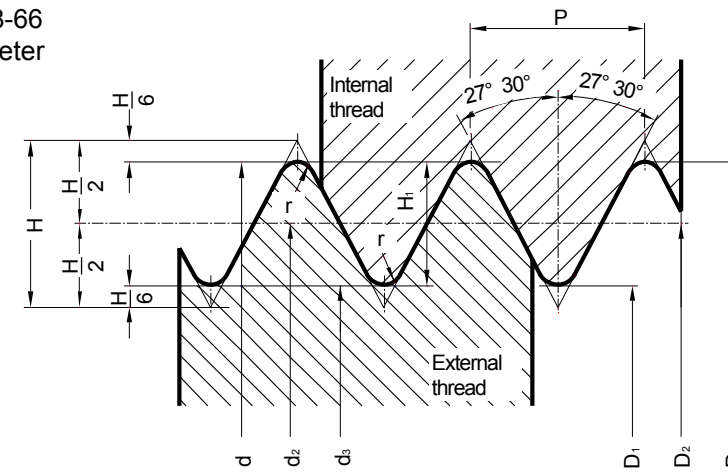
Dimensions in mm

$$P = \frac{25.4}{Z}$$

$$H = 0.960491 P$$

$$H_1 = 0.640327 P$$

$$r = 0.137329 P$$



Type	Thread diameter d = D	Pitch P	TPI z	Flank diameter d2 = D2	Minor diameter d3 = d1	H1	r	Tap Flank diameter		Internal Thread Flank diameter	
								min.	max.	min.	max.
								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.

CARBIDE	<div><div></div><div>TECHNICAL DATA</div><div>SUPER CUTTING TAPS HOCHLEISTUNGS GEWINDEBOHRER</div></div>	
HSS		
THREAD MILL		
SYNCHRO TAP		
PRIME TAP / FORMING		
COMBO TAP		
YG TAP STEEL		
YG TAP CHIP BREAKER		
YG TAP INOX		
YG TAP CAST IRON		
YG TAP HARDENED STEEL		
YG TAP Ti Ni		
YG TAP ALU		
YG TAP FORMING		
YG TAP GENERAL / HAND TAP		
PIPE TAP		
STI TAP		
NUT TAP		
TECHNICAL DATA		



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 für den Werkstoff geeigneten Gewindebohrer auswählen
	Faulty alignment Fehlerhafte Fluchtung	Ensure that the tap is correctly aligned with the core hole axis Dafür 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 für den Werkstoff geeigneten Gewindebohrer auswählen
	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 überprüfen 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 erhöhen
Bell mouthed tapped hole Gewinde trichterförmig	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 für den Werkstoff geeigneten Gewindebohrer auswählen
	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 Prüfen, ob die Schneidengeometrie für den Werkstoff geeignet ist
	Coolant lacking in lubricating qualities and / or quantity Kühlmittel mit unzureichendem Schmiermittelanteil	Ensure the use of a suitable coolant and an ample supply Für qualitativ und quantitativ gute Kühlung und Schmierung sorgen

434

phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

 YG-1 CO., LTD.

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TECHNICAL DATA

SUPER CUTTING TAPS HOCHLEISTUNGS GEWINDEBOHRER

6 RESHARPENING NACHSCHARFEN

The resharpening on taps is done for regenerating the active hedges worn 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:

- resharpening of (relieved) chamfer;
- resharpening of flutes. (See picture 1)

Das Nachscharfen der Gewindebohrer dient der Erneuerung der verschlissenen Schneidkanten.

Es ist wichtig, um das Leistungsvermögen des Werkzeugs voll auszuschoffen und muss daher präzise durchgeführt werden, um Fehler zu vermeiden, die die Präzision des Gewindes und die Standzeit beeinträchtigen.

Um das Nachscharfen schnell und präzise durchzuführen, empfehlen wir den Einsatz von geeigneten Schleifmaschinen mit dem notwendigen Zubehör.

Das Nachscharfen der Gewindebohrer erfolgt in zwei Stufen :

- scharfen der Freiflächen im Anschnitt;
- scharfen der Nuten (Spanfläche) (siehe Abb. 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 concentrically; 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 für einen genauen Hinterschliff.

Abb. 2 zeigt das Nachscharfen mit einer zylindrischen Schleifscheibe.

Vor dem Schleifen überprüfen, ob der Gewindebohrer, zwischen Spitzen oder in einer Spannzange gehalten, rund läuft; prüfen Sie auch den Winkel β , der korrekt sein muss, um die gleiche Anzahl Gänge im Anschnitt zu haben

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)

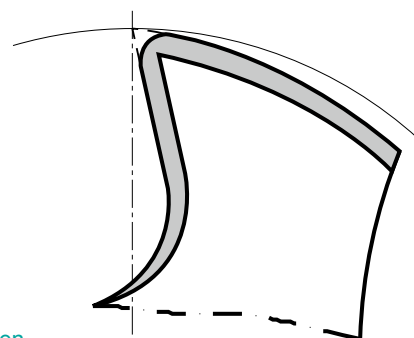
Dieser Arbeitsgang muss auf einer speziellen Gewindebohrer ? Schleifmaschine erfolgen, die ausgerüstet ist mit : Teilkopf, Leitspindel zum Schleifen entlang gedrahter Nuten und Kuhlmitteversorgung. Den Spanwinkel τ bei Gewindebohrern mit geraden Nuten erhält man durch Verstellen der Bohrerachse im Verhältnis zu der zu schleifenden Oberfläche um den Einstellwert X, der nach folgender Formel errechnet wird : $X = \frac{1}{2} d_1 \sin \tau$ (siehe Abb. 3). (d_1 = Gewindebohrerdurchmesser)

Example:

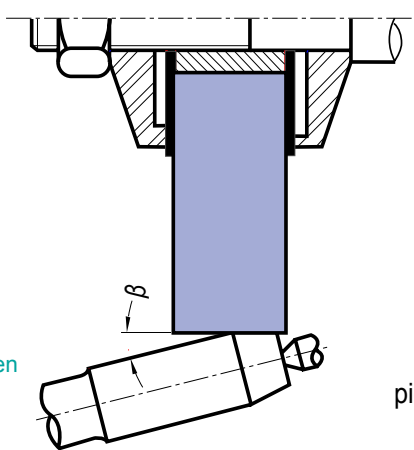
Tap 10 $\times$ 1,5 to cut on steel strength = 600 N/mm²

$d_1 = 10\text{mm}$; $\tau = 15^\circ$; $\sin \tau = 0,25882$;

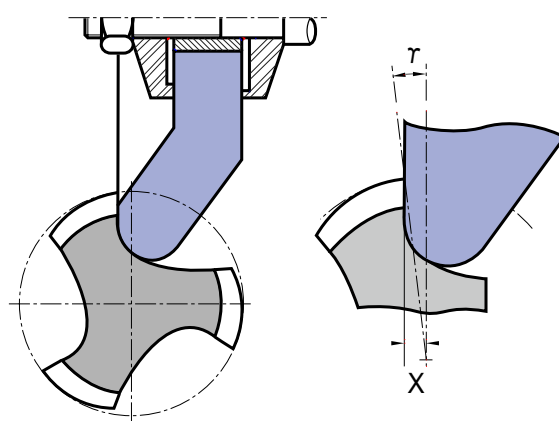
$X = \frac{0,25882 \times 10}{2}$; $X = 1,29\text{mm}$



pic. 1



pic. 2



pic. 3



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 referred 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 gedrahten

Nuten werden allgemein spezielle Schleifmaschinen eingesetzt, die die Drahlsteigung messen und selbständig einstellen können.

Beim Einsatz von Gewindebohrern mit dem Entgratwerkzeug Burr-Bit ist es notwendig, die Nuten entsprechend den Vorgaben des Herstellers zu verlängern.

Da der Verschleiß eines Gewindebohrers hauptsächlich im Anschnitt und dem erstenvollen Gewindezahn liegt,

können Gewindebohrer mit Schalanschnitt und gerader Nute auch nur im vorderen

Gewindeteil nachgeschliffen werden (siehe Abb. 4).

It is very important to pay attention that, when also the thread flanks are worn (in addition to the active hedges) 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.

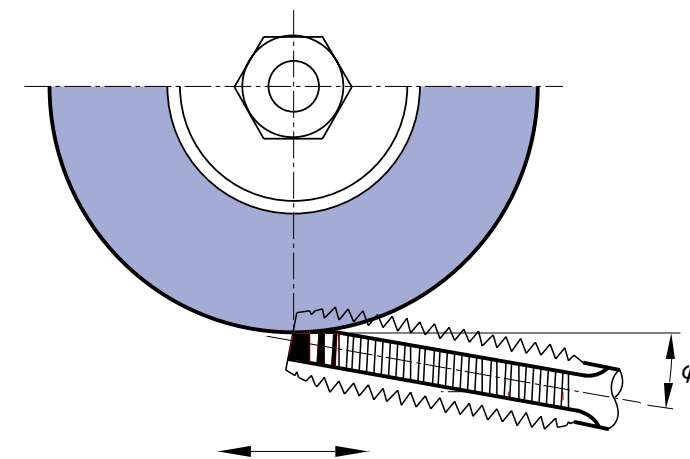
(see picture 5)

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.

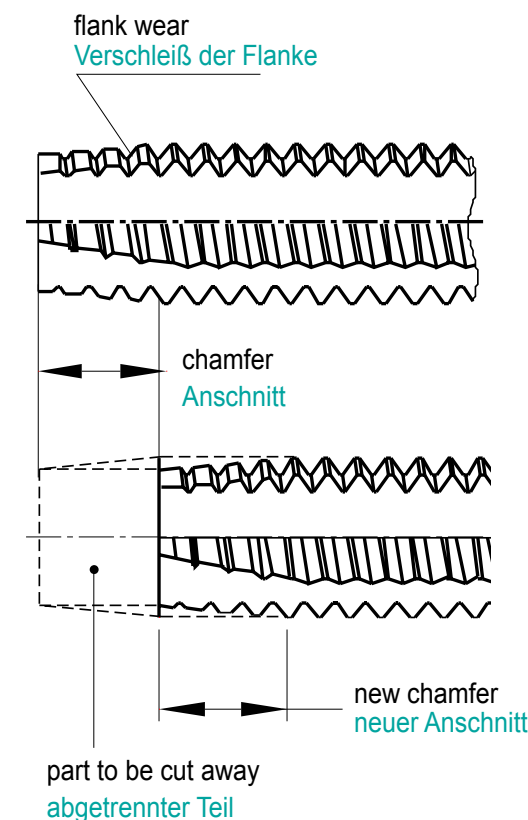
Es ist wichtig zu wissen, daß beim Verschleiß der Gewindezahnflanken (zusätzlich zur Hauptschneidkante) das oben beschriebene Nachschleifen praktisch nutzlos ist !

In diesem Fall wird die "Erneuerung" dadurch erreicht, daß der Anschnitt komplett abgetrennt wird (das bedeutet eine Kürzung des Gewindebohrers und Verlust der entrierung) und neu angeschliffen wird, mit gleichen Winkeln und Hinterschliff (siehe Abb. 5).

Diese "Erneuerung" ist auch für drahtgenutete Gewindebohrer zu empfehlen, weil dann das Nutenschleifen entfällt, wenn keine geeignete Schleifmaschine mit Leitspindel vorhanden ist



pic. 4



pic. 5

 IMPORTANT RECOMMENDATIONS
WICHTIGE EMPFEHLUNGEN

RESHARPEN TIMELY
RECHTZEITIGES NACHSCHARFEN

It is important to resharpen timely the wore 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 nachzuschärfen. Stumpfe Gewindebohrer können defekte Gewinde schneiden, die Bruchgefahr ist erhöht; zudem nimmt der Verschleiß schnell zu und zerstört weite Bereiche der Schneiden

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 müssen auf die Gewindebohrer abgestimmt sein. Unsere Techniker sind bereit, Ihnen die geeignete Empfehlung zu geben

TAPS FOR CAST IRONS
GEWINDEBOHRER FÜR 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 Nachschärfen kaum möglich. Der verschleißfordernde Guss greift die Schneidenflanken an, wodurch die Toleranz verloren geht.

TAPS FOR ALUMINIUM
GEWINDEBOHRER FÜR 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 Nachschärfen Schleifgrate vom Gewindebohrer mit Stahlbursten zu entfernen. Dadurch wird die Gefahr vermieden, Gewinde zu groß zu schneiden.

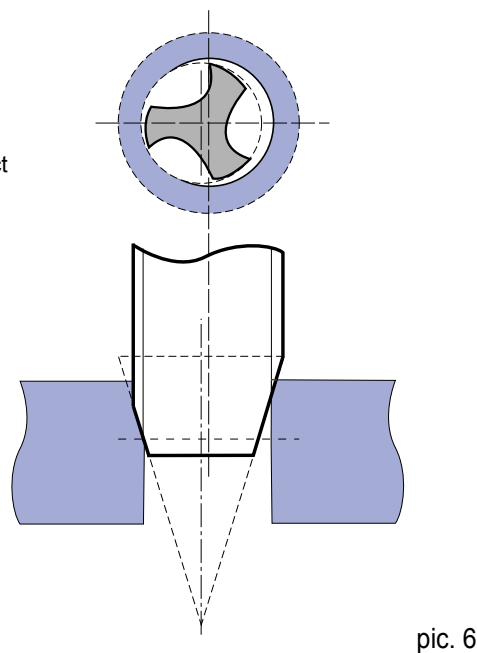
CONTROLS (TESTS)
KONTROLLEN (TESTS)

Once resharpened the tap, it is always better to make some tests to obtain correct threads same as when the tap was new.

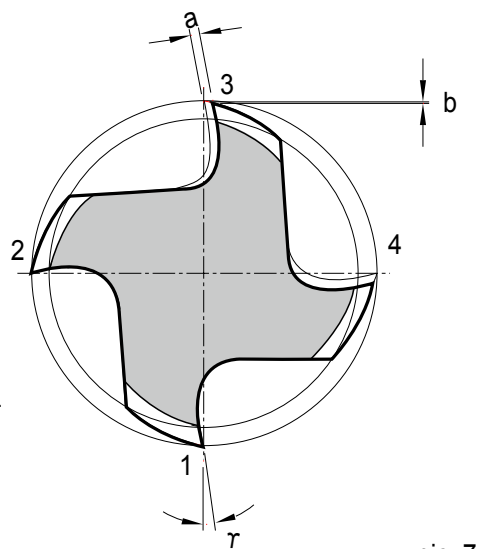
- The chamfer must be perfectly on axis to avoid the effects of picture 6.
- The cutters must have correct divisions.
The results of a resharpening with a wrong division is shown on picture 7.
- The length and number of threads on chamfer must be rigorously identical to those of the new tap.

Nach dem Nachschärfen 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. 6 zu vermeiden.
- Die Schneiden müssen eine genaue Teilung haben.
Das Ergebnis des Nachschleifens mit falscher Teilung ist in Abb. 7 zu sehen.
- Die Länge und Anzahl der Gewingegänge im Anschnitt muss absolut genau so sein, wie bei einem neuen Gewindebohrer.



chamfer out of center
unrund geschliffener Anschnitt



incorrect division
Teilungsfehler
cutters not concentric
Schneiden nicht konzentrisch

 ORDERS / INQUIRIES SPECIAL TAPS
Bestellungen / Anfragen ; SONDERGEWINDEBOHRER

For photocopying

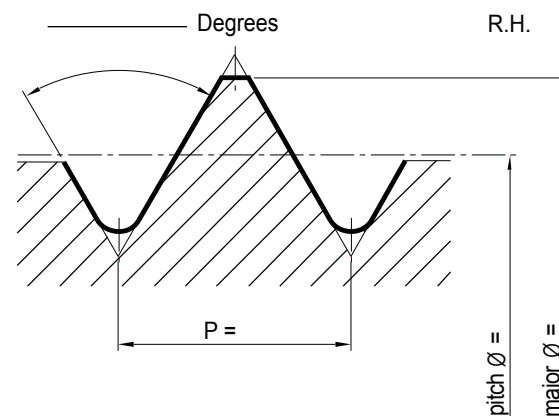
Orders / Inquiries

This form may be returned to your local YG-1 distributor or to YG-1.

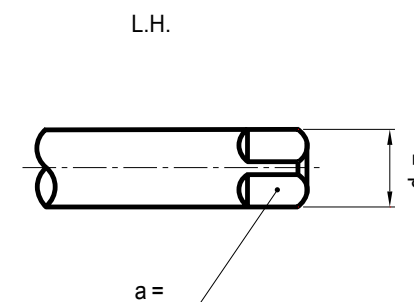
Company _____
Address _____
Department _____
Phone _____

Tool

Thread $\varnothing$ and pitch _____

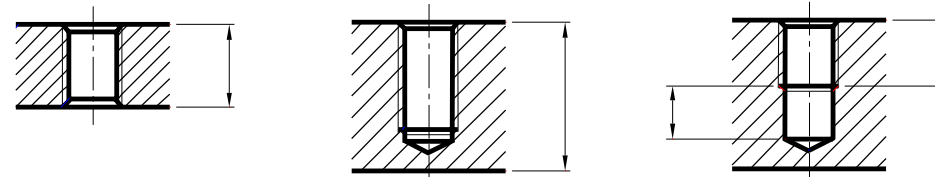


Tolerance class _____



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 MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

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
Thread Ø and pitch
☐ right-hand cutting
☐ fluteless
☐ straight flutes
☐ spiral point
Additional information for special pitches or thread forms
pitch Ø
minor Ø

Make

Type

Class of tolerance

☐ left-hand cutting
☐ right hand spiral flutes degrees
☐ left hand spiral flutes degrees
☐ length of chamfer thread chamfer

major Ø
flank angle degrees

Hole

Tap drill Ø
☐ through hole
Special requirements or unusual characteristics of the threaded product

length of hole
depth of full thread
☐ bottoming hole

Tapping speed

meters per minute
revolutions per minute

Lubricant

☐ without
Application

☐ emulsion %
☐ under pressure

☐ cutting oil
☐ vaporization

☐ other
☐ other

Machine

Type

☐ horizontal tapping
☐ vertical tapping

Driving

☐ tap revolves
☐ work revolves

Number of
spindles

Feed

☐ without
☐ power
☐ CNC %

Tool holder

☐ rigid
Make

☐ floating
Type

☐ with safety clutch

Material to be tapped

Material No. or designation
Composition, if possible
Tensile strength or hardness N/mm²
Chip form ☐ short ☐ long

Short description of problem :

Person to be contacted within the company

Date

Signature

440

phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

YG-1 CO., LTD.

CARBIDE

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP / FORMING

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL / HAND TAP

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

10

MAIN THREAD SYMBOLS
HAUFIGE GEWINDEARTE

AMERICAN STANDARD

Cylindrical threads

UNC
UNF
UNEF
UN

UNS
UNJ

UNJC

UNJEF

UNJF

Unified Coarse-Thread Series
Unified Fine-Thread Series
Unified Extra-Fine-Thread Series
Constant Pitch Series-Threads with constant pitch of TPI 4,6,8,12,16, 20,28,32

Selected combinations-Threads with special dia-pitch combinations
Unified threads with constant pitch with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
Unified coarse thread with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
Unified extra fine thread with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch
Unified fine threads with radius on minor diameter from 0,15011 Pitch to 0,18042 Pitch

F-PTE

NPT
NPTF
NPTR

PTF-SAE SHORT

PTF-SPL SHORT

PTF-SPL EXTRA SHORT

SPL-PTF

NGT

SGT
API

Taper pipe fine threads(dryseal)
Taper pipe thread
Taper pipe thread (dryseal)
Taper pipe thread for railways equipments
Taper pipe short thread(dryseal)-SAE
Taper pipe special thread(dryseal)-SAE
Extra short special thread(dryseal)-SAE
Special taper pipe dryseal thread
National American taper pipe thread
Special taper pipe thread
American petroleum Institute taper pipe thread

Trapezoidal and saw tooth threads

ACME-C
ACME-G
STUB-ACME

60° STUB-ACME

N BUTT

ACME selfcentering thread
ACME generical application
ACME flat thread with reduced thread depth
ACME flat thread with 60° flank angle
American National Saw tooth thread

BRITISH STANDARD

BSW
BSF
WHIT
R

Rc
Rp

BA
BSC
CEI

Whitworth British Standard coarse pitch
Whitworth British Standard fine pitch
Whitworth Standard special pitch
British Standard external threading for taper pipe(dryseal)(already BSP-Tr)
British Standard internal threading taper thread for pipe(BSP-Tr)
British Standard cylindrical thread for pipe(already BSP.PI)
British Standard Association thread
British Standard thread for bicycle
British Standard for bicycle

Taper pipe threads

ANPT

Taper pipe threads for Army, Navy and Airforce

441

phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions

YG-1 CO., LTD.


**COMPARISON CHART SCALE FOR HARDNESS
VERGLEICHSTABELLE FÜR HÄRTESTKALEN**

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

EDP No. INDEX

EDP No.	Page	EDP No.	Page	EDP No.	Page
L1211	50	TRQ18	124	TBJ07	172
L121H	51	TRQ19	125	TCJ08	173
L1212	52	TRQ17	126	TDJ08	173
L1213	53	TRE39	127	TBJ08	173
L1214	54	TRE41	128	TC854	174
L3215	55	TRE40	129	TC854-U	174
L3218	56	TRE42	131	TD854	174
L3216	57	TRJ24	132	TB854	174
L4211	58	TRJ25	133	TCJ09	177
L4212	59	TRQ20	135	TDJ09	177
L4213	60	TRQ24	136	TC814-IC	179
L4214	61	TRQ22	137	TC445	180
L6215	62	TRQ21	138	TC834	181
L4271	63	TRQ25	139	TD834	181
L4272	64	TRQ23	140	TB834	181
L4273	65	TC804	150	TCJ01	182
L4274	66	TC804-U	150	TDJ01	182
L4276	67	TD804	150	TC874	183
L12D1	68	TB804	150	TD874	183
L12D3	69	TCE05	152	TB874	183
L19E1	70	TDE05	152	TCJ02	184
L19E3	71	TBE05	152	TDJ02	184
L1AG1	72	TCE06	153	TQ823	192
L41A1	73	TDE06	153	TR823	193
L42A1	73	TBE06	153	TC312	194
TTS31	80	TCE07	154	TD312	195
TTS32	81	TDE07	154	TB312	196
TTS33	82	TBE07	154	TY312	197
TTS34	83	TCE08	155	TC413	198
TKS35	84	TDE08	155	TD413	199
TKS36	85	TBE08	155	TC174	200
TTS37	86	TC844	156	TD174	201
TTS38	87	TC844-U	156	TC184	202
TTS39	88	TD844	156	TB913	203
TTS41-IC	89	TB844	156	TQ863	204
TTS42-RCP	90	TCE09	159	TR863	205
TKS43-IC	91	TDE09	159	TC422	206
TKS44-RCP	92	TC804-IC	161	TD422	207
TTS45-RCP	93	TC807	162	TE422	208
TRE30	99	TC633	163	TY422	209
TRE35	100	TC824	164	TC263	210
TRE34	101	TD824	164	TD263	211
TRE31	102	TB824	164	TC244	212
TRE36	104	TCE01	165	TD244	213
TRE32	105	TDE01	165	TC254	214
TRE33	106	TC864	166	TDE24	219
TRE37	107	TD864	166	TDE25	220
TRE38	108	TB864	166	TDE26	221
TRJ15	109	TCE02	167	TDE27	222
TRJ10	110	TDE02	167	TDE28	223
TRJ16	111	TC814	168	TDE29	224
TRJ11	113	TC814-U	168	TB711	230
TRJ17	114	TD814	168	TQ813	231
TRJ18	115	TB814	168	TR813	232
TRJ12	116	TCJ05	170	TB914	233
TRQ10	117	TDJ05	170	TI914	233
TRQ14	118	TBJ05	170	TBE15	234
TRQ16	119	TCJ06	171	TBE16	235
TRQ12	120	TDJ06	171	TBE17	236
TRQ11	121	TBJ06	171	TBE18	237
TRQ15	122	TCJ07	172	TCH14	238
TRQ13	123	TDJ07	172	TQ853	239

EDP No.	Page
TR853	240
TB623	241
TCH23	242
TB183	243
TB904	244
TB924	245
TB123	246
TB264	247
TB274	248
TOB04	255
TOB01	256
TO993	257
TRB10	258
TRB06	259
TRB19	260
TRB13	261
TRB23	262
TE821	263
TD821	264
TI821	265
TY821	266
TOB05	267
TOB02	268
TRB11	269
TRB07	270
TRB20	271
TRB14	272
TRB24	273
TE403	274
TE434	275
TE454	276
TRB12	277
TRB08	278
TRB22	279
TRB18	280
TRB25	281
TO997-TIC	286
TO999-TIC	287
TKE43	288
TC313	289
TB313	290
TY313	291
TKJ26	292
TC283	293
TY283	294
TKE44	295
TKJ27	296
TM903	302
TZ903	303
TM293	304
TZ293	305
TM933	306
TZ933	307
TM923	308
TZ923	309
TQ833	310
TR833	311
TQ873	312
TR873	313
TC163	318
TE953	319
TC963	320

EDP No.	Page
TC169	321
TC170	322
TC622	323
TE943	324
TC433	325
TE443	326
TY433	327
TOQ01	332
TOQ02	333
TD703	334
TE703	335
TY703	336
TQ703	337
TD713	338
TE713	339
TQ723	340
TE723	341
TD723	342
TD733	343
TE733	344
TD704	345
TE704	346
TC711	354
TD711	355
TC411	356
TD411	358
TC144	360
TC124	361
TC134	362
TC517	363
TC612	364
TC127	365
TD127	366
TC122	367
TC222	368
TD222	370
TC214	372
TC234	373
TC224	374
TC227	375
TD227	376
TC211	377
TC463	378
TC473	379
TC424	380
T7109	381
T7309	383
T7363	385
T7509	386
T7609	387
T7343	388
TB373	389
TC353	390
T7709	396
TC728	397
TD728	397
TC729	398
TY729	398
TB514	399
TC514-HAR	399
TC727	400
TD727	400

EDP No.	Page
TCM01	401
TDM01	401
TCM02	402
TDM02	402
TCM03	403
TDM03	403
TBM04	404
TCM04-HAR	404
TBM05	405
TCM05-HAR	405
TBM06	406
TCM06-HAR	406
TC909	411
TC973	412
TC944	413
TC934	414
TC954	415
TC803	419