

HSS



Being the best through innovation



STRAIGHT FLUTE TAPS

GEWINDEBOHRER GERADE GENUTET









- Tapping Shallow Holes of Cast Iron, Mild Steels and Brass.
- Für flache Bohrungen von Grauguss, Stähle und Messing.

SELECTION GUIDE

STRAIGHT FLUTE TAPS

Tapping Shallow Holes of Cast Iron, Mild Steels and Brass.

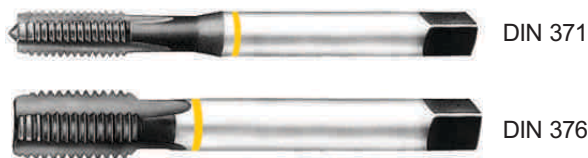
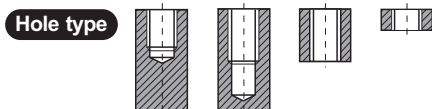
STRAIGHT FLUTE TAPS

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Surface Treatment	PAGE
TC463		HSS-E	M	GS	DIN 371/376	ISO 2/6H	C	Bright	433
TE821		HSS-E	M	GG	DIN 371/376	ISO 2X/6HX	C	NI	434
TD821		HSS-E	M	GG	DIN 371/376	ISO 2X/6HX	C	TiN	435
TY821		HSS-E	M	GG	DIN 371/376	ISO 2X/6HX	C	TiAlN	436
TI821		HSS-E	M	GG	DIN 371/376	ISO 2X/6HX	C	TiCN	437
TC433		HSS-E	M	Ms	DIN 371/376	ISO 2/6H	C	Bright	438
TE443		HSS-E	M	Ms	DIN 371/376	ISO 2X/6HX	C	NI	439
TY433		HSS-E	M	Ms	DIN 371/376	ISO 2/6H	C	TiAlN	440
TC473		HSS-E	MF	GS	DIN 374	ISO 2/6H	C	Bright	441
TE403		HSS-E	MF	GG	DIN 374	ISO 2X/6HX	C	NI	442
TC424		HSS-E	UNC	GS	DIN 371/376	2B	C	Bright	443
TE434		HSS-E	UNC	GG	DIN 371/376	2BX	C	NI	444
TE454		HSS-E	UNF	GG	DIN 371/374	2BX	C	NI	445

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

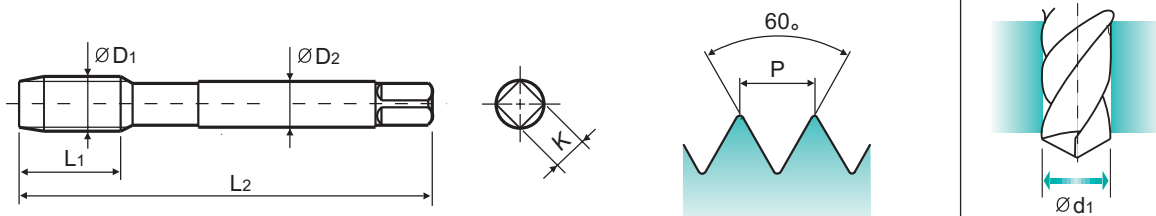
► Suitable for tapping shallow holes and the blind holes having enough chip space at the bottom of holes.

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



Material groups **GS** **HSS-E** **DIN 371/376** **6H** **60°** **C** **Bright**

Machine taps
Maschinengewindebohrer



SIZE	Pitch		EDP No.	Thread Length		Overall Length	Shank Diameter	Square Size	Tapping drill diameter
	Ø D1	P		L1	L2				
M2	×	0.4	TC463136	8	45	2.8	2.1	1.6	
M2.2	×	0.45	TC463156	8	45	2.8	2.1	1.75	
#d M2.3	×	0.4	TC463196	8	45	2.8	2.1	1.9	
M2.5	×	0.45	TC463176	9	50	2.8	2.1	2.05	
#d M2.6	×	0.45	TC463496	9	50	2.8	2.1	2.1	
M3	×	0.5	TC463206	11	56	3.5	2.7	2.5	
M3.5	×	0.6	TC463226	12	56	4	3	2.9	
M4	×	0.7	TC463246	13	63	4.5	3.4	3.3	
M4.5	×	0.75	TC463266	14	70	6	4.9	3.7	
M5	×	0.8	TC463286	15	70	6	4.9	4.2	
M6	×	1	TC463316	17	80	6	4.9	5	
M7	×	1	TC463346	17	80	7	5.5	6	
M8	×	1.25	TC463366	20	90	8	6.2	6.8	
M9	×	1.25	TC463396	20	90	9	7	7.8	
M10	×	1.5	TC463426	22	100	10	8	8.5	
M11	×	1.5	TC463466	22	100	8	6.2	9.5	
M12	×	1.75	TC463506	24	110	9	7	10.2	
M14	×	2	TC463546	26	110	11	9	12	
M16	×	2	TC463606	27	110	12	9	14	
M18	×	2.5	TC463656	30	125	14	11	15.5	
M20	×	2.5	TC463706	32	140	16	12	17.5	
M22	×	2.5	TC463746	32	140	18	14.5	19.5	
M24	×	3	TC463786	34	160	18	14.5	21	
M27	×	3	TC463866	36	160	20	16	24	
M30	×	3.5	TC463946	40	180	22	18	26.5	

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

Unit : N/mm²

◎ Z @ e □ □ □ □ □ □ □ □ □ □ @ @ @ @ @ ◎ Z @ g □

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

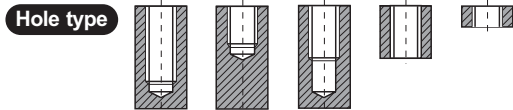
STRAIGHT FLUTE TAPS

TE821 SERIES

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

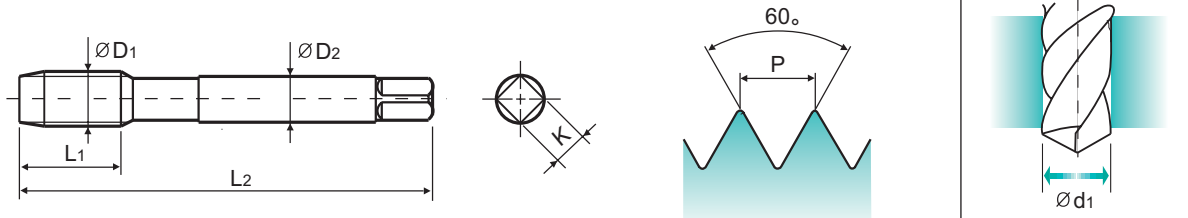
► Suitable for tapping cast iron or similar work materials.

► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen



Material groups: **GG** HSS-E DIN 371/376 6HX 60° C NI

Machine taps
Maschinengewindebohrer



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M2	× 0.4	TE821136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TE821156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TE821196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TE821176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TE821496	9	50	2.8	2.1	2.1
M3	× 0.5	TE821206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TE821226	12	56	4	3	2.9
M4	× 0.7	TE821246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TE821266	14	70	6	4.9	3.7
M5	× 0.8	TE821286	15	70	6	4.9	4.2
M6	× 1	TE821316	17	80	6	4.9	5
M7	× 1	TE821346	17	80	7	5.5	6
M8	× 1.25	TE821366	20	90	8	6.2	6.8
M9	× 1.25	TE821396	20	90	9	7	7.8
M10	× 1.5	TE821426	22	100	10	8	8.5
M11	× 1.5	TE821466	22	100	8	6.2	9.5
M12	× 1.75	TE821506	24	110	9	7	10.2
M14	× 2	TE821546	26	110	11	9	12
M16	× 2	TE821606	27	110	12	9	14
M18	× 2.5	TE821656	30	125	14	11	15.5
M20	× 2.5	TE821706	32	140	16	12	17.5
M22	× 2.5	TE821746	32	140	18	14.5	19.5
M24	× 3	TE821786	34	160	18	14.5	21
M27	× 3	TE821866	36	160	20	16	24
M30	× 3.5	TE821946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

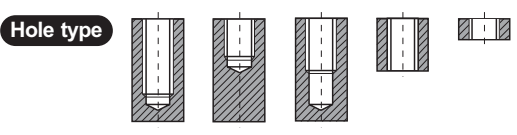
Unit : N/mm²

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

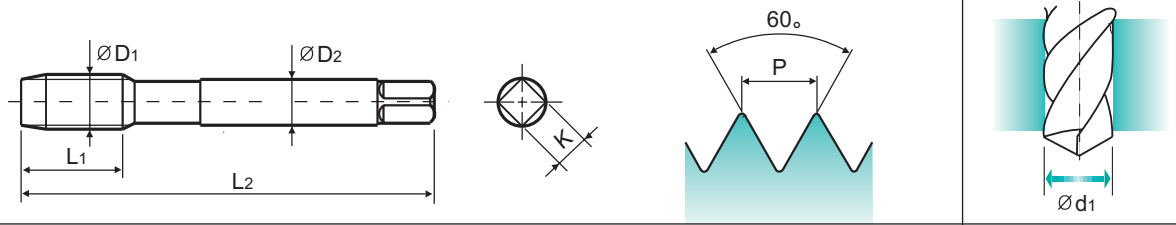
M ISO metric coarse threads DIN 13 Metrisches ISO-Gewinde DIN 13

► Suitable for tapping cast iron or similar work materials. ► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen



Material groups: **GG** HSS-E DIN 371/376 6HX 60° C TiN

Machine taps
Maschinengewindebohrer



SIZE	Pitch		EDP No.	Thread Length		Overall Length	Shank Diameter	Square Size	Tapping drill diameter
	Ø D1	P		L1	L2				
M2	×	0.4	TD821136	8	45	2.8	2.1	1.6	
M2.2	×	0.45	TD821156	8	45	2.8	2.1	1.75	
#d M2.3	×	0.4	TD821196	8	45	2.8	2.1	1.9	
M2.5	×	0.45	TD821176	9	50	2.8	2.1	2.05	
#d M2.6	×	0.45	TD821496	9	50	2.8	2.1	2.1	
M3	×	0.5	TD821206	11	56	3.5	2.7	2.5	
M3.5	×	0.6	TD821226	12	56	4	3	2.9	
M4	×	0.7	TD821246	13	63	4.5	3.4	3.3	
M4.5	×	0.75	TD821266	14	70	6	4.9	3.7	
M5	×	0.8	TD821286	15	70	6	4.9	4.2	
M6	×	1	TD821316	17	80	6	4.9	5	
M7	×	1	TD821346	17	80	7	5.5	6	
M8	×	1.25	TD821366	20	90	8	6.2	6.8	
M9	×	1.25	TD821396	20	90	9	7	7.8	
M10	×	1.5	TD821426	22	100	10	8	8.5	
M11	×	1.5	TD821466	22	100	8	6.2	9.5	
M12	×	1.75	TD821506	24	110	9	7	10.2	
M14	×	2	TD821546	26	110	11	9	12	
M16	×	2	TD821606	27	110	12	9	14	
M18	×	2.5	TD821656	30	125	14	11	15.5	
M20	×	2.5	TD821706	32	140	16	12	17.5	
M22	×	2.5	TD821746	32	140	18	14.5	19.5	
M24	×	3	TD821786	34	160	18	14.5	21	
M27	×	3	TD821866	36	160	20	16	24	
M30	×	3.5	TD821946	40	180	22	18	26.5	

► DIN 371(M2~M10) and DIN 376(M11~M30)
► #d DIN profile not ISO

Unit : N/mm²

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

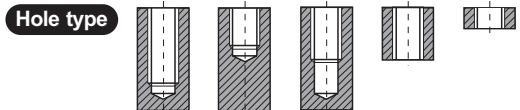
STRAIGHT FLUTE TAPS

TY821 SERIES

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

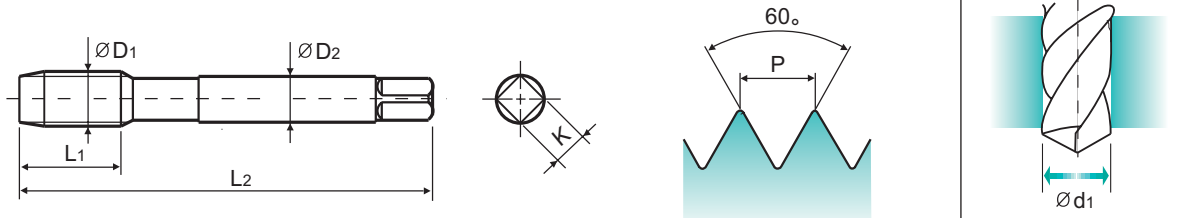
► Suitable for tapping cast iron or similar work materials.

► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen



Material groups: **GG** HSS-E DIN 371/376 6HX 60° C TiAlN

Machine taps
Maschinengewindebohrer



SIZE	Pitch	EDP No.	Thread Length		Shank Diameter	Square Size	Tapping drill diameter
			L1	L2			
Ø D1	P				Ø D2	K	Ø d1
M2	× 0.4	TY821136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TY821156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TY821196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TY821176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TY821496	9	50	2.8	2.1	2.1
M3	× 0.5	TY821206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TY821226	12	56	4	3	2.9
M4	× 0.7	TY821246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TY821266	14	70	6	4.9	3.7
M5	× 0.8	TY821286	15	70	6	4.9	4.2
M6	× 1	TY821316	17	80	6	4.9	5
M7	× 1	TY821346	17	80	7	5.5	6
M8	× 1.25	TY821366	20	90	8	6.2	6.8
M9	× 1.25	TY821396	20	90	9	7	7.8
M10	× 1.5	TY821426	22	100	10	8	8.5
M11	× 1.5	TY821466	22	100	8	6.2	9.5
M12	× 1.75	TY821506	24	110	9	7	10.2
M14	× 2	TY821546	26	110	11	9	12
M16	× 2	TY821606	27	110	12	9	14
M18	× 2.5	TY821656	30	125	14	11	15.5
M20	× 2.5	TY821706	32	140	16	12	17.5
M22	× 2.5	TY821746	32	140	18	14.5	19.5
M24	× 3	TY821786	34	160	18	14.5	21
M27	× 3	TY821866	36	160	20	16	24
M30	× 3.5	TY821946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

Unit : N/mm²

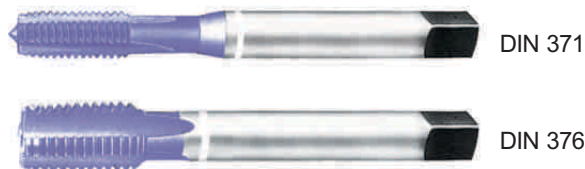
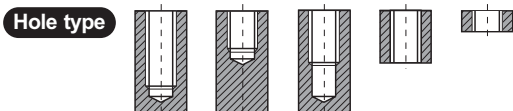
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Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy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

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

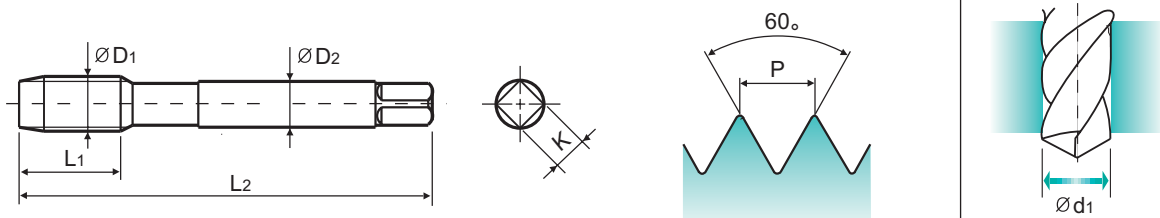
► Suitable for tapping cast iron or similar work materials.

► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen



Material groups **GG** **HSS-E** **DIN 371/376** **6HX** **60°** **C** **TiCN**

Machine taps
Maschinengewindebohrer



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M2	× 0.4	TI821136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TI821156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TI821196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TI821176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TI821496	9	50	2.8	2.1	2.1
M3	× 0.5	TI821206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TI821226	12	56	4	3	2.9
M4	× 0.7	TI821246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TI821266	14	70	6	4.9	3.7
M5	× 0.8	TI821286	15	70	6	4.9	4.2
M6	× 1	TI821316	17	80	6	4.9	5
M7	× 1	TI821346	17	80	7	5.5	6
M8	× 1.25	TI821366	20	90	8	6.2	6.8
M9	× 1.25	TI821396	20	90	9	7	7.8
M10	× 1.5	TI821426	22	100	10	8	8.5
M11	× 1.5	TI821466	22	100	8	6.2	9.5
M12	× 1.75	TI821506	24	110	9	7	10.2
M14	× 2	TI821546	26	110	11	9	12
M16	× 2	TI821606	27	110	12	9	14
M18	× 2.5	TI821656	30	125	14	11	15.5
M20	× 2.5	TI821706	32	140	16	12	17.5
M22	× 2.5	TI821746	32	140	18	14.5	19.5
M24	× 3	TI821786	34	160	18	14.5	21
M27	× 3	TI821866	36	160	20	16	24
M30	× 3.5	TI821946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

Unit : N/mm²

◎ Z @ e □ □ □ □ □ □ □ □ □ □ @ @ @ @ @ ◎ Z @ g □

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

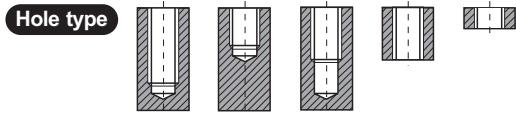
STRAIGHT FLUTE TAPS

TC433 SERIES

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

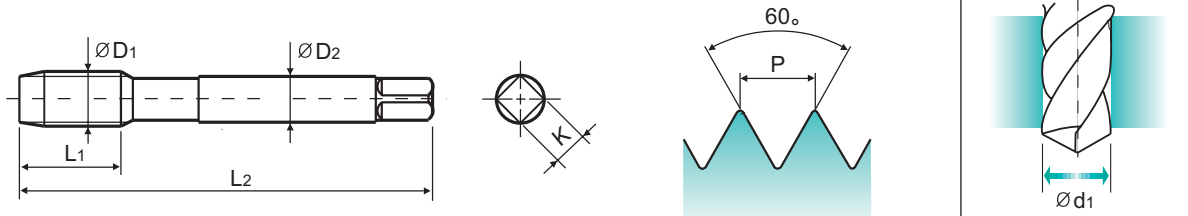
► Suitable for brass and short chip work materials.

► Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen



Material groups: **Ms** HSS-E DIN 371/376 6H 60° C Bright

Machine taps
Maschinengewindebohrer



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M2	× 0.4	TC433136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TC433156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TC433196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TC433176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TC433496	9	50	2.8	2.1	2.1
M3	× 0.5	TC433206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TC433226	12	56	4	3	2.9
M4	× 0.7	TC433246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TC433266	14	70	6	4.9	3.7
M5	× 0.8	TC433286	15	70	6	4.9	4.2
M6	× 1	TC433316	17	80	6	4.9	5
M7	× 1	TC433346	17	80	7	5.5	6
M8	× 1.25	TC433366	20	90	8	6.2	6.8
M9	× 1.25	TC433396	20	90	9	7	7.8
M10	× 1.5	TC433426	22	100	10	8	8.5
M11	× 1.5	TC433466	22	100	8	6.2	9.5
M12	× 1.75	TC433506	24	110	9	7	10.2
M14	× 2	TC433546	26	110	11	9	12
M16	× 2	TC433606	27	110	12	9	14
M18	× 2.5	TC433656	30	125	14	11	15.5
M20	× 2.5	TC433706	32	140	16	12	17.5
M22	× 2.5	TC433746	32	140	18	14.5	19.5
M24	× 3	TC433786	34	160	18	14.5	21
M27	× 3	TC433866	36	160	20	16	24
M30	× 3.5	TC433946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

Unit : N/mm²

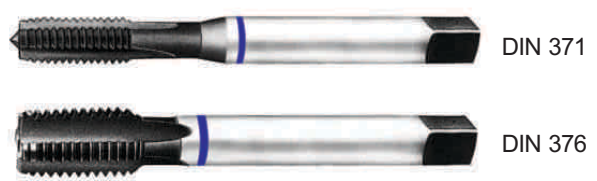
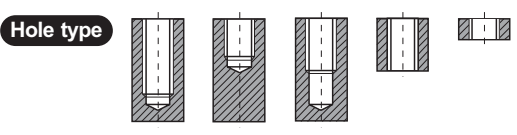
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Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy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

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

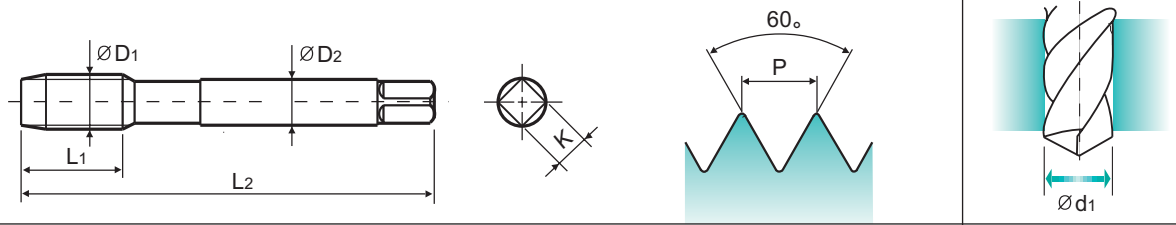
► Suitable for brass and short chip work materials.

► Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen



Material groups: **Ms** HSS-E DIN 371/376 6HX 60° C NI

Machine taps
Maschinengewindebohrer



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M2	× 0.4	TE443136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TE443156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TE443196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TE443176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TE443496	9	50	2.8	2.1	2.1
M3	× 0.5	TE443206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TE443226	12	56	4	3	2.9
M4	× 0.7	TE443246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TE443266	14	70	6	4.9	3.7
M5	× 0.8	TE443286	15	70	6	4.9	4.2
M6	× 1	TE443316	17	80	6	4.9	5
M7	× 1	TE443346	17	80	7	5.5	6
M8	× 1.25	TE443366	20	90	8	6.2	6.8
M9	× 1.25	TE443396	20	90	9	7	7.8
M10	× 1.5	TE443426	22	100	10	8	8.5
M11	× 1.5	TE443466	22	100	8	6.2	9.5
M12	× 1.75	TE443506	24	110	9	7	10.2
M14	× 2	TE443546	26	110	11	9	12
M16	× 2	TE443606	27	110	12	9	14
M18	× 2.5	TE443656	30	125	14	11	15.5
M20	× 2.5	TE443706	32	140	16	12	17.5
M22	× 2.5	TE443746	32	140	18	14.5	19.5
M24	× 3	TE443786	34	160	18	14.5	21
M27	× 3	TE443866	36	160	20	16	24
M30	× 3.5	TE443946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)
► #d DIN profile not ISO

Unit : N/mm²

© Z@e□□□□□□□□@□□□□□□□□ Z@g□□

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

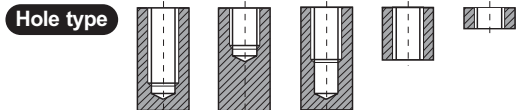
STRAIGHT FLUTE TAPS

TY433 SERIES

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

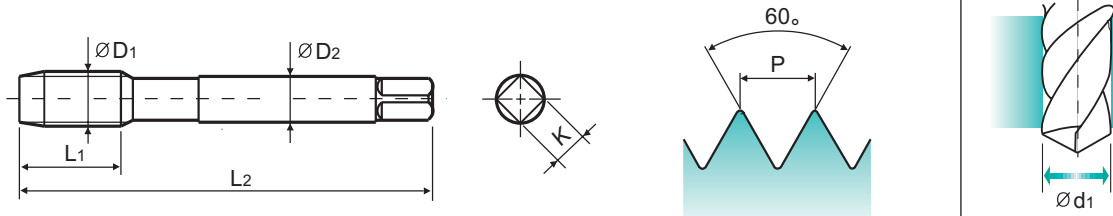
► Suitable for brass and short chip work materials.

► Geeignet zum Gewindeschneiden von Messing und anderen kurzspanenden Werkstoffen



Material groups: **Ms** HSS-E DIN 371/376 6H 60° C TiAlN

Machine taps
Maschinengewindebohrer



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M2	× 0.4	TY433136	8	45	2.8	2.1	1.6
M2.2	× 0.45	TY433156	8	45	2.8	2.1	1.75
#d M2.3	× 0.4	TY433196	8	45	2.8	2.1	1.9
M2.5	× 0.45	TY433176	9	50	2.8	2.1	2.05
#d M2.6	× 0.45	TY433496	9	50	2.8	2.1	2.1
M3	× 0.5	TY433206	11	56	3.5	2.7	2.5
M3.5	× 0.6	TY433226	12	56	4	3	2.9
M4	× 0.7	TY433246	13	63	4.5	3.4	3.3
M4.5	× 0.75	TY433266	14	70	6	4.9	3.7
M5	× 0.8	TY433286	15	70	6	4.9	4.2
M6	× 1	TY433316	17	80	6	4.9	5
M7	× 1	TY433346	17	80	7	5.5	6
M8	× 1.25	TY433366	20	90	8	6.2	6.8
M9	× 1.25	TY433396	20	90	9	7	7.8
M10	× 1.5	TY433426	22	100	10	8	8.5
M11	× 1.5	TY433466	22	100	8	6.2	9.5
M12	× 1.75	TY433506	24	110	9	7	10.2
M14	× 2	TY433546	26	110	11	9	12
M16	× 2	TY433606	27	110	12	9	14
M18	× 2.5	TY433656	30	125	14	11	15.5
M20	× 2.5	TY433706	32	140	16	12	17.5
M22	× 2.5	TY433746	32	140	18	14.5	19.5
M24	× 3	TY433786	34	160	18	14.5	21
M27	× 3	TY433866	36	160	20	16	24
M30	× 3.5	TY433946	40	180	22	18	26.5

► DIN 371(M2~M10) and DIN 376(M11~M30)

► #d DIN profile not ISO

Unit : N/mm²

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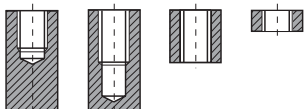
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy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

MF ISO metric fine threads DIN 13
Metrisches ISO-Feingewinde DIN 13

► Suitable for tapping shallow holes.

► Geeignet zum Gewindeschneiden flacher Sacklöcher.

Hole type



DIN 374

Material groups **GS**

HSS-E

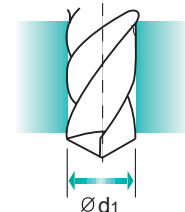
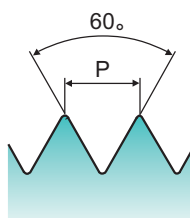
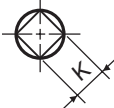
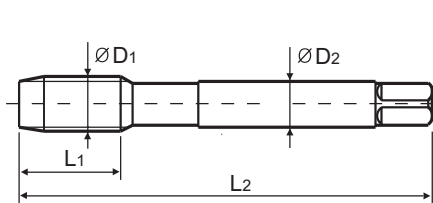
DIN 374

6H



Bright

Machine taps
 Maschinengewindebohrer



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M4	× 0.5	TC473256	10	63	2.8	2.1	3.5
M5	× 0.5	TC473296	11	70	3.5	2.7	4.5
M6	× 0.75	TC473326	13	80	4.5	3.4	5.2
M6	× 0.5	TC473336	13	80	4.5	3.4	5.5
M7	× 0.75	TC473356	14	80	5.5	4.3	6.2
M8	× 1	TC473376	17	90	6	4.9	7
M8	× 0.75	TC473386	14	80	6	4.9	7.2
M8	× 0.5	TC473936	14	80	6	4.9	7.5
M10	× 1.25	TC473436	22	100	7	5.5	8.8
M10	× 1	TC473446	18	90	7	5.5	9
M10	× 0.75	TC473456	18	90	7	5.5	9.2
M12	× 1.5	TC473516	22	100	9	7	10.5
M12	× 1.25	TC473526	22	100	9	7	10.8
M12	× 1	TC473536	18	100	9	7	11
M14	× 1.5	TC473556	22	100	11	9	12.5
M14	× 1.25	TC473566	22	100	11	9	12.8
M14	× 1	TC473576	18	100	11	9	13
M16	× 1.5	TC473616	22	100	12	9	14.5
M18	× 1.5	TC473676	25	110	14	11	16.5
M20	× 1.5	TC473726	25	125	16	12	18.5
M22	× 1.5	TC473766	25	125	18	14.5	20.5
M24	× 1.5	TC473806	27	140	18	14.5	22.5

Unit : N/mm²

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

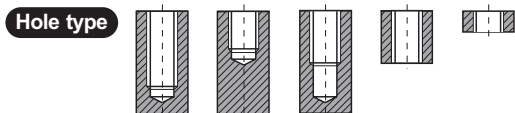
W/G STRAIGHT FLUTE TAPS

TE403 SERIES

MF ISO metric fine threads DIN 13 Metrisches ISO-Feingewinde DIN 13

► Suitable for tapping cast iron or similar work materials due to nitriding.

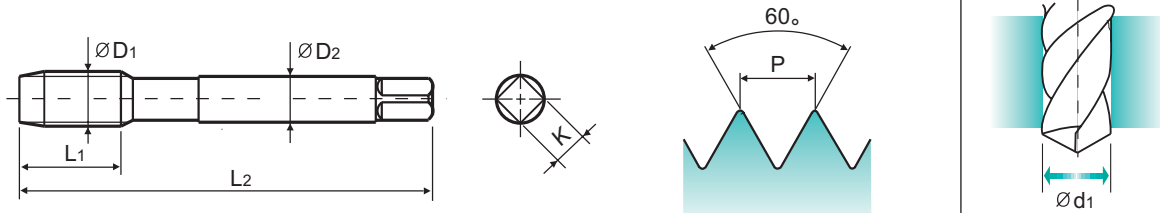
► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung



DIN 374

Material groups: **GG** HSS-E DIN 374 6HX 60° C NI

Machine taps
Maschinengewindebohrer



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1	P		L1	L2	Ø D2	K	Ø d1
M4	× 0.5	TE403256	10	63	2.8	2.1	3.5
M5	× 0.5	TE403296	11	70	3.5	2.7	4.5
M6	× 0.75	TE403326	13	80	4.5	3.4	5.2
M6	× 0.5	TE403336	13	80	4.5	3.4	5.5
M7	× 0.75	TE403356	14	80	5.5	4.3	6.2
M8	× 1	TE403376	17	90	6	4.9	7
M8	× 0.75	TE403386	14	80	6	4.9	7.2
M10	× 1.25	TE403436	22	100	7	5.5	8.8
M10	× 1	TE403446	18	90	7	5.5	9
M10	× 0.75	TE403456	18	90	7	5.5	9.2
M12	× 1.5	TE403516	22	100	9	7	10.5
M12	× 1.25	TE403526	22	100	9	7	10.8
M12	× 1	TE403536	18	100	9	7	11
M14	× 1.5	TE403556	22	100	11	9	12.5
M14	× 1.25	TE403566	22	100	11	9	12.8
M16	× 1.5	TE403616	22	100	12	9	14.5
M18	× 1.5	TE403676	25	110	14	11	16.5
M20	× 1.5	TE403726	25	125	16	12	18.5
M22	× 1.5	TE403766	25	125	18	14.5	20.5
M24	× 1.5	TE403806	27	140	18	14.5	22.5

Unit : N/mm²

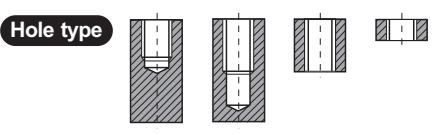
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Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy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

UNC Unified coarse threads Unified Grobgewinde

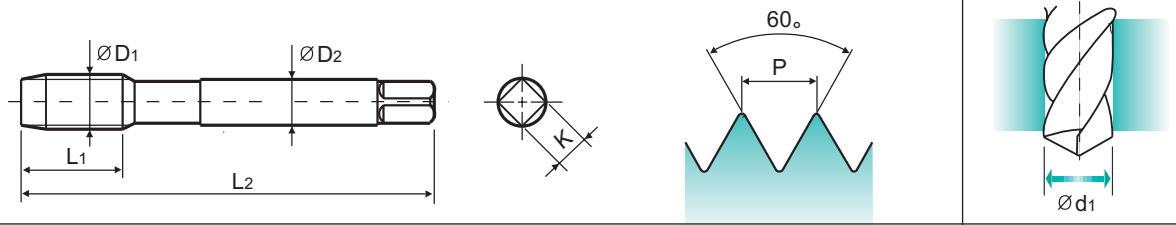
► Suitable for tapping shallow holes.

► Geeignet zum Gewindeschneiden flacher Sacklöcher.



Material groups **GS** **HSS-E** **DIN 371/376** **2B** **60°** **C** **Bright**

Machine taps
Maschinengewindebohrer



SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1			L1	L2	Ø D2	K	Ø d1
#4	M 40 UNC	TC424162	11	56	3.5	2.7	2.3
#5	M 40 UNC	TC424202	11	56	3.5	2.7	2.6
#6	M 32 UNC	TC424242	12	56	4	3	2.85
#8	M 32 UNC	TC424282	13	63	4.5	3.4	3.5
#10	M 24 UNC	TC424322	15	70	6	4.9	3.9
#12	M 24 UNC	TC424362	16	80	6	4.9	4.5
1/4"	M 20 UNC	TC424402	17	80	7	5.5	5.2
5/16"	M 18 UNC	TC424442	20	90	8	6.2	6.6
3/8"	M 16 UNC	TC424482	22	100	9	7	8
7/16"	M 14 UNC	TC424522	22	100	8	6.2	9.4
1/2"	M 13 UNC	TC424562	25	110	9	7	10.75
9/16"	M 12 UNC	TC424602	26	110	11	9	12.25
5/8"	M 11 UNC	TC424642	27	110	12	9	13.5
3/4"	M 10 UNC	TC424702	30	125	14	11	16.5
7/8"	M 9 UNC	TC424742	32	140	18	14.5	19.5
1"	M 8 UNC	TC424782	36	160	20	16	22.25
1 *1/8"	M 7 UNC	TC424822	40	180	22	18	25

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

Unit : N/mm²

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

- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

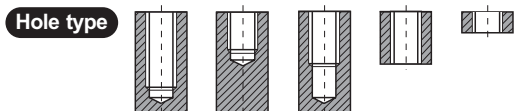
W/G STRAIGHT FLUTE TAPS

TE434 SERIES

UNC Unified coarse threads Unified Grobgewinde

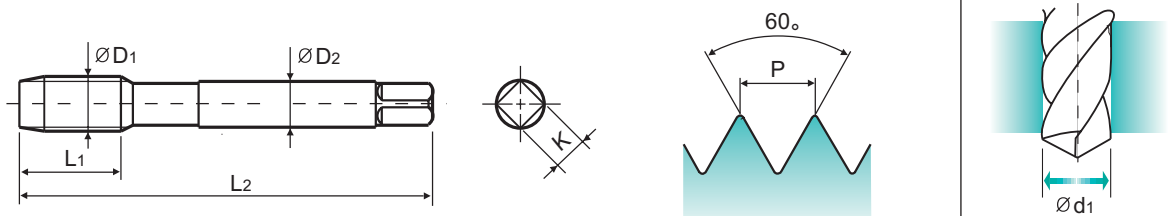
► Suitable for tapping cast iron or similar work materials due to nitriding.

► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung



Material groups: **GG** HSS-E DIN 371/376 2BX 60° C NI

Machine taps
Maschinengewindebohrer



SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
Ø D1			L1	L2	Ø D2	K	Ø d1
#4	M 40 UNC	TE434162	11	56	3.5	2.7	2.3
#5	M 40 UNC	TE434202	11	56	3.5	2.7	2.6
#6	M 32 UNC	TE434242	12	56	4	3	2.85
#8	M 32 UNC	TE434282	13	63	4.5	3.4	3.5
#10	M 24 UNC	TE434322	15	70	6	4.9	3.9
#12	M 24 UNC	TE434362	16	80	6	4.9	4.5
1/4"	M 20 UNC	TE434402	17	80	7	5.5	5.2
5/16"	M 18 UNC	TE434442	20	90	8	6.2	6.6
3/8"	M 16 UNC	TE434482	22	100	9	7	8
7/16"	M 14 UNC	TE434522	22	100	8	6.2	9.4
1/2"	M 13 UNC	TE434562	25	110	9	7	10.75
9/16"	M 12 UNC	TE434602	26	110	11	9	12.25
5/8"	M 11 UNC	TE434642	27	110	12	9	13.5
3/4"	M 10 UNC	TE434702	30	125	14	11	16.5
7/8"	M 9 UNC	TE434742	32	140	18	14.5	19.5
1"	M 8 UNC	TE434782	36	160	20	16	22.25
1 1/8"	M 7 UNC	TE434822	40	180	22	18	25

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

Unit : N/mm²

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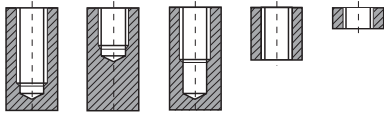
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy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

UNF Unified fine threads
Unified Feingewinde

► Suitable for tapping cast iron or similar work materials due to nitriding.

► Geeignet zum Gewindeschneiden von Guss oder ähnlichen Werkstoffen dank der Nitrierung

Hole type



DIN 371

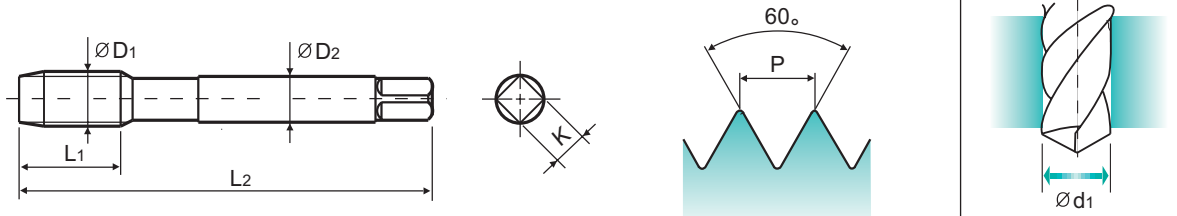


DIN 374

Material groups
GG

HSS-E DIN 371/374 2B 60° C NI

Machine taps
Maschinengewindebohrer



Unit : mm

SIZE Ø D1	TPI	EDP No.	Thread Length L1	Overall Length L2	Shank Diameter Ø D2	Square Size K	Tapping drill diameter Ø d1
#4	M 48 UNF	TE454182	11	56	3.5	2.7	2.4
#5	M 44 UNF	TE454222	11	56	3.5	2.7	2.7
#6	M 40 UNF	TE454262	12	56	4	3	3
#8	M 36 UNF	TE454302	13	63	4.5	3.4	3.5
#10	M 32 UNF	TE454342	13	70	6	4.9	4.1
#12	M 28 UNF	TE454382	16	80	6	4.9	4.7
1/4"	M 28 UNF	TE454422	17	80	7	5.5	5.5
5/16"	M 24 UNF	TE454462	17	90	8	6.2	6.9
3/8"	M 24 UNF	TE454502	18	100	9	7	8.5
7/16"	M 20 UNF	TE454542	22	100	8	6.2	9.9
1/2"	M 20 UNF	TE454582	22	100	9	7	11.5
9/16"	M 18 UNF	TE454622	22	100	11	9	12.9
5/8"	M 18 UNF	TE454662	22	100	12	9	14.5
3/4"	M 16 UNF	TE454722	25	110	14	11	17.5
7/8"	M 14 UNF	TE454762	26	125	18	14.5	20.5
1"	M 12 UNF	TE454802	28	140	20	16	23.25
1 *1/8"	M 12 UNF	TE454842	30	150	22	18	26.5

► DIN 371(#4~3/8") and DIN 374(7/16"~1 *1/8")

Unit : N/mm²

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