

# HSS



Being the best through innovation



# HAND TAPS

# HANDGEWINDEBOHRER









- General Tapping, HSS & HSS-E
- Für normales Gewindeschneiden. HSS und HSS-E

# SELECTION GUIDE

## HAND TAPS

General Tapping, HSS & HSS-E

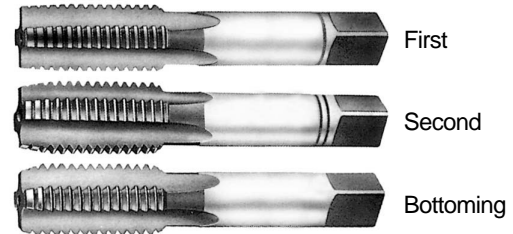
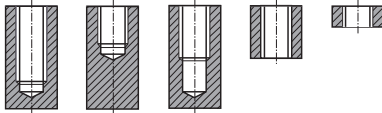
### HSS HAND TAPS

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Surface Treatment	PAGE
<b>T7109</b>		HSS	M	<b>GS</b>	DIN 352	ISO 2/6H	I / II / III	Bright	<b>475</b>
<b>T7343</b>		HSS	M-LH	<b>GS</b>	DIN 352	ISO 2/6H	I / II / III	Bright	<b>476</b>
<b>TC353</b>		HSS-E	M	<b>VG</b>	DIN 352	ISO 2/6H	I / II / III	Bright	<b>477</b>
<b>TB373</b>		HSS-E	M	<b>VA</b>	DIN 352	ISO 2X/6HX	I / II / III	vap	<b>478</b>
<b>T7309</b>		HSS	MF	<b>GS</b>	DIN 2181	ISO 2/6H	I / III	Bright	<b>479</b>
<b>T7363</b>		HSS	UNC	<b>GS</b>	DIN 351	2B	I / II / III	Bright	<b>481</b>
<b>T7509</b>		HSS	UNF	<b>GS</b>	DIN 2181	2B	I / III	Bright	<b>482</b>
<b>T7609</b>		HSS	BSW	<b>GS</b>	DIN 351	-	I / II / III	Bright	<b>483</b>

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

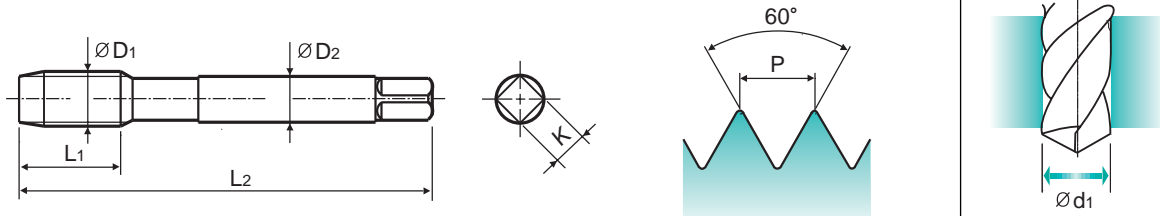
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

#### Hole type



HSS
DIN 352
6H
60°
1/II/III
Bright

Sets of taps  
Gewindebohrer - Satz



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M2	× 0.4	T7109139	8	36	2.8	2.1	1.6
M2.2	× 0.45	T7109159	9	36	2.8	2.1	1.75
* M2.3	× 0.4	T7109199	9	36	2.8	2.1	1.9
M2.5	× 0.45	T7109179	9	40	2.8	2.1	2.05
* M2.6	× 0.45	T7109499	9	40	2.8	2.1	2.1
M3	× 0.5	T7109209	11	40	3.5	2.7	2.5
M3.5	× 0.6	T7109229	13	45	4	3	2.9
M4	× 0.7	T7109249	13	45	4.5	3.4	3.3
M4.5	× 0.75	T7109269	16	50	6	4.9	3.7
M5	× 0.8	T7109289	16	52	6	4.9	4.2
* M5.5	× 0.9	T7109N69	18	56	6	4.9	4.6
M6	× 1	T7109319	18	56	6	4.9	5
M7	× 1	T7109349	18	56	6	4.9	6
M8	× 1.25	T7109369	20	63	6	4.9	6.8
M9	× 1.25	T7109399	20	63	7	5.5	7.8
M10	× 1.5	T7109429	22	70	7	5.5	8.5
M11	× 1.5	T7109469	22	70	8	6.2	9.5
M12	× 1.75	T7109509	24	80	9	7	10.2
M14	× 2	T7109549	26	80	11	9	12
M16	× 2	T7109609	27	80	12	9	14
M18	× 2.5	T7109659	30	95	14	11	15.5
M20	× 2.5	T7109709	32	95	16	12	17.5
M22	× 2.5	T7109749	32	100	18	14.5	19.5
M24	× 3	T7109789	34	110	18	14.5	21
M27	× 3	T7109869	36	110	20	16	24
M30	× 3.5	T7109949	40	125	22	18	26.5
M33	× 3.5	T7109A49	40	125	25	20	29.5
M36	× 4	T7109B39	50	150	28	22	32
M39	× 4	T7109C09	50	150	32	24	35
M42	× 4.5	T7109C89	56	150	32	24	37.5
M45	× 4.5	T7109D59	58	160	36	29	40.5
M48	× 5	T7109E29	65	180	36	29	43
M52	× 5	T7109F39	65	180	40	32	47

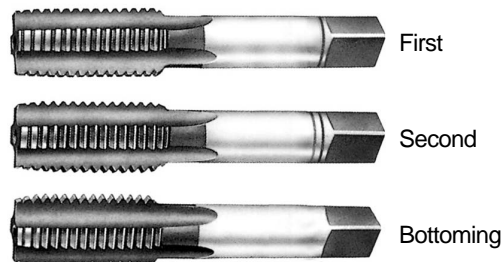
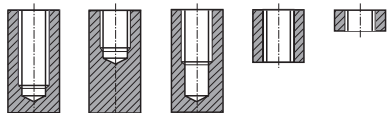
▶ \* DIN profile not ISO

# M-LH

## ISO metric coarse threads DIN 13

### Metrisches ISO-Gewinde DIN 13

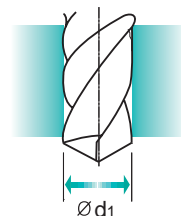
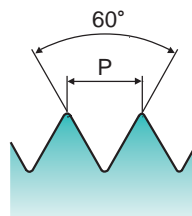
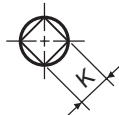
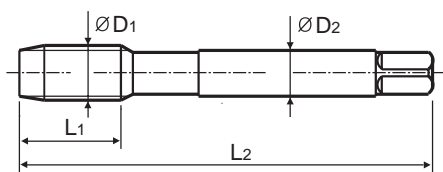
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

**Hole type**


Material groups

**GS**
**HSS**
**DIN 352**
**6H**

**Bright**

 Sets of taps  
 Gewindebohrer - Satz


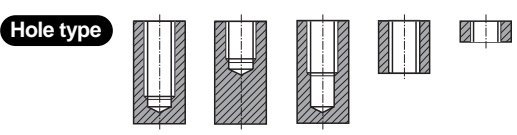
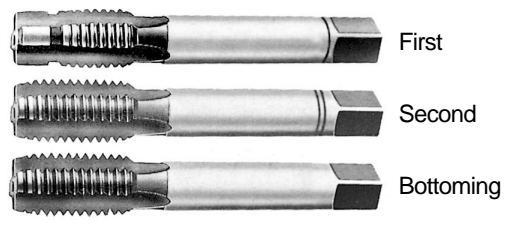
Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M3	× 0.5	<b>T7343209</b>	11	40	3.5	2.7	2.5
M3.5	× 0.6	<b>T7343229</b>	13	45	4	3	2.9
M4	× 0.7	<b>T7343249</b>	13	45	4.5	3.4	3.3
M4.5	× 0.75	<b>T7343269</b>	16	50	6	4.9	3.7
M5	× 0.8	<b>T7343289</b>	16	52	6	4.9	4.2
M6	× 1	<b>T7343319</b>	18	56	6	4.9	5
M8	× 1.25	<b>T7343369</b>	20	63	6	4.9	6.8
M10	× 1.5	<b>T7343429</b>	22	70	7	5.5	8.5
M12	× 1.75	<b>T7343509</b>	24	80	9	7	10.2
M14	× 2	<b>T7343549</b>	26	80	11	9	12
M16	× 2	<b>T7343609</b>	27	80	12	9	14
M18	× 2.5	<b>T7343659</b>	30	95	14	11	15.5
M20	× 2.5	<b>T7343709</b>	32	95	16	12	17.5
M22	× 2.5	<b>T7343749</b>	32	100	18	14.5	19.5
M24	× 3	<b>T7343789</b>	34	110	18	14.5	21
M27	× 3	<b>T7343869</b>	36	110	20	16	24
M30	× 3.5	<b>T7343949</b>	40	125	22	18	26.5

- ▶ LH=Left hand thread

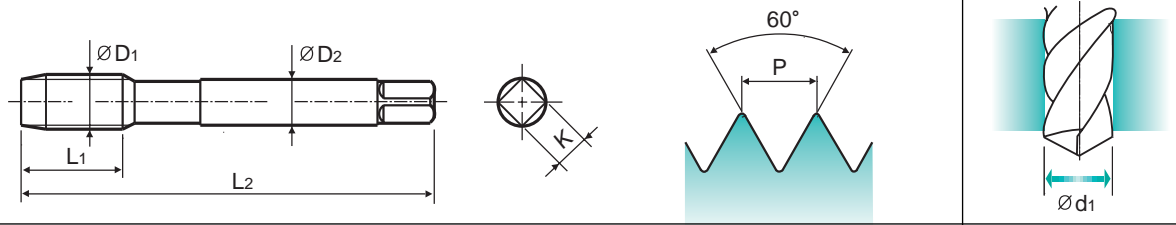
### M ISO metric coarse threads DIN 13 Metrisches ISO-Gewinde DIN 13

- ▶ 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.



HSS-E
DIN 352
6H
60°
Bright

Sets of taps  
Gewindebohrer - Satz



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M3	× 0.5	<b>TC353209</b>	11	40	3.5	2.7	2.5
M3.5	× 0.6	<b>TC353229</b>	13	45	4	3	2.9
M4	× 0.7	<b>TC353249</b>	13	45	4.5	3.4	3.3
M4.5	× 0.75	<b>TC353269</b>	16	50	6	4.9	3.7
M5	× 0.8	<b>TC353289</b>	16	52	6	4.9	4.2
M6	× 1	<b>TC353319</b>	18	56	6	4.9	5
M8	× 1.25	<b>TC353369</b>	20	63	6	4.9	6.8
M10	× 1.5	<b>TC353429</b>	22	70	7	5.5	8.5
M12	× 1.75	<b>TC353509</b>	24	80	9	7	10.2
M14	× 2	<b>TC353549</b>	26	80	11	9	12
M16	× 2	<b>TC353609</b>	27	80	12	9	14
M18	× 2.5	<b>TC353659</b>	30	95	14	11	15.5
M20	× 2.5	<b>TC353709</b>	32	95	16	12	17.5

▶ First with pilot guide

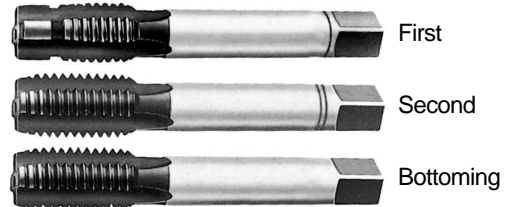
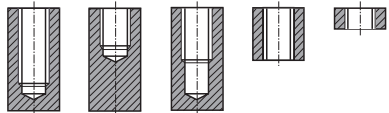
- HSS
- CARBIDE
- COMBO TAPS
- SPIRAL POINT TAPS
- SPIRAL FLUTE TAPS
- STRAIGHT FLUTE TAPS
- COLD FORMING TAPS
- NUT TAPS
- STI TAPS
- HAND TAPS
- PIPE TAPS
- CARBIDE TAPS
- THREAD MILLS
- TECHNICAL DATA

# M ISO metric coarse threads DIN 13

## Metrisches ISO-Gewinde DIN 13

- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

## Hole type



Material groups

VA

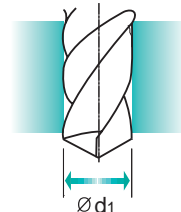
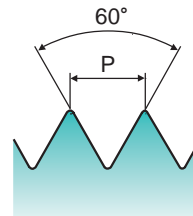
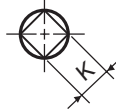
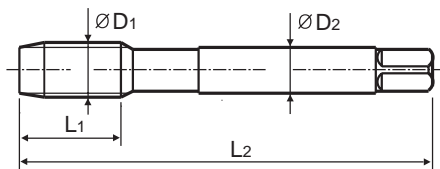
HSS-E

DIN  
352

6HX



Vap

Sets of taps  
Gewindebohrer - Satz

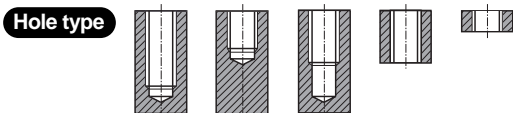
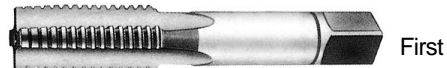
Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M3	× 0.5	<b>TB373209</b>	11	40	3.5	2.7	2.5
M3.5	× 0.6	<b>TB373229</b>	13	45	4	3	2.9
M4	× 0.7	<b>TB373249</b>	13	45	4.5	3.4	3.3
M4.5	× 0.75	<b>TB373269</b>	16	50	6	4.9	3.7
M5	× 0.8	<b>TB373289</b>	16	52	6	4.9	4.2
M6	× 1	<b>TB373319</b>	18	56	6	4.9	5
M8	× 1.25	<b>TB373369</b>	20	63	6	4.9	6.8
M10	× 1.5	<b>TB373429</b>	22	70	7	5.5	8.5
M12	× 1.75	<b>TB373509</b>	24	80	9	7	10.2
M14	× 2	<b>TB373549</b>	26	80	11	9	12
M16	× 2	<b>TB373609</b>	27	80	12	9	14
M18	× 2.5	<b>TB373659</b>	30	95	14	11	15.5
M20	× 2.5	<b>TB373709</b>	32	95	16	12	17.5

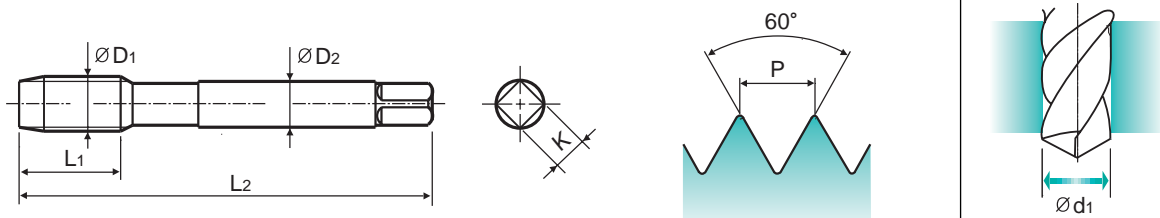
- ▶ First with pilot guide

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

- ▶ Serial hand tap set in First and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.



Sets of taps  
Gewindebohrer-Satz

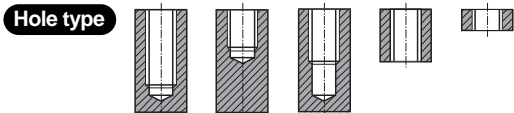
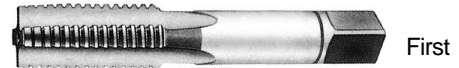
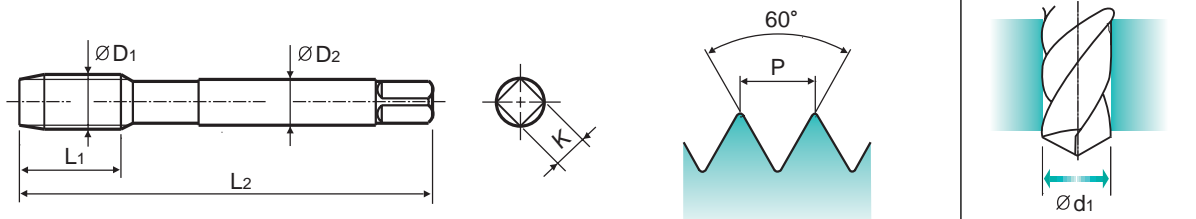


SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M3	× 0.35	T7309219	8	42	3.5	2.7	2.65
M4	× 0.5	T7309259	9	48	4.5	3.4	3.5
M5	× 0.5	T7309299	11	52	6	4.9	4.5
M6	× 0.75	T7309329	12	56	6	4.9	5.2
M6	× 0.5	T7309339	12	56	6	4.9	5.5
M7	× 0.75	T7309359	14	56	6	4.9	6.2
M8	× 1	T7309379	17	63	6	4.9	7
M8	× 0.75	T7309389	14	63	6	4.9	7.2
M8	× 0.5	T7309939	14	63	6	4.9	7.5
M9	× 1	T7309409	17	63	7	5.5	8
M10	× 1.25	T7309439	22	70	7	5.5	8.8
M10	× 1	T7309449	18	63	7	5.5	9
M10	× 0.75	T7309459	18	63	7	5.5	9.2
M11	× 1	T7309479	18	63	8	6.2	10
M12	× 1.5	T7309519	20	70	9	7	10.5
M12	× 1.25	T7309529	20	70	9	7	10.8
M12	× 1	T7309539	18	70	9	7	11
M13	× 1.5	T7309N19	20	70	11	9	11.5
M13	× 1	T7309N29	18	70	11	9	12
M14	× 1.5	T7309559	20	70	11	9	12.5
M14	× 1.25	T7309569	20	70	11	9	12.8
M14	× 1	T7309579	18	70	11	9	13
M15	× 1.5	T7309589	20	70	12	9	13.5
M15	× 1	T7309599	18	70	12	9	14
M16	× 1.5	T7309619	20	70	12	9	14.5
M16	× 1	T7309629	18	70	12	9	15

# MF

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

- ▶ Serial hand tap set in First and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.


 Sets of taps  
 Gewindebohrer-Satz


Unit : mm

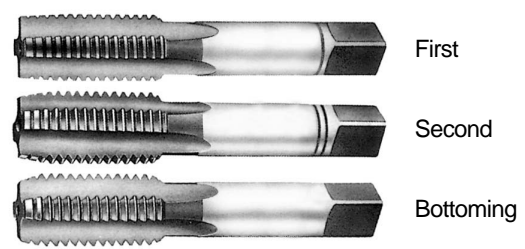
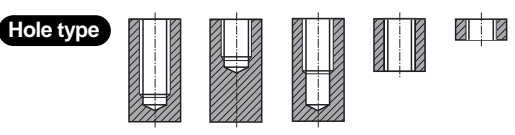
SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
			L1	L2	ØD2	K	Ød1
M18 × 2		<b>T7309669</b>	22	80	14	11	16
M18 × 1.5		<b>T7309679</b>	22	80	14	11	16.5
M18 × 1		<b>T7309689</b>	18	80	14	11	17
M20 × 2		<b>T7309719</b>	22	80	16	12	18
M20 × 1.5		<b>T7309729</b>	22	80	16	12	18.5
M20 × 1		<b>T7309739</b>	18	80	16	12	19
M22 × 2		<b>T7309759</b>	22	80	18	14.5	20
M22 × 1.5		<b>T7309769</b>	22	80	18	14.5	20.5
M22 × 1		<b>T7309779</b>	18	80	18	14.5	21
M24 × 2		<b>T7309799</b>	22	90	18	14.5	22
M24 × 1.5		<b>T7309809</b>	22	90	18	14.5	22.5
M24 × 1		<b>T7309819</b>	18	90	18	14.5	23
M25 × 1.5		<b>T7309839</b>	22	90	18	14.5	23.5
M25 × 1		<b>T7309849</b>	18	90	18	14.5	24
M26 × 1.5		<b>T7309859</b>	22	90	18	14.5	24.5
M26 × 1		<b>T7309N59</b>	18	90	18	14.5	25
M27 × 2		<b>T7309879</b>	22	90	20	16	25
M27 × 1.5		<b>T7309889</b>	22	90	20	16	25.5
M27 × 1		<b>T7309899</b>	18	90	20	16	26
M28 × 2		<b>T7309909</b>	22	90	20	16	26
M28 × 1.5		<b>T7309919</b>	22	90	20	16	26.5
M30 × 2		<b>T7309969</b>	22	90	22	18	28
M30 × 1.5		<b>T7309979</b>	22	90	22	18	28.5
M30 × 1		<b>T7309989</b>	18	90	22	18	29



# UNC Unified coarse threads

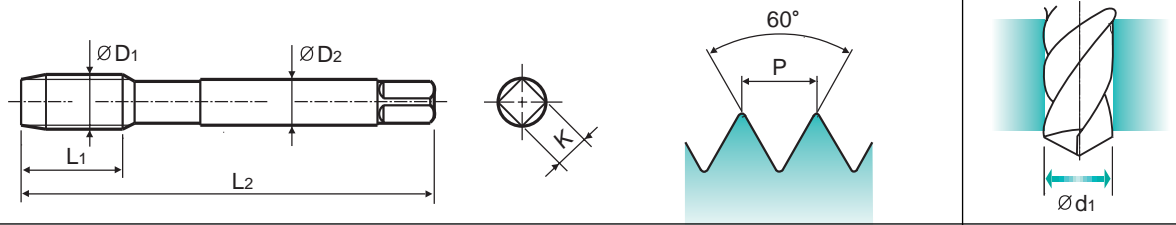
## Unified Grobgewinde

- ▶ 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.



Material groups: **GS** HSS DIN 351 2B 60° 1/II/III Bright

Sets of taps  
Gewindebohrer-Satz



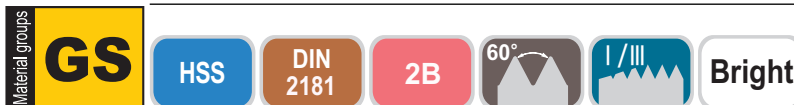
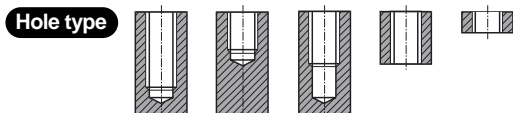
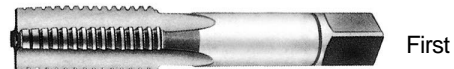
SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1			L1	L2	ØD2	K	Ød1
#2	56 UNC	T7363089	9	36	2.8	2.1	1.8
#3	48 UNC	T7363129	10	40	2.8	2.1	2.1
#4	40 UNC	T7363169	10	42	3.5	2.7	2.3
#5	40 UNC	T7363209	10	42	3.5	2.7	2.6
#6	32 UNC	T7363249	11	45	4	3	2.85
#8	32 UNC	T7363289	12	48	4.5	3.4	3.5
#10	24 UNC	T7363329	14	52	6	4.9	3.9
#12	24 UNC	T7363369	16	56	6	4.9	4.5
1/4"	20 UNC	T7363409	16	56	6	4.9	5.2
5/16"	18 UNC	T7363449	20	63	6	4.9	6.6
3/8"	16 UNC	T7363489	22	70	7	5.5	8
7/16"	14 UNC	T7363529	22	70	8	6.2	9.4
1/2"	13 UNC	T7363569	25	80	9	7	10.75
9/16"	12 UNC	T7363609	26	80	11	9	12.25
5/8"	11 UNC	T7363649	27	90	12	9	13.5
3/4"	10 UNC	T7363709	32	105	14	11	16.5
7/8"	9 UNC	T7363749	32	110	18	14.5	19.5
1"	8 UNC	T7363789	36	110	20	16	22.25
1*1/8"	7 UNC	T7363829	40	125	22	18	25
1*1/4"	7 UNC	T7363869	40	125	25	20	28.25
1*3/8"	6 UNC	T7363909	50	150	28	22	30.75
1*1/2"	6 UNC	T7363949	50	150	32	24	34
1*3/4"	5 UNC	T7363B89	58	160	36	29	39.5
2"	4 1/2 UNC	T7363D29	65	180	40	32	45.25

- 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

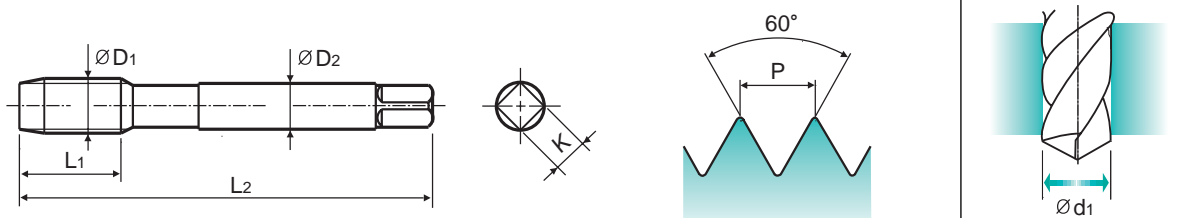
# UNF

Unified fine threads  
Unified Feingewinde

- ▶ Serial hand tap set in First and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Handgewindebohrersatz mit Vor- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.



Sets of taps  
Gewindebohrer-Satz



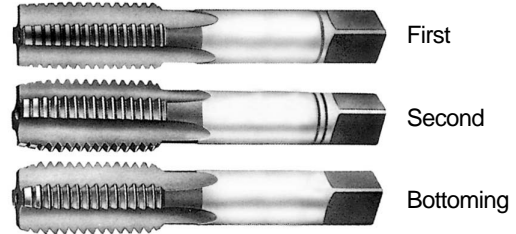
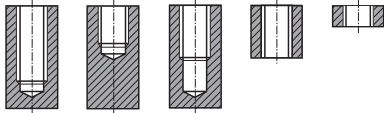
Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
$\varnothing D_1$			L1	L2	$\varnothing D_2$	K	$\varnothing d_1$
#4	- 48 UNF	<b>T7509189</b>	10	42	3.5	2.7	2.4
#5	- 44 UNF	<b>T7509229</b>	10	42	3.5	2.7	2.7
#6	- 40 UNF	<b>T7509269</b>	11	45	4	3	3
#8	- 36 UNF	<b>T7509309</b>	12	48	4.5	3.4	3.5
#10	- 32 UNF	<b>T7509349</b>	14	52	6	4.9	4.1
#12	- 28 UNF	<b>T7509389</b>	16	56	6	4.9	4.7
1/4"	- 28 UNF	<b>T7509429</b>	16	56	6	4.9	5.5
5/16"	- 24 UNF	<b>T7509469</b>	17	63	6	4.9	6.9
3/8"	- 24 UNF	<b>T7509509</b>	18	63	7	5.5	8.5
7/16"	- 20 UNF	<b>T7509549</b>	20	70	8	6.2	9.9
1/2"	- 20 UNF	<b>T7509589</b>	20	70	9	7	11.5
9/16"	- 18 UNF	<b>T7509629</b>	20	70	11	9	12.9
5/8"	- 18 UNF	<b>T7509669</b>	20	70	12	9	14.5
3/4"	- 16 UNF	<b>T7509729</b>	22	80	14	11	17.5
7/8"	- 14 UNF	<b>T7509769</b>	22	80	18	14.5	20.5
1"	- 12 UNF	<b>T7509809</b>	22	90	18	14.5	23.25
1*1/8"	- 12 UNF	<b>T7509849</b>	22	90	22	18	26.5

**BSW** Whitworth threads  
Whitworth Gewinde

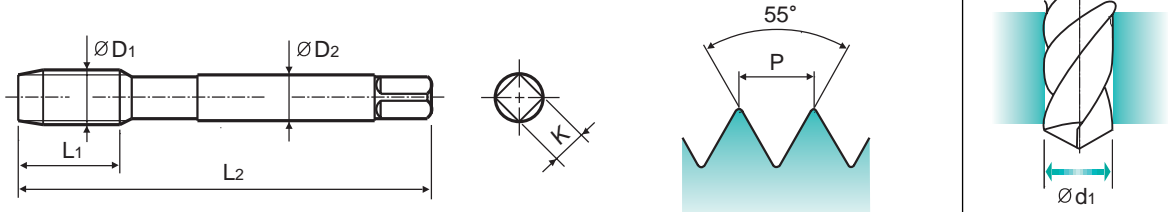
- ▶ This tap is a serial hand tap in set, First, Second and Bottoming.
- ▶ Bottoming tap of set has final internal thread dimensions only.
- ▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
- ▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.

**Hole type**



Material groups **GS** HSS DIN 351 55° Bright

Sets of taps  
Gewindebohrer-Satz



Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1			L1	L2	ØD2	K	Ød1
W3/32"	48	T7609129	10	40	2.8	2.1	1.8
W1/8"	40	T7609209	10	42	3.5	2.7	2.5
W5/32"	32	T7609289	12	48	4.5	3.4	3.1
W3/16"	24	T7609329	14	52	6	4.9	3.6
W7/32"	24	T7609369	16	56	6	4.9	4.4
W1/4"	20	T7609409	16	56	6	4.9	5.1
W5/16"	18	T7609449	20	63	6	4.9	6.5
W3/8"	16	T7609489	22	70	7	5.5	7.9
W7/16"	14	T7609529	22	70	8	6.2	9.3
W1/2"	12	T7609569	25	80	9	7	10.5
W9/16"	12	T7609609	26	80	11	9	12
W5/8"	11	T7609649	27	90	12	9	13.5
W3/4"	10	T7609709	32	105	14	11	16.5
W7/8"	9	T7609749	32	110	18	14.5	19.25
W1"	8	T7609789	36	110	20	16	22
W1*1/8"	7	T7609829	40	125	22	18	24.75
W1*1/4"	7	T7609869	40	125	25	20	27.75
W1*3/8"	6	T7609909	50	150	28	22	30.5
W1*1/2"	6	T7609949	50	150	32	24	33.5
W1*5/8"	5	T7609B29	56	150	32	24	35.5
W1*3/4"	5	T7609B89	58	160	36	29	39
W1*7/8"	4 1/2	T7609C69	65	180	36	29	41.5
W2"	4 1/2	T7609D29	65	180	40	32	44.5