



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



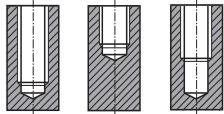
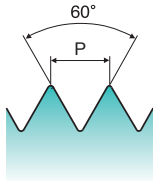
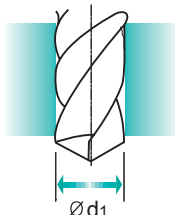
HSS-E & HSS-PM
YG TAP
STEEL

For Steel Materials but also other
Long Chip Forming Materials

Please visit globalyg1.com/mat for material search
© : Excellent ○ : Good
Recommended cutting conditions : p.B159

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.B140)	TY312 (p.B141)	TB913 (p.B147)	TQ863 (p.B148)	TR863 (p.B149)	TC422 (p.B150)	TD422 (p.B151)	TE422 (p.B152)	TY422 (p.B153)	M
					TC263 (p.B154)	TD263 (p.B155)			MF
					TC244 (p.B156)	TD244 (p.B157)			UNC
					TC254 (p.B158)				UNF
									BSW
									G(BSP)
									EG-M
									EG-UNC
									EG-UNF
VAP	TiAlN	VAP	VAP	Bright	Bright	TiN	Nitride	TiAlN	
○	○	○	○	○	○	○	○	○	2
○	○	○	○	○	○	○	○	○	3
○	○	○	○	○	○	○	○	○	4
◎	◎	◎	◎	◎	◎	◎	◎	◎	5
○	○	○	○	○	○	○	○	○	6
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			○	○	○	○	○	○	12
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THREAD MILL	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 2.5xD    Material groups VG HSS PM DIN 371/376 6H 60° C R40 Vap  p.B159 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 M2.5 × 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 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)
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◎ : Excellent ○ : Good

ISO	P										M					K								
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron					
VDI 3323	1	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											○					○								

M

ISO metric coarse threads DIN 13

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

Machine taps
Maschinengewindebohrer

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

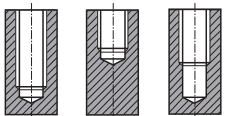
► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

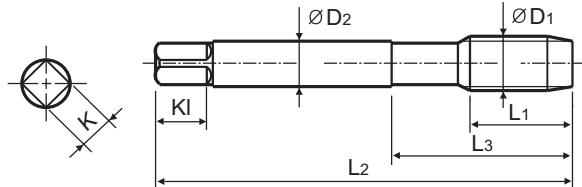
DIN 371

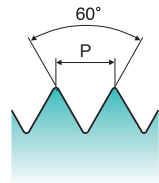
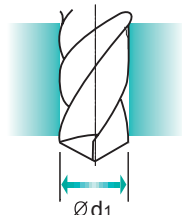

DIN 376


Hole type

2.5×D





Material groups

VG

HSS PM

DIN 371/376

6H

60°

C

R40

Bright

p.B159

Unit : mm										
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Bright	L1	L2	L3	ØD2	K	Kl	Z	Ød1
M2.5 × 0.45		TR823176	9	50	15	2.8	2.1	5	3	2.05
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
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
M8 × 1.25		TR823366	13	90	35	8	6.2	9	3	6.8
M10 × 1.5		TR823426	15	100	39	10	8	11	3	8.5
M12 × 1.75		TR823506	18	110	44	9	7	10	3	10.2

► DIN 371 (M2~M10) and DIN 376(M12)

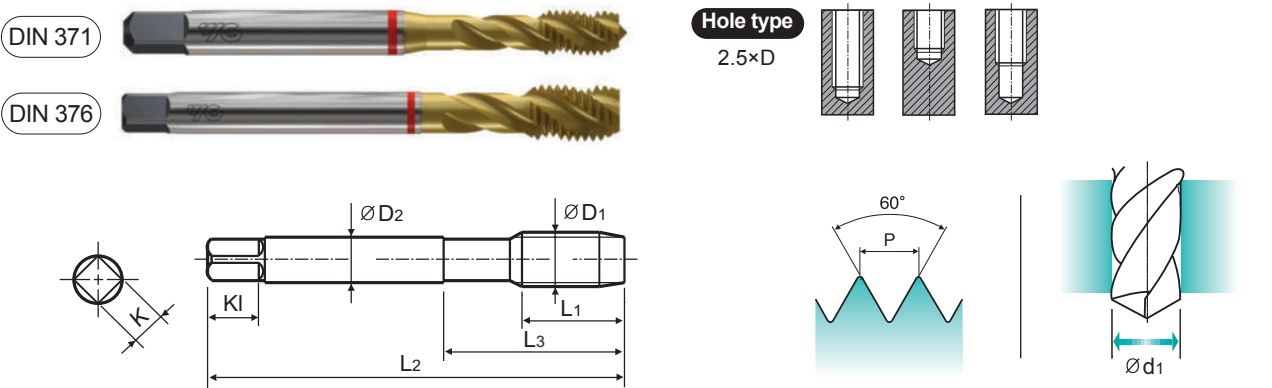
																				◎ : Excellent ○ : Good			
ISO	P										M					K							
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel	Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
HRc		13	25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

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		TD312136	8	45	13	2.8	2.1	5	3	1.6
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
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
M10 × 1.5		TD312426	15	100	39	10	8	11	3	8.5
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 3323	1	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											○					○						

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

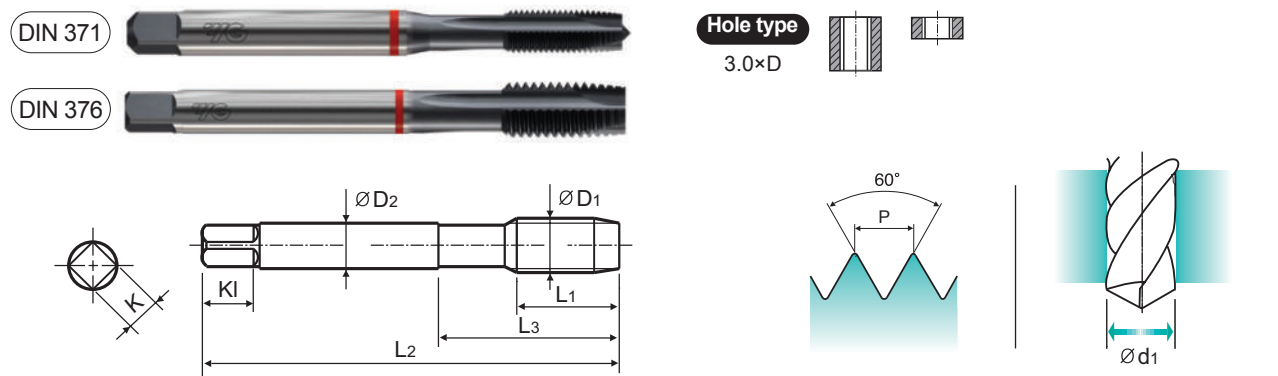
ISO MÉTRIQUE DIN13

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.



Material groups

VG HSS PM DIN 371/376 6H 60° B Vap p.B159

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	TQ863136	8	45	13	2.8	2.1	5	3	1.6
M3	× 0.5	TQ863206	11	56	18	3.5	2.7	6	3	2.5
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
M8	× 1.25	TQ863366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ863426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TQ863506	24	110	44	9	7	10	3	10.2

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

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

ISO metric coarse threads DIN 13

Metrisches ISO-Gewinde DIN 13

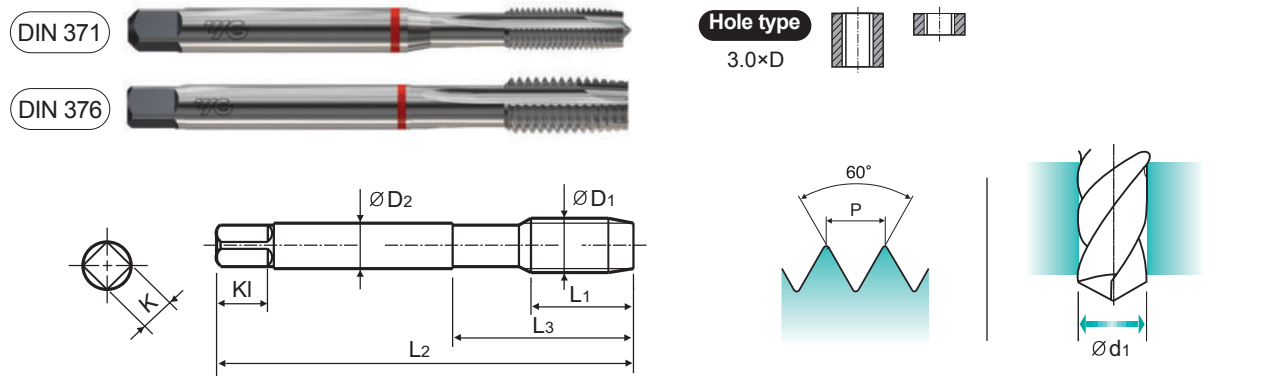
ISO MÉTRIQUE DIN13

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.



Material groups

VG HSS PM DIN 371/376 6H 60° B Bright p.B159

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
M2.5	× 0.45	TR863176	9	50	15	2.8	2.1	5	3	2.05
M5	× 0.8	TR863286	15	70	25	6	4.9	8	3	4.2
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)

																				◎ : Excellent ○ : Good			
ISO	P										M				K								
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron			
VDI 3323	1	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

YG TAP STEEL

TE422 SERIES

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

L1

L2

L3

KI

Ød1

60°

P

ØD2

ØD1

L1

L2

L3

KI

Ød1

VG

HSS-E

DIN 371/376

6H

60°

B

Nitride

p.B159

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Ni	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2	× 0.4	TE422136	8	45	13	2.8	2.1	5	3	1.6
M3	× 0.5	TE422206	11	56	18	3.5	2.7	6	3	2.5
M4	× 0.7	TE422246	13	63	21	4.5	3.4	6	3	3.3
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
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
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
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

ISO

Material Description

VDI 3323

HRC

HB

Recommended

P										M				K							
Non-alloy steel					Low alloy steel					High alloy 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	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21			
125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
	○	○	○	◎	○	○	◎	◎			○	○	○								

ISO

Material Description

VDI 3323

HRC

HB

Recommended

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	
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			55	60	42	55	
60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
										○					○						

◎ : Excellent ○ : Good

B152

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YG-1 CO., LTD.

CARBIDE

HSS

YG TAP STEEL

TY422 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 371

DIN 376

Hole type

3.0×D

60°

P

ØD2

ØD1

L1

L2

L3

KI

Ød1

60°

P

ØD2

ØD1

L1

L2

L3

KI

Ød1

VG

HSS-E

DIN 371/376

6H

60°

B

TiAIN

p.B159

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
*M2.6	× 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

ISO

Material Description

VDI 3323

HRC

HB

Recommended

P										M				K							
Non-alloy steel					Low alloy steel					High alloy 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	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21			
125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
	○	○	○	◎	○	○	◎	◎			○	○	○								

ISO

Material Description

VDI 3323

HRC

HB

Recommended

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	
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			55	60	42	55	
60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
										○					○						

◎ : Excellent ○ : Good

B153

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YG-1 CO., LTD.

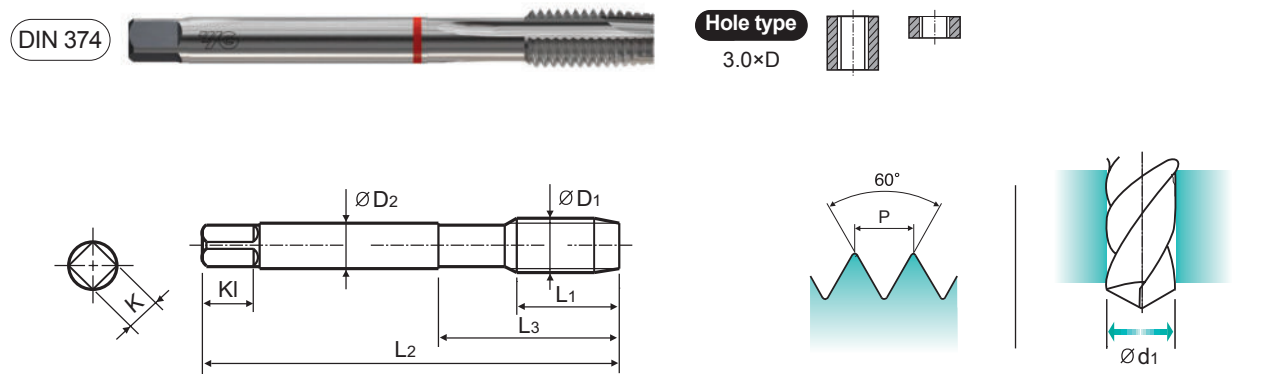
MF ISO metric fine threads DIN 13

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

Machine taps
Maschinengewindebohrer

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.



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
$\varnothing D_1$	P	Bright	L_1	L_2	L_3	$\varnothing D_2$	K	KI	Z	$\varnothing d_1$
M5	$\times 0.5$	TC263296	11	70	25	3.5	2.7	6	3	4.5
M7	$\times 0.75$	TC263356	14	80	30	5.5	4.3	7	3	6.2
M8	$\times 1.0$	TC263376	17	90	36	6	4.9	8	3	7
M8	$\times 0.75$	TC263386	14	80	30	6	4.9	8	3	7.2
M10	$\times 1.25$	TC263436	22	100	40	7	5.5	8	3	8.8
M10	$\times 1.0$	TC263446	18	90	36	7	5.5	8	3	9
M10	$\times 0.75$	TC263456	18	90	36	7	5.5	8	3	9.2
M12	$\times 1.5$	TC263516	22	100	40	9	7	10	3	10.5
M12	$\times 1.25$	TC263526	22	100	40	9	7	10	3	10.8
M12	$\times 1.0$	TC263536	18	100	40	9	7	10	3	11
M14	$\times 1.5$	TC263556	22	100	40	11	9	12	3	12.5
M24	$\times 1.5$	TC263806	27	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	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	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											○					○				

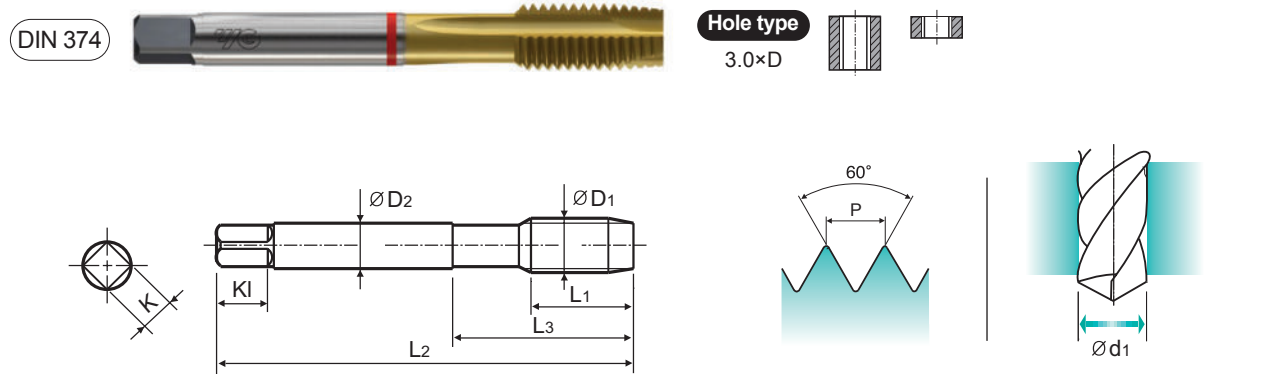
MF ISO metric fine threads DIN 13

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

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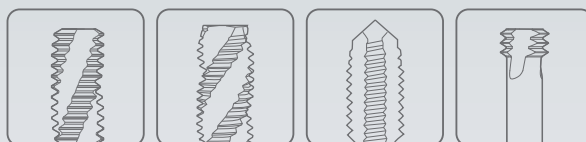


SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
$\varnothing D_1$	P	TiN	L_1	L_2	L_3	$\varnothing D_2$	K	KI	Z	$\varnothing d_1$
M5	$\times 0.5$	TD263296	11	70	25	3.5	2.7	6	3	4.5
M6	$\times 0.75$	TD263326	13	80	30	4.5	3.4	6	3	5.2
M7	$\times 0.75$	TD263356	14	80	30	5.5	4.3	7	3	6.2
M8	$\times 1.0$	TD263376	17	90	36	6	4.9	8	3	7
M8	$\times 0.75$	TD263386	14	80	30	6	4.9	8	3	7.2
M10	$\times 1.25$	TD263436	22	100	40	7	5.5	8	3	8.8
M10	$\times 1.0$	TD263446	18	90	36	7	5.5	8	3	9
M10	$\times 0.75$	TD263456	18	90	36	7	5.5	8	3	9.2
M12	$\times 1.5$	TD263516	22	100	40	9	7	10	3	10.5
M12	$\times 1.25$	TD263526	22	100	40	9	7	10	3	10.8
M12	$\times 1.0$	TD263536	18	100	40	9	7	10	3	11
M14	$\times 1.5$	TD263556	22	100	40	11	9	12	3	12.5
M16	$\times 1.5$	TD263616	22	100	40	12	9	12	3	14.5
M18	$\times 1.5$	TD263676	25	110	44	14	11	14	4	16.5
M20	$\times 1.5$	TD263726	25	125	50	16	12	15	4	18.5
M22	$\times 1.5$	TD263766	25	125	50	18	14.5	17	4	20.5

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	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	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											○					○				



Global Cutting Tool Leader **YG-1**



THREADING