Solid drilling and bore machining

1 HSS drilling

2 Solid carbide drilling

3 Indexable insert drilling

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Threading

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WNT \ Performance

Premium quality tools for high performance.

The premium quality tools from the **WNT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

WNT \ Standard

Quality tools for standard applications.

The quality tools of the **WNT Standard** product line are high quality, powerful and reliable and enjoy the highest trust of our customers worldwide. Tools from this product line are the first choice for many standard applications and guarantee optimal results.

Symbol explanation

Chamfer form

B 4–5	Form B (with spiral point, 4 – 5 cutting leads)
C 2–3	Form C (without spiral point, 2 – 3 cutting leads)
D 4–5	Form D (without spiral point, 4 – 5 cutting leads)
E 1,5–2	Form E (without spiral point, 1,5 – 2 cutting leads)

Helix angle

∢ 42°	Example: helix angle 42°

Tolerances

ISO 2 6H	Explanation of the tolerances can be found on → **Page 114.**

Tensile strength

≤ 1100 N/mm²	Example up to 1100 N/mm²

Tap Material

HSS	High-speed steel
HSS-E	High-performance high speed steel
HSS-PM	High-performance sintered high-speed steel
VHM	Solid carbide

Coloured rings

WNT \ Performance

An explanation of the coloured rings can be found on → **Page 117.**

Thread types

M	Explanation of the thread types can be found on → **Page 3.**

Version

	Int. coolant supply

Tap types

Tool type

WNT \ Performance

Stabil	for through holes to 4xD	**Salo-Rex**	for blind holes up to 3xD, high helix angle for secure chip evacuation	**TWIN**	straight flutes for through and blind holes up 2xD
DL	left hand helix for through holes up to 4xD	**SL**	for blind holes up to 2xD, 15°, 25° or 30° helix angle	**Spanlos**	thread former for through and blind holes up to 3xD

A detailed explanation of the types of tools can be found on → **Page 113**.

Application range

WNT \ Performance

UNI	for universal application	**ST**	for good quality free machining steel	**VG**	for tempered and heat-resistant steels < 1100 N/mm²
HR	for high-tensile steels < 1400 N/mm²	**GG**	for cast iron	**VA**	for stainless and acid-resistant steels up to 1100 N/mm²
NW	for aluminium	**Soft**	for soft materials	**Ms**	for short chipping brass
Ti	for titanium and titanium alloys	**Ni**	special for Inconel 718	**AMPCO**	for Ampco alloys
HT	for hardened steel and chilled iron up to 55 HRc	**EC**	Spanlos – thread former for universal application	**NEO**	Spanlos – thread former for heat resistant alloys
ERGO	hand taps for stainless, heat-resistant and heat-treated steels up to 1100 N/mm²	**ERGO F.T.**	hand tap for steel up to 1400 N/mm², wolfram, chilled iron	**FE**	dies for steel

WNT \ Standard

UNI	for universal application up to 1000 N/mm²	**FE**	for steel to 850 N/mm²	**FE-HF**	for high-tensile steel to 1100 N/mm ²
VA	for corrosion and acid-resistant steels	**GG**	for cast iron	**AL**	for aluminium and aluminium alloys

Special Features

CNC	for synchronised CNC machining with minimum length compensation chuck	**NC**	for synchronised CNC machining with minimum length compensation chuck	**NCW**	with Weldon flat for synchronised CNC machining without length compensation chuck
AZ	with intermittent teeth, reduces friction	**S**	with back taper, for deep threads	**DRY**	for dry machining or minimum quantity lubrication (MMS)
TS	for high-speed machining, up to 100 m/min.	**LH**	for left hand threads	**EL**	extra long, with double overall length
AUT	short version for automatic use	**SN**	thread formers with lubrication grooves	**ES**	extra short
MMB	machine taps	**R_z=1**	lapped dies		

Thread types

M	ISO metric coarse thread DIN 13	**UNF**	Unified fine thread ASME – B1.1	**NPTF**	American taper pipe thread with sealing (1:16) ANSI/ASME – B1.20.3
EG M	ISO Metric coarse thread for wire inserts DIN 8140-2	**EG UNF**	EG Unified fine thread for wire inserts ASME – B18.29.1	**Rp**	Cyl. Whitworth coarse thread DIN EN 10226-1 (ISO7-1)
MF	ISO Metric fine thread DIN 13	**UNJC**	Unified coarse thread ASME – B1.15 and ISO 3161	**Rc**	Whitworth taper pipe thread (1:16) DIN EN 10226-2 (ISO7-1)
G	Whitworth pipe thread DIN EN ISO 228	**UNJF**	Unified fine thread ASME – B1.15 and ISO 3161	**Tr**	ISO metric trapezoidal thread DIN 103
UNC	Unified coarse thread ASME – B1.1	**BSW**	Whitworth thread BS84		The thread types BSW, NPTF, Rp and Rc as well as hand taps and dies are now available in the online shop.
EG UNC	EG Unified coarse thread for wire inserts ASME – B18.29.1	**NPT**	American taper pipe thread with sealing (1:16) ANSI/ASME – B1.20.1		

Toolfinder – WNT Performance

Thread formers

for cold-formable materials	Through hole – Blind hole

HSS taps

for universal application up to 1100 N/mm²	Through hole Blind hole
for steel up to 750 N/mm²	Through hole Blind hole Through hole – Blind hole
for steel up to 1400 N/mm²	Through hole Blind hole Through hole – Blind hole
for corrosion and acid-resistant steels	Through hole Blind hole
for cast iron materials	Through hole – Blind hole
for heat-resistant materials	Through hole Blind hole Through hole – Blind hole
for aluminium and non-ferrous metal	Through hole Blind hole
Hard materials	Through hole – Blind hole

For tools for other applications, refer to the taps overview on → **Pages 8–20.**

Shank extensions for taps and thread-cutting oils can be found in our online shop at cuttingtools.ceratizit.com

WNT \ Performance

Tool type	Application range	M	EG M	MF	G	UNC	EG UNC	UNJC	UNF	EG UNF	UNJF	BSW	NPT	NPTF	Rp	Rc	Tr
Spanlos	EC	59–61		81	89	94			103								
Stabil	UNI	21–23	63	65+66	83	90	95		98	104							
Salo-Rex	UNI	35–38	64	69	85	92	96		100	105							
Stabil	ST	24+25		66	83												109
Salo-Rex	ST	39–41		71+72	86												
TWIN	ST	52+53 56		78–80	88								108				
Stabil	HR	25															
Salo-Rex	HR	39–41															
TWIN	HR	52+53		78+79	88												
Stabil	VA	26			83	90											
Salo-Rex	VA	42		74	86	92			100				106				
TWIN	GG	54		79													
Stabil	Ti	27				90			98								
SL	Ti	44						97	101								
TWIN	AMPCO	52															
Stabil	NW	26															
Salo-Rex	NW	43		74													
TWIN	HT	55		78													

This article can be found in our online shop at cuttingtools.ceratizit.com

Toolfinder – WNT Standard

Thread formers

for cold-formable materials	Through hole – Blind hole

HSS taps

for universal application up to 1000 N/mm²	Through hole Blind hole
for steel to 850 N/mm²	Through hole Blind hole
for high-tensile steels up to 1100 N/mm²	Through hole Blind hole
for corrosion and acid-resistant steels	Through hole Blind hole
for cast iron materials	Through hole – Blind hole
for aluminium and non-ferrous metal	Through hole Blind hole

For tools for other applications, refer to the taps overview on → **Pages 8–20.**

Shank extensions for taps and thread-cutting oils can be found in our online shop at cuttingtools.ceratizit.com

Application range	WNT \ Standard M	MF	G	UNC	UNF
UNI	62	82			
UNI	31+32	67+68	84	91	99
UNI	49+50	75+76	87	93	102
FE	32+34	68		91	99
FE	50	76		93	102
FE-HF	32	68		91	
FE-HF	50	76		93	
VA	33	68		91	99
VA	50+51	77		93	102
GG	58				
AL	33				
AL	51				

Taps Overview

M – Metric ISO Standard Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
Universal				Stabil	UNI	ISO 2 6H ISO 3 6G 7G	HSS-E	■			21+22	
Universal					UNI	ISO 2 6H	HSS-E HSS-PM	■				31
Universal				Stabil	UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck	23	
Universal					UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck		32
Universal				Stabil	UNI DRY	ISO 2X 6HX	HSS-E	■		for dry machining or minimum quantity lubrication (MMS)		
Universal				Stabil	UNI CNC	ISO 2X 6HX ISO 3X 6GX 7GX	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck	23	
Universal					UNI NC	ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		32
Universal				Stabil	UNI EL	ISO 2 6H	HSS-E	■		extra long, with double overall length	29	
Steel				Stabil	ST	ISO 2 6H	HSS-E		□		24	
Steel				Stabil	ST	ISO 1 4H ISO 3 6G	HSS-E		□			
Steel					FE	ISO 2 6H	HSS-E		□			32
Steel					FE ES	ISO 2 6H	HSS-E		□	extra short		34
Steel				Stabil	ST AZ	ISO 2 6H	HSS-E		□	with intermittent teeth, reduces friction	24	
Steel				Stabil	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	24	
Steel				Stabil	ST TS	ISO 2X 6HX	HSS-E	■		for high-speed machining, up to 100 m/min.	25	
Steel				Stabil	HR	ISO 2X 6HX	HSS-PM	■			25	
Steel				Stabil	VG	ISO 2X 6HX	HSS-E	■			25	
Steel					FE-HF	ISO 2 6H	HSS-E	■				32
Steel				Stabil	VG AZ	ISO 2 6H	HSS-E	■		with intermittent teeth, reduces friction		

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Taps Overview

M – Metric ISO Standard Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
Steel				Stabil	ST EL	ISO 2 6H	HSS-E		□	extra long, with double overall length	29	
Steel					ST MMB	ISO 2 6H	HSS-E		□	Machine taps	30	
Stainless steel				Stabil	VA	ISO 2 6H	HSS-E	■			26	
Stainless steel					VA	ISO 2 6H	HSS-PM HSS-E	■	□			33
Non-ferrous metals				Stabil	NW	ISO 2 6H	HSS-E	■			26	
Non-ferrous metals					AL	ISO 2 6H	HSS-E	■	□			33
Non-ferrous metals				Stabil	Soft	ISO 2 6H	HSS-E	■				
Heat-resistant				Stabil	Ti	ISO 1X 4HX ISO 2X 6HX	HSS-PM	■			27	
Heat-resistant				DL	Ti	ISO 2X 6HX	HSS-E	■			28	
Heat-resistant				DL	Ni	ISO 2X 6HX	HSS-E	■			28	
Universal				Salo-Rex	UNI	ISO 2 6H 7G	HSS-E	■		with thro' coolant	35+36	
Universal				Salo-Rex	UNI	ISO 1 4H ISO 3 6G	HSS-E	■				
Universal					UNI	ISO 2 6H	HSS-E HSS-PM	■				49
Universal				Salo-Rex	UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck	36	
Universal					UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck		50
Universal				Salo-Rex	UNI CNC	ISO 2X 6HX ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck, with thro' coolant	37	
Universal				Salo-Rex	UNI CNC	ISO 3 6G, 7G	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		
Universal					UNI NC	ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		49
Universal				Salo-Rex	UNI DRY	ISO 2 6H	HSS-E	■		for dry machining or minimum quantity lubrication (MMS), with thro' coolant	38	

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Taps Overview

M – Metric ISO Standard Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
Universal				Salo-Rex	UNI S	ISO 2 6H	HSS-E	■		with back taper, for deep threads		
Universal				Salo-Rex	UNI ES	ISO 2 6H	HSS-E	■		extra short	45	
Universal				Salo-Rex	UNI EL	ISO 2 6H	HSS-E	■		extra long, with double overall length	47	
Universal				SL	UNI	ISO 2 6H	HSS-E		□			
Steel				SL	ST	ISO 2 6H	HSS-E		□			
Steel				SL	ST CNC	ISO 2X 6HX	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck, with thro' coolant	39	
Steel				SL	ST TS	ISO 2 6H	HSS-PM	■		for high-speed machining, up to 100 m/min.		
Steel				SL	ST TS	ISO 2X 6HX	HSS-E	■		for high-speed machining, up to 100 m/min.	39	
Steel				SL	ST ES	ISO 2 6H	HSS-E		□	extra short	46	
Steel				SL	ST AUT/ES	ISO 2 6H	HSS-E		□	short version for automatic use; extra short	46	
Steel				SL	ST EL	ISO 2 6H	HSS-E		□	extra long, with double overall length	48	
Steel				SL	HR	ISO 2 6H	HSS-PM		□		39	
Steel				Salo-Rex	ST	ISO 2 6H	HSS-E	■	□		40	
Steel				Salo-Rex	ST	ISO 1 4H ISO 3 6G	HSS-E	■	□			
Steel					FE	ISO 2 6H	HSS-E		□			50
Steel					FE-HF	ISO 2 6H	HSS-E	■				50
Steel				Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	40	
Steel				Salo-Rex	ST ES	ISO 2 6H	HSS-E		□	extra short		
Steel				Salo-Rex	ST EL	ISO 2 6H	HSS-E		□	extra long, with double overall length	47	

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Taps Overview

M – Metric ISO Standard Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Steel		■		Salo-Rex	HR	ISO 2 6H	HSS-PM	■	□		41	
Steel		■		Salo-Rex	ST TS	ISO 2 6H	HSS-E	■		with thro' coolant	41	
Stainless steel		■		Salo-Rex	VA	ISO 2 6H	HSS-E	■		with thro' coolant	42	
Stainless steel		■			VA	ISO 2 6H	HSS-E HSS-PM	■	□			50+51
Stainless steel		■		Salo-Rex	VA S	ISO 2 6H	HSS-E	■		with back taper, for deep threads		
Non-ferrous metals		■		Salo-Rex	Soft	ISO 2 6H	HSS-E	■	□		43	
Non-ferrous metals		■		Salo-Rex	NW	ISO 2 6H	HSS-E	■			43	
Non-ferrous metals		■			AL	ISO 2 6H	HSS-E	■	□			51
Heat-resistant		■		SL	Ti	ISO 2X	HSS-PM	■			44	
Heat-resistant		■		SL	Ni	ISO 2X ISO 2 6H	HSS-PM	■			44	
Steel			■	TWIN	ST	ISO 2X 6HX	HSS-E		□		52	
Steel			■	TWIN	ST AZ	ISO 2X 6HX	HSS-E		□	with intermittent teeth, reduces friction		
Steel			■	TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extra short	56	
Steel			■	TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	for left hand threads; extra short		
Steel			■	TWIN	HR	ISO 2X 6HX	HSS-E	■				
Steel			■	TWIN	HR EL	ISO 2X 6HX	HSS-E	■		extra long, with double overall length	57	
Cast iron			■	TWIN	GG	ISO 2X 6HX	HSS-E	■		with thro' coolant	54	
Cast iron			■		GG	ISO 2X 6HX	HSS-E	■				58
Non-ferrous metals			■	TWIN	Ms	ISO 2X 6HX	HSS-E		□			

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Taps Overview

M – Metric ISO Standard Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
Heat-resistant				TWIN	AMPCO	ISO 2X 6HX	HSS-PM		□		52	
Tempered steel				TWIN	HT	ISO 2X 6HX	VHM HSS-PM	■			55	
Machine thread formers				Spanlos	EC	ISO 2X 6HX	HSS-E HSS-PM	■			59	
Machine thread formers				Spanlos	EC SN	ISO 2X 6HX ISO 3X 6GX	HSS-E HSS-PM	■		Thread formers with oil grooves and thro' coolant	60+61	
Machine thread formers				Spanlos	NEO SN	ISO 2X 6HX	HSS-PM	■		Thread formers with oil grooves and thro' coolant	61	
Machine thread formers					UNI	ISO 2X 6HX	HSS-E	■				62
Machine thread formers					UNI SN	ISO 2X 6HX	HSS-E	■		Thread formers with lubrication grooves		62
Hand taps					ST	ISO 2X 6HX	HSS-E VHM		□			
Hand taps					ERGO	ISO 2X 6HX	HSS-E		□			
Hand taps					ERGO F.T.	ISO 2X 6HX	HSS-E	■				
Dies					FE	ISO 6g ISO 6e	HSS		□			
Dies					FE	ISO 6g	HSS		□			
Dies					FE R_z=1	ISO 6g	HSS		□	Lapped Dies		
Dies					FE LH	ISO 6g	HSS		□	for left hand threads		
Dies					VA	ISO 6g	HSS-E		□			
Dies					VA R_z=1	ISO 6g	HSS-E		□	Lapped Dies		
Dies					Ms R_z=1	ISO 6g	HSS		□	Lapped Dies		

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Taps Overview

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Metric ISO standard thread for wire thread inserts												
Universal	■			Stabil	UNI	6H mod	HSS-E	■			63	
Universal		■		Salo-Rex	UNI	6H mod	HSS-E	■			64	
Non-ferrous metals		■		Salo-Rex	Soft	6H mod	HSS-E	■			64	
MF – Metric ISO Fine Thread												
Universal	■			Stabil	UNI	ISO 2 6H	HSS-E	■			65+66	
Universal	■			Stabil	UNI	ISO 3 6G	HSS-E	■				
Universal	■				UNI	ISO 2 6H	HSS-PM HSS-E	■				67+68
Universal	■			Stabil	UNI DRY	ISO 2X 6HX	HSS-E	■		for dry machining or minimum quantity lubrication (MMS)		
Steel	■			Stabil	ST	ISO 2 6H	HSS-E		□			
Steel	■				FE	ISO 2 6H	HSS-E		□			68
Steel	■				FE-HF	ISO 2 6H	HSS-E	■				68
Steel	■			Stabil	ST TS	ISO 2X 6HX	HSS-E	■		for high-speed machining, up to 100 m/min.	66	
Steel	■			Stabil	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	66	
Steel	■			Stabil	VG	ISO 2X 6HX	HSS-E	■			65+66	
Stainless steel	■			Stabil	VA	ISO 2 6H	HSS-E	■				
Stainless steel	■				VA	ISO 2 6H	HSS-E	■				68
Universal		■		Salo-Rex	UNI	ISO 2 6H ISO 3 6G	HSS-E	■		with thro' coolant	69+70	
Universal		■			UNI	ISO 2 6H	HSS-E HSS-PM	■				75+76
Universal		■		Salo-Rex	UNI CNC	ISO 3 6G	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		

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Taps Overview

MF – Metric ISO Fine Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Universal				Salo-Rex	UNI CNC	7G ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck	70	
Universal					UNI NC	ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		76
Steel				Salo-Rex	ST	ISO 2 6H	HSS-E		□		71	
Steel				Salo-Rex	ST	ISO 1 4H	HSS-E		□			
Steel					FE	ISO 2 6H	HSS-E		□			76
Steel					FE-HF	ISO 2 6H	HSS-E	■				76
Steel				Salo-Rex	ST TS	ISO 2 6H	HSS-E	■		for high-speed machining, up to 100 m/min.		
Steel				Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	71	
Steel				SL	ST	ISO 2 6H	HSS-E		□		72	
Steel				SL	ST CNC	ISO 2X 6HX	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		
Stainless steel				Salo-Rex	VA	ISO 2 6H	HSS-E	■			74	
Stainless steel					VA	ISO 2 6H	HSS-E HSS-PM	■	□			77
Non-ferrous metals				Salo-Rex	NW	ISO 2 6H	HSS-E	■			74	
Steel				TWIN	ST	ISO 2X 6HX	HSS-E		□		78	
Steel				TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extra short	80	
Steel				TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	for left hand threads	80	
Steel				TWIN	HR	ISO 2X 6HX	HSS-E	■			78+79	
Cast iron				TWIN	GG	ISO 2X 6HX	HSS-E	■			79	
Tempered steel				TWIN	HT	ISO 2X 6HX	VHM	■			78	

This article can be found in our online shop at cuttingtools.ceratizit.com

Taps Overview

MF – Metric ISO Fine Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Machine thread formers			■	Spanlos	EC	ISO 2X 6HX	HSS-E	■			81	
Machine thread formers			■	Spanlos	EC SN	ISO 2X 6HX	HSS-E	■		Thread formers with lubrication grooves	81	
Machine thread formers			■		UNI	ISO 2X 6HX	HSS-E	■				82
Machine thread formers			■		UNI SN	ISO 2X 6HX	HSS-E	■		Thread formers with lubrication grooves		82
Hand taps					ST	ISO 2X 6HX	HSS-E		□			
Dies					FE	ISO 6g	HSS		□			
Dies					FE	ISO 6g	HSS		□			
Dies					FE LH	ISO 6g	HSS		□	for left hand threads		
Dies					VA	ISO 6g	HSS-E		□			

G – Whitworth Pipe Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Universal				Stabil	UNI	ISO 228	HSS-E	■			83	
Universal					UNI	ISO 228	HSS-E	■				84
Steel				Stabil	ST	ISO 228	HSS-E		□		83	
Steel					FE	ISO 228	HSS-E		□			
Stainless steel				Stabil	VA	ISO 228	HSS-E	■			83	
Universal				Salo-Rex	UNI	ISO 228 ISO 228 +0,05	HSS-E	■			85	
Universal					UNI	ISO 228	HSS-E	■				87
Universal				Salo-Rex	UNI CNC	ISO 228	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck	86	

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Taps Overview

G – Whitworth Pipe Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Steel		■		Salo-Rex	ST	ISO 228	HSS-E		□		86	
Steel		■		SL	ST	ISO 228	HSS-E		□			
Stainless steel		■		Salo-Rex	VA	ISO 228	HSS-E	■			86	
Steel			■	TWIN	ST	ISO 228X	HSS-E		□		88	
Steel			■	TWIN	HR	ISO 228X	HSS-E	■			88	
Cast iron			■	TWIN	GG	ISO 228X	HSS-E	■				
Machine thread formers			■	Spanlos	EC	ISO 228	HSS-E	■			89	
Machine thread formers			■	Spanlos	EC SN	ISO 228	HSS-E	■		Thread formers with lubrication grooves	89	
Hand taps					ERGO	ISO 228	HSS-E		□			
Dies					FE	ISO 228A	HSS		□			

UNC – Unified Coarse Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Universal	■			Stabil	UNI	3B	HSS-E	■				
Universal	■			Stabil	UNI	2B	HSS-E	■			90	
Universal	■				UNI	2B	HSS-E	■				91
Steel	■			Stabil	ST	2B	HSS-E		□			
Steel	■				FE	2B	HSS-E		□			91
Steel	■				FE-HF	2B	HSS-E	■				91
Stainless steel	■			Stabil	VA	2B	HSS-E	■			90	
Stainless steel	■				VA	2B	HSS-E	■				91

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Taps Overview

UNC – Unified Coarse Thread

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Heat-resistant	■			Stabil	Ti	2BX	HSS-PM	■			90	
Universal		■		Salo-Rex	UNI	2B	HSS-E	■			92	
Universal		■		Salo-Rex	UNI	2B +0,05	HSS-E	■				
Universal		■			UNI	2B	HSS-E	■				93
Steel		■		Salo-Rex	ST	2B	HSS-E		□			
Steel		■			FE	2B	HSS-E		□			93
Steel		■			FE-HF	2B	HSS-E	■				93
Stainless steel		■		Salo-Rex	VA	2B	HSS-E	■			92	
Stainless steel		■			VA	2B	HSS-E		□			93
Heat-resistant		■		SL	Ti	2BX	HSS-PM	■				
Cast iron			■	TWIN	GG	2BX	HSS-E	■				
Machine thread formers			■	Spanlos	EC	2BX	HSS-E	■			94	
Machine thread formers			■	Spanlos	EC SN	2BX	HSS-E	■		Thread formers with lubrication grooves	94	
Hand taps			■		ERGO	2BX	HSS-E		□			
Dies			■		FE	2A	HSS-E		□			

EG UNC – Unified coarse thread for wire inserts

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
Universal	■			Stabil	UNI	2B	HSS-E	■			95	
Universal		■		Salo-Rex	UNI	2B	HSS-E	■			96	

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Taps Overview

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
UNJC – Unified Coarse Thread												
Heat-resistant				SL	Ti	3BX	HSS-E	■			97	
UNF – Unified Fine Thread												
Universal				Stabil	UNI	2B	HSS-E	■			98	
Universal					UNI	2B	HSS-E	■				99
Steel				Stabil	ST	2B	HSS-E		□			
Steel					FE	2B	HSS-E		□			99
Stainless steel					VA	2B	HSS-E	■				99
Heat-resistant				Stabil	Ti	2BX	HSS-PM	■			98	
Universal				Salo-Rex	UNI	2B 2B +0,05	HSS-E	■			100	
Universal					UNI	2B	HSS-E	■				102
Steel					FE	2B	HSS-E		□			102
Stainless steel				Salo-Rex	VA	2B	HSS-E	■			100	
Stainless steel					VA	2B	HSS-E		□			102
Heat-resistant				SL	Ti	2BX 3BX	HSS-PM	■			101	
Cast iron				TWIN	GG	2BX	HSS-E	■				
Thread formers				Spanlos	EC SN	2BX	HSS-E	■		Thread formers with lubrication grooves	103	
Dies					FE	2A	HSS		□			

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Taps Overview

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated	uncoated	Comments	WNT \ Performance	WNT \ Standard
EG UNF – Unified fine thread for wire inserts												
Universal	■			Stabil	UNI	2B	HSS-E	■			104	
		■		Salo-Rex	UNI	2B	HSS-E	■			105	
UNJF – Unified Extra Fine Thread												
Heat-resistant	■			DL	Ti	3BX	HSS-E	■				
		■		SL	Ti	3BX	HSS-E	■				
BSW – Whitworth Thread												
Universal	■			Stabil	UNI	med.	HSS-E	■				
		■		Salo-Rex	UNI	med.	HSS-E	■				
NPT – American Tapered Pipe Thread												
Stainless steel		■		Salo-Rex	VA		HSS-E	■			106	
Steel			■	TWIN	ST AZ		HSS-E		□	with intermittent teeth, reduces friction		
			■	TWIN	VG		HSS-E		□		107	
			■	TWIN	VG AZ		HSS-E		□	with intermittent teeth, reduces friction		
			■	TWIN	ST ES		HSS-E		□	extra short	108	
Dies					FE		HSS-E		□			

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Taps Overview

Application range	Through hole	Blind hole	Through hole-Blind hole	Tool type	Application Area / Special Features	Tolerance	Tap Material	coated ■	uncoated □	Comments	WNT \ Performance	WNT \ Standard
NPTF – American Tapered Pipe Thread												
Steel				TWIN	ST		HSS-E		□			
Steel				TWIN	VG		HSS-E		□			
Steel				TWIN	ST ES		HSS-E		□	extra short		
Rp – Cylindrical Whitworth Pipe Thread												
Steel				TWIN	ST	X	HSS-E		□			
Rc – Tapered Whitworth Pipe Thread												
Steel				TWIN	ST		HSS-E		□			
Tr – Metric ISO Trapezoidal Thread												
Steel					ST	7H	HSS-E		□		109	

Accessories

Shank extensions for taps		
Tapping Oil, Chlorine Free		

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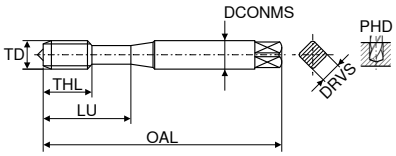
Through hole – Machine taps, right hand

M	Stabil



DIN 371 with reinforced shank

	UNI	UNI	UNI	UNI	UNI
	B 4–5	B 4–5	B 4–5	B 4–5	B 4–5
	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 3 6G	7G
	nitr. + vap.	TiN	TiCN	nitr. + vap.	nitr. + vap.

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD
	U0	U0	U0	U0	U0
	Article no. 22 501 ...	Article no. 22 503 ...	Article no. 22 505 ...	Article no. 22 508 ...	Article no. 22 510 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	EUR		EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm	mm											
M1	0,25	40	2,5	2,1	0,75	5	13	2	99,83	**010** [1]								
M1,2	0,25	40	2,5	2,1	0,95	5	13	2	94,74	**012** [1]								
M1,4	0,30	40	2,5	2,1	1,10	7	13	3	85,74	**014** [1]								
M1,6	0,35	40	2,5	2,1	1,25	8	11	3	60,20	**016**								
M1,7	0,35	40	2,5	2,1	1,35	6	11	2	92,62	**017**								
M1,8	0,35	40	2,5	2,1	1,45	6	11	2	127,20	**018**								
M2	0,40	45	2,8	2,1	1,60	7	12	2			41,43	**020**			43,76	**020**	50,87	**020**
M2	0,40	45	2,8	2,1	1,60	8	8	3	43,76	**020**								
M2,2	0,45	45	2,8	2,1	1,75	7	12	2	46,63	**022**								
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	43,02	**025**					43,02	**025**	49,81	**025**
M3	0,50	56	3,5	2,7	2,50	11	18	3	32,22	**030**	34,98	**030**	34,98	**030**	34,98	**030**	40,27	**030**
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	35,39	**035**					35,61	**035**		
M4	0,70	63	4,5	3,4	3,30	13	21	3	29,24	**040**	36,45	**040**	36,45	**040**	35,39	**040**	40,49	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	3	29,99	**050**	36,98	**050**	36,98	**050**	35,61	**050**	41,43	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	30,42	**060**	41,76	**060**	41,76	**060**	36,45	**060**	42,49	**060**
M7	1,00	80	7,0	5,5	6,00	17	30	3	42,49	**070**								
M8	1,25	90	8,0	6,2	6,80	20	35	3	34,44	**080**	46,84	**080**	46,84	**080**	41,23	**080**	46,63	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	41,33	**100**	65,28	**100**	65,28	**100**	49,81	**100**	56,91	**100**
M12	1,75	110	12,0	9,0	10,20	24	44	3	60,83	**120**								

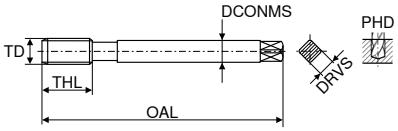
Steel	**6-20**	**6-25**	**6-25**	**6-20**	**6-20**
Stainless steel	**4-8**	**5-10**	**5-10**	**4-8**	**4-8**
Cast iron	**6-15**	**10-20**	**10-20**	**6-15**	**6-15**
Non ferrous metals		**12-25**	**12-25**		
Heat resistant alloys					
Hardened materials					

1) Tol. ISO 1 4H ≤ M1.4

DIN 376 can be found on the next page

Through hole – Machine taps, right hand

M | Stabil



DIN 376 with reduced shank

UNI	UNI	UNI	UNI
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 3 6G	7G
nitr. + vap.	TiN	nitr. + vap.	nitr. + vap.

HSS-E	HSS-E	HSS-E	HSS-E
0°	0°	0°	0°
≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²
≤ 4xD	≤ 4xD	≤ 4xD	≤ 4xD
U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 502 ...		Article no. 22 504 ...		Article no. 22 509 ...		Article no. 22 511 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	11	3	59,66	030						
M4	0,70	63	2,8	2,1	3,3	13	3	39,74	040						
M5	0,80	70	3,5	2,7	4,2	15	3	37,94	050						
M6	1,00	80	4,5	3,4	5,0	17	3	37,20	060						
M8	1,25	90	6,0	4,9	6,8	20	3	40,80	080						
M10	1,50	100	7,0	5,5	8,5	22	3	47,27	100						
M12	1,75	110	9,0	7,0	10,2	24	3	46,21	120	75,14	120	57,23	120	64,65	120
M14	2,00	110	11,0	9,0	12,0	26	3	66,66	140	111,30	140			95,91	140
M16	2,00	110	12,0	9,0	14,0	27	3	67,40	160	96,75	160	84,04	160	97,93	160
M18	2,50	125	14,0	11,0	15,5	30	3	132,50	180	174,80	180				
M20	2,50	140	16,0	12,0	17,5	32	3	103,10	200	180,10	200	128,20	200		
M22	2,50	140	18,0	14,5	19,5	32	3	165,40	220	267,10	220				
M24	3,00	160	18,0	14,5	21,0	34	3	134,60	240	227,90	240				
M27	3,00	160	20,0	16,0	24,0	36	3	187,60	270						
M30	3,50	180	22,0	18,0	26,5	40	4	220,50	300						
M33	3,50	180	25,0	20,0	29,5	40	4	508,70	330						
M36	4,00	200	28,0	22,0	32,0	50	4	606,20	360						
M42	4,50	200	32,0	24,0	37,5	56	4	1.154,00	420						
M48	5,00	250	36,0	29,0	43,0	65	4	1.165,00	480						

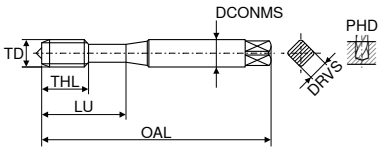
Steel	6-20	6-25	6-20	6-20
Stainless steel	4-8	5-10	4-8	4-8
Cast iron	6-15	10-20	6-15	6-15
Non ferrous metals		12-25		
Heat resistant alloys				
Hardened materials				

Through hole – Machine taps, right hand

▲ CNC = for synchronised CNC machining with minimum length compensation chuck

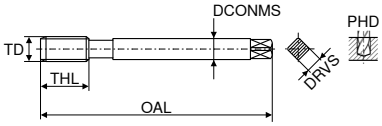
▲ NCW = with Weldon flat for synchronised CNC machining without length compensation chuck

M	Stabil				
		UNI NCW	UNI CNC	UNI CNC	UNI CNC
		B 4–5	B 4–5	B 4–5	B 4–5
		ISO 2 6H	ISO 2X 6HX	ISO 3X 6GX	7GX
		TiN	TiN GS	TiN GS	TiN GS



DIN 371 with reinforced shank

									HSS-PM		HSS-E		HSS-E		HSS-E	
									◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD	
									U0		U0		U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 148 ...		Article no. 22 542 ...		Article no. 22 596 ...		Article no. 22 592 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M3	0,50	70	6,0	4,9	2,5	6	18	3	50,02	030						
M3	0,50	56	3,5	2,7	2,5	6	18	3			37,94	030				
M4	0,70	70	6,0	4,9	3,3	7	21	3	52,03	040						
M4	0,70	63	4,5	3,4	3,3	7	21	3			40,27	040	48,54	040	48,54	040
M5	0,80	70	6,0	4,9	4,2	8	25	3	52,56	050	40,80	050	50,02	050	50,02	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	66,13	060	51,82	060	54,79	060	61,15	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	73,86	080						
M8	1,25	90	8,0	6,2	6,8	14	35	4			57,23	080	59,24	080	66,77	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	90,72	100						
M10	1,50	100	10,0	8,0	8,5	16	39	4			71,22	100	73,86	100	80,23	100
M12	1,75	110	10,0	8,0	10,2	18		3	110,20	120						
M16	2,00	110	12,0	9,0	14,0	22		3	153,70	160						



DIN 376 with reduced shank

								U0		U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 543 ...		Article no. 22 597 ...		Article no. 22 593 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M12	1,75	110	9	7	10,2	18	4	82,88	120	90,19	120	97,18	120
M14	2,00	110	11	9	12,0	20	4	233,20	140				
M16	2,00	110	12	9	14,0	22	4	118,70	160				
M20	2,50	140	16	12	17,5	25	4	201,30	200				

Steel	6-25	6-25	6-25	6-25
Stainless steel	5-10	5-10	5-10	5-10
Cast iron	10-20	10-20	10-20	10-20
Non ferrous metals	12-25	12-25	12-25	12-25
Heat resistant alloys				
Hardened materials				

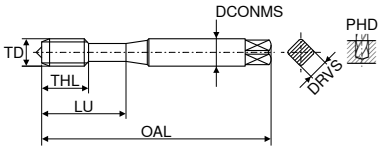
Through hole – Machine taps, right/left hand

▲ AZ = with intermittent teeth, reduces friction

▲ LH = for left hand threads

M	Stabil

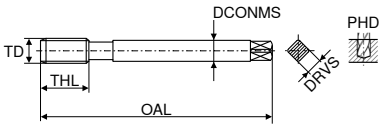
ST	ST AZ	ST LH
B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 750 N/mm² ≤ 4xD	◁ 0° ≤ 750 N/mm² ≤ 4xD	◁ 0° ≤ 750 N/mm² ≤ 4xD
	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 020 ...		Article no. 22 022 ...		Article no. 22 127 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	7	12	2	28,61	020	40,80	020		
M2,3	0,40	45	2,8	2,1	1,90	7	12	2	31,47	023				
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	28,61	025				
M2,6	0,45	50	2,8	2,1	2,15	9	14	2	31,47	026				
M3	0,50	56	3,5	2,7	2,50	11	18	3	23,21	030	38,57	030	36,98	030
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	24,79	035				
M4	0,70	63	4,5	3,4	3,30	13	21	3	23,52	040	38,57	040	38,57	040
M5	0,80	70	6,0	4,9	4,20	15	25	3	24,79	050	35,61	050	39,74	050
M6	1,00	80	6,0	4,9	5,00	17	30	3	24,79	060	36,45	060	39,74	060
M8	1,25	90	8,0	6,2	6,80	20	35	3	29,78	080	40,27	080	44,72	080
M10	1,50	100	10,0	8,0	8,50	22	39	3	35,71	100	48,74	100	56,91	100
M12	1,75	110	12,0	9,0	10,20	24	44	3	40,49	120				



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 021 ...		Article no. 22 023 ...		Article no. 22 147 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	11	3	28,83	030				
M4	0,70	63	2,8	2,1	3,3	13	3	28,61	040				
M5	0,80	70	3,5	2,7	4,2	15	3	29,36	050				
M6	1,00	80	4,5	3,4	5,0	17	3	30,10	060				
M8	1,25	90	6,0	4,9	6,8	20	3	32,00	080				
M10	1,50	100	7,0	5,5	8,5	22	3	36,45	100				
M12	1,75	110	9,0	7,0	10,2	24	3	44,29	120	67,51	120	68,04	120
M14	2,00	110	11,0	9,0	12,0	26	3	60,20	140				
M16	2,00	110	12,0	9,0	14,0	27	3	62,95	160	101,70	160	103,80	160
M18	2,50	125	14,0	11,0	15,5	30	3	92,62	180				
M20	2,50	140	16,0	12,0	17,5	32	3	93,89	200	146,20	200	152,60	200
M22	2,50	140	18,0	14,5	19,5	32	3	145,20	220				
M24	3,00	160	18,0	14,5	21,0	34	3	124,00	240				
M27	3,00	160	20,0	16,0	24,0	36	3	169,50	270				
M30	3,50	180	22,0	18,0	26,5	40	4	201,30	300				

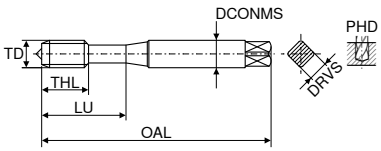
Steel	10-20	10-20	10-20
Stainless steel			
Cast iron			
Non ferrous metals	10-20	10-20	10-20
Heat resistant alloys			
Hardened materials			

Through hole – Machine taps, right hand

▲ TS = for high-speed machining, up to 100 m/min.

M | Stabil

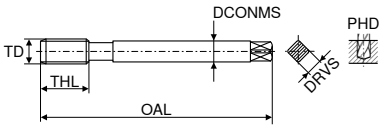
ST TS	HR	HR	VG
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
TiN	nitr.	TiN	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-PM	HSS-PM	HSS-E
	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1400 N/mm² ≤ 4xD	◁ 0° ≤ 1400 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 092 ...		Article no. 22 053 ...		Article no. 22 055 ...		Article no. 22 120 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	8	9,5	2			64,32	020				
M2	0,40	45	2,8	2,1	1,60	4	12,0	2	49,17	020					43,02	020
M2,2	0,45	45	2,8	2,1	1,75	7	12,0	2			64,32	022				
M2,5	0,45	50	2,8	2,1	2,05	9	14,0	2			63,06	025				
M2,5	0,45	50	2,8	2,1	2,05	5	15,0	2	49,17	025					43,02	025
M3	0,50	56	3,5	2,7	2,50	11	18,0	2			33,06	030	43,02	030		
M3	0,50	56	3,5	2,7	2,50	6	18,0	3	38,57	030					31,69	030
M3,5	0,60	56	4,0	3,0	2,90	12	20,0	2			51,50	035				
M4	0,70	63	4,5	3,4	3,30	13	21,0	2			33,81	040	61,46	040		
M4	0,70	63	4,5	3,4	3,30	7	21,0	3	42,07	040					34,02	040
M5	0,80	70	6,0	4,9	4,20	15	25,0	2			35,92	050	45,68	050		
M5	0,80	70	6,0	4,9	4,20	8	25,0	3	45,99	050					36,24	050
M6	1,00	80	6,0	4,9	5,00	17	30,0	3			35,92	060	52,03	060		
M6	1,00	80	6,0	4,9	5,00	10	30,0	3	55,95	060					44,09	060
M8	1,25	90	8,0	6,2	6,80	20	35,0	3			42,49	080	57,23	080		
M8	1,25	90	8,0	6,2	6,80	14	35,0	4	70,58	080					46,63	080
M10	1,50	100	10,0	8,0	8,50	22	39,0	3			52,03	100	81,07	100		
M10	1,50	100	10,0	8,0	8,50	16	39,0	4	76,51	100					66,77	100
M12	1,75	110	12,0	9,0	10,20	24	44,0	3			86,27	120				



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 093 ...		Article no. 22 121 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
M12	1,75	110	9	7	10,2	18	4	102,90	120	79,06	120
M16	2,00	110	12	9	14,0	22	4	133,50	160	110,20	160
M20	2,50	140	16	12	17,5	25	4	199,30	200	185,40	200

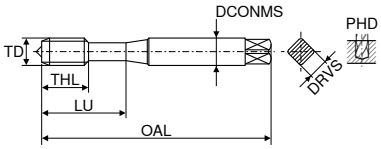
Steel	20-100	2-6	2-6	6-15
Stainless steel				5-10
Cast iron	20-60			
Non ferrous metals	20-100			10-20
Heat resistant alloys	10-25	3-5	3-5	
Hardened materials				

6

Through hole – Machine taps, right hand

M	Stabil

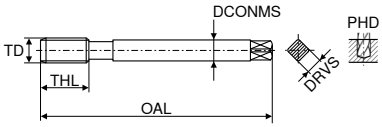
VA	VA	NW	NW
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
nitr.	TiN GS	vap.	HCr



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	0° ≤ 900 N/mm² ≤ 4xD	0° ≤ 900 N/mm² ≤ 4xD	0° ≤ 500 N/mm² ≤ 4xD	0° ≤ 500 N/mm² ≤ 4xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 056 ...		Article no. 22 038 ...		Article no. 22 058 ...		Article no. 22 060 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M1,6	0,35	40	2,5	2,1	1,25	6	11	2			56,91	016				
M2	0,40	45	2,8	2,1	1,60	7	12	2	32,43	020	46,63	020	31,47	020	38,57	020
M2,3	0,40	45	2,8	2,1	1,90	7	12	2					36,24	023	40,80	023
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	32,00	025	45,25	025	31,47	025	38,57	025
M2,6	0,45	50	2,8	2,1	2,15	9	14	2					35,92	026	40,80	026
M3	0,50	56	3,5	2,7	2,50	11	18	3	25,97	030	38,79	030	25,01	030	31,69	030
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	29,14	035			25,97	035	33,81	035
M4	0,70	63	4,5	3,4	3,30	13	21	3	27,24	040	40,80	040	25,01	040	32,43	040
M5	0,80	70	6,0	4,9	4,20	15	25	3	28,19	050	42,07	050	25,97	050	33,06	050
M6	1,00	80	6,0	4,9	5,00	17	30	3	29,36	060	52,35	060	25,97	060	33,06	060
M8	1,25	90	8,0	6,2	6,80	20	35	3	32,65	080	57,97	080	30,94	080	38,79	080
M10	1,50	100	10,0	8,0	8,50	22	39	3	40,27	100	71,96	100	36,98	100	48,74	100



DIN 376 with reduced shank

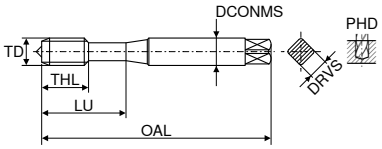
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 057 ...		Article no. 22 039 ...		Article no. 22 059 ...		Article no. 22 061 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M12	1,75	110	9	7,0	10,2	24	3	51,19	120	85,74	120	46,63	120	58,50	120
M14	2,00	110	11	9,0	12,0	26	3	70,58	140	122,90	140				
M16	2,00	110	12	9,0	14,0	27	3	73,12	160	120,90	160	66,13	160	72,59	160
M18	2,50	125	14	11,0	15,5	30	3	140,90	180						
M20	2,50	140	16	12,0	17,5	32	3	105,00	200	203,50	200				
M22	2,50	140	18	14,5	19,5	32	3	222,60	220						
M24	3,00	160	18	14,5	21,0	34	3	143,10	240						
M27	3,00	160	20	16,0	24,0	36	3	240,60	270						
M30	3,50	180	22	18,0	26,5	40	4	231,00	300						

Steel		5-12			
Stainless steel	5-10	5-10			
Cast iron					
Non ferrous metals			10-20	12-25	
Heat resistant alloys					
Hardened materials					

Through hole – Machine taps, right hand

M | Stabil

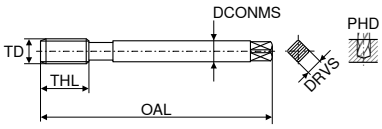
Ti	Ti	Ti
B 4–5	B 4–5	B 4–5
ISO 1X 4HX	ISO 2X 6HX	ISO 2X 6HX
TiN	vap.	TiN



DIN 371 with reinforced shank

	HSS-PM	HSS-PM	HSS-PM
	0° ≤ 44 HRC ≤ 4xD	0° ≤ 1400 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD
	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 081 ...		Article no. 22 075 ...		Article no. 22 077 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M1	0,25	40	2,5	2,1	0,75	5	6,5	2	122,90	**010**				
M1,6	0,35	40	2,5	2,1	1,25	8	9,5	3			105,00	**016**		
M2	0,40	45	2,8	2,1	1,60	8	9,5	3	75,67	**020**	84,04	**020**		
M2,5	0,45	50	2,8	2,1	2,05	9	14,0	3			82,35	**025**		
M3	0,50	56	3,5	2,7	2,50	11	18,0	3	52,03	**030**	57,65	**030**	55,11	**030**
M3,5	0,60	56	4,0	3,0	2,90	12	20,0	3			65,92	**035**		
M4	0,70	63	4,5	3,4	3,30	13	21,0	3	53,52	**040**	60,51	**040**	57,23	**040**
M5	0,80	70	6,0	4,9	4,20	15	25,0	3	55,11	**050**	60,51	**050**	57,65	**050**
M6	1,00	80	6,0	4,9	5,00	17	30,0	3	61,46	**060**	62,21	**060**	59,03	**060**
M8	1,25	90	8,0	6,2	6,80	20	35,0	3	73,86	**080**	71,22	**080**	68,04	**080**
M10	1,50	100	10,0	8,0	8,50	22	39,0	3			82,88	**100**	81,70	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 140 ...		Article no. 22 142 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
M12	1,75	110	9	7	10,2	24	3	100,40	**120**	89,44	**120**

Steel	**2-5**	**2-5**	**2-5**
Stainless steel			
Cast iron			
Non ferrous metals			
Heat resistant alloys	**2-6**	**2-6**	**2-6**
Hardened materials			

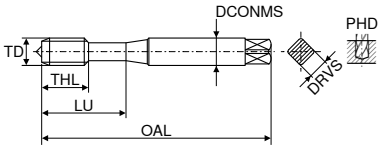
6

Through hole – Machine taps, right hand

M | DL

Ti: D 4–5 | ISO 2X 6HX | TiCN

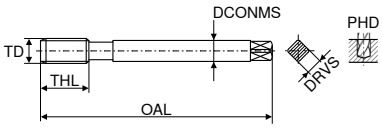
Ni: D 4–5 | ISO 2X 6HX | TiCN



DIN 371 with reinforced shank

	HSS-E	HSS-E
	◁ 15° ≤ 1200 N/mm² ≤ 4xD	◁ 15° ≤ 1600 N/mm² ≤ 4xD
	U0	U0
	Article no. 22 159 ...	Article no. 22 297 ...
	EUR	EUR

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes				
	mm	mm	mm	mm	mm	mm	mm					
M3	0,50	56	3,5	2,7	2,5	11	18	2	46,10	**030**	55,11	**030**
M4	0,70	63	4,5	3,4	3,3	13	21	3	50,44	**040**	57,54	**040**
M5	0,80	70	6,0	4,9	4,2	15	25	3	50,76	**050**	58,93	**050**
M6	1,00	80	6,0	4,9	5,0	17	30	3	67,83	**060**	74,51	**060**
M8	1,25	90	8,0	6,2	6,8	20	35	3	74,51	**080**	82,66	**080**
M10	1,50	100	10,0	8,0	8,5	22	39	3	91,67	**100**	103,50	**100**



DIN 376 with reduced shank

	U0	U0
	Article no. 22 160 ...	Article no. 22 298 ...
	EUR	EUR

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes				
	mm	mm	mm	mm	mm	mm					
M12	1,75	110	9	7,0	10,2	24	3	105,80	**120**	119,80	**120**
M14	2,00	110	11	9,0	12,0	26	3			179,10	**140**
M16	2,00	110	12	9,0	14,0	27	3	149,50	**160**	167,40	**160**
M20	2,50	140	16	12,0	17,5	32	3	258,50	**200**	286,10	**200**
M24	3,00	160	18	14,5	21,0	34	3	303,10	**240**		

Steel	**6-8**	
Stainless steel	**4-10**	
Cast iron		
Non ferrous metals	**10-12**	
Heat resistant alloys	**4-6**	**2-20**
Hardened materials		

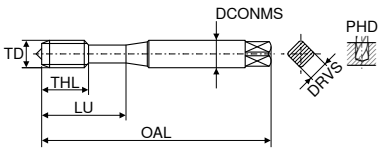
Through hole – Machine taps, right hand

▲ EL = extra long, with double overall length

M | Stabil

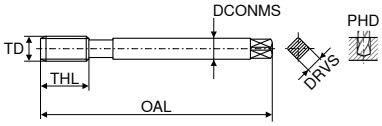
UNI EL | B 4–5 | ISO 2 6H | nitr. + vap.

ST EL | B 4–5 | ISO 2 6H



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ∢ 0° ≤ 1100 N/mm² ≤ 4xD U0 Article no. 22 514 ... EUR		HSS-E ∢ 0° ≤ 950 N/mm² ≤ 4xD U0 Article no. 22 233 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M3	0,50	100	3,5	2,7	2,5	11	18	3	61,46	030	59,99	030
M4	0,70	125	4,5	3,4	3,3	13	21	3	61,46	040	57,54	040
M5	0,80	140	6,0	4,9	4,2	15	25	3	68,04	050	62,85	050
M6	1,00	160	6,0	4,9	5,0	17	30	3	75,04	060	65,60	060
M8	1,25	180	8,0	6,2	6,8	20	35	3	80,23	080	78,21	080



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 515 ... EUR		U0 Article no. 22 234 ... EUR	
	mm	mm	mm	mm	mm	mm					
M6	1,00	160	4,5	3,4	5,0	17	3	62,52	060	65,60	060
M8	1,25	180	6,0	4,9	6,8	20	3	77,26	080	78,21	080
M10	1,50	200	7,0	5,5	8,5	22	3	84,78	100	87,11	100
M12	1,75	224	9,0	7,0	10,2	24	3	105,00	120	105,00	120
M14	2,00	224	11,0	9,0	12,0	26	3	159,00	140	169,50	140
M16	2,00	224	12,0	9,0	14,0	27	3	203,50	160	163,20	160
M18	2,50	250	14,0	11,0	15,5	30	3	242,70	180	245,90	180
M20	2,50	280	16,0	12,0	17,5	32	3	213,00	200	221,50	200

Steel	6-20	5-25
Stainless steel	4-8	
Cast iron	6-15	10-20
Non ferrous metals		10-40
Heat resistant alloys		
Hardened materials		

Through hole – Machine taps, right hand

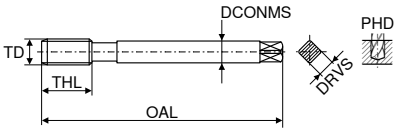
▲ MMB = Nut taps

M

ST
MMB

≈ 20

ISO 2
6H



DIN 357 with reduced shank

HSS-E
0°
≤ 850 N/mm²
≤ 1xD

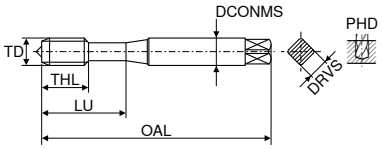
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 098 ... EUR	
	mm	mm	mm	mm	mm	mm			
M3	0,50	70	2,2		2,5	16	3	45,25	**030**
M4	0,70	90	2,8	2,1	3,3	22	3	45,25	**040**
M5	0,80	100	3,5	2,7	4,2	24	3	47,37	**050**
M6	1,00	110	4,5	3,4	5,0	30	3	47,37	**060**
M8	1,25	125	6,0	4,9	6,8	38	3	58,50	**080**
M10	1,50	140	7,0	5,5	8,5	45	3	66,77	**100**
M12	1,75	180	9,0	7,0	10,2	50	3	89,44	**120**
M16	2,00	200	12,0	9,0	14,0	63	3	127,20	**160**

Steel	**10-25**
Stainless steel	
Cast iron	
Non ferrous metals	**10-25**
Heat resistant alloys	
Hardened materials	

Through hole – Machine taps, right hand

M

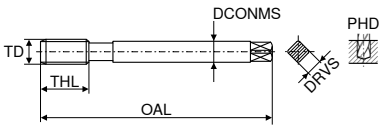
UNI	UNI	UNI
B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H
nitr. + vap.	TiN	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-PM
	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD
	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 110 ...		Article no. 23 112 ...		Article no. 23 010 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	7	12,0	2	12,13	020	14,27	020		
M2	0,40	45	2,8	2,1	1,60	4	13,5	2					9,88	020
M2,5	0,45	50	2,8	2,1	2,05	9	14,0	2	11,92	025	15,90	025		
M3	0,50	56	3,5	2,7	2,50	11	18,0	3	8,08	030	10,29	030	12,33	030
M4	0,70	63	4,5	3,4	3,30	13	21,0	3	8,24	040	11,21	040	11,31	040
M5	0,80	70	6,0	4,9	4,20	15	25,0	3	8,24	050	11,31	050	12,64	050
M6	1,00	80	6,0	4,9	5,00	17	30,0	3	8,39	060	14,37	060	15,08	060
M8	1,25	90	8,0	6,2	6,80	20	35,0	3	9,72	080	15,59	080	16,81	080
M10	1,50	100	10,0	8,0	8,50	22	39,0	3	11,62	100	19,26	100	22,21	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 111 ...		Article no. 23 113 ...		Article no. 23 021 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	11	3	8,75	030				
M4	0,70	63	2,8	2,1	3,3	13	3	8,61	040				
M5	0,80	70	3,5	2,7	4,2	15	3	8,61	050				
M6	1,00	80	4,5	3,4	5,0	17	3	9,04	060				
M8	1,25	90	6,0	4,9	6,8	20	3	10,60	080				
M10	1,50	100	7,0	5,5	8,5	22	3	12,23	100				
M12	1,75	110	9,0	7,0	10,2	24	3	14,67	120	22,83	120	26,49	120
M14	2,00	110	11,0	9,0	12,0	26	3	21,20	140	39,72	14000		
M14	2,00	110	11,0	9,0	12,0	20	4					40,15	140
M16	2,00	110	12,0	9,0	14,0	27	3	21,70	160	32,30	160	37,30	160
M18	2,50	125	14,0	11,0	15,5	30	3			63,02	18000		
M18	2,50	125	14,0	11,0	15,5	25	4					65,32	180
M20	2,50	140	16,0	12,0	17,5	32	3	34,54	200	55,54	200	67,46	200
M22	2,50	140	18,0	14,5	19,5	32	3			93,33	22000		
M24	3,00	160	18,0	14,5	21,0	34	3			83,66	240		
M27	3,00	160	20,0	16,0	24,0	36	3			116,70	27000		
M30	3,50	180	22,0	18,0	26,5	40	4			130,90	30000		
M33	3,50	180	25,0	20,0	29,5	40	4			171,70	33000		
M36	4,00	200	28,0	22,0	32,0	50	4			210,30	36000		

Steel	2-25	5-45	10-20
Stainless steel	2-8	5-15	8-15
Cast iron	5-20	10-25	20-25
Non ferrous metals	10-20	15-40	20-25
Heat resistant alloys			
hardened materials			

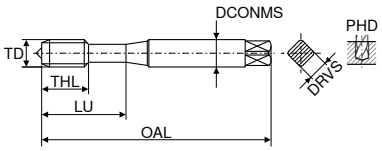
Through hole – Machine taps, right hand

▲ NCW = with Weldon flat for synchronised CNC machining without length compensation chuck

▲ NC = for synchronised CNC machining with minimum length compensation chuck

M

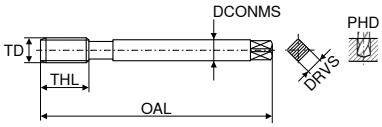
UNI NC	UNI NCW	FE	FE-HF
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN GS	TiCN		TiCN



DIN 371 with reinforced shank

	HSS-E	HSS-PM	HSS-E	HSS-E
	◁ 0° ≤ 1000 N/mm² ≤ 3xD	◁ 0° ≤ 1000 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 1100 N/mm² ≤ 3xD
	T9	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 114 ...		Article no. 23 116 ...		Article no. 23 212 ...		Article no. 23 310 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M1,6	0,35	40	2,5	2,1	1,25	6	11	2					25,17	016		
M2	0,40	45	2,8	2,1	1,60	7	12	2					17,02	020		
M2,5	0,45	50	2,8	2,1	2,05	9	14	2					14,27	025		
M3	0,50	70	6,0	4,9	2,50	6	18	3			20,89	030				
M3	0,50	56	3,5	2,7	2,50	11	18	3	17,42	030			11,31	030	16,51	030
M3,5	0,60	56	4,0	3,0	2,90	12	20	3					12,74	035		
M4	0,70	70	6,0	4,9	3,30	7	21	3			23,84	040				
M4	0,70	63	4,5	3,4	3,30	13	21	3	18,95	040			11,31	040	17,53	040
M5	0,80	70	6,0	4,9	4,20	15	25	3	19,06	050			11,72	050	17,73	050
M5	0,80	70	6,0	4,9	4,20	8	25	3			24,25	050				
M6	1,00	80	6,0	4,9	5,00	17	30	3	27,92	060			11,72	060	24,25	060
M6	1,00	80	6,0	4,9	5,00	10	30	3			24,25	060				
M8	1,25	90	8,0	6,2	6,80	20	35	3	29,55	080			15,18	080	26,19	080
M8	1,25	90	8,0	6,2	6,80	14	35	3			30,67	080				
M10	1,50	100	10,0	8,0	8,50	22	39	3	37,19	100			18,14	100	32,91	100
M10	1,50	100	10,0	8,0	8,50	16	39	3			36,99	100				



DIN 376 with reduced shank

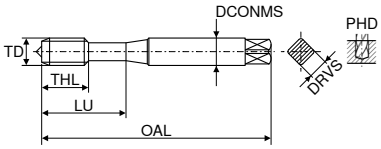
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 115 ...		Article no. 23 117 ...		Article no. 23 213 ...		Article no. 23 311 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M12	1,75	110	10	8	10,2	18	3			46,26	120				
M12	1,75	110	9	7	10,2	24	3	42,90	120			24,46	120	38,11	120
M14	2,00	110	11	9	12,0	26	3					29,45	140		
M16	2,00	110	12	9	14,0	22	3			62,26	160				
M16	2,00	110	12	9	14,0	27	3	58,18	160			37,09	160	52,89	160
M20	2,50	140	16	12	17,5	32	3	106,00	200			57,98	200	93,44	200

Steel	5-45	5-45	5-25	5-45
Stainless steel	5-15	5-15		
Cast iron	10-25	10-25		
Non ferrous metals	15-40	15-40		
Heat resistant alloys		5-8		
hardened materials				

Through hole – Machine taps, right hand

M

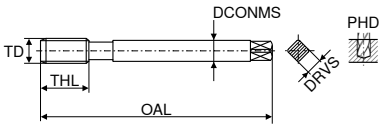
VA	VA	VA	AL	AL
B 4–5	B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
nitr.	nitr.	TiN		CrN



DIN 371 with reinforced shank

	HSS-PM	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 1200 N/mm² ≤ 3xD	◁ 0° ≤ 1200 N/mm² ≤ 3xD	◁ 0° ≤ 1200 N/mm² ≤ 3xD	◁ 0° ≤ 500 N/mm² ≤ 3xD	◁ 0° ≤ 500 N/mm² ≤ 3xD
	T9	T9	T9	T9	T9
	Article no. 23 450 ...	Article no. 23 410 ...	Article no. 23 412 ...	Article no. 23 610 ...	Article no. 23 612 ...
	EUR	EUR	EUR	EUR	EUR

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes										
	mm	mm	mm	mm	mm	mm	mm											
M2	0,40	45	2,8	2,1	1,60	7	12	2			12,53	020	23,03	020				
M2,5	0,45	50	2,8	2,1	2,05	9	14	2			14,47	025	19,36	025				
M3	0,50	56	3,5	2,7	2,50	11	18	3	11,51	030	8,24	030	15,29	030	11,31	030	12,84	030
M4	0,70	63	4,5	3,4	3,30	13	21	3	11,62	040	8,24	040	17,02	040	11,31	040	13,25	040
M5	0,80	70	6,0	4,9	4,20	15	25	3	12,53	050	8,58	050	17,42	050	11,72	050	13,65	050
M6	1,00	80	6,0	4,9	5,00	17	30	3	12,74	060	8,58	060	22,83	060	11,72	060	13,65	060
M8	1,25	90	8,0	6,2	6,80	20	35	3	14,27	080	11,01	080	24,35	080	15,18	080	15,59	080
M10	1,50	100	10,0	8,0	8,50	22	39	3	16,20	100	13,35	100	33,53	100	18,14	100	19,16	100



DIN 376 with reduced shank

									T9		T9		T9		T9		T9	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes		Article no. 23 451 ...		Article no. 23 411 ...		Article no. 23 413 ...		Article no. 23 611 ...		Article no. 23 613 ...	
	mm	mm	mm	mm	mm	mm			EUR		EUR		EUR		EUR		EUR	
M12	1,75	110	9	7,0	10,2	24	3		28,84	120	17,73	120	36,99	120	24,46	120	24,05	120
M14	2,00	110	11	9,0	12,0	26	3		38,21	140								
M16	2,00	110	12	9,0	14,0	27	3		40,45	160	27,31	160	46,16	160				
M20	2,50	140	16	12,0	17,5	32	3		60,43	200	41,78	200	80,70	200				
M24	3,00	160	18	14,5	21,0	34	3				55,23	240						

Steel					
Stainless steel	5-10	3-10	8-20		
Cast iron					
Non ferrous metals				10-20	15-40
Heat resistant alloys					
hardened materials					

6

Through hole – Machine taps, right hand

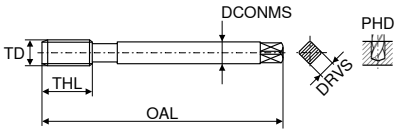
▲ ES = extra short

M

FE
ES

B
4–5

ISO 2
6H



DIN 376 with reduced shank

HSS-E
0°
≤ 850 N/mm²
≤ 3xD

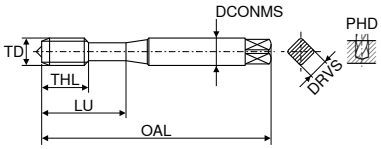
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 210 ...	
	mm	mm	mm	mm	mm	mm		EUR	
M2	0,40	36	2,8	2,1	1,60	8	2	13,25	**020**
M2,5	0,45	40	2,8	2,1	2,05	9	2	10,29	**025**
M3	0,50	40	3,5	2,7	2,50	10	3	7,36	**030**
M4	0,70	45	4,5	3,4	3,30	12	3	7,36	**040**
M5	0,80	50	6,0	4,9	4,20	14	3	7,88	**050**
M6	1,00	56	6,0	4,9	5,00	16	3	7,94	**060**
M8	1,25	63	6,0	4,9	6,80	20	3	10,29	**080**
M10	1,50	70	7,0	5,5	8,50	22	3	13,55	**100**
M12	1,75	75	9,0	7,0	10,20	24	3	17,53	**120**
M16	2,00	80	12,0	9,0	14,00	27	3	30,57	**160**

Steel	**5-25**
Stainless steel	
Cast iron	
Non ferrous metals	
Heat resistant alloys	
hardened materials	

Blind hole – Machine taps, right hand

M | Salo-Rex

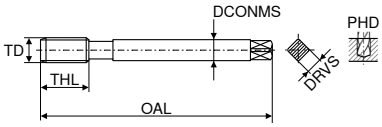
UNI	UNI	UNI	UNI
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	7G	ISO 2 6H	ISO 2 6H
vap.	vap.	TiN	TiCN



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 518 ...		Article no. 22 532 ...		Article no. 22 520 ...		Article no. 22 522 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	4,0	12	2	33,81	020			48,54	020		
M2,2	0,45	45	2,8	2,1	1,75	4,5	12	2	38,26	022						
M2,3	0,40	45	2,8	2,1	1,90	4,5	12	2	40,49	023						
M2,5	0,45	50	2,8	2,1	2,05	5,0	15	2	32,43	025						
M2,6	0,45	50	2,8	2,1	2,15	5,0	15	2	38,57	026						
M3	0,50	56	3,5	2,7	2,50	6,0	18	3	28,83	030	33,81	030	36,45	030	36,45	030
M3,5	0,60	56	4,0	3,0	2,90	7,0	20	3	31,16	035						
M4	0,70	63	4,5	3,4	3,30	7,0	21	3	30,42	040	33,81	040	39,00	040	39,00	040
M5	0,80	70	6,0	4,9	4,20	8,0	25	3	30,73	050	36,24	050	39,31	050	39,31	050
M6	1,00	80	6,0	4,9	5,00	10,0	30	3	31,69	060	48,54	060	46,31	060	46,31	060
M7	1,00	80	7,0	5,5	6,00	10,0	30	3	46,63	070						
M8	1,25	90	8,0	6,2	6,80	14,0	35	3	37,30	080	56,70	080	51,08	080	51,50	080
M10	1,50	100	10,0	8,0	8,50	16,0	39	3	44,72	100	84,04	100	60,83	100	60,83	100
M12	1,75	110	12,0	9,0	10,20	18,0	44	3	49,17	120			74,51	120	77,47	120



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 519 ...		Article no. 22 533 ...		Article no. 22 521 ...		Article no. 22 523 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	6	3	50,34	030						
M4	0,70	63	2,8	2,1	3,3	7	3	47,58	040						
M5	0,80	70	3,5	2,7	4,2	8	3	33,81	050						
M6	1,00	80	4,5	3,4	5,0	10	3	35,61	060						
M8	1,25	90	6,0	4,9	6,8	14	3	39,74	080						
M10	1,50	100	7,0	5,5	8,5	16	3	50,02	100						
M12	1,75	110	9,0	7,0	10,2	18	3	52,46	120	63,26	120	73,33	120	80,65	120
M14	2,00	110	11,0	9,0	12,0	20	3	70,47	140			117,60	140	132,50	140
M16	2,00	110	12,0	9,0	14,0	22	3	75,04	160	98,56	160	106,00	160	107,00	160
M18	2,50	125	14,0	11,0	15,5	25	3	114,50	180			184,40	180	200,30	180
M20	2,50	140	16,0	12,0	17,5	25	3	114,50	200	152,60	200	181,30	200	191,80	200
M22	2,50	140	18,0	14,5	19,5	27	4	159,00	220			267,10	220		
M24	3,00	160	18,0	14,5	21,0	30	4	143,10	240			233,20	240		
M27	3,00	160	20,0	16,0	24,0	30	4	188,70	270						
M30	3,50	180	22,0	18,0	26,5	35	4	242,70	300						
M33	3,50	180	25,0	20,0	29,5	35	4	465,20	330						
M36	4,00	200	28,0	22,0	32,0	40	4	385,70	360						

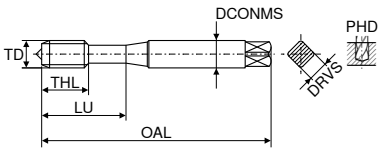
Steel	6-20	6-20	6-25	6-25
Stainless steel	4-8	4-8	5-10	5-10
Cast iron	6-15	6-15	10-20	10-20
Non ferrous metals			12-25	12-25
Heat resistant alloys				
Hardened materials				

Blind hole – Machine taps, right hand

▲ NCW = with Weldon flat for synchronised CNC machining without length compensation chuck

M | Salo-Rex

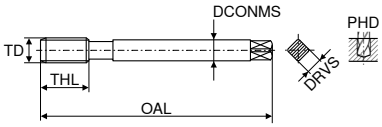
UNI NCW	UNI	UNI	UNI
C 2–3	E 1,5–2	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN	vap.	vap.	TiN



DIN 371 with reinforced shank

	HSS-PM	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
	U0	U0	U0	U0
	Article no. 22 149 ...	Article no. 22 524 ...	Article no. 22 534 ...	Article no. 22 526 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm	mm									
M3	0,50	70	6,0	4,9	2,5	6	18	3	51,19	030						
M3	0,50	56	3,5	2,7	2,5	6	18	3			30,10	030			34,02	030
M4	0,70	63	4,5	3,4	3,3	7	21	3			30,10	040			37,20	040
M4	0,70	70	6,0	4,9	3,3	7	21	3	55,95	040						
M5	0,80	70	6,0	4,9	4,2	8	25	3	57,97	050	31,47	050	47,37	050	37,94	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	71,22	060	31,47	060	47,37	060	44,94	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	79,59	080	35,92	080	52,56	080	49,17	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	97,93	100	43,76	100	63,26	100	59,03	100



DIN 376 with reduced shank

	U0	U0	U0	U0
	Article no. 22 149 ...	Article no. 22 525 ...	Article no. 22 535 ...	Article no. 22 527 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm									
M12	1,75	110	10	8,0	10,2	18	3	117,60	120						
M12	1,75	110	9	7,0	10,2	18	4			55,64	120	71,96	120	71,22	120
M14	2,00	110	11	9,0	12,0	20	4			90,72	140	105,00	140		
M16	2,00	110	12	9,0	14,0	22	3	157,90	160						
M16	2,00	110	12	9,0	14,0	22	4			77,78	160	103,80	160	102,40	160
M18	2,50	125	14	11,0	15,5	25	4			142,10	180				
M20	2,50	140	16	12,0	17,5	25	4			120,90	200	154,80	200	173,80	200
M22	2,50	140	18	14,5	19,5	27	5			194,00	220				
M24	3,00	160	18	14,5	21,0	30	5			169,50	240				

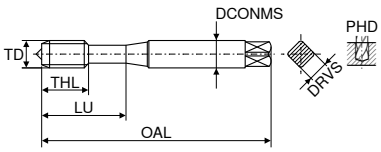
Steel	6-25	6-20	6-20	6-25
Stainless steel	5-10	4-8	4-8	5-10
Cast iron	10-20	6-15	6-15	10-20
Non ferrous metals	12-25			12-25
Heat resistant alloys				
Hardened materials				

Blind hole – Machine taps, right hand

▲ CNC = for synchronised CNC machining with minimum length compensation chuck

M | Salo-Rex

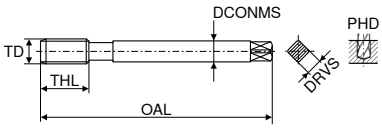
UNI CNC	UNI CNC	UNI CNC	UNI CNC
C 2–3	C 2–3	E 1,5–2	C 2–3
ISO 2X 6HX	ISO 2 6H	ISO 2 6H	7G
TiN	TiN GS	TiN GS	TiN GS



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 50° ≤ 1100 N/mm² ≤ 3xD	◁ 45° ≤ 1100 N/mm² ≤ 3xD	◁ 45° ≤ 1100 N/mm² ≤ 3xD	◁ 45° ≤ 1100 N/mm² ≤ 3xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 416 ...		Article no. 22 544 ...		Article no. 22 546 ...		Article no. 22 594 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M3	0,50	56	3,5	2,7	2,5	6	18	3	49,49	030	43,76	030			50,34	030
M4	0,70	63	4,5	3,4	3,3	7	21	3	51,82	040	44,72	040			50,87	040
M5	0,80	70	6,0	4,9	4,2	8	25	3	53,20	050	46,31	050	66,13	050	52,35	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	64,32	060	47,90	060	66,77	060	57,23	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	71,53	080	59,87	080	85,74	080	70,58	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	88,60	100	68,04	100	98,56	100	78,31	100



DIN 376 with reduced shank

									U0		U0				U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes		Article no. 22 417 ...		Article no. 22 545 ...				Article no. 22 595 ...	
	mm	mm	mm	mm	mm	mm			EUR		EUR				EUR	
M12	1,75	110	9	7	10,2	18	3		104,40	120						
M12	1,75	110	9	7	10,2	18	4				92,62	120			105,00	120
M14	2,00	110	11	9	12,0	20	3		149,50	140						
M14	2,00	110	11	9	12,0	20	4				113,40	140			125,00	140
M16	2,00	110	12	9	14,0	22	3		145,20	160						
M16	2,00	110	12	9	14,0	22	4				124,00	160			135,60	160
M20	2,50	140	16	12	17,5	25	3		249,10	200						
M20	2,50	140	16	12	17,5	25	4				180,10	200			198,20	200

Steel	2-25	6-25	6-25	6-25
Stainless steel	1-10	5-10	5-10	5-10
Cast iron		10-20	10-20	10-20
Non ferrous metals	2-20	12-25	12-25	12-25
Heat resistant alloys				
Hardened materials				

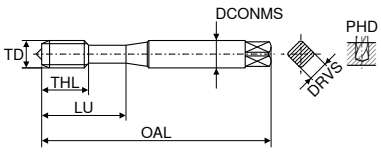
Blind hole – Machine taps, right hand

▲ DRY = for dry machining or minimum quantity lubrication (MMS)

M | Salo-Rex

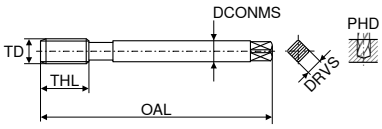
UNI DRY | C 2–3 | ISO 2 6H | TiN GS

UNI DRY | C 2–3 | ISO 2 6H | TiN



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 566 ... EUR		HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 449 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M3	0,50	56	3,5	2,7	2,5	6	18	3	40,27	**030**		
M4	0,70	63	4,5	3,4	3,3	7	21	3	43,45	**040**		
M5	0,80	70	6,0	4,9	4,2	8	25	3	44,94	**050**	67,83	**050**
M6	1,00	80	6,0	4,9	5,0	10	30	3	50,34	**060**	78,96	**060**
M8	1,25	90	8,0	6,2	6,8	14	35	3	53,09	**080**	87,11	**080**
M10	1,50	100	10,0	8,0	8,5	16	39	3	75,67	**100**	105,80	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 567 ... EUR		U0 Article no. 22 450 ... EUR	
	mm	mm	mm	mm	mm	mm					
M12	1,75	110	9	7	10,2	18	4	90,72	**120**	115,50	**120**
M16	2,00	110	12	9	14,0	22	4	140,90	**160**	163,20	**160**
M20	2,50	140	16	12	17,5	25	4	258,50	**200**	267,10	**200**

Steel	**6-25**	**5-45**
Stainless steel	**5-10**	**5-20**
Cast iron		
Non ferrous metals		**20-60**
Heat resistant alloys		
Hardened materials		

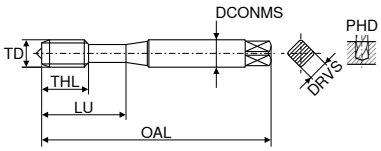
Blind hole – Machine taps, right hand

▲ CNC = for synchronised CNC machining with minimum length compensation chuck

▲ TS = for high-speed machining, up to 100 m/min.

M | SL

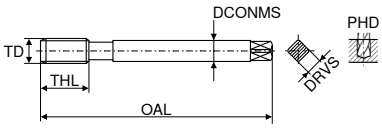
ST TS	HR	ST CNC	ST CNC
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2 6H	ISO 2X 6HX	ISO 2X 6HX
TiN	TiN	TiN	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-PM	HSS-E	HSS-E
	◁ 15° ≤ 1050 N/mm² ≤ 2xD	◁ 25° ≤ 1400 N/mm² ≤ 2xD	◁ 15° ≤ 1100 N/mm² ≤ 2xD	◁ 15° ≤ 1100 N/mm² ≤ 2xD
	U0	U0	U0	U0

TD	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	Article no. 22 406 ...	EUR	Article no. 22 072 ...	EUR	Article no. 22 328 ...	EUR	Article no. 22 443 ...	EUR
M3	0,50	56	3,5	2,7	2,5	6	18	2	46,63	030			42,49	030		
M3	0,50	56	3,5	2,7	2,5	11	18	3			43,76	030				
M4	0,70	63	4,5	3,4	3,3	13	21	3			44,09	040				
M4	0,70	63	4,5	3,4	3,3	7	21	3	49,49	040			44,29	040		
M5	0,80	70	6,0	4,9	4,2	15	25	3			45,68	050				
M5	0,80	70	6,0	4,9	4,2	8	25	3	51,08	050			46,10	050	67,83	050
M6	1,00	80	6,0	4,9	5,0	17	30	3			55,32	060				
M6	1,00	80	6,0	4,9	5,0	10	30	3	62,21	060			56,91	060	78,96	060
M8	1,25	90	8,0	6,2	6,8	20	35	3			59,66	080				
M8	1,25	90	8,0	6,2	6,8	14	35	3	69,41	080			64,32	080	86,48	080
M10	1,50	100	10,0	8,0	8,5	22	39	3			84,78	100				
M10	1,50	100	10,0	8,0	8,5	16	39	3	84,78	100			78,96	100	105,00	100
M12	1,75	110	12,0	9,0	10,2	24	44	3			94,74	120				



DIN 376 with reduced shank

TD	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	Article no. 22 407 ...	EUR	Article no. 22 329 ...	EUR	Article no. 22 444 ...	EUR
								U0		U0		U0	
M12	1,75	110	9	7	10,2	18	3	101,30	120	92,41	120	117,60	120
M16	2,00	110	12	9	14,0	22	3	142,10	160	133,50	160	165,40	160
M20	2,50	140	16	12	17,5	25	3	232,10	200	221,50	200		

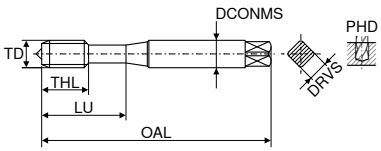
Steel	20-100	2-6	5-45	5-45
Stainless steel				
Cast iron	20-60		10-30	10-30
Non ferrous metals	20-100		5-30	5-30
Heat resistant alloys	10-25	3-5		
Hardened materials				

Blind hole – Machine taps, right/left hand

▲ LH = for left hand threads

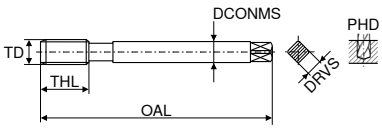
M | Salo-Rex

ST	ST	ST LH
C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H
	TiN	



DIN 371 with reinforced shank

	HSS-E ◁ 42° ≤ 750 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 750 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 750 N/mm² ≤ 3xD	
	U0		U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 082 ...		Article no. 22 084 ...		Article no. 22 138 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	4,0	12	2	31,47	020	40,49	020		
M2,3	0,40	45	2,8	2,1	1,90	4,5	12	2	34,98	023				
M2,5	0,45	50	2,8	2,1	2,05	5,0	15	2	30,52	025				
M3	0,50	56	3,5	2,7	2,50	6,0	18	3	26,60	030	33,06	030	45,99	030
M3,5	0,60	56	4,0	3,0	2,90	7,0	20	3	29,36	035				
M4	0,70	63	4,5	3,4	3,30	7,0	21	3	26,50	040	33,81	040	41,43	040
M5	0,80	70	6,0	4,9	4,20	8,0	25	3	26,92	050	34,02	050	44,72	050
M6	1,00	80	6,0	4,9	5,00	10,0	30	3	27,55	060	42,71	060	43,02	060
M8	1,25	90	8,0	6,2	6,80	14,0	35	3	33,06	080	47,90	080	51,82	080
M10	1,50	100	10,0	8,0	8,50	16,0	39	3	39,00	100	64,65	100	59,66	100
M12	1,75	110	12,0	9,0	10,20	18,0	44	3	44,94	120				



DIN 376 with reduced shank

	U0		U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 083 ...		Article no. 22 085 ...		Article no. 22 139 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	6	3	30,94	030				
M4	0,70	63	2,8	2,1	3,3	7	3	31,16	040				
M5	0,80	70	3,5	2,7	4,2	8	3	31,47	050				
M6	1,00	80	4,5	3,4	5,0	10	3	37,73	060				
M8	1,25	90	6,0	4,9	6,8	14	3	34,98	080				
M10	1,50	100	7,0	5,5	8,5	16	3			72,59	100		
M12	1,75	110	9,0	7,0	10,2	18	3	50,44	120	76,51	120	84,78	120
M14	2,00	110	11,0	9,0	12,0	20	3	64,01	140				
M16	2,00	110	12,0	9,0	14,0	22	3	69,94	160	98,56	160	121,90	160
M18	2,50	125	14,0	11,0	15,5	25	3	102,20	180				
M20	2,50	140	16,0	12,0	17,5	25	3	104,00	200	165,40	200	180,10	200
M22	2,50	140	18,0	14,5	19,5	27	4	143,10	220				
M24	3,00	160	18,0	14,5	21,0	30	4	133,50	240				
M30	3,50	180	22,0	18,0	26,5	35	4	228,90	300				
M33	3,50	180	25,0	20,0	29,5	35	4	331,80	330				
M36	4,00	200	28,0	22,0	32,0	40	4	331,80	360				

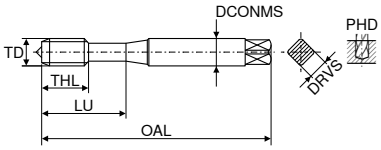
Steel	10-20	10-25	10-20
Stainless steel			
Cast iron			
Non ferrous metals	10-20	10-25	10-20
Heat resistant alloys			
Hardened materials			

Blind hole – Machine taps, right hand

▲ TS = for high-speed machining, up to 100 m/min.

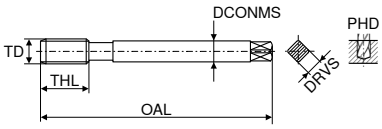
M | Salo-Rex

HR	HR	ST TS	ST TS
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
	OSM	TiN	TiN



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-PM ∢ 42° ≤ 1400 N/mm² ≤ 3xD U0 Article no. 22 498 ... EUR		HSS-PM ∢ 42° ≤ 1400 N/mm² ≤ 3xD U0 Article no. 22 499 ... EUR		HSS-E ∢ 40° ≤ 1100 N/mm² ≤ 2xD U0 Article no. 22 044 ... EUR		HSS-E ∢ 40° ≤ 1100 N/mm² ≤ 2xD U0 Article no. 22 046 ... EUR	
	mm	mm	mm	mm	mm	mm	mm									
M3	0,50	56	3,5	2,7	2,5	6	18	3	31,16	030	39,53	030				
M4	0,70	63	4,5	3,4	3,3	7	21	3	29,36	040	39,53	040	48,21	040		
M5	0,80	70	6,0	4,9	4,2	8	25	3	30,94	050	42,07	050	51,82	050	81,70	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	30,52	060	43,45	060	55,11	060	106,00	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	36,98	080	55,11	080	62,21	080	110,20	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	44,72	100	62,21	100	77,26	100	149,50	100



DIN 376 with reduced shank

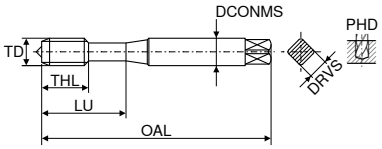
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 045 ... EUR		U0 Article no. 22 047 ... EUR	
	mm	mm	mm	mm	mm	mm					
M12	1,75	110	9	7	10,2	18	4	92,62	120	162,10	120
M16	2,00	110	12	9	14,0	22	4	133,50	160	249,10	160

Steel	4-12	4-12	20-100	20-100
Stainless steel	6-8	6-8		
Cast iron			20-60	20-60
Non ferrous metals			20-100	20-100
Heat resistant alloys	3-5	3-5	10-25	10-25
Hardened materials				

Blind hole – Machine taps, right hand

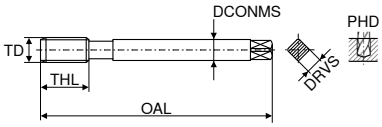
M | Salo-Rex

VA	VA	VA
C 2–3	E 1,5–2	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	TiN GS	TiN GS



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ◁ 42° ≤ 900 N/mm² ≤ 3xD U0 Article no. 22 090 ... EUR		HSS-E ◁ 45° ≤ 900 N/mm² ≤ 3xD U0 Article no. 22 042 ... EUR		HSS-E ◁ 45° ≤ 900 N/mm² ≤ 3xD U0 Article no. 22 040 ... EUR	
	mm	mm	mm	mm	mm	mm	mm							
M1,6	0,35	40	2,5	2,1	1,25	4	11	2					81,07	**016**
M2	0,40	45	2,8	2,1	1,60	4	12	2	50,87	**020**			45,68	**020**
M2,5	0,45	50	2,8	2,1	2,05	5	15	2	40,27	**025**				
M2,5	0,45	50	2,8	2,1	2,05	5	15	3					43,45	**025**
M3	0,50	56	3,5	2,7	2,50	6	18	3	30,10	**030**			44,72	**030**
M4	0,70	63	4,5	3,4	3,30	7	21	3	30,94	**040**			45,25	**040**
M5	0,80	70	6,0	4,9	4,20	8	25	3	31,47	**050**	66,77	**050**	47,37	**050**
M6	1,00	80	6,0	4,9	5,00	10	30	3	31,69	**060**	67,51	**060**	48,54	**060**
M8	1,25	90	8,0	6,2	6,80	14	35	3	36,98	**080**	86,27	**080**	60,83	**080**
M10	1,50	100	10,0	8,0	8,50	16	39	3	44,72	**100**	99,20	**100**	70,58	**100**



DIN 376 with reduced shank

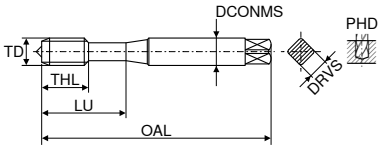
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 091 ... EUR		U0 Article no. 22 041 ... EUR	
	mm	mm	mm	mm	mm	mm					
M12	1,75	110	9	7,0	10,2	18	4	55,64	**120**	94,74	**120**
M14	2,00	110	11	9,0	12,0	20	4	81,70	**140**	114,50	**140**
M16	2,00	110	12	9,0	14,0	22	4	78,31	**160**	125,00	**160**
M20	2,50	140	16	12,0	17,5	25	4	120,90	**200**	182,30	**200**
M22	2,50	140	18	14,5	19,5	27	5	202,40	**220**		
M24	3,00	160	18	14,5	21,0	30	5	153,70	**240**		
M30	3,50	180	22	18,0	26,5	35	5	315,90	**300**		

Steel		**5-12**	**5-12**
Stainless steel	**5-10**	**5-10**	**5-10**
Cast iron			
Non ferrous metals			
Heat resistant alloys			
Hardened materials			

Blind hole – Machine taps, right hand

M | Salo-Rex

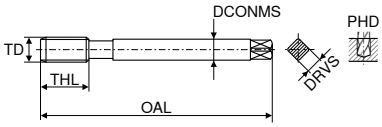
Soft	Soft	NW	NW
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
	CH	vap.	HCr



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 38° ≤ 500 N/mm² ≤ 3xD	◁ 38° ≤ 500 N/mm² ≤ 3xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 326 ...		Article no. 22 324 ...		Article no. 22 086 ...		Article no. 22 088 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	4	12	2	41,33	**020**	55,85	**020**	35,61	**020**	43,02	**020**
M2,5	0,45	50	2,8	2,1	2,05	5	15	2	38,68	**025**	54,26	**025**	33,06	**025**	42,49	**025**
M3	0,50	56	3,5	2,7	2,50	6	18	2	31,69	**030**	47,05	**030**				
M3	0,50	56	3,5	2,7	2,50	6	18	3					27,77	**030**	35,92	**030**
M4	0,70	63	4,5	3,4	3,30	7	21	2	31,69	**040**	50,76	**040**				
M4	0,70	63	4,5	3,4	3,30	7	21	3					27,77	**040**	36,98	**040**
M5	0,80	70	6,0	4,9	4,20	8	25	2	32,75	**050**	52,35	**050**				
M5	0,80	70	6,0	4,9	4,20	8	25	3					28,83	**050**	37,20	**050**
M6	1,00	80	6,0	4,9	5,00	10	30	2	32,75	**060**	72,70	**060**				
M6	1,00	80	6,0	4,9	5,00	10	30	3					28,83	**060**	38,26	**060**
M8	1,25	90	8,0	6,2	6,80	14	35	2	39,21	**080**	78,96	**080**				
M8	1,25	90	8,0	6,2	6,80	14	35	3					33,28	**080**	43,02	**080**
M10	1,50	100	10,0	8,0	8,50	16	39	2	46,10	**100**	99,20	**100**				
M10	1,50	100	10,0	8,0	8,50	16	39	3					40,80	**100**	49,81	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 087 ...		Article no. 22 089 ...	
								U0		U0	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
M12	1,75	110	9	7	10,2	18	3	51,19	**120**	62,21	**120**
M16	2,00	110	12	9	14,0	22	3	73,12	**160**	86,80	**160**

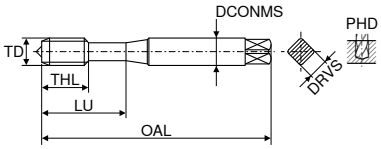
Steel				
Stainless steel				
Cast iron				
Non ferrous metals	**15-40**	**15-40**	**10-20**	**12-25**
Heat resistant alloys				
Hardened materials				

6

Blind hole – Machine taps, right hand

M | SL

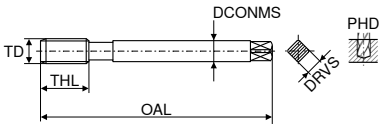
Ti	Ti	Ni	Ni
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2 6H	ISO 2X 6HX
TiN	TiCN	TiCN	TiCN



DIN 371 with reinforced shank

	HSS-PM	HSS-PM	HSS-PM	HSS-PM
	◁ 30° ≤ 1400 N/mm² ≤ 1,5xD	◁ 15° ≤ 1200 N/mm² ≤ 2xD	◁ 15° ≤ 1600 N/mm² ≤ 1,5xD	◁ 15° ≤ 1600 N/mm² ≤ 2xD
	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 076 ...		Article no. 22 163 ...		Article no. 22 073 ...		Article no. 22 424 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M3	0,50	56	3,5	2,7	2,5	11	18	2			45,04	030			57,54	030
M3	0,50	56	3,5	2,7	2,5	11	18	3					97,18	030		
M3	0,50	56	3,5	2,7	2,5	6	18	3	43,45	030						
M3,5	0,60	56	4,0	3,0	2,9	12	20	3			48,43	035				
M4	0,70	63	4,5	3,4	3,3	7	21	3	44,72	040						
M4	0,70	63	4,5	3,4	3,3	13	21	3			49,49	040	97,18	040	59,99	040
M5	0,80	70	6,0	4,9	4,2	8	25	3	44,94	050						
M5	0,80	70	6,0	4,9	4,2	15	25	3			50,02	050	86,80	050	62,21	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	49,17	060						
M6	1,00	80	6,0	4,9	5,0	17	30	3			66,66	060	102,40	060	78,21	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	51,82	080						
M8	1,25	90	8,0	6,2	6,8	20	35	3			72,70	080	150,50	080	85,84	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	75,04	100						
M10	1,50	100	10,0	8,0	8,5	22	39	3			89,44	100	130,30	100	107,00	100
M12	1,75	110	12,0	9,0	10,2	18	44	3	85,74	120						



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 164 ...		Article no. 22 124 ...		Article no. 22 425 ...	
								U0		U0		U0	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M12	1,75	110	9	7,0	10,2	24	3	101,30	120			125,00	120
M12	1,75	110	9	7,0	10,2	24	4			149,50	120		
M14	2,00	110	11	9,0	12,0	26	3					183,40	140
M14	2,00	110	11	9,0	12,0	26	4			200,30	140		
M16	2,00	110	12	9,0	14,0	27	3	142,10	160			171,70	160
M16	2,00	110	12	9,0	14,0	27	5			181,30	160		
M20	2,50	140	16	12,0	17,5	32	3	245,90	200			297,80	200
M24	3,00	160	18	14,5	21,0	34	3	280,80	240				

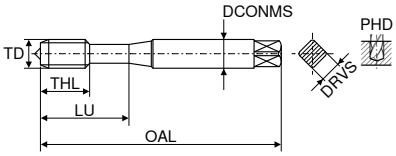
Steel	2-5	6-8		
Stainless steel		4-10		
Cast iron				
Non ferrous metals		10-12		
Heat resistant alloys	2-6	4-6	2-4	2-4
Hardened materials				

Blind hole – Machine taps, right hand

▲ ES = extra short

M | Salo-Rex

UNI ES | E 1,5–2 | ISO 2 6H | vap.



DIN 352 with reinforced shank

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 500 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M3	0,50	40	3,5	2,7	2,5	6	18	3	25,22	**030**
M3,5	0,60	45	4,0	3,0	2,9	7	20	3	32,43	**035**
M4	0,70	45	4,5	3,4	3,3	7	22	3	25,97	**040**
M5	0,80	50	6,0	4,9	4,2	9	25	3	26,60	**050**
M6	1,00	56	6,0	4,9	5,0	10	28	3	27,55	**060**
M8	1,25	63	6,0	4,9	6,8	14		3	31,69	**080**
M10	1,50	70	7,0	5,5	8,5	16		3	37,73	**100**
M12	1,75	75	9,0	7,0	10,2	18		4	49,17	**120**
M16	2,00	80	12,0	9,0	14,0	22		4	77,78	**160**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – Machine taps, right hand

▲ AUT = short version for automatic use

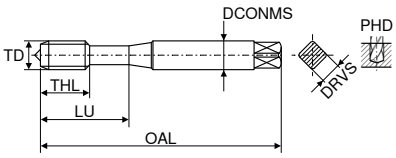
▲ ES = extra short

M | SL

ST ES | ST AUT/ES

C 2–3 | E 1,5–2

ISO 2 6H | ISO 2 6H



DIN 352 with reinforced shank

HSS-E ◁ 15° ≤ 750 N/mm² ≤ 2xD | HSS-E ◁ 15° ≤ 750 N/mm² ≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 016 ...		U0 Article no. 22 001 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
M3	0,50	40	3,5	2,7	2,5	10	18	2	22,68	**030**	24,27	**030**
M4	0,70	45	4,5	3,4	3,3	12	22	3	22,79	**040**	24,59	**040**
M5	0,80	50	6,0	4,9	4,2	14	25	3	23,42	**050**	24,69	**050**
M6	1,00	56	6,0	4,9	5,0	16	28	3	24,16	**060**	26,81	**060**
M8	1,25	63	6,0	4,9	6,8	20		3	27,55	**080**	30,52	**080**
M10	1,50	70	7,0	5,5	8,5	22		3	34,98	**100**	38,26	**100**
M12	1,75	75	9,0	7,0	10,2	24		3	44,94	**120**		
M14	2,00	80	11,0	9,0	12,0	26		3	65,38	**140**		
M16	2,00	80	12,0	9,0	14,0	27		3	71,96	**160**		
M20	2,50	95	16,0	12,0	17,5	32		3	103,80	**200**		

Steel	**10-20**	**10-20**
Stainless steel		
Cast iron		
Non ferrous metals	**10-20**	**10-20**
Heat resistant alloys		
Hardened materials		

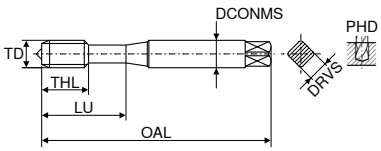
Blind hole – Machine taps, right hand

▲ EL = extra long, with double overall length

M | Salo-Rex

UNI EL | C 2–3 | ISO 2 6H | vap.

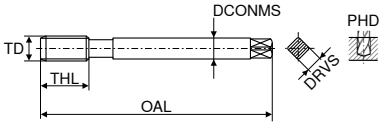
ST EL | C 2–3 | ISO 2 6H



DIN 371 with reinforced shank

	HSS-E ∢ 42° ≤ 1100 N/mm² ≤ 3xD		HSS-E ∢ 42° ≤ 750 N/mm² ≤ 3xD	
	U0		U0	
	Article no. 22 538 ...		Article no. 22 422 ...	
	EUR		EUR	
M3	52,35	030	60,93	030
M4	52,35	040	59,66	040
M5	58,71	050	66,66	050
M6	61,79	060	69,41	060
M8	73,86	080	83,51	080

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes
	mm	mm	mm	mm	mm	mm	mm	
M3	0,50	100	3,5	2,7	2,5	6	18	3
M4	0,70	125	4,5	3,4	3,3	7	21	3
M5	0,80	140	6,0	4,9	4,2	8	25	3
M6	1,00	160	6,0	4,9	5,0	10	30	3
M8	1,25	180	8,0	6,2	6,8	14	35	3



DIN 376 with reduced shank

	U0		U0	
	Article no. 22 539 ...		Article no. 22 423 ...	
	EUR		EUR	
M6	66,77	060	69,41	060
M8	81,07	080	83,51	080
M10	81,70	100	91,67	100
M12	104,40	120	119,80	120
M14	153,70	140	173,80	140
M16	147,30	160	168,50	160
M18	236,30	180	255,40	180
M20	202,40	200	227,90	200

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes
	mm	mm	mm	mm	mm	mm	
M6	1,00	160	4,5	3,4	5,0	10	3
M8	1,25	180	6,0	4,9	6,8	14	3
M10	1,50	200	7,0	5,5	8,5	16	3
M12	1,75	224	9,0	7,0	10,2	18	3
M14	2,00	224	11,0	9,0	12,0	20	3
M16	2,00	224	12,0	9,0	14,0	22	3
M18	2,50	250	14,0	11,0	15,5	25	3
M20	2,50	280	16,0	12,0	17,5	25	3

Steel	6-20	5-25
Stainless steel	4-8	
Cast iron	6-15	
Non ferrous metals		10-40
Heat resistant alloys		
Hardened materials		

6

Blind hole – Machine taps, right hand

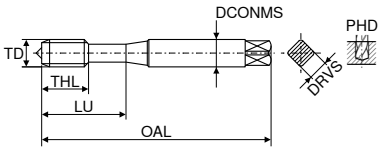
▲ EL = extra long, with double overall length

M | SL

ST
EL

E
1,5–2

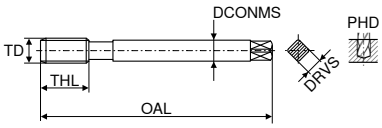
ISO 2
6H



DIN 371 with reinforced shank

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 078 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M3	0,50	100	3,5	2,7	2,5	11	18	2	50,34	**030**
M4	0,70	125	4,5	3,4	3,3	13	21	3	50,02	**040**
M5	0,80	140	6,0	4,9	4,2	15	25	3	56,70	**050**
M6	1,00	160	6,0	4,9	5,0	17	30	3	59,03	**060**
M8	1,25	180	8,0	6,2	6,8	20	35	3	71,22	**080**



DIN 376 with reduced shank

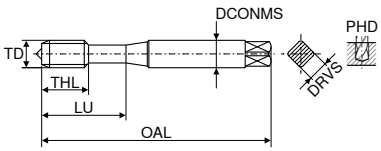
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 080 ...	
	mm	mm	mm	mm	mm	mm		EUR	
M6	1,00	160	4,5	3,4	5,0	17	3	61,46	**060**
M8	1,25	180	6,0	4,9	6,8	20	3	73,12	**080**
M10	1,50	200	7,0	5,5	8,5	22	3	77,78	**100**
M12	1,75	224	9,0	7,0	10,2	24	3	99,20	**120**
M14	2,00	224	11,0	9,0	12,0	26	3	145,20	**140**
M16	2,00	224	12,0	9,0	14,0	27	3	143,10	**160**
M20	2,50	280	16,0	12,0	17,5	32	3	198,20	**200**

Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
Hardened materials	

Blind hole – Machine taps, right hand

▲ NC = for synchronised CNC machining with minimum length compensation chuck

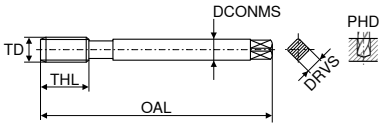
M



DIN 371 with reinforced shank

UNI	UNI	UNI	UNI	UNI NC	
C 2–3	C 2–3	C 2–3	C 2–3	C 2–3	
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	
vap.	TiN	TiN	TiCN	TiN GS	
HSS-E	HSS-E	HSS-PM	HSS-E	HSS-E	
◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 50° ≤ 1000 N/mm² ≤ 2,5xD	◁ 45° ≤ 1000 N/mm² ≤ 3xD	◁ 45° ≤ 1000 N/mm² ≤ 3xD	
T9	T9	T9	T9	T9	
Article no. 23 118 ...	Article no. 23 120 ...	Article no. 23 026 ...	Article no. 23 122 ...	Article no. 23 124 ...	

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes											
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR		
M2	0,40	45	2,8	2,1	1,60	4	12	2	12,64	020	11,01	020							
M2,5	0,45	50	2,8	2,1	2,05	5	14	2	12,43	025	16,61	025							
M3	0,50	56	3,5	2,7	2,50	6	18	3	8,54	030	12,64	030	14,06	030	18,44	030	19,46	030	
M4	0,70	63	4,5	3,4	3,30	7	21	3	8,54	040	13,55	040	14,06	040	19,46	040	20,58	040	
M5	0,80	70	6,0	4,9	4,20	8	25	3	8,97	050	13,76	050	15,08	050	20,28	050	21,70	050	
M6	1,00	80	6,0	4,9	5,00	10	30	3	9,27	060	17,12	060	17,53	060	26,19	060	29,35	060	
M8	1,25	90	8,0	6,2	6,80	14	35	3	10,90	080	18,44	080	20,79	080	28,12	080	31,49	080	
M10	1,50	100	10,0	8,0	8,50	16	39	3	12,53	100	23,64	100	26,19	100	35,56	100	40,05	100	



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 119 ...		T9 Article no. 23 121 ...		T9 Article no. 23 027 ...		T9 Article no. 23 123 ...		T9 Article no. 23 125 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M3	0,50	56	2,2		2,5	6	3	10,19	030								
M4	0,70	63	2,8	2,1	3,3	7	3	9,18	040								
M5	0,80	70	3,5	2,7	4,2	8	3	9,04	050								
M6	1,00	80	4,5	3,4	5,0	10	3	8,90	060								
M8	1,25	90	6,0	4,9	6,8	14	3	9,32	080								
M10	1,50	100	7,0	5,5	8,5	16	3	12,64	100								
M12	1,75	110	9,0	7,0	10,2	18	3	14,27	120	28,33	120						
M12	1,75	110	9,0	7,0	10,2	18	4					30,88	120	42,19	120	46,47	120
M14	2,00	110	11,0	9,0	12,0	20	3			43,07	14000						
M14	2,00	110	11,0	9,0	12,0	20	4					44,53	140				
M16	2,00	110	12,0	9,0	14,0	22	3	20,99	160	39,44	160						
M16	2,00	110	12,0	9,0	14,0	22	4					44,53	160	56,25	160	61,96	160
M18	2,50	125	14,0	11,0	15,5	25	3			68,13	18000						
M20	2,50	140	16,0	12,0	17,5	25	3	31,59	200	58,39	200	50,95	200				
M20	2,50	140	16,0	12,0	17,5	25	4							101,90	200	113,10	200
M22	2,50	140	18,0	14,5	19,5	27	4			99,86	22000						
M24	3,00	160	18,0	14,5	21,0	34	4			82,34	240						
M27	3,00	160	20,0	16,0	24,0	30	4			124,90	27000						
M30	3,50	180	22,0	18,0	26,5	35	4			138,70	30000						
M33	3,50	180	25,0	20,0	29,5	35	4			200,00	33000						
M36	4,00	200	28,0	22,0	32,0	40	4			217,30	36000						

Steel	2-25	5-45	10-20	5-45	5-45
Stainless steel	2-8	5-15	8-15	5-15	5-15
Cast iron	5-20	10-25	20-25	10-25	10-25
Non ferrous metals	10-20	15-40	20-25	15-40	15-40
Heat resistant alloys					
Hardened materials					

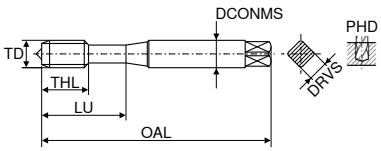
6

Blind hole – Machine taps, right hand

▲ NCW = with Weldon flat for synchronised CNC machining without length compensation chuck

M

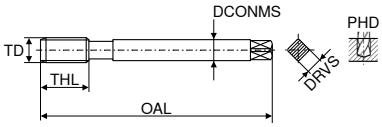
UNI NCW	FE	FE-HF	VA
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiCN		TiCN	



DIN 371 with reinforced shank

	HSS-PM	HSS-E	HSS-E	HSS-E
	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 850 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 1200 N/mm² ≤ 2,5xD
	T9	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 126 ...		Article no. 23 216 ...		Article no. 23 312 ...		Article no. 23 414 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	4	12	2			11,51	**020**			19,67	**020**
M2,5	0,45	50	2,8	2,1	2,05	5	14	2			21,09	**025**			23,34	**025**
M3	0,50	56	3,5	2,7	2,50	6	18	3			11,31	**030**	16,92	**030**	12,74	**030**
M3	0,50	70	6,0	4,9	2,50	6	18	3	20,89	**030**						
M4	0,70	63	4,5	3,4	3,30	7	21	3			11,31	**040**	18,44	**040**	12,74	**040**
M4	0,70	70	6,0	4,9	3,30	7	21	3	23,84	**040**						
M5	0,80	70	6,0	4,9	4,20	8	25	3	24,25	**050**	11,72	**050**	18,65	**050**	13,15	**050**
M6	1,00	80	6,0	4,9	5,00	10	30	3	24,25	**060**	11,72	**060**	25,78	**060**	13,15	**060**
M8	1,25	90	8,0	6,2	6,80	14	35	3	30,67	**080**	15,18	**080**	28,12	**080**	17,02	**080**
M10	1,50	100	10,0	8,0	8,50	16	39	3	36,99	**100**	18,14	**100**	35,05	**100**	20,69	**100**



DIN 376 with reduced shank

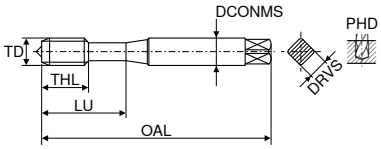
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 127 ...		Article no. 23 217 ...		Article no. 23 313 ...		Article no. 23 415 ...	
								T9		T9		T9		T9	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M12	1,75	110	10	8,0	10,2	18	3	46,26	**120**						
M12	1,75	110	9	7,0	10,2	18	3			24,46	**120**	40,56	**120**	27,41	**120**
M14	2,00	110	11	9,0	12,0	20	3			29,45	**140**				
M16	2,00	110	12	9,0	14,0	22	3	62,26	**160**	37,09	**160**	54,82	**160**	42,19	**160**
M20	2,50	140	16	12,0	17,5	25	3			58,49	**200**	98,23	**200**	64,50	**200**
M24	3,00	160	18	14,5	21,0	30	4							88,45	**240**

Steel	**5-45**	**5-25**	**5-45**	
Stainless steel	**5-15**			**3-10**
Cast iron	**10-25**			
Non ferrous metals	**15-40**			
Heat resistant alloys	**5-8**			
Hardened materials				

Blind hole – Machine taps, right hand

M

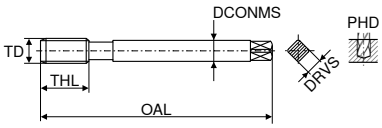
VA	VA	VA	AL	AL
C 2–3	C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN		TiN		CrN



DIN 371 with reinforced shank

	HSS-E	HSS-PM	HSS-PM	HSS-E	HSS-E
	◁ 45° ≤ 1200 N/mm² ≤ 3xD	◁ 40° ≤ 1200 N/mm² ≤ 2,5xD	◁ 40° ≤ 1200 N/mm² ≤ 2,5xD	◁ 35° ≤ 500 N/mm² ≤ 2,5xD	◁ 35° ≤ 500 N/mm² ≤ 2,5xD
	T9	T9	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 416 ...		Article no. 23 426 ...		Article no. 23 456 ...		Article no. 23 616 ...		Article no. 23 614 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,60	4	12	2	21,20	020								
M2,5	0,45	50	2,8	2,1	2,05	5	14	2	20,28	025								
M3	0,50	56	3,5	2,7	2,50	6	18	3	17,22	030	12,53	030	14,06	030	11,31	030	14,88	030
M4	0,70	63	4,5	3,4	3,30	7	21	3	18,04	040	12,74	040	15,29	040	11,31	040	14,88	040
M5	0,80	70	6,0	4,9	4,20	8	25	3	18,44	050	13,04	050	15,59	050	11,72	050	15,39	050
M6	1,00	80	6,0	4,9	5,00	10	30	3	23,13	060	13,25	060	20,07	060	11,72	060	15,39	060
M8	1,25	90	8,0	6,2	6,80	14	35	3	25,48	080	15,59	080	21,50	080	15,18	080	17,83	080
M10	1,50	100	10,0	8,0	8,50	16	39	3	32,20	100	18,75	100	29,65	100	18,14	100	21,81	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 417 ...		Article no. 23 427 ...		Article no. 23 457 ...		Article no. 23 617 ...		Article no. 23 615 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M12	1,75	110	9	7,0	10,2	18	3			30,98	120	42,39	120	24,46	120	27,00	120
M12	1,75	110	9	7,0	10,2	18	4	38,11	120								
M14	2,00	110	11	9,0	12,0	20	4			40,76	140						
M16	2,00	110	12	9,0	14,0	22	3			44,33	160	53,40	160				
M16	2,00	110	12	9,0	14,0	22	4	51,97	160								
M20	2,50	140	16	12,0	17,5	25	3			66,03	200	106,00	200				
M20	2,50	140	16	12,0	17,5	25	4	89,57	200								
M24	3,00	160	18	14,5	21,0	30	4			83,56	240						

Steel					
Stainless steel	8-20	5-10	8-20		
Cast iron					
Non ferrous metals				10-20	15-40
Heat resistant alloys					
Hardened materials					

6

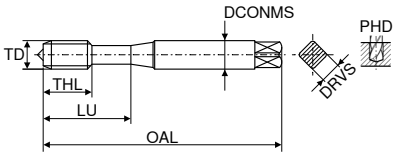
Through hole / Blind hole – Machine taps, right hand

M | TWIN

ST: C 2–3 | ISO 2X 6HX

HR: C 2–3 | ISO 2X 6HX | nitr.

AMPCO: C 2–3 | ISO 2X 6HX



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-PM
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 800 N/mm² ≤ 2xD
	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 028 ...		Article no. 22 006 ...		Article no. 22 030 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M1,2	0,25	40	2,5	2,1	0,95	5	13	2	44,09	012 1)				
M1,4	0,30	40	2,5	2,1	1,10	6	13	2	35,61	014 1)				
M1,6	0,35	40	2,5	2,1	1,25	6	11	2	32,00	016				
M1,7	0,35	40	2,5	2,1	1,35	6	11	2	34,98	017				
M1,8	0,35	40	2,5	2,1	1,45	6	11	2	32,43	018				
M2	0,40	45	2,8	2,1	1,60	7	12	3	27,24	020				
M2,2	0,45	45	2,8	2,1	1,75	7	12	3	28,83	022				
M2,3	0,40	45	2,8	2,1	1,90	7	12	3	31,16	023				
M2,5	0,45	50	2,8	2,1	2,05	9	14	3	26,60	025				
M2,6	0,45	50	2,8	2,1	2,15	9	14	3	28,61	026				
M3	0,50	56	3,5	2,7	2,50	11	18	3	22,15	030	30,10	030	32,65	030
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	22,68	035				
M4	0,70	63	4,5	3,4	3,30	13	21	3	22,46	040	31,16	040	33,81	040
M5	0,80	70	6,0	4,9	4,20	15	25	3	22,68	050	32,43	050	33,81	050
M6	1,00	80	6,0	4,9	5,00	17	30	3	22,79	060	32,65	060	33,81	060
M7	1,00	80	7,0	5,5	6,00	17	30	3	32,43	070				
M8	1,25	90	8,0	6,2	6,80	20	35	3	25,97	080	36,24	080	38,57	080
M10	1,50	100	10,0	8,0	8,50	22	39	3	32,65	100	44,94	100	48,54	100
M12	1,75	110	12,0	9,0	10,20	24	44	3	40,80	120				

Steel	10-20	6-15	
Stainless steel			
Cast iron		6-15	
Non ferrous metals	10-20		
Heat resistant alloys		3-5	3-5
Hardened materials			

1) Tol. 4H/5H ≤ M1.4

DIN 376 can be found on the next page

Through hole / Blind hole – Machine taps, right hand

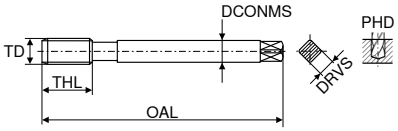
M | TWIN

ST | HR | AMPCO

C 2–3

ISO 2X 6HX

nitr.



DIN 376 with reduced shank

								HSS-E		HSS-E		HSS-PM	
								0° ≤ 750 N/mm² ≤ 2xD		0° ≤ 1400 N/mm² ≤ 2xD		0° ≤ 800 N/mm² ≤ 2xD	
								U0		U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	**Article no. 22 029 ...**		**Article no. 22 007 ...**		**Article no. 22 031 ...**	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M4	0,70	63	2,8	2,1	3,3	13	3	28,19	**040**				
M5	0,80	70	3,5	2,7	4,2	15	3	28,83	**050**				
M6	1,00	80	4,5	3,4	5,0	17	3	28,83	**060**				
M8	1,25	90	6,0	4,9	6,8	20	3	36,45	**080**				
M10	1,50	100	7,0	5,5	8,5	22	3	40,80	**100**				
M12	1,75	110	9,0	7,0	10,2	24	3	42,07	**120**	57,23	**120**		
M12	1,75	110	9,0	7,0	10,2	24	4					81,70	**120**
M14	2,00	110	11,0	9,0	12,0	26	3	57,97	**140**				
M16	2,00	110	12,0	9,0	14,0	27	3	61,79	**160**	81,07	**160**		
M16	2,00	110	12,0	9,0	14,0	27	4					122,90	**160**
M18	2,50	125	14,0	11,0	15,5	30	4	91,88	**180**				
M20	2,50	140	16,0	12,0	17,5	32	4	93,36	**200**			155,80	**200**
M22	2,50	140	18,0	14,5	19,5	32	4	132,50	**220**				
M24	3,00	160	18,0	14,5	21,0	34	4	126,20	**240**			190,70	**240**
M33	3,50	180	25,0	20,0	29,5	40	4	249,10	**330**				

Steel	**10-20**	**6-15**	
Stainless steel			
Cast iron		**6-15**	
Non ferrous metals	**10-20**		
Heat resistant alloys		**3-5**	**3-5**
Hardened materials			

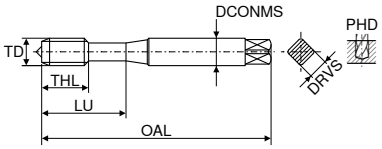
6

Through hole / Blind hole – Machine taps, right hand

M | TWIN

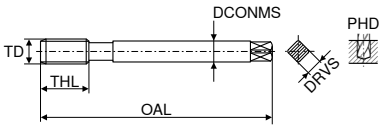
GG | C 2–3 | ISO 2X 6HX | nitr.

GG | C 2–3 | ISO 2X 6HX | nitr.



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ◁ 0° ≤ 1050 N/mm² ≤ 2xD U0 Article no. 22 032 ... EUR		HSS-E ◁ 0° ≤ 1050 N/mm² ≤ 2xD U0 Article no. 22 036 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M2	0,40	45	2,8	2,1	1,60	7	12	3	28,83	**020**		
M2,5	0,45	50	2,8	2,1	2,05	9	14	3	28,83	**025**		
M3	0,50	56	3,5	2,7	2,50	11	18	3	24,27	**030**		
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	26,60	**035**		
M4	0,70	63	4,5	3,4	3,30	13	21	3	24,91	**040**		
M5	0,80	70	6,0	4,9	4,20	15	25	3	26,50	**050**	38,79	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	26,50	**060**	39,74	**060**
M8	1,25	90	8,0	6,2	6,80	20	35	3	31,05	**080**	43,76	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	36,45	**100**	51,82	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 033 ... EUR		U0 Article no. 22 037 ... EUR	
	mm	mm	mm	mm	mm	mm					
M4	0,70	63	2,8	2,1	3,3	13	3	31,16	**040**		
M5	0,80	70	3,5	2,7	4,2	15	3	31,47	**050**		
M6	1,00	80	4,5	3,4	5,0	17	3	31,69	**060**		
M8	1,25	90	6,0	4,9	6,8	20	3	33,81	**080**		
M10	1,50	100	7,0	5,5	8,5	22	3	38,79	**100**		
M12	1,75	110	9,0	7,0	10,2	24	3	46,21	**120**	61,15	**120**
M14	2,00	110	11,0	9,0	12,0	26	3	61,15	**140**	84,04	**140**
M16	2,00	110	12,0	9,0	14,0	27	3	66,66	**160**	84,78	**160**
M18	2,50	125	14,0	11,0	15,5	30	4	98,66	**180**		
M20	2,50	140	16,0	12,0	17,5	32	4	98,66	**200**	126,20	**200**
M22	2,50	140	18,0	14,5	19,5	32	4	149,50	**220**		
M24	3,00	160	18,0	14,5	21,0	34	4	130,30	**240**		

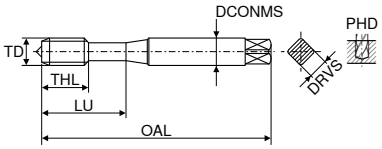
Steel		
Stainless steel		
Cast iron	**10-20**	**10-20**
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

M | TWIN

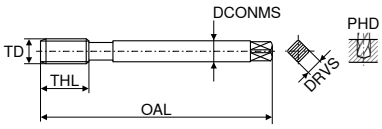
HT | D 4–5 | ISO 2X 6HX | OSM

HT | C 2–3 | ISO 2X 6HX | TiCN



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Solid carbide 0° ≤ 63 HRC ≤ 1,5xD U0 Article no. 22 806 ... EUR		HSS-PM 0° 44 - 52 HRC ≤ 1,5xD U0 Article no. 22 227 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M3	0,50	63	4,5	3,4	2,55	6	18	4	194,00	**030**		
M4	0,70	63	4,5	3,4	3,40	8	20	4	194,00	**040**		
M5	0,80	70	6,0	4,9	4,30	10	26	4	219,30	**050**		
M6	1,00	80	6,0	4,9	5,00	10	30	4			129,30	**060**
M6	1,00	80	6,0	4,9	5,10	12	28	4	229,30	**060**		
M8	1,25	90	8,0	6,2	6,80	14	35	5			138,80	**080**
M8	1,25	90	8,0	6,2	6,90	15	35	5	255,70	**080**		
M10	1,50	100	10,0	8,0	8,50	18	38	5	316,40	**100**		
M10	1,50	100	10,0	8,0	8,50	16	39	5			173,80	**100**
M12	1,75	110	12,0	9,0	10,40	21	41	5	486,10	**120**		
M16	2,00	110	16,0	12,0	14,20	24	44	6	685,60	**160**		



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 228 ... EUR	
	mm	mm	mm	mm	mm	mm			
M12	1,75	110	9	7	10,4	18	5	217,30	**120**
M16	2,00	110	12	9	14,2	22	6	297,80	**160**

Steel		
Stainless steel		
Cast iron		
Non ferrous metals		
Heat resistant alloys		
Hardened materials	**1-3**	**1-3**

6

Through hole / Blind hole – Machine taps, right hand

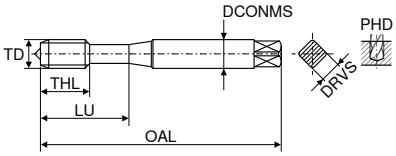
▲ ES = extra short

M | TWIN

ST
ES

C
2–3

ISO 2X
6HX



DIN 352 with reinforced shank

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 018 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M2	0,40	36	2,8	2,1	1,60	8		3	30,94	**020**
M2,5	0,45	40	2,8	2,1	2,05	9		3	30,94	**025**
M3	0,50	40	3,5	2,7	2,50	10	18	3	19,93	**030**
M4	0,70	45	4,5	3,4	3,30	12	22	3	19,93	**040**
M5	0,80	50	6,0	4,9	4,20	14	25	3	19,93	**050**
M6	1,00	56	6,0	4,9	5,00	16	28	3	21,40	**060**
M8	1,25	63	6,0	4,9	6,80	20		3	24,59	**080**
M10	1,50	70	7,0	5,5	8,50	22		3	32,00	**100**
M12	1,75	75	9,0	7,0	10,20	24		3	38,57	**120**

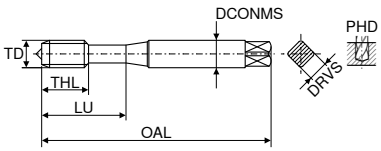
Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
Hardened materials	

Through hole / Blind hole – Machine taps, right hand

▲ EL = extra long, with double overall length

M | TWIN

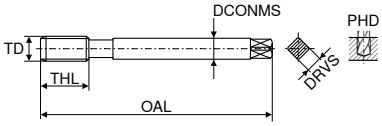
HR EL | C 2–3 | ISO 2X 6HX | nitr.



DIN 371 with reinforced shank

HSS-E
0°
≤ 1400 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 122 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M3	0,50	100	3,5	2,7	2,5	11	18	3	55,32	**030**
M4	0,70	125	4,5	3,4	3,3	13	21	3	55,32	**040**
M5	0,80	140	6,0	4,9	4,2	15	25	3	58,50	**050**
M6	1,00	160	6,0	4,9	5,0	17	30	3	61,15	**060**
M8	1,25	180	8,0	6,2	6,8	20	35	3	72,59	**080**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 123 ...	
	mm	mm	mm	mm	mm	mm		EUR	
M10	1,50	200	7	5,5	8,5	22	3	81,07	**100**
M12	1,75	224	9	7,0	10,2	24	3	97,18	**120**
M16	2,00	224	12	9,0	14,0	27	3	152,60	**160**
M20	2,50	280	16	12,0	17,5	32	4	207,70	**200**

Steel	**6-15**
Stainless steel	
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	**3-5**
Hardened materials	

Through hole / Blind hole – Machine taps, right hand

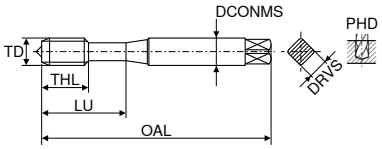
M

GG

C
2–3

ISO 2X
6HX

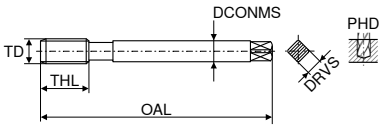
TiCN



DIN 371 with reinforced shank

HSS-E
0°
≤ 900 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 512 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M3	0,50	56	3,5	2,7	2,5	11	18	3	15,39	**030**
M4	0,70	63	4,5	3,4	3,3	13	21	3	16,71	**040**
M5	0,80	70	6,0	4,9	4,2	15	25	3	17,02	**050**
M6	1,00	80	6,0	4,9	5,0	17	30	3	23,54	**060**
M8	1,25	90	8,0	6,2	6,8	20	35	3	24,76	**080**
M10	1,50	100	10,0	8,0	8,5	22	39	3	31,49	**100**



DIN 376 with reduced shank

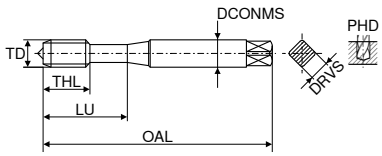
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 513 ...	
	mm	mm	mm	mm	mm	mm		EUR	
M12	1,75	110	9	7	10,2	24	3	36,48	**120**

Steel	
Stainless steel	
Cast iron	**10-30**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Through hole / Blind hole – Machine thread formers, right hand

M | Spanlos

EC	EC	EC	EC
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
Ti200	HCr	TiN GS	TiN

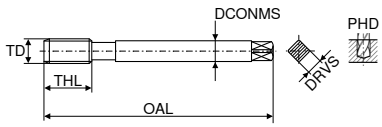


DIN 2174 with reinforced shank

	HSS-PM	HSS-E	HSS-E	HSS-E
	≤ 1400 N/mm² ≤ 1,5xD	≤ 1100 N/mm² ≤ 1,5xD	≤ 1100 N/mm² ≤ 1,5xD	≤ 1100 N/mm² ≤ 1,5xD
	U0	U0	U0	U0
	Article no. 22 112 ...	Article no. 22 128 ...	Article no. 22 136 ...	Article no. 22 100 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm	mm								
M1	0,25	40	2,5	2,1	0,90	5	6,5							78,00	**010** [1]
M1,2	0,25	40	2,5	2,1	1,10	5	6,5							73,86	**012** [1]
M1,4	0,30	40	2,5	2,1	1,28	6	9,0							66,02	**014** [1]
M1,6	0,35	40	2,5	2,1	1,47	6	9,0							63,69	**016**
M1,7	0,35	40	2,5	2,1	1,57	6	9,0							69,94	**017**
M2	0,40	45	2,8	2,1	1,85	7	10,0			64,01	**020**			45,68	**020**
M2,5	0,45	50	2,8	2,1	2,30	9	14,0					68,67	**025**		
M2,5	0,45	50	2,8	2,1	2,33	9	14,0			55,11	**025**			44,29	**025**
M2,6	0,45	50	2,8	2,1	2,43	9	14,0							49,28	**026**
M3	0,50	56	3,5	2,7	2,80	6	18,0	60,51	**030**						
M3	0,50	56	3,5	2,7	2,80	11	18,0			39,63	**030**	56,27	**030**	42,39	**030**
M3,5	0,60	56	4,0	3,0	3,25	12	20,0							37,30	**035**
M4	0,70	63	4,5	3,4	3,70	13	21,0			41,23	**040**	57,76	**040**	43,35	**040**
M4	0,70	63	4,5	3,4	3,70	7	21,0	63,69	**040**						
M5	0,80	70	6,0	4,9	4,65	15	25,0			43,02	**050**	59,66	**050**	45,25	**050**
M5	0,80	70	6,0	4,9	4,65	8	25,0	67,40	**050**						
M6	1,00	80	6,0	4,9	5,60	10	30,0	82,56	**060**						
M6	1,00	80	6,0	4,9	5,60	17	30,0			43,02	**060**	66,34	**060**	51,72	**060**
M8	1,25	90	8,0	6,2	7,40	20	35,0							56,80	**080**
M8	1,25	90	8,0	6,2	7,45	20	35,0			48,96	**080**	72,06	**080**		
M8	1,25	90	8,0	6,2	7,45	14	35,0	91,99	**080**						
M10	1,50	100	10,0	8,0	9,35	16	39,0	118,70	**100**						
M10	1,50	100	10,0	8,0	9,35	22	39,0			64,01	**100**	88,28	**100**	72,06	**100**

1) Tol. ISO 1X 4HX ≤ M1.4



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	U0 Article no. 22 101 ... EUR	
	mm	mm	mm	mm	mm	mm		
M12	1,75	110	9	7	11,25	24	79,16	**120**
M16	2,00	110	12	9	15,10	27	133,50	**160**

Steel	**8-30**	**8-25**	**8-30**	**8-30**
Stainless steel	**8-15**		**8-15**	**8-15**
Cast iron				
Non ferrous metals	**12-25**	**10-30**	**12-25**	**12-25**
Heat resistant alloys				
Hardened materials				

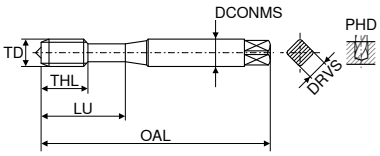
6

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

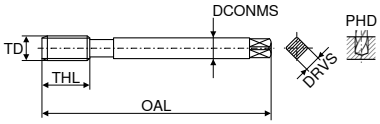
M | Spanlos

EC SN	EC SN	EC SN	EC SN	EC SN
C 2–3	C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 3X 6GX	ISO 2X 6HX	ISO 2X 6HX
nitr.	HCr	TiN	TiN GS	TiN



DIN 2174 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 104 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 107 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 108 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 154 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 105 ... EUR	
	mm	mm	mm	mm	mm	mm	mm											
M2	0,40	45	2,8	2,1	1,85	7	10	3									52,46	**020**
M2,5	0,45	50	2,8	2,1	2,33	9	14	3									47,90	**025**
M3	0,50	56	3,5	2,7	2,80	11	18	3					43,98	**030**	60,62	**030**		
M3	0,50	56	3,5	2,7	2,80	11	18	4	32,65	**030**	45,25	**030**					46,21	**030**
M3,5	0,60	56	4,0	3,0	3,25	12	20	3									45,68	**035**
M4	0,70	63	4,5	3,4	3,70	13	21	4					45,68	**040**	62,32	**040**		
M4	0,70	63	4,5	3,4	3,70	13	21	5	33,81	**040**	46,21	**040**					47,90	**040**
M5	0,80	70	6,0	4,9	4,65	15	25	4					47,90	**050**	64,54	**050**		
M5	0,80	70	6,0	4,9	4,65	15	25	5	35,71	**050**	48,54	**050**					49,81	**050**
M6	1,00	80	6,0	4,9	5,60	17	30	4					55,95	**060**	71,32	**060**		
M6	1,00	80	6,0	4,9	5,60	17	30	5	36,24	**060**	48,54	**060**					56,48	**060**
M8	1,25	90	8,0	6,2	7,45	20	35	6	43,66	**080**	55,64	**080**	63,69	**080**	77,57	**080**	62,32	**080**
M10	1,50	100	10,0	8,0	9,35	22	39	6	55,95	**100**	73,33	**100**	80,65	**100**	94,32	**100**	78,00	**100**



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 106 ... EUR	
	mm	mm	mm	mm	mm	mm			
M12	1,75	110	9	7	11,25	24	6	97,28	**120**
M14	2,00	110	11	9	13,10	26	5	187,60	**140**
M16	2,00	110	12	9	15,10	27	7	150,50	**160**

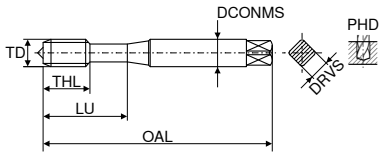
Steel	**8-30**	**8-30**	**8-30**	**8-30**	**8-30**
Stainless steel	**8-15**	**8-15**	**8-15**	**8-15**	**8-15**
Cast iron					
Non ferrous metals	**10-30**	**10-30**	**12-25**	**12-25**	**12-25**
Heat resistant alloys					
Hardened materials					

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

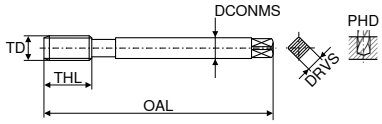
M | Spanlos

EC SN	EC SN	NEO SN	NEO SN
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
Ti200	Ti200	TiN	TiN



DIN 2174 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-PM ≤ 1400 N/mm² ≤ 3xD U0 Article no. 22 114 ... EUR		HSS-PM ≤ 1400 N/mm² ≤ 3xD U0 Article no. 22 118 ... EUR		HSS-PM ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 452 ... EUR		HSS-PM ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 453 ... EUR	
	mm	mm	mm	mm	mm	mm	mm									
M2	0,40	45	2,8	2,1	1,85	4	12	3	110,20	020						
M2,5	0,45	50	2,8	2,1	2,33	5	14	3	68,04	025						
M3	0,50	56	3,5	2,7	2,80	6	18	3	68,04	030						
M3	0,50	56	3,5	2,7	2,80	11	18	4					60,62	030		
M4	0,70	63	4,5	3,4	3,70	13	21	4					62,32	040		
M4	0,70	63	4,5	3,4	3,70	7	21	4	70,47	040						
M5	0,80	70	6,0	4,9	4,65	8	25	4	75,04	050	95,38	050				
M5	0,80	70	6,0	4,9	4,65	15	25	4					66,34	050	82,88	050
M6	1,00	80	6,0	4,9	5,60	10	30	4	89,97	060	112,30	060				
M6	1,00	80	6,0	4,9	5,60	17	30	5					83,62	060	101,10	060
M8	1,25	90	8,0	6,2	7,45	20	35	5					93,68	080	114,50	080
M8	1,25	90	8,0	6,2	7,45	14	35	5	100,50	080	124,00	080				
M10	1,50	100	10,0	8,0	9,35	22	39	5					121,90	100	145,20	100
M10	1,50	100	10,0	8,0	9,35	16	39	5	129,30	100	156,80	100				



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 115 ... EUR		U0 Article no. 22 452 ... EUR		U0 Article no. 22 454 ... EUR	
	mm	mm	mm	mm	mm	mm							
M12	1,75	110	9	7	11,25	18	5	132,50	120				
M12	1,75	110	9	7	11,25	24	6			140,90	120	169,50	120
M16	2,00	110	12	9	15,10	27	6			228,90	160	259,70	160

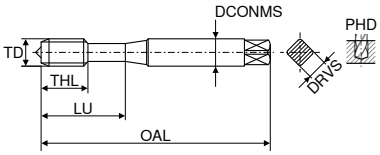
Steel	8-30	8-30	5-30	5-30
Stainless steel	8-15	8-15	5-15	5-15
Cast iron				
Non ferrous metals	12-25	12-25	5-10	5-10
Heat resistant alloys			5-20	5-20
Hardened materials				

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

M

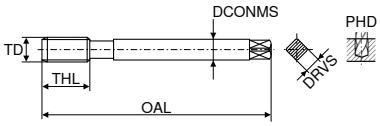
UNI	UNI	UNI SN	UNI SN
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
TiN	CrN	TiN	CrN



DIN 2174 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD
	T9	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 810 ...		Article no. 23 812 ...		Article no. 23 814 ...		Article no. 23 816 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M2	0,40	45	2,8	2,1	1,85	7	12		25,07	020	24,56	020				
M2	0,40	45	2,8	2,1	1,85	7	12	3					28,43	020	28,02	020
M2,5	0,45	50	2,8	2,1	2,33	9	14	3					25,78	025	24,56	025
M2,5	0,45	50	2,8	2,1	2,33	9	14		22,32	025	21,30	025				
M3	0,50	56	3,5	2,7	2,80	11	18	3					18,44	030	17,83	030
M3	0,50	56	3,5	2,7	2,80	11	18		16,20	030	15,39	030				
M4	0,70	63	4,5	3,4	3,70	13	21	4					19,16	040	17,83	040
M4	0,70	63	4,5	3,4	3,70	13	21		16,81	040	15,79	040				
M5	0,80	70	6,0	4,9	4,65	15	25	4					20,28	050	18,85	050
M5	0,80	70	6,0	4,9	4,65	15	25		17,83	050	16,51	050				
M6	1,00	80	6,0	4,9	5,60	17	30	4					23,44	060	18,85	060
M6	1,00	80	6,0	4,9	5,60	17	30		21,20	060	16,51	060				
M8	1,25	90	8,0	6,2	7,45	20	35	5					26,49	080	22,21	080
M8	1,25	90	8,0	6,2	7,45	20	35		23,64	080	19,06	080				
M10	1,50	100	10,0	8,0	9,35	22	39	5					34,34	100	28,43	100
M10	1,50	100	10,0	8,0	9,35	22	39		31,49	100	24,56	100				



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 811 ...		Article no. 23 813 ...		Article no. 23 815 ...		Article no. 23 817 ...	
								T9		T9		T9		T9	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M12	1,75	110	9	7,0	11,25	24		35,97	120	30,06	120				
M12	1,75	110	9	7,0	11,25	24	5					40,25	120	34,54	120
M16	2,00	110	12	9,0	15,10	27	6					75,30	160	69,09	160
M16	2,00	110	12	9,0	15,10	27		67,76	160	60,12	160				
M18	2,50	125	14	11,0	16,80	30	6					138,90	18000		
M20	2,50	140	16	12,0	18,80	32	6					129,20	20000		
M24	3,00	160	18	14,5	22,60	34	6					172,60	24000		

Steel	10-50	10-50	10-50	10-50
Stainless steel	5-20	5-20	5-20	5-20
Cast iron				
Non ferrous metals	10-50	10-50	10-50	10-50
Heat resistant alloys	5-15	5-15	5-15	5-15
Hardened materials				

Through hole – machine taps for wire thread inserts, right hand

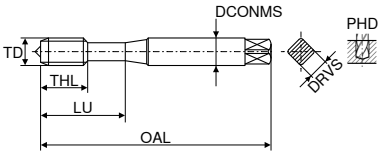
EG M | Stabil

UNI

B
4–5

6H mod

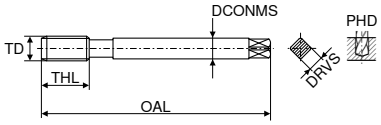
nitr. + vap.



DIN 40435 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 662 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
EG-M2,5	0,45	56	3,5	2,7	2,65	11	18	3	48,74	**025**
EG-M3	0,50	63	4,5	3,4	3,15	10	21	3	40,49	**030**
EG-M4	0,70	70	6,0	4,9	4,20	12	25	3	42,07	**040**
EG-M5	0,80	80	6,0	4,9	5,25	13	30	3	40,80	**050**
EG-M6	1,00	90	8,0	6,2	6,30	17	35	3	41,23	**060**
EG-M8	1,25	100	10,0	8,0	8,40	18	39	3	49,17	**080**



DIN 40435 with reduced shank

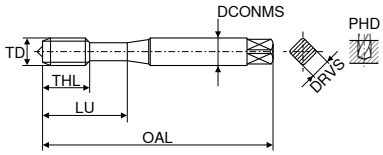
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 663 ...	
	mm	mm	mm	mm	mm	mm		EUR	
EG-M10	1,50	100	9	7,0	10,50	22	3	66,13	**100**
EG-M12	1,75	110	11	9,0	12,50	26	3	75,67	**120**
EG-M16	2,00	125	14	11,0	16,50	27	3	110,20	**160**
EG-M20	2,50	160	18	14,5	20,75	34	3	154,80	**200**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – machine taps for wire thread inserts, right hand

EG M | Salo-Rex

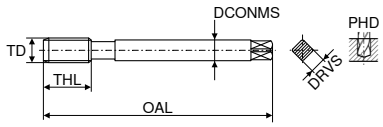
Soft	UNI
C 2–3	C 2–3
6H mod	6H mod
CH	vap.



DIN 40435 with reinforced shank

	HSS-E	HSS-E
	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
	U0	U0
	Article no. 22 280 ...	Article no. 22 664 ...

TD	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	EUR		EUR	
EG-M2,5	0,45	56	3,5	2,7	2,65	5	18	2	58,93	025		
EG-M2,5	0,45	56	3,5	2,7	2,65	5	18	3			46,63	025
EG-M3	0,50	63	4,5	3,4	3,15	5	21	2	56,91	030		
EG-M3	0,50	63	4,5	3,4	3,15	5	21	3			42,49	030
EG-M4	0,70	70	6,0	4,9	4,20	8	25	2	56,91	040		
EG-M4	0,70	70	6,0	4,9	4,20	8	25	3			42,49	040
EG-M5	0,80	80	6,0	4,9	5,25	8	30	2	77,57	050		
EG-M5	0,80	80	6,0	4,9	5,25	8	30	3			39,21	050
EG-M6	1,00	90	8,0	6,2	6,30	10	35	2	78,96	060		
EG-M6	1,00	90	8,0	6,2	6,30	10	35	3			42,49	060
EG-M8	1,25	100	10,0	8,0	8,40	16	39	2	99,20	080		
EG-M8	1,25	100	10,0	8,0	8,40	16	39	3			47,58	080



DIN 40435 with reduced shank

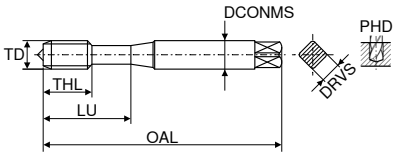
TD	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	EUR	
								U0 Article no. 22 665 ...	
EG-M10	1,50	100	9	7,0	10,50	15	5	60,83	100
EG-M12	1,75	110	11	9,0	12,50	20	4	74,51	120
EG-M16	2,00	125	14	11,0	16,50	20	5	112,30	160
EG-M20	2,50	160	18	14,5	20,75	30	4	152,60	200

Steel		6-20
Stainless steel		4-8
Cast iron		6-15
Non ferrous metals	15-40	
Heat resistant alloys		
Hardened materials		

Through hole – Machine taps, right hand

MF | Stabil

UNI	UNI	VG
B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2X 6HX
nitr. + vap.	TiN	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 1100 N/mm² ≤ 4xD
	U0	U0	U0
	Article no. 22 590 ...	Article no. 22 550 ...	Article no. 22 587 ...
	EUR	EUR	EUR

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes						
	mm	mm	mm	mm	mm	mm	mm							
M4x0,5	0,50	63	4,5	3,4	3,5	10	21	3	49,17	040	56,91	040		
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3					56,91	040
M5x0,5	0,50	70	6,0	4,9	4,5	11	25	3	49,17	050	56,91	050		
M6x0,5	0,50	80	6,0	4,9	5,5	13	30	3	51,82	060	71,22	060		
M6x0,75	0,75	80	6,0	4,9	5,2	13	30	3	51,82	062	71,22	062		
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3					68,04	062
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3					68,04	060
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3					56,91	050
M8x1	1,00	90	8,0	6,2	7,0	17	35	3	50,55	084	68,04	080		
M10x1	1,00	90	10,0	8,0	9,0	18	35	4	51,82	102	77,26	100		

Steel	6-20	6-25	6-15
Stainless steel	4-8	5-10	5-10
Cast iron	6-15	10-20	
Non ferrous metals		12-25	10-20
Heat resistant alloys			
hardened materials			

DIN 374 can be found on the next page

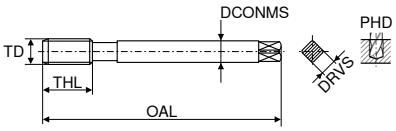
6

Through hole – Machine taps, right/left hand

▲ TS = for high-speed machining, up to 100 m/min.

▲ LH = for left hand threads

MF | Stabil



DIN 374 with reduced shank

	ST LH	ST TS	UNI	UNI	VG
	B 4–5	B 4–5	B 4–5	B 4–5	B 4–5
	ISO 2 6H	ISO 2X 6HX	ISO 2 6H	ISO 2 6H	ISO 2X 6HX
		TiN	nitr. + vap.	TiN	TiN

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 750 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD
	U0	U0	U0	U0	U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 210 ...		Article no. 22 193 ...		Article no. 22 551 ...		Article no. 22 552 ...		Article no. 22 570 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M6x0,75	0,75	80	4,5	3,4	5,2	13	3					44,09	062				
M6x0,5	0,50	80	4,5	3,4	5,5	13	3					91,25	060				
M8x0,75	0,75	80	6,0	4,9	7,2	14	3	86,27	082			48,21	082				
M8x1	1,00	90	6,0	4,9	7,0	17	3	64,32	084			44,09	084	68,04	080		
M8x1	1,00	90	6,0	4,9	7,0	10	4			77,26	080					68,04	080
M10x1	1,00	90	7,0	5,5	9,0	18	4	66,77	102			44,94	102	74,51	100		
M10x0,75	0,75	90	7,0	5,5	9,2	18	4					64,65	100				
M10x1,25	1,25	100	7,0	5,5	8,8	16	4									91,88	102
M10x1,25	1,25	100	7,0	5,5	8,8	22	3					96,44	104				
M10x1	1,00	90	7,0	5,5	9,0	10	4			82,88	100					81,07	100
M12x1	1,00	100	9,0	7,0	11,0	18	4	86,27	120			52,56	120	87,33	121		
M12x1,5	1,50	100	9,0	7,0	10,5	22	3	91,88	124			49,81	124	77,26	120		
M12x1,25	1,25	100	9,0	7,0	10,8	22	3					73,12	122				
M12x1,5	1,50	100	9,0	7,0	10,5	15	4			79,59	120					91,25	120
M14x1,5	1,50	100	11,0	9,0	12,5	22	3	117,60	144			66,77	144	101,10	140		
M14x1	1,00	100	11,0	9,0	13,0	18	4					135,60	140				
M14x1,5	1,50	100	11,0	9,0	12,5	15	4			100,40	140					110,20	140
M16x1,5	1,50	100	12,0	9,0	14,5	22	3	117,60	162			79,59	162	104,40	160		
M16x1,5	1,50	100	12,0	9,0	14,5	15	4			133,50	160					125,00	160
M18x1	1,00	110	14,0	11,0	17,0	20	5					221,50	180				
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	133,50	182			92,62	182				
M18x2	2,00	125	14,0	11,0	16,0	26	3					182,30	184				
M18x1,5	1,50	110	14,0	11,0	16,5	17	4			165,40	180					154,80	180
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	154,80	202			104,40	202	164,30	200		
M20x1	1,00	125	16,0	12,0	19,0	20	5					239,50	200				
M20x1,5	1,50	125	16,0	12,0	18,5	17	4			207,70	200					194,00	200
M22x1,5	1,50	125	18,0	14,5	20,5	25	4					114,50	222	199,30	220		
M26x1,5	1,50	140	18,0	14,5	24,5	28	4					160,10	260				
M24x2	2,00	140	18,0	14,5	22,0	27	4					234,20	244				
M25x1,5	1,50	140	18,0	14,5	23,5	28	4					385,70	250				
M24x1,5	1,50	140	18,0	14,5	22,5	27	4					129,30	242				
M27x2	2,00	140	20,0	16,0	25,0	28	4					407,00	272				
M28x1,5	1,50	140	20,0	16,0	26,5	28	5					187,60	280				
M30x1,5	1,50	150	22,0	18,0	28,5	28	5					201,30	302				

Steel	10-20	20-100	6-20	6-25	6-15
Stainless steel			4-8	5-10	5-10
Cast iron		20-60	6-15	10-20	
Non ferrous metals	10-20	20-100		12-25	10-20
Heat resistant alloys		10-25			
hardened materials					

Through hole – Machine taps, right hand

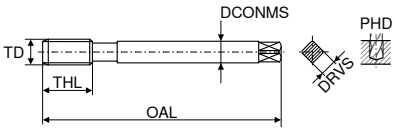
MF

UNI

B
4–5

ISO 2
6H

TiN



DIN 374 with reduced shank

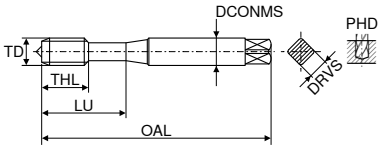
HSS-PM
0°
≤ 1000 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 041 ... EUR	
	mm	mm	mm	mm	mm	mm			
M8x1	1,00	90	6	4,9	7,0	17	3	21,91	**081**
M10x1	1,00	90	7	5,5	9,0	18	4	25,07	**102**
M10x1,25	1,25	100	7	5,5	8,8	22	3	26,90	**104**
M12x1	1,00	100	9	7,0	11,0	18	4	30,88	**120**
M12x1,25	1,25	100	9	7,0	10,8	22	3	32,30	**122**
M12x1,5	1,50	100	9	7,0	10,5	22	3	28,74	**121**
M14x1,5	1,50	100	11	9,0	12,5	22	3	35,46	**144**
M14x1,25	1,25	100	11	9,0	12,8	22	3	37,30	**142**
M16x1,5	1,50	100	12	9,0	14,5	22	3	40,15	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	4	53,09	**182**
M20x1,5	1,50	125	16	12,0	18,5	17	4	71,74	**202**
M24x1,5	1,50	140	18	14,5	22,5	27	4	77,44	**242**
M24x2	2,00	140	18	14,5	22,0	27	4	88,25	**244**
M22x1,5	1,50	125	18	14,5	20,5	25	4	67,46	**222**

Steel	**10-20**
Stainless steel	**8-15**
Cast iron	**20-25**
Non ferrous metals	**20-25**
Heat resistant alloys	
hardened materials	

Through hole – Machine taps, right hand

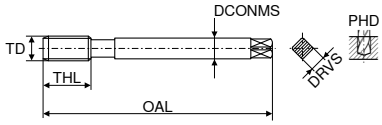
MF



DIN 371 with reinforced shank

	UNI	UNI	FE	FE-HF	VA
	B 4–5	B 4–5	B 4–5	B 4–5	B 4–5
	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
	nitr. + vap.	TiN		TiCN	TiN
	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 850 N/mm² ≤ 3xD	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 1200 N/mm² ≤ 4xD
	T9	T9	T9	T9	T9

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 140 ...		Article no. 23 142 ...		Article no. 23 240 ...		Article no. 23 340 ...		Article no. 23 440 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M4x0,5	0,50	63	4,5	3,4	3,5	10	21	3	15,49	**040**	20,89	**040**	18,65	**040**				
M6x0,75	0,75	80	6,0	4,9	5,2	13	30	3	15,49	**062**	25,98	**062**	18,65	**062**	34,85	**062**	31,39	**062**
M6x0,5	0,50	80	6,0	4,9	5,5	13	30	3	16,51	**060**	25,98	**060**	18,85	**060**				
M5x0,5	0,50	70	6,0	4,9	4,5	11	25	3	15,49	**050**	21,09	**050**	18,85	**050**	26,70	**050**	25,68	**050**



DIN 374 with reduced shank

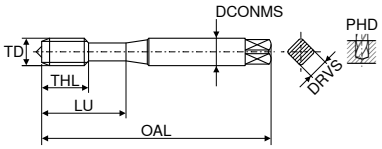
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 141 ...		Article no. 23 143 ...		Article no. 23 241 ...		Article no. 23 341 ...		Article no. 23 441 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR	
M8x0,75	0,75	80	6	4,9	7,0	14	3							36,17	**082**		
M8x0,5	0,50	80	6	8,0	7,5	14	3					25,07	**080**				
M8x1	1,00	90	6	4,9	7,0	17	3	13,86	**084**			20,48	**084**	34,34	**084**	33,22	**084**
M8x1	1,00	90	6	4,9	7,0	17	4			25,58	**084**						
M8x0,75	0,75	80	6	4,9	7,2	14	3	17,73	**082**	27,21	**082**	21,70	**082**			35,36	**082**
M10x0,75	0,75	90	7	5,5	9,2	18	4	23,95	**100**	36,38	**100**	29,96	**100**				
M10x1,25	1,25	100	7	5,5	8,8	22	3	21,60	**104**	34,24	**104**	24,66	**104**				
M10x1	1,00	90	7	5,5	9,0	18	4	14,27	**102**	27,92	**102**	23,84	**102**	38,11	**102**	36,17	**102**
M12x1,5	1,50	100	9	7,0	10,5	22	3	16,20	**124**	29,65	**124**	26,49	**124**	41,27	**124**	38,72	**124**
M12x1,25	1,25	100	9	7,0	10,8	22	3	21,81	**122**	34,85	**122**	28,94	**122**				
M12x1	1,00	100	9	7,0	11,0	18	4	18,34	**120**	32,10	**120**	27,61	**120**	42,90	**120**	41,68	**120**
M14x1	1,00	100	11	9,0	13,0	18	4	25,98	**140**	38,52	**140**	34,03	**140**				
M14x1,5	1,50	100	11	9,0	12,5	22	3	23,13	**144**	39,44	**144**	32,71	**144**	53,40	**144**	51,15	**144**
M16x1	1,00	100	12	9,0	15,0	18	4	29,14	**160**	44,94	**160**	44,94	**160**				
M16x1,5	1,50	100	12	9,0	14,5	22	3	23,95	**162**	44,94	**162**	41,58	**162**	60,12	**162**	58,49	**162**
M18x1	1,00	110	14	11,0	17,0	20	5					59,41	**180**				
M18x1,5	1,50	110	14	11,0	16,5	25	4	33,02	**182**	55,54	**182**	54,01	**182**				
M20x1,5	1,50	125	16	12,0	18,5	25	4	36,79	**202**	70,41	**202**	59,92	**202**				
M20x1	1,00	125	16	12,0	19,0	20	5					64,20	**200**				
M26x1,5	1,50	140	18	14,5	24,5	28	4					102,90	**260**				
M24x1,5	1,50	140	18	14,5	22,5	27	4	47,89	**242**	76,63	**242**	80,40	**242**				
M22x1,5	1,50	125	18	14,5	20,5	25	4	41,58	**222**	73,16	**222**	68,99	**222**				
M28x1,5	1,50	140	20	16,0	26,5	28	5					118,20	**280**				
M30x1,5	1,50	150	22	18,0	28,5	28	5					131,50	**300**				

Steel	**2-25**	**5-45**	**5-25**	**5-45**	
Stainless steel	**2-8**	**5-15**			**8-20**
Cast iron	**5-20**	**10-25**			
Non ferrous metals	**10-20**	**15-40**			
Heat resistant alloys					
hardened materials					

Blind hole – Machine taps, right hand

MF | Salo-Rex

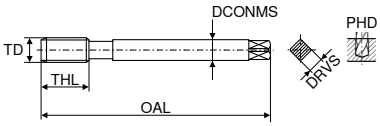
UNI	UNI	UNI	UNI
E 1,5–2	E 1,5–2	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 3 6G
vap.	TiN	vap.	vap.



DIN 371 with reinforced shank

HSS-E	HSS-E	HSS-E	HSS-E
◁ 42°	◁ 42°	◁ 42°	◁ 42°
≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²
≤ 3xD	≤ 3xD	≤ 3xD	≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 441 ... EUR	
	mm	mm	mm	mm	mm	mm	mm			
M4x0,5	0,50	63	4,5	3,4	3,50	5	21	3	53,09	**040**
M6x0,75	0,75	80	6,0	4,9	5,25	8	30	3	53,09	**062**
M5x0,5	0,50	70	6,0	4,9	4,50	5	25	3	53,09	**050**



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 555 ... EUR		U0 Article no. 22 556 ... EUR		U0 Article no. 22 491 ... EUR		U0 Article no. 22 490 ... EUR	
	mm	mm	mm	mm	mm	mm									
M8x1	1,0	90	6	4,9	7,0	10	3	48,54	**080**	62,21	**080**			53,09	**080**
M10x1	1,0	90	7	5,5	9,0	10	4	52,35	**100**	79,59	**100**			58,50	**100**
M12x1,5	1,5	100	9	7,0	10,5	15	5	59,87	**120**	91,25	**120**	86,27	**120**	64,32	**120**
M14x1,5	1,5	100	11	9,0	12,5	15	5	77,26	**140**	116,60	**140**	114,50	**140**	84,78	**140**
M16x1,5	1,5	100	12	9,0	14,5	15	5	91,88	**160**	122,90	**160**	117,60	**160**	101,10	**160**
M18x1,5	1,5	110	14	11,0	16,5	17	5							116,60	**180**
M20x1,5	1,5	125	16	12,0	18,5	17	5					180,10	**200**	133,50	**200**

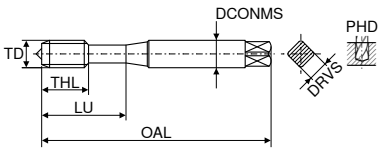
Steel	**6-20**	**6-25**	**6-20**	**6-20**
Stainless steel	**4-8**	**5-10**	**4-8**	**4-8**
Cast iron	**6-15**	**10-20**	**6-15**	**6-15**
Non ferrous metals		**12-25**		
Heat resistant alloys				
hardened materials				

Blind hole – Machine taps, right hand

▲ CNC = for synchronised CNC machining with minimum length compensation chuck

MF | Salo-Rex

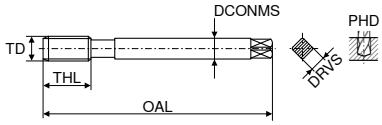
UNI	UNI	UNI CNC	UNI CNC
C 2–3	C 2–3	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	7G	ISO 2 6H
vap.	TiN	TiN GS	TiN GS



DIN 371 with reinforced shank

HSS-E	HSS-E	HSS-E	HSS-E
◁ 42°	◁ 42°	◁ 45°	◁ 45°
≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²	≤ 1100 N/mm²
≤ 3xD	≤ 3xD	≤ 3xD	≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 202 ...		U0 Article no. 22 548 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	53,09	040		
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	48,54	050	61,46	050
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	53,09	062	61,46	062
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	53,09	060	61,46	060



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 553 ...		U0 Article no. 22 554 ...		U0 Article no. 22 563 ...		U0 Article no. 22 549 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
M6x0,75	0,75	80	4,5	3,4	5,2	8	3	53,09	062						
M8x0,75	0,75	80	6,0	4,9	7,2	8	3	49,81	080					64,65	082
M8x1	1,00	90	6,0	4,9	7,0	10	3	45,99	082	62,21	080	93,89	084	78,31	084
M10x0,75	0,75	90	7,0	5,5	9,2	10	4	91,88	101						
M10x1	1,00	90	7,0	5,5	9,0	10	3	49,17	100	79,59	100				
M10x1	1,00	90	7,0	5,5	9,0	10	4					101,10	102	89,44	102
M10x1,25	1,25	100	7,0	5,5	8,8	16	3	121,90	102						
M12x1	1,00	100	9,0	7,0	11,0	11	4	62,21	120	93,36	121			102,90	120
M12x1,25	1,25	100	9,0	7,0	10,8	15	4	97,18	122						
M12x1,5	1,50	100	9,0	7,0	10,5	15	4	59,87	124	91,25	120				
M12x1,5	1,50	100	9,0	7,0	10,5	15	5					114,50	124	99,20	124
M14x1,5	1,50	100	11,0	9,0	12,5	15	5					140,90	144	126,20	144
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	73,86	140	105,60	140				
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	90,19	160	122,90	160				
M16x1,5	1,50	100	12,0	9,0	14,5	15	5					160,10	162	147,30	162
M18x1,5	1,50	110	14,0	11,0	16,5	17	5							180,10	182
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	110,20	180	156,80	182				
M20x1,5	1,50	125	16,0	12,0	18,5	17	5					239,50	202	221,50	202
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	150,50	200	199,30	202				
M22x1,5	1,50	125	18,0	14,5	20,5	17	4	146,20	220						
M26x1,5	1,50	140	18,0	14,5	24,5	20	5	203,50	260						
M24x1,5	1,50	140	18,0	14,5	22,5	20	5	159,00	240						
M28x1,5	1,50	140	20,0	16,0	26,5	20	5	239,50	280						
M30x1,5	1,50	150	22,0	18,0	28,5	22	6	242,70	300						

Steel	6-20	6-25	6-25	6-25
Stainless steel	4-8	5-10	5-10	5-10
Cast iron	6-15	10-20	10-20	10-20
Non ferrous metals		12-25	12-25	12-25
Heat resistant alloys				
hardened materials				

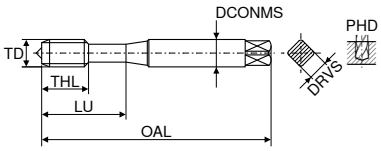
Blind hole – Machine taps, right/left hand

▲ LH = for left hand threads

MF | Salo-Rex

ST LH | C 2–3 | ISO 2 6H

ST | C 2–3 | ISO 2 6H

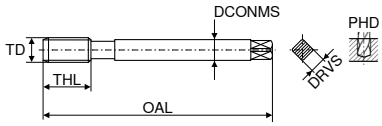


DIN 371 with reinforced shank

HSS-E
42°
≤ 750 N/mm²
≤ 3xD

HSS-E
42°
≤ 750 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 238 ... EUR	
	mm	mm	mm	mm	mm	mm	mm			
M2,5x0,35	0,35	50	2,8	2,1	2,15	5,0	15	2	84,78	025
M3x0,35	0,35	56	3,5	2,7	2,65	4,5	18	3	51,82	030
M3,5x0,35	0,35	56	4,0	3,0	3,15	5,0	20	3	71,22	035
M4x0,5	0,50	63	4,5	3,4	3,50	5,0	21	3	47,90	040
M5x0,5	0,50	70	6,0	4,9	4,50	5,0	25	3	47,90	050
M6x0,75	0,75	80	6,0	4,9	5,20	8,0	30	3	47,90	060
M8x0,75	0,75	80	8,0	6,2	7,20	8,0	30	3	53,09	080
M8x1	1,00	90	8,0	6,2	7,00	10,0	35	3	47,90	082



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 601 ... EUR		U0 Article no. 22 186 ... EUR	
	mm	mm	mm	mm	mm	mm					
M6x0,75	0,75	80	4,5	3,4	5,2	8	3			47,37	060
M8x0,75	0,75	80	6,0	4,9	7,2	8	3			48,54	080
M8x1	1,00	90	6,0	4,9	7,0	10	3	77,26	082	44,09	082
M10x1	1,00	90	7,0	5,5	9,0	10	3	79,59	100	45,99	100
M12x1,5	1,50	100	9,0	7,0	10,5	15	4			54,79	122
M12x1	1,00	100	9,0	7,0	11,0	11	4	97,18	120	56,70	120
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	105,00	140	73,12	140
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	125,00	160	86,27	160
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	145,20	180	112,30	180
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	169,50	200	111,30	200
M22x1,5	1,50	125	18,0	14,5	20,5	17	4			125,00	220
M26x1,5	1,50	140	18,0	14,5	24,5	20	5			196,00	260
M24x1,5	1,50	140	18,0	14,5	22,5	20	5			134,60	240

Steel	10-20	10-20
Stainless steel		
Cast iron		
Non ferrous metals	10-20	10-20
Heat resistant alloys		
hardened materials		

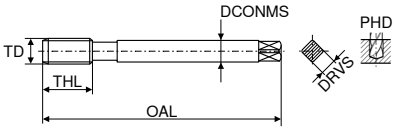
Blind hole – Machine taps, right hand

MF | SL

ST

C
2–3

ISO 2
6H



DIN 374 with reduced shank

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 182 ... EUR	
	mm	mm	mm	mm	mm	mm			
M6x0,75	0,75	80	4,5	3,4	5,2	13	3	48,74	**062**
M8x0,75	0,75	80	6,0	4,9	7,2	14	3	49,17	**082**
M8x1	1,00	90	6,0	4,9	7,0	17	3	44,94	**084**
M10x1	1,00	90	7,0	5,5	9,0	18	3	47,37	**102**
M10x0,75	0,75	90	7,0	5,5	9,2	18	3	78,31	**100**
M10x1,25	1,25	100	7,0	5,5	8,8	22	3	67,51	**104**
M9x1	1,00	90	7,0	5,5	8,0	17	3	66,77	**090**
M11x1	1,00	90	8,0	6,2	10,0	18	3	75,04	**110**
M12x1,25	1,25	100	9,0	7,0	10,8	22	3	75,04	**122**
M12x1,5	1,50	100	9,0	7,0	10,5	22	3	55,32	**124**
M12x1	1,00	100	9,0	7,0	11,0	18	3	57,97	**120**
M14x1	1,00	100	11,0	9,0	13,0	18	4	76,51	**140**
M14x1,5	1,50	100	11,0	9,0	12,5	22	3	74,51	**144**
M16x1	1,00	100	12,0	9,0	15,0	18	4	90,19	**160**
M16x1,5	1,50	100	12,0	9,0	14,5	22	3	87,96	**162**
M15x1	1,00	100	12,0	9,0	14,0	18	4	100,40	**150**
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	114,50	**182**
M18x2	2,00	125	14,0	11,0	16,0	26	3	181,30	**184**
M18x1	1,00	110	14,0	11,0	17,0	20	4	124,00	**180**
M20x1	1,00	125	16,0	12,0	19,0	20	4	126,20	**200**
M20x2	2,00	140	16,0	12,0	18,0	27	3	154,80	**204**
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	113,40	**202**
M22x2	2,00	140	18,0	14,5	20,0	27	4	157,90	**224**
M24x1,5	1,50	140	18,0	14,5	22,5	27	4	139,90	**242**
M24x1	1,00	140	18,0	14,5	23,0	20	5	172,70	**240**
M24x2	2,00	140	18,0	14,5	22,0	27	4	163,20	**244**
M22x1,5	1,50	125	18,0	14,5	20,5	25	4	128,20	**222**
M25x1,5	1,50	140	18,0	14,5	23,5	28	4	233,20	**252**
M22x1	1,00	125	18,0	14,5	21,0	20	4	165,40	**220**
M27x1,5	1,50	140	20,0	16,0	25,5	28	4	202,40	**270**
M28x2	2,00	140	20,0	16,0	26,0	28	4	267,10	**282**
M27x2	2,00	140	20,0	16,0	25,0	28	4	228,90	**272**
M30x1,5	1,50	150	22,0	18,0	28,5	28	5	232,10	**302**
M32x1,5	1,50	150	22,0	18,0	30,5	28	6	267,10	**320**
M30x2	2,00	150	22,0	18,0	28,0	28	4	245,90	**304**
M33x2	2,00	160	25,0	20,0	31,0	30	4	323,20	**332**
M36x2	2,00	170	28,0	22,0	34,0	30	5	411,20	**362**
M36x3	3,00	200	28,0	22,0	33,0	42	4	385,70	**364**
M34x1,5	1,50	170	28,0	22,0	32,5	30	6	326,50	**340**

Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
hardened materials	

Continued on next page

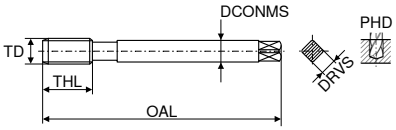
Blind hole – Machine taps, right hand

MF | SL

ST

C
2–3

ISO 2
6H



DIN 374 with reduced shank

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 182 ... EUR	
	mm	mm	mm	mm	mm	mm			
M40x1,5	1,50	170	32,0	24,0	38,5	30	6	404,90	**400**
M42x3	3,00	200	32,0	24,0	39,0	45	4	518,20	**424**
M42x2	2,00	170	32,0	24,0	40,0	30	6	489,60	**422**
M45x1,5	1,50	180	36,0	29,0	43,5	32	6	479,00	**450**
M48x2	2,00	190	36,0	29,0	46,0	32	6	675,10	**482**
M48x3	3,00	225	36,0	29,0	45,0	50	5	685,70	**484**
M48x1,5	1,50	190	36,0	29,0	46,5	32	6	562,70	**480**
M45x3	3,00	200	36,0	29,0	42,0	45	5	661,30	**454**
M52x2	2,00	190	40,0	32,0	50,0	32	6	801,20	**522**

Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
hardened materials	

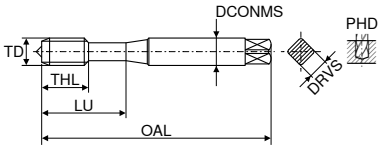
6

Blind hole – Machine taps, right hand

MF | Salo-Rex

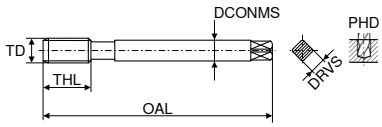
NW	VA	VA
C 2–3	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	vap.	TiN GS

HSS-E	HSS-E	HSS-E
◁ 42°	◁ 42°	◁ 45°
≤ 500 N/mm²	≤ 750 N/mm²	≤ 900 N/mm²
≤ 3xD	≤ 3xD	≤ 3xD



DIN 371 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 176 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	81,07	**040**
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	62,21	**062**
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	62,21	**060**
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	62,21	**050**



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 188 ...		U0 Article no. 22 189 ...		U0 Article no. 22 177 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
M8x1	1,00	90	6	4,9	7,0	10	3	48,54	**081**	48,54	**082**	79,06	**084**
M8x0,75	0,75	80	6	4,9	7,2	8	3					65,38	**082**
M10x1	1,00	90	7	5,5	9,0	10	4			56,38	**100**	90,19	**102**
M10x1	1,00	90	7	5,5	9,0	10	3	50,55	**100**				
M12x1	1,00	100	9	7,0	11,0	11	4	61,79	**120**	63,79	**121**	104,40	**120**
M12x1,5	1,50	100	9	7,0	10,5	15	4	55,64	**122**				
M12x1,5	1,50	100	9	7,0	10,5	15	5			62,21	**120**	100,40	**124**
M14x1,5	1,50	100	11	9,0	12,5	15	5			77,26	**140**	128,20	**144**
M14x1,5	1,50	100	11	9,0	12,5	15	4	79,59	**140**				
M16x1,5	1,50	100	12	9,0	14,5	15	4	87,33	**160**				
M16x1,5	1,50	100	12	9,0	14,5	15	5			93,36	**160**	149,50	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	5					182,30	**182**
M18x1,5	1,50	110	14	11,0	16,5	17	4	122,90	**180**				
M20x1,5	1,50	125	16	12,0	18,5	17	4	114,50	**200**				
M20x1,5	1,50	125	16	12,0	18,5	17	5			129,30	**200**	225,80	**202**
M26x1,5	1,50	140	18	14,5	24,5	20	6			251,20	**260**		
M28x1,5	1,50	140	20	16,0	26,5	20	6			293,60	**280**		
M30x1,5	1,50	150	22	18,0	28,5	22	6			290,40	**300**		

Steel			**5-12**
Stainless steel		**5-10**	**5-10**
Cast iron			
Non ferrous metals	**10-20**		
Heat resistant alloys			
Hardened materials			

Blind hole – Machine taps, right hand

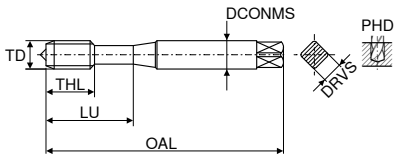
MF

UNI

C
2–3

ISO 2
6H

TiN



DIN 374 with reinforced shank

HSS-PM
40°
≤ 1000 N/mm²
≤ 2,5xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 047 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
M8x1	1,00	90	6	4,9	7,0	10	35	3	21,50	**081**
M10x1	1,00	90	7	5,5	9,0	10	35	4	28,02	**102**
M10x1,25	1,25	100	7	5,5	8,8	16	39	4	27,31	**104**
M12x1	1,00	100	9	7,0	11,0	11	40	4	31,89	**120**
M12x1,25	1,25	100	9	7,0	10,8	15	40	5	34,75	**122**
M12x1,5	1,50	100	9	7,0	10,5	15	40	5	30,88	**121**
M14x1	1,00	100	11	9,0	12,8	11	40	4	37,30	**140**
M14x1,5	1,50	100	11	9,0	12,5	15	40	5	36,58	**144**
M16x1,5	1,50	100	12	9,0	14,5	15	44	5	47,38	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	44	5	61,65	**182**
M20x1,5	1,50	125	16	12,0	18,5	17	44	5	70,31	**202**
M22x1,5	1,50	125	18	14,5	20,5	17	44	5	77,44	**222**
M24x1,5	1,50	140	18	14,5	22,5	20	48	5	78,87	**242**
M24x2	2,00	140	18	14,5	22,0	20	48	5	91,81	**244**

Steel	**10-20**
Stainless steel	**8-15**
Cast iron	**20-25**
Non ferrous metals	**20-25**
Heat resistant alloys	
Hardened materials	

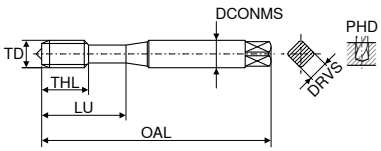
6

Blind hole – Machine taps, right hand

▲ NC = for synchronised CNC machining with minimum length compensation chuck

MF

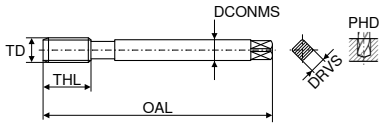
UNI	UNI	UNI NC	FE	FE-HF
C 2–3	C 2–3	E 1,5–2	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	TiN	TiN GS		TiCN



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 45° ≤ 1000 N/mm² ≤ 3xD	◁ 35° ≤ 850 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD
	T9	T9	T9	T9	T9
	Article no. 23 144 ...	Article no. 23 146 ...	Article no. 23 148 ...	Article no. 23 242 ...	Article no. 23 342 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	EUR		EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm	mm											
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	15,49	040	22,52	040			20,07	040		
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	16,51	062	26,19	062	38,31	062	20,07	062	34,85	062
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	16,92	060	26,19	060	38,31	060	20,48	060		
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	15,49	050	22,52	050	29,86	050	20,48	050	28,63	050



DIN 374 with reduced shank

	T9	T9	T9	T9	T9
	Article no. 23 145 ...	Article no. 23 147 ...	Article no. 23 149 ...	Article no. 23 243 ...	Article no. 23 343 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	EUR		EUR		EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm											
M4x0,5	0,50	63	2,8	2,1	3,5	5	3	15,08	040								
M5x0,5	0,50	70	3,5	2,7	4,5	5	3	15,08	050								
M6x0,75	0,75	80	4,5	3,4	5,2	8	3	16,10	062								
M8x0,75	0,75	80	6,0	4,9	7,2	8	3	18,24	082	27,92	082	40,86	082	23,23	082		
M8x1	1,00	90	6,0	4,9	7,0	10	3	13,35	084	26,19	084	38,31	084	21,81	084	35,05	084
M8x0,5	0,50	80	6,0	8,0	7,5	6	3							44,63	080		
M8x0,75	0,75	80	6,0	4,9	7,0	8	3									41,98	082
M10x1,25	1,25	100	7,0	5,5	8,8	16	3	15,49	104	37,09	104			42,29	104		
M10x0,75	0,75	90	7,0	5,5	9,2	10	4	29,35	100	42,59	100			48,91	100		
M10x1	1,00	90	7,0	5,5	9,0	10	4					45,04	102				
M10x1	1,00	90	7,0	5,5	9,0	10	3	13,96	102	29,35	102			25,58	102	40,25	102
M12x1,25	1,25	100	9,0	7,0	10,8	15	4	22,11	122	41,78	122			47,49	122		
M12x1,5	1,50	100	9,0	7,0	10,5	15	4	16,51	124	33,22	124			28,33	124	44,84	124
M12x1,5	1,50	100	9,0	7,0	10,5	15	5					48,61	124				
M12x1	1,00	100	9,0	7,0	11,0	11	4	18,75	120	34,44	120	51,26	120	29,45	120	46,06	120
M14x1	1,00	100	11,0	9,0	13,0	11	4	24,66	140	44,94	140			47,49	140		
M14x1,5	1,50	100	11,0	9,0	12,5	15	5					62,46	144				
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	22,42	144	41,78	144			34,85	144	56,76	144
M16x1	1,00	100	12,0	9,0	15,0	12	4	26,49	160	49,32	160			55,84	160		
M16x1,5	1,50	100	12,0	9,0	14,5	15	5					69,60	162				
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	25,68	162	49,32	162			44,43	162	65,83	162
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	35,56	182	57,47	182			57,47	182		
M18x1,5	1,50	110	14,0	11,0	16,5	17	5					88,25	182				
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	32,71	202	73,16	202			64,20	202		
M20x1,5	1,50	125	16,0	12,0	18,5	17	5					115,20	202				
M24x1,5	1,50	140	18,0	14,5	22,5	20	5	52,99	242	86,82	242			86,62	242		
M22x1,5	1,50	125	18,0	14,5	20,5	17	4	48,61	222	81,32	222			74,29	222		

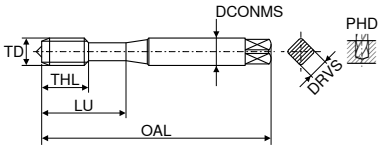
Steel	2-25	5-45	5-45	5-25	5-45
Stainless steel	2-8	5-15	5-15		
Cast iron	5-20	10-25	10-25		
Non ferrous metals	10-20	15-40	15-40		
Heat resistant alloys					
Hardened materials					

Blind hole – Machine taps, right hand

MF

VA | C 2–3 | ISO 2 6H

VA | E 1,5–2 | ISO 2 6H | TiN

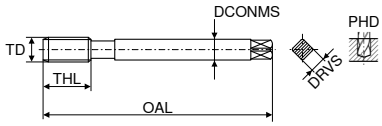


DIN 371 with reinforced shank

HSS-PM
40°
≤ 1200 N/mm²
≤ 2,5xD

HSS-E
45°
≤ 1200 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 442 ... EUR	
	mm	mm	mm	mm	mm	mm	mm			
M6x0,75	0,75	80	6	4,9	5,2	8	30	3	32,00	**062**
M5x0,5	0,50	70	6	4,9	4,5	5	25	3	27,21	**050**



DIN 374 with reduced shank

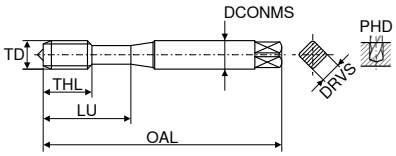
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 447 ... EUR		T9 Article no. 23 443 ... EUR	
	mm	mm	mm	mm	mm	mm					
M8x1	1,00	90	6	4,9	7,0	10	3	34,75	**084**	32,00	**084**
M8x0,75	0,75	80	6	4,9	7,2	8	3			34,14	**082**
M10x1	1,00	90	7	5,5	9,0	10	4	36,99	**102**	35,97	**102**
M12x1,5	1,50	100	9	7,0	10,5	15	5	44,84	**124**	40,56	**124**
M12x1	1,00	100	9	7,0	11,0	11	4	47,79	**120**	42,19	**120**
M14x1,5	1,50	100	11	9,0	12,5	15	5	57,88	**144**	51,46	**144**
M16x1,5	1,50	100	12	9,0	14,5	15	5	68,17	**162**	59,10	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	5	84,17	**182**		
M20x1,5	1,50	125	16	12,0	18,5	17	5	91,61	**202**		

Steel		
Stainless steel	**5-10**	**8-20**
Cast iron		
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

MF | TWIN

ST	HR	HT
C 2–3	C 2–3	D 4–5
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
	nitr.	OSM



DIN 371 with reinforced shank

	HSS-E	HSS-E	Solid carbide
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 63 HRC ≤ 1,5xD
	U0	U0	U0
	Article no. 22 144 ...	Article no. 22 146 ...	Article no. 22 817 ...
	EUR	EUR	EUR

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes						
	mm	mm	mm	mm	mm	mm	mm							
M3x0,35	0,35	56	3,5	2,7	2,65	8	18	3	43,02	030				
M4x0,5	0,50	63	4,5	3,4	3,50	10	21	3	41,43	040	45,99	040		
M5x0,5	0,50	70	6,0	4,9	4,50	11	25	3	41,43	050	45,99	050		
M6x0,5	0,50	80	6,0	4,9	5,50	13	30	3	41,43	060	45,99	060		
M6x0,75	0,75	80	6,0	4,9	5,20	13	30	3	41,43	062	45,99	062		
M8x1	1,00	90	8,0	6,2	7,00	17	35	3	41,43	084				
M8x1	1,00	90	8,0	6,2	7,10	15	35	5					342,80	080
M10x1	1,00	100	10,0	8,0	9,10	18	38	5					437,50	100
M10x1	1,00	90	10,0	8,0	9,00	18	35	4	41,43	104				
M12x1,5	1,50	110	12,0	9,0	10,60	21	41	5					507,00	120
M14x1,5	1,50	110	14,0	11,0	12,60	24	44	6					595,20	140
M16x1,5	1,50	110	16,0	12,0	14,60	24	44	6					676,70	160

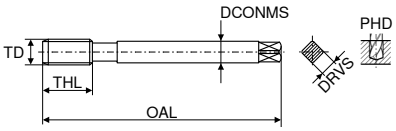
Steel	10-20	6-15	
Stainless steel			
Cast iron		6-15	
Non ferrous metals	10-20		
Heat resistant alloys		3-5	
Hardened materials			1-3

DIN 374 can be found on the next page

Through hole / Blind hole – Machine taps, right hand

MF | TWIN

ST	HR	GG
C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
	nitr.	nitr.



DIN 374 with reduced shank

	HSS-E	HSS-E	HSS-E
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 1050 N/mm² ≤ 2xD
	U0	U0	U0
	Article no. 22 171 ...	Article no. 22 209 ...	Article no. 22 173 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	EUR		EUR		EUR	
	mm	mm	mm	mm	mm	mm							
M4x0,5	0,50	63	2,8	2,1	3,5	10	3	37,73	042				
M5x0,5	0,50	70	3,5	2,7	4,5	11	3	45,25	050			42,07	050
M6x0,75	0,75	80	4,5	3,4	5,2	13	3	40,80	062			45,99	062
M6x0,5	0,50	80	4,5	3,4	5,5	13	3	42,07	060			52,03	060
M8x0,75	0,75	80	6,0	4,9	7,2	14	3	46,31	082			81,07	080
M8x1	1,00	90	6,0	4,9	7,0	17	3	37,20	084	45,99	082	81,07	082
M10x1	1,00	90	7,0	5,5	9,0	18	4	38,57	104	45,99	100	45,25	100
M10x1,25	1,25	100	7,0	5,5	8,8	22	3	45,99	106				
M10x0,75	0,75	90	7,0	5,5	9,2	18	4	59,87	102				
M11x1	1,00	90	8,0	6,2	10,0	18	4	68,04	110				
M12x1	1,00	100	9,0	7,0	11,0	18	4	44,94	122			52,03	120
M12x1,25	1,25	100	9,0	7,0	10,8	22	4	55,32	124				
M12x1,5	1,50	100	9,0	7,0	10,5	22	4	44,94	126	55,32	120	50,02	124
M14x1	1,00	100	11,0	9,0	13,0	18	4	68,04	140			77,26	140
M14x1,25	1,25	100	11,0	9,0	12,8	22	4	62,21	142				
M14x1,5	1,50	100	11,0	9,0	12,5	22	4	64,32	144	71,22	140	70,58	142
M16x1	1,00	100	12,0	9,0	15,0	18	5	70,58	160				
M16x1,5	1,50	100	12,0	9,0	14,5	22	4	63,26	162	77,26	160	73,12	160
M18x1	1,00	110	14,0	11,0	17,0	20	5	91,25	180				
M18x2	2,00	125	14,0	11,0	16,0	26	4	101,70	184				
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	84,78	182	91,88	180	97,93	180
M20x1	1,00	125	16,0	12,0	19,0	20	5	101,70	200				
M20x2	2,00	140	16,0	12,0	18,0	27	4	127,20	204				
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	92,62	202	116,60	200	102,40	200
M24x2	2,00	140	18,0	14,5	22,0	27	4	125,00	244				
M22x2	2,00	140	18,0	14,5	20,0	27	4	140,90	224				
M22x1	1,00	125	18,0	14,5	21,0	20	5	143,10	220				
M24x1	1,00	140	18,0	14,5	23,0	20	6	156,80	240				
M26x1,5	1,50	140	18,0	14,5	24,5	28	4	157,90	260			154,80	260
M24x1,5	1,50	140	18,0	14,5	22,5	27	4	111,30	242			125,00	240
M25x1,5	1,50	140	18,0	14,5	23,5	28	4	202,40	250				
M22x1,5	1,50	125	18,0	14,5	20,5	25	4	99,20	222			110,20	220
M28x1,5	1,50	140	20,0	16,0	26,5	28	5					183,40	280
M27x2	2,00	140	20,0	16,0	25,0	28	4	172,70	274				
M27x1,5	1,50	140	20,0	16,0	25,5	28	5	183,40	272				
M30x2	2,00	150	22,0	18,0	28,0	28	4	212,00	302				
M32x2	2,00	150	22,0	18,0	30,0	28	5	294,60	322				
M32x1,5	1,50	150	22,0	18,0	30,5	28	6	212,00	320				
M30x1,5	1,50	150	22,0	18,0	28,5	28	5	177,00	300			199,30	300
M33x2	2,00	160	25,0	20,0	31,0	30	5	239,50	332				
M36x2	2,00	170	28,0	22,0	34,0	30	5	297,80	362				
M36x1,5	1,50	170	28,0	22,0	34,5	30	6	265,00	360				
M35x1,5	1,50	170	28,0	22,0	33,5	30	6	326,50	350				
M42x1,5	1,50	170	32,0	24,0	40,5	30	6	390,00	420				
M42x3	3,00	200	32,0	24,0	39,0	45	5	472,70	424				
M40x2	2,00	170	32,0	24,0	38,0	30	6	344,50	402				
M50x1,5	1,50	190	36,0	29,0	48,5	32	8	498,10	500				
M52x1,5	1,50	190	40,0	32,0	50,5	32	8	569,10	520				

Steel	10-20	6-15	
Stainless steel			
Cast iron		6-15	10-20
Non ferrous metals	10-20		
Heat resistant alloys		3-5	
Hardened materials			

6

Through hole / Blind hole – Machine taps, right/left hand

▲ ES = extra short

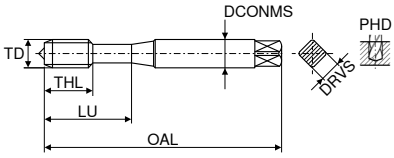
▲ LH = for left hand threads

MF | TWIN

ST ES | ST LH/ES

C 2–3 | C 2–3

ISO 2X 6HX | ISO 2X 6HX



DIN 2181 with reinforced shank

HSS-E ∢ 0° ≤ 750 N/mm² ≤ 2xD | HSS-E ∢ 0° ≤ 750 N/mm² ≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 179 ...		U0 Article no. 22 200 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
M2,5x0,35	0,35	40	2,8	2,1	2,15	9		3	61,15	025		
M3x0,35	0,35	40	3,5	2,7	2,65	8	18	3	39,74	030		
M4x0,35	0,35	45	4,5	3,4	3,65	9	22	3	56,91	040		
M4x0,5	0,50	45	4,5	3,4	3,50	9	22	3	39,74	042		
M4,5x0,5	0,50	50	6,0	4,9	4,00	10	24	3	66,13	045		
M5x0,5	0,50	50	6,0	4,9	4,50	11	25	3	39,74	050		
M6x0,5	0,50	56	6,0	4,9	5,50	12	27	3	41,76	060		
M6x0,75	0,75	56	6,0	4,9	5,20	12	27	3	39,74	062	55,32	062
M7x0,75	0,75	56	6,0	4,9	6,20	14		3	44,72	070		
M8x0,5	0,50	56	6,0	4,9	7,50	14		4	55,32	080		
M8x0,75	0,75	56	6,0	4,9	7,20	14		3	44,72	082		
M8x1	1,00	63	6,0	4,9	7,00	17		3	39,74	084	55,32	084
M9x1	1,00	63	7,0	5,5	8,00	17		4	55,32	090		
M10x0,75	0,75	63	7,0	5,5	9,20	18		4	58,50	100		
M10x1	1,00	63	7,0	5,5	9,00	18		4	41,76	102	56,91	102
M10x1,25	1,25	70	7,0	5,5	8,80	22		3	53,52	104		
M11x1	1,00	63	8,0	6,2	10,00	18		4	64,65	110		
M12x1	1,00	70	9,0	7,0	11,00	18		4	49,17	120	68,04	120
M12x1,25	1,25	70	9,0	7,0	10,80	20		4	55,32	122		
M12x1,5	1,50	70	9,0	7,0	10,50	20		4	47,90	124	66,13	124
M13x1	1,00	70	11,0	9,0	12,00	18		4	72,59	130		
M14x1	1,00	70	11,0	9,0	13,00	18		4	64,65	140		
M14x1,25	1,25	70	11,0	9,0	12,80	20		4	64,65	142		
M14x1,5	1,50	70	11,0	9,0	12,50	20		4	61,15	144	87,33	144
M15x1	1,00	70	12,0	9,0	14,00	18		5	78,31	150		
M16x1	1,00	70	12,0	9,0	15,00	18		5	73,86	160		
M16x1,5	1,50	70	12,0	9,0	14,50	20		4	68,04	162	95,91	162
M18x1	1,00	80	14,0	11,0	17,00	18		5	95,91	180		
M18x1,5	1,50	80	14,0	11,0	16,50	22		4	79,59	182	113,40	182
M18x2	2,00	80	14,0	11,0	16,00	22		4	95,91	184		
M20x1,5	1,50	80	16,0	12,0	18,50	22		4	93,36	202	129,30	202
M20x2	2,00	80	16,0	12,0	18,00	22		4	101,10	204		

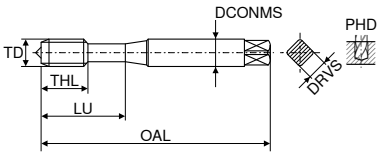
Steel	10-20	10-20
Stainless steel		
Cast iron		
Non ferrous metals	10-20	10-20
Heat resistant alloys		
Hardened materials		

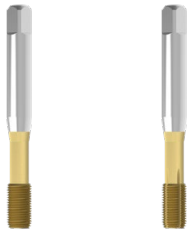
Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

MF | Spanlos

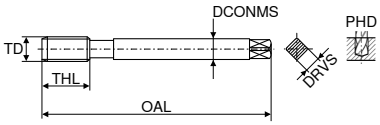
EC	EC SN
C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX
TiN	TiN





DIN 2174 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ≤ 1100 N/mm² ≤ 1,5xD U0 Article no. 22 204 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 205 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M4x0,5	0,50	63	4,5	3,4	3,8	10	21		87,33	040		
M4x0,5	0,50	63	4,5	3,4	3,8	10	21	4			98,03	040
M5x0,5	0,50	70	6,0	4,9	4,8	11	25		74,51	050		
M5x0,5	0,50	70	6,0	4,9	4,8	11	25	4			87,33	050
M6x0,5	0,50	80	6,0	4,9	5,8	13	30		87,33	060		
M6x0,5	0,50	80	6,0	4,9	5,8	13	30	5			98,03	060
M6x0,75	0,75	80	6,0	4,9	5,7	13	30		69,20	062		
M6x0,75	0,75	80	6,0	4,9	5,7	13	30	4			78,00	062
M8x0,75	0,75	80	8,0	6,2	7,7	14	30		91,25	080		
M8x0,75	0,75	80	8,0	6,2	7,7	14	30	5			87,33	080
M8x1	1,00	90	8,0	6,2	7,6	17	35		84,57	082		
M8x1	1,00	90	8,0	6,2	7,6	17	35	5			92,62	082
M10x1	1,00	90	10,0	8,0	9,6	18	35		78,00	100		
M10x1	1,00	90	10,0	8,0	9,6	18	35	5			86,05	100



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 196 ... EUR		U0 Article no. 22 197 ... EUR	
	mm	mm	mm	mm	mm	mm					
M12x1	1,0	100	9	7	11,60	18		89,97	120		
M12x1	1,0	100	9	7	11,60	18	6			99,93	120
M12x1,5	1,5	100	9	7	11,35	22		90,60	124		
M12x1,5	1,5	100	9	7	11,35	22	6			101,30	124
M14x1,5	1,5	100	11	9	13,35	22		124,00	140		
M14x1,5	1,5	100	11	9	13,35	22	6			129,30	140
M16x1,5	1,5	100	12	9	15,35	22		128,20	160		
M16x1,5	1,5	100	12	9	15,35	22	6			146,20	160
M20x1,5	1,5	125	16	12	19,35	25		185,40	200		
M20x1,5	1,5	125	16	12	19,35	25	6			204,60	200

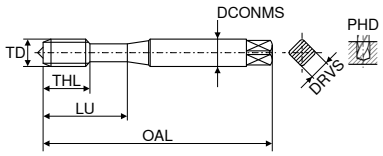
Steel	8-30	8-30
Stainless steel	8-15	8-15
Cast iron		
Non ferrous metals	12-25	12-25
Heat resistant alloys		
Hardened materials		

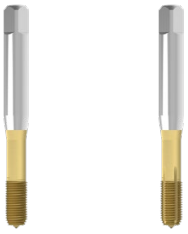
Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

MF

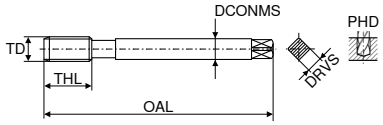
UNI	UNI SN
C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX
TiN	TiN





DIN 2174 with reinforced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ≤ 850 N/mm² ≤ 3xD T9 Article no. 23 840 ... EUR		HSS-E ≤ 850 N/mm² ≤ 3xD T9 Article no. 23 842 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
M4x0,5	0,50	63	4,5	3,4	3,80	10	21		39,13	040		
M4x0,5	0,50	63	4,5	3,4	3,80	10	21	4			43,92	040
M5x0,5	0,50	70	6,0	4,9	4,80	11	25		33,83	050		
M5x0,5	0,50	70	6,0	4,9	4,80	11	25	4			39,54	050
M6x0,5	0,50	80	6,0	4,9	5,80	13	30		39,13	060		
M6x0,5	0,50	80	6,0	4,9	5,80	13	30	5			44,12	060
M8x1	1,00	90	8,0	6,2	7,60	17	35		37,70	084		
M8x1	1,00	90	8,0	6,2	7,60	17	35	5			41,98	084
M10x1	1,00	90	10,0	8,0	9,60	18	35		42,90	102		
M10x1	1,00	90	10,0	8,0	9,60	18	35	5			46,47	102
M10x1,25	1,25	100	10,0	8,0	9,45	18	39		51,05	104		
M10x1,25	1,25	100	10,0	8,0	9,45	18	39	5			56,76	104



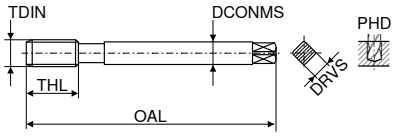
DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 841 ... EUR		T9 Article no. 23 843 ... EUR	
	mm	mm	mm	mm	mm	mm					
M12x1,25	1,25	100	9	7	11,45	22		54,82	122		
M12x1,25	1,25	100	9	7	11,45	22	6			61,96	122
M12x1,5	1,50	100	9	7	11,35	22		49,63	124		
M12x1,5	1,50	100	9	7	11,35	22	6			55,33	124
M14x1,5	1,50	100	11	9	13,35	22		61,55	144		
M14x1,5	1,50	100	11	9	13,35	22	6			68,68	144
M16x1,5	1,50	100	12	9	15,35	22		70,11	162		
M16x1,5	1,50	100	12	9	15,35	22	6			80,09	162

Steel	10-50	10-50
Stainless steel	5-20	5-20
Cast iron		
Non ferrous metals	10-50	10-50
Heat resistant alloys	5-15	5-15
Hardened materials		

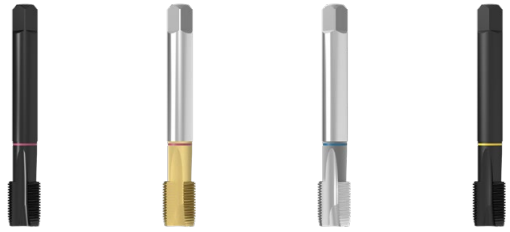
Through hole – Machine taps, right hand

G | Stabil



DIN 5156 with reduced shank

	UNI	UNI	ST	VA
	B 4–5	B 4–5	B 4–5	B 4–5
	ISO 228	ISO 228	ISO 228	ISO 228
	nitr. + vap.	TiN		nitr.



	HSS-E	HSS-E	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 750 N/mm² ≤ 4xD	0° ≤ 900 N/mm² ≤ 4xD
	U0	U0	U0	U0

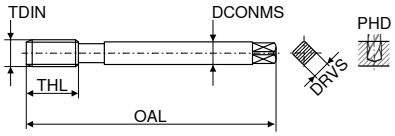
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 632 ...		Article no. 22 630 ...		Article no. 22 346 ...		Article no. 22 352 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
1/8-28	0,907	90	7	5,5	8,80	18	3	59,03	**012**	79,59	**012**	44,72	**012**	56,91	**012**
1/4-19	1,337	100	11	9,0	11,80	22	3	79,06	**025**	105,00	**025**	60,51	**025**	74,51	**025**
3/8-19	1,337	100	12	9,0	15,25	22	3	98,56	**037**	122,90	**037**	72,59	**037**	92,62	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	127,20	**050**	188,70	**050**	99,20	**050**	122,90	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	202,40	**075**			159,00	**075**	182,30	**075**
1-11	2,309	160	25	20,0	30,75	30	4	313,70	**100**			227,90	**100**	278,70	**100**

Steel	**6-20**	**6-25**	**10-20**	
Stainless steel	**4-8**	**5-10**		**5-10**
Cast iron	**6-15**	**10-20**		
Non ferrous metals		**12-25**	**10-20**	
Heat resistant alloys				
Hardened materials				

6

Through hole – Machine taps, right hand

G



DIN 5156 with reduced shank

	UNI	UNI
	B 4–5	B 4–5
	ISO 228	ISO 228
	nitr. + vap.	TiN

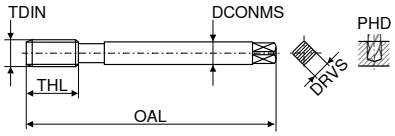
	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 3xD	0° ≤ 1100 N/mm² ≤ 3xD
	T9	T9

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 161 ...		Article no. 23 160 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
1/8-28	0,907	90	7	5,5	8,80	18	3	15,79	**012**	29,14	**012**
1/4-19	1,337	100	11	9,0	11,80	22	3	21,30	**025**	38,52	**025**
3/8-19	1,337	100	12	9,0	15,25	22	3	26,09	**037**	45,35	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	36,07	**050**	69,60	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	70,62	**075**	91,10	**075**
1-11	2,309	160	25	20,0	30,75	30	4	77,95	**100**	168,10	**100**

Steel	**2-25**	**5-45**
Stainless steel	**2-8**	**5-15**
Cast iron	**5-20**	**10-25**
Non ferrous metals	**10-20**	**15-40**
Heat resistant alloys		
Hardened materials		

Blind hole – Machine taps, right hand

G | Salo-Rex



DIN 5156 with reduced shank

								UNI		UNI		UNI		UNI		UNI		
								C 2–3		C 2–3		E 1,5–2		E 1,5–2		E 1,5–2		
								ISO 228		ISO 228		ISO 228		ISO 228		ISO 228 +0,05		
								vap.		TiN		vap.		TiN		vap.		
								HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD		HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD		
								U0		U0		U0		U0		U0		
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	**Article no. 22 633 ...**		**Article no. 22 634 ...**		**Article no. 22 635 ...**		**Article no. 22 636 ...**		**Article no. 22 639 ...**		
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR		EUR		
1/8-28	0,907	90	7	5,5	8,80	10	3	59,03	**012**	82,88	**012**							
1/8-28	0,907	90	7	5,5	8,80	10	4					60,51	**012**	82,88	**012**	79,59	**012**	
1/4-19	1,337	100	11	9,0	11,80	15	4	82,88	**025**	103,80	**025**							
1/4-19	1,337	100	11	9,0	11,80	15	5					80,23	**025**	103,80	**025**	105,00	**025**	
3/8-19	1,337	100	12	9,0	15,25	15	4	101,70	**037**	146,20	**037**							
3/8-19	1,337	100	12	9,0	15,25	15	5					99,20	**037**	146,20	**037**	130,30	**037**	
1/2-14	1,814	125	16	12,0	19,00	17	4	134,60	**050**	209,90	**050**							
1/2-14	1,814	125	16	12,0	19,00	17	5					129,30	**050**	203,50	**050**	167,40	**050**	
5/8-14	1,814	125	18	14,5	21,00	17	4	165,40	**062**									
5/8-14	1,814	125	18	14,5	21,00	17	5							234,20	**062**			
3/4-14	1,814	140	20	16,0	24,50	20	4	207,70	**075**									
3/4-14	1,814	140	20	16,0	24,50	20	5									254,40	**075**	
7/8-14	1,814	150	22	18,0	28,25	22	5	286,10	**087**									
1-11	2,309	160	25	20,0	30,75	24	5	315,90	**100**									
1-11	2,309	160	25	20,0	30,75	24	6									387,90	**100**	
1 1/4-11	2,309	170	32	24,0	39,50	25	6	508,70	**125**									
1 1/2-11	2,309	190	36	29,0	45,25	27	6	725,90	**150**									

Steel	**6-20**	**6-25**	**6-25**	**6-25**	**6-25**
Stainless steel	**4-8**	**5-10**	**4-10**	**4-10**	**4-10**
Cast iron	**6-15**	**10-20**	**6-20**	**6-20**	**6-20**
Non ferrous metals		**12-25**	**12-25**	**12-25**	**12-25**
Heat resistant alloys					
Hardened materials					

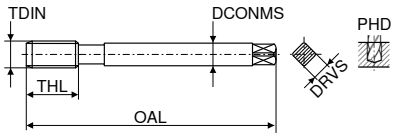
6

Blind hole – Machine taps, right hand

▲ CNC = for synchronised CNC machining with minimum length compensation chuck

G | Salo-Rex

UNI CNC	ST	VA	VA
E 1,5–2	C 2–3	E 1,5–2	E 1,5–2
ISO 228	ISO 228	ISO 228	ISO 228
TiN GS		vap.	TiN GS



DIN 5156 with reduced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 45° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 750 N/mm² ≤ 3xD	◁ 42° ≤ 900 N/mm² ≤ 3xD	◁ 45° ≤ 900 N/mm² ≤ 3xD
	U0	U0	U0	U0
	Article no. 22 624 ...	Article no. 22 354 ...	Article no. 22 355 ...	Article no. 22 358 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	EUR		EUR		EUR		EUR	
1/8-28	0,907	90	7	5,5	8,80	10	3			50,55	012			96,44	012
1/8-28	0,907	90	7	5,5	8,80	10	4	94,74	012			60,51	012		
1/4-19	1,337	100	11	9,0	11,80	15	4			70,58	025				
1/4-19	1,337	100	11	9,0	11,80	15	5	124,00	025			80,23	025	125,00	025
3/8-19	1,337	100	12	9,0	15,25	15	4			86,27	037				
3/8-19	1,337	100	12	9,0	15,25	15	5	147,30	037			99,20	037	149,50	037
1/2-14	1,814	125	16	12,0	19,00	17	4			111,30	050				
1/2-14	1,814	125	16	12,0	19,00	17	5	222,60	050			126,20	050	225,80	050
5/8-14	1,814	125	18	14,5	21,00	17	5					165,40	062		
3/4-14	1,814	140	20	16,0	24,50	20	4			177,00	075				
3/4-14	1,814	140	20	16,0	24,50	20	5					212,00	075		
1-11	2,309	160	25	20,0	30,75	24	5			269,20	100				
1-11	2,309	160	25	20,0	30,75	24	6					311,60	100		

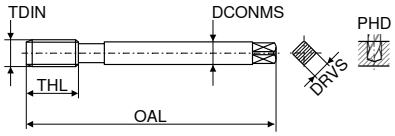
Steel	6-25	10-20		5-12
Stainless steel	5-10		5-10	5-10
Cast iron	10-20			
Non ferrous metals	12-25	10-20		
Heat resistant alloys				
Hardened materials				

Blind hole – Machine taps, right hand

G

UNI | C 2–3 | ISO 228 | vap.

UNI | C 2–3 | ISO 228 | TiN



DIN 5156 with reduced shank

								HSS-E		HSS-E	
								◁ 35° ≤ 1100 N/mm² ≤ 2,5xD		◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	
								T9		T9	
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	**Article no. 23 163 ...**		**Article no. 23 162 ...**	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
1/8-28	0,907	90	7	5,5	8,80	10	3	16,51	**012**	30,37	**012**
1/4-19	1,337	100	11	9,0	11,80	15	4	23,54	**025**	41,78	**025**
3/8-19	1,337	100	12	9,0	15,25	15	4	34,24	**037**	49,32	**037**
1/2-14	1,814	125	16	12,0	19,00	17	4	44,12	**050**	74,29	**050**
3/4-14	1,814	140	20	16,0	24,50	20	4	67,66	**075**	95,38	**075**
1-11	2,309	160	25	20,0	30,75	24	5	94,16	**100**	181,40	**100**

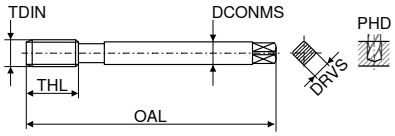
Steel	**2-25**	**5-45**
Stainless steel	**2-8**	**5-15**
Cast iron	**5-20**	**10-25**
Non ferrous metals	**10-20**	**15-40**
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

G | TWIN

ST: C 2–3 | ISO 228 X

HR: C 2–3 | ISO 228 X | nitr.



DIN 5156 with reduced shank

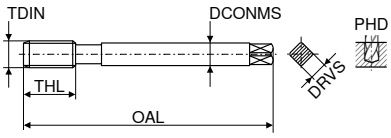
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	HSS-E ◁ 0° ≤ 750 N/mm² ≤ 2xD U0 Article no. 22 347 ... EUR		HSS-E ◁ 0° ≤ 1400 N/mm² ≤ 2xD U0 Article no. 22 339 ... EUR	
	mm	mm	mm	mm	mm	mm					
1/16-28	0,907	90	6	4,9	6,80	17	3	52,35	**006**		
1/8-28	0,907	90	7	5,5	8,80	18	4	48,54	**012**	49,17	**012**
1/4-19	1,337	100	11	9,0	11,80	22	4	58,50	**025**	66,13	**025**
3/8-19	1,337	100	12	9,0	15,25	22	4	71,22	**037**	82,88	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	97,93	**050**	114,50	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	149,50	**075**	180,10	**075**
1-11	2,309	160	25	20,0	30,75	30	5	228,90	**100**	245,90	**100**
1 1/8-11	2,309	170	28	22,0	35,50	30	5	321,20	**112**	347,60	**112**
1 1/4-11	2,309	170	32	24,0	39,50	30	6	379,40	**125**	409,00	**125**
1 3/8-11	2,309	180	36	29,0	41,75	32	6	463,10	**137**	508,70	**137**
1 1/2-11	2,309	190	36	29,0	45,25	32	6	505,50	**150**	567,00	**150**
1 3/4-11	2,309	190	40	32,0	51,00	32	6			765,10	**175**

Steel	**10-20**	**6-15**
Stainless steel		
Cast iron		**6-15**
Non ferrous metals	**10-20**	
Heat resistant alloys		**3-5**
Hardened materials		

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

G | Spanlos



DIN 2189 with reduced shank

	EC	EC SN
	C 2–3	C 2–3
	ISO 228	ISO 228
	TiN	TiN

	HSS-E ≤ 1100 N/mm² ≤ 1,5xD	HSS-E ≤ 1100 N/mm² ≤ 3xD
	U0	U0
	Article no. 22 360 ...	Article no. 22 359 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	EUR		EUR	
1/8-28	0,907	90	7	5,5	9,25	18		94,85	**012**		
1/8-28	0,907	90	7	5,5	9,25	18	5			107,00	**012**
1/4-19	1,337	100	11	9,0	12,55	22		121,90	**025**		
1/4-19	1,337	100	11	9,0	12,55	22	6			134,60	**025**
3/8-19	1,337	100	12	9,0	16,05	22		164,30	**037**		
3/8-19	1,337	100	12	9,0	16,05	22	6			184,40	**037**
1/2-14	1,814	125	16	12,0	20,10	25		219,30	**050**		
1/2-14	1,814	125	16	12,0	20,10	25	6			246,90	**050**

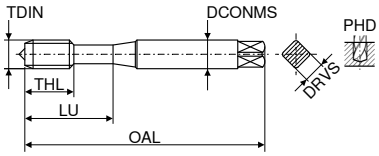
Steel	**8-30**	**8-30**
Stainless steel	**8-15**	**8-15**
Cast iron		
Non ferrous metals	**12-25**	**12-25**
Heat resistant alloys		
Hardened materials		

6

Through hole – Machine taps, right hand

UNC | Stabil

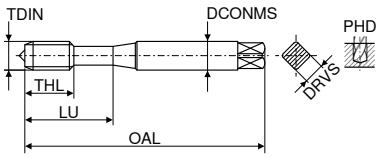
UNI	VA	Ti
B 4–5	B 4–5	B 4–5
2B	2B	2BX
nitr. + vap.	nitr.	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-PM
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 900 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD
	U0	U0	U0

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 572 ...		Article no. 22 250 ...		Article no. 22 269 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
Nr. 2-56	0,454	45	2,8	2,1	1,85	7	12	2	77,26	**002**				
Nr. 4-40	0,635	56	3,5	2,7	2,35	11	18	2	42,49	**004**				
Nr. 4-40	0,635	56	3,5	2,7	2,35	11	18	3					68,04	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	37,94	**006**	36,24	**006**	59,87	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	35,92	**008**	35,61	**008**	61,15	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	40,49	**010**	35,61	**010**	61,79	**010**
Nr. 12-24	1,058	80	6,0	4,9	4,50	16	30	3	48,54	**012**				
1/4-20	1,270	80	7,0	5,5	5,10	17	30	3	43,76	**025**	45,25	**025**	65,38	**025**
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3	50,34	**031**	45,68	**031**	72,59	**031**
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3	55,95	**037**	46,31	**037**	84,78	**037**



DIN 371 with reinforced shank

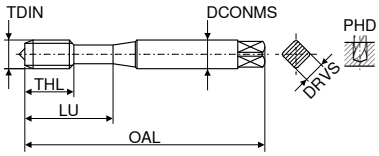
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 573 ...	
	mm	mm	mm	mm	mm	mm		EUR	
1/2-13	1,954	110	9	7,0	10,80	25	3	66,77	**050**
5/8-11	2,309	110	12	9,0	13,50	27	3	93,36	**062**
3/4-10	2,540	125	14	11,0	16,50	30	3	115,50	**075**
7/8-9	2,822	140	18	14,5	19,50	32	3	147,30	**087**
1-8	3,175	160	18	14,5	22,25	36	3	187,60	**100**

Steel	**6-20**		**2-5**
Stainless steel	**4-8**	**5-10**	
Cast iron	**6-15**		
Non ferrous metals			
Heat resistant alloys			**2-6**
Hardened materials			

Through hole – Machine taps, right hand

UNC

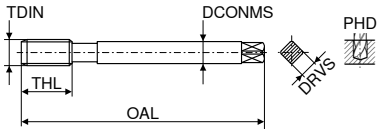
UNI	FE	FE-HF	VA
B 4–5	B 4–5	B 4–5	B 4–5
2B	2B	2B	2B
TiN		TiCN	nitr.



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 1000 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 1100 N/mm² ≤ 3xD	◁ 0° ≤ 1000 N/mm² ≤ 3xD
	T9	T9	T9	T9

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 170 ...		Article no. 23 270 ...		Article no. 23 370 ...		Article no. 23 470 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2	19,06	**004**	23,23	**004**	27,00	**004**	15,79	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	18,34	**006**	21,60	**006**	26,19	**006**	14,67	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	18,34	**008**	21,09	**008**	26,19	**008**	14,27	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	19,06	**010**	23,23	**010**	27,21	**010**	15,79	**010**
1/4-20	1,270	80	7,0	5,5	5,20	17	30	3	25,07	**025**	23,74	**025**	37,80	**025**	16,92	**025**
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3	27,41	**031**	27,00	**031**	41,17	**031**	19,26	**031**
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3	32,61	**037**	30,67	**037**	48,61	**037**	21,81	**037**



DIN 376 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 171 ...		Article no. 23 271 ...		Article no. 23 371 ...		Article no. 23 471 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
7/16-14	1,814	100	8	6,2	9,40	22	3	37,91	**043**	38,42	**043**	56,25	**043**	27,31	**043**
1/2-13	1,954	110	9	7,0	10,75	25	3	42,39	**050**	42,08	**050**	63,89	**050**	29,86	**050**
5/8-11	2,309	110	12	9,0	13,50	27	3	52,89	**062**	54,21	**062**	77,14	**062**	38,52	**062**
3/4-10	2,540	125	14	11,0	16,50	30	3	80,09	**075**	69,60	**075**	121,30	**075**	49,52	**075**

Steel	**5-45**	**5-25**	**5-45**	
Stainless steel	**5-15**			**3-10**
Cast iron	**10-25**			
Non ferrous metals	**15-40**			
Heat resistant alloys				
Hardened materials				

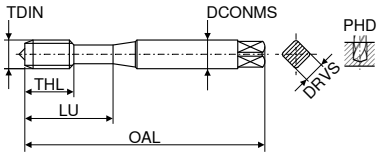
6

Blind hole – Machine taps, right hand

UNC | Salo-Rex

UNI | C 2–3 | 2B | vap.

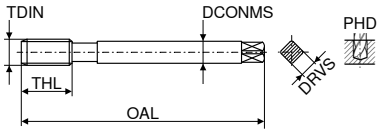
VA | C 2–3 | 2B | vap.



DIN 371 with reinforced shank

	HSS-E	HSS-E
	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 900 N/mm² ≤ 3xD
	U0	U0

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 582 ...		Article no. 22 266 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
Nr. 2-56	0,454	45	2,8	2,1	1,85	4,5	12	2	61,79	**002**		
Nr. 4-40	0,635	56	3,5	2,7	2,35	6,0	18	2	38,57	**004**		
Nr. 6-32	0,794	56	4,0	3,0	2,85	7,0	20	3	33,81	**006**	36,98	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	8,0	21	3	36,24	**008**	39,53	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	10,0	25	3	37,94	**010**	42,07	**010**
1/4-20	1,270	80	7,0	5,5	5,10	13,0	30	3	40,80	**025**	43,02	**025**
5/16-18	1,411	90	8,0	6,2	6,60	14,0	35	3	43,45	**031**	48,74	**031**
3/8-16	1,588	100	10,0	8,0	8,00	16,0	39	3	48,74	**037**	50,55	**037**



DIN 376 with reduced shank

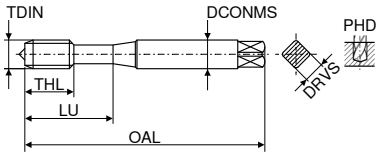
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 583 ...		Article no. 22 267 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
7/16-14	1,814	100	8	6,2	9,40	18	3	66,77	**043**		
7/16-14	1,814	100	8	6,2	9,40	18	4			84,78	**043**
1/2-13	1,954	110	9	7,0	10,80	20	3	66,77	**050**		
1/2-13	1,954	110	9	7,0	10,80	20	4			74,51	**050**
9/16-12	2,117	110	11	9,0	12,25	20	3	94,74	**056**		
5/8-11	2,309	110	12	9,0	13,50	22	3	87,96	**062**		
5/8-11	2,309	110	12	9,0	13,50	22	4			95,91	**062**
3/4-10	2,540	125	14	11,0	16,50	25	3	113,40	**075**		
3/4-10	2,540	125	14	11,0	16,50	25	4			117,60	**075**
7/8-9	2,822	140	18	14,5	19,50	27	4	135,60	**087**		
1-8	3,175	160	18	14,5	22,25	30	4	184,40	**100**		
1-8	3,175	160	18	14,5	22,25	30	5			197,10	**100**

Steel	**6-20**	
Stainless steel	**4-8**	**5-10**
Cast iron	**6-15**	
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Blind hole – Machine taps, right hand

UNC

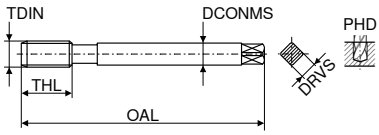
UNI	FE	FE-HF	VA
C 2–3	C 2–3	C 2–3	C 2–3
2B	2B	2B	2B
TiN		TiCN	



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 850 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD
	T9	T9	T9	T9

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 172 ...		Article no. 23 272 ...		Article no. 23 372 ...		Article no. 23 472 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2					21,60	**004**		
Nr. 4-40	0,635	56	3,5	2,7	2,30	6	18	2	20,58	**004**	23,74	**004**			26,09	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	7	20	3	18,95	**006**	22,11	**006**			24,46	**006**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3					20,48	**006**		
Nr. 8-32	0,794	63	4,5	3,4	3,50	8	21	3	20,38	**008**	23,13	**008**			25,37	**008**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3					21,70	**008**		
Nr. 10-24	1,058	70	6,0	4,9	3,90	10	25	3	21,09	**010**	24,15	**010**			26,39	**010**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3					22,42	**010**		
1/4-20	1,270	80	7,0	5,5	5,20	13	30	3	27,21	**025**	26,90	**025**			29,65	**025**
1/4-20	1,270	80	7,0	5,5	5,20	17	30	3					30,26	**025**		
5/16-18	1,411	90	8,0	6,2	6,60	14	35	3	27,21	**031**	28,53	**031**			31,28	**031**
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3					31,49	**031**		
3/8-16	1,588	100	10,0	8,0	8,00	16	39	3	33,32	**037**	31,79	**037**			34,95	**037**
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3					37,50	**037**		



DIN 376 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 173 ...		Article no. 23 273 ...		Article no. 23 373 ...		Article no. 23 473 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR		EUR	
								T9		T9		T9		T9	
7/16-14	1,814	100	8	6,2	9,40	22	3					46,77	**043**		
7/16-14	1,814	100	8	6,2	9,40	18	3	42,19	**043**	43,92	**043**			48,40	**043**
1/2-13	1,954	110	9	7,0	10,75	20	3	44,53	**050**	43,41	**050**			47,69	**050**
1/2-13	1,954	110	9	7,0	10,75	25	3					50,54	**050**		
5/8-11	2,309	110	12	9,0	13,50	22	3	54,82	**062**	60,73	**062**			66,95	**062**
5/8-11	2,309	110	12	9,0	13,50	27	3					60,53	**062**		
3/4-10	2,540	125	14	11,0	16,50	25	3	82,95	**075**	74,69	**075**			82,13	**075**
3/4-10	2,540	125	14	11,0	16,50	30	3					94,87	**075**		

Steel	**5-45**	**5-25**	**5-45**	
Stainless steel	**5-15**			**3-10**
Cast iron	**10-25**			
Non ferrous metals	**15-40**			
Heat resistant alloys				
Hardened materials				

6

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

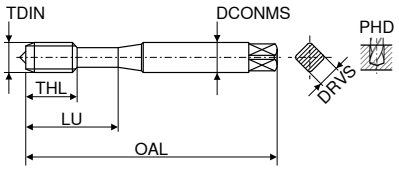
UNC | Spanlos

EC | EC SN

C 2–3 | C 2–3

2BX | 2BX

TiN | TiN



DIN 2174 with reduced shank

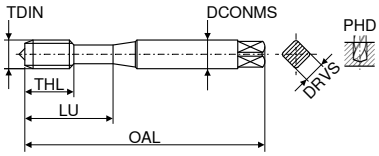
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	HSS-E ≤ 1100 N/mm² ≤ 1,5xD U0 Article no. 22 270 ... EUR		HSS-E ≤ 1100 N/mm² ≤ 3xD U0 Article no. 22 271 ... EUR	
	mm	mm	mm	mm	mm	mm	mm					
Nr. 4-40	0,635	56	3,5	2,7	2,55	11	18		54,48	**004**		
Nr. 4-40	0,635	56	3,5	2,7	2,55	11	18	3			62,95	**004**
Nr. 6-32	0,794	56	4,0	3,0	3,15	12	20		50,76	**006**		
Nr. 6-32	0,794	56	4,0	3,0	3,15	12	20	3			58,50	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,80	13	21		50,97	**008**		
Nr. 8-32	0,794	63	4,5	3,4	3,80	13	21	4			58,50	**008**
Nr. 10-24	1,058	70	6,0	4,9	4,35	15	25		56,80	**010**		
Nr. 10-24	1,058	70	6,0	4,9	4,35	15	25	4			64,32	**010**
1/4-20	1,270	80	7,0	5,5	5,75	17	30		66,02	**025**		
1/4-20	1,270	80	7,0	5,5	5,75	17	30	4			74,51	**025**
5/16-18	1,411	90	8,0	6,2	7,30	20	35		71,22	**031**		
5/16-18	1,411	90	8,0	6,2	7,30	20	35	5			80,65	**031**
3/8-16	1,588	100	10,0	8,0	8,80	22	39		85,42	**037**		
3/8-16	1,588	100	10,0	8,0	8,80	22	39	5			93,89	**037**

Steel	**8-30**	**8-30**
Stainless steel	**8-15**	**8-15**
Cast iron		
Non ferrous metals	**12-25**	**12-25**
Heat resistant alloys		
Hardened materials		

Through hole – machine taps for wire thread inserts, right hand

EG UNC | Stabil

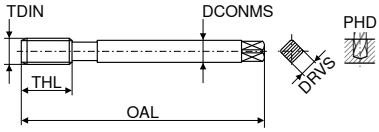
UNI | B 4–5 | 2B | nitr. + vap.



DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	U0 Article no. 22 668 ... EUR	
EG Nr. 4-40	0,635	63	4,5	3,4	3,1	13	21	3	55,95	**004**
EG Nr. 6-32	0,794	70	6,0	4,9	3,8	14	25	3	57,97	**006**
EG Nr. 8-32	0,794	80	6,0	4,9	4,4	16	30	3	55,64	**008**
EG Nr. 10-24	1,058	80	7,0	5,5	5,2	17	30	3	60,51	**010**
EG 1/4-20	1,270	90	8,0	6,2	6,7	20	35	3	62,52	**025**
EG 5/16-18	1,411	100	10,0	8,0	8,4	22	39	3	71,96	**031**



DIN 376 with reduced shank

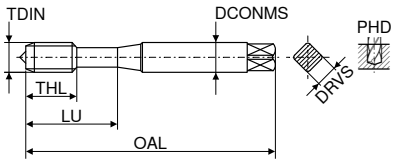
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	U0 Article no. 22 670 ... EUR	
EG 3/8-16	1,588	100	9	7,0	10,00	22	3	82,88	**037**
EG 7/16-14	1,814	110	11	9,0	11,60	26	3	100,40	**043**
EG 1/2-13	1,954	110	12	9,0	13,30	27	3	107,00	**050**
EG 5/8-11	2,309	125	14	11,0	16,50	30	3	133,50	**062**
EG 3/4-10	2,540	140	18	14,5	19,75	32	3	173,80	**075**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – machine taps for wire thread inserts, right hand

EG UNC | Salo-Rex

UNI | E 1,5–2 | 2B | vap.



DIN 371 with reinforced shank

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 672 ... EUR	
	mm	mm	mm	mm	mm	mm	mm			
EG Nr. 4-40	0,635	63	4,5	3,4	3,1	7	21	3	56,70	**004**
EG Nr. 6-32	0,794	70	6,0	4,9	3,8	8	25	3	53,09	**006**
EG Nr. 8-32	0,794	80	6,0	4,9	4,4	8	30	3	56,38	**008**
EG Nr. 10-24	1,058	80	7,0	5,5	5,2	10	30	3	59,24	**010**
EG 1/4-20	1,270	90	8,0	6,2	6,7	14	35	3	65,38	**025**
EG 5/16-18	1,411	100	10,0	8,0	8,4	16	39	3	70,58	**031**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – Machine taps, right hand

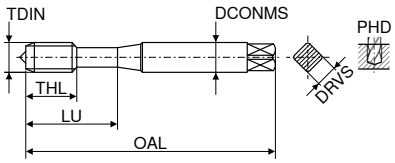
UNJC | SL

Ti

C
2–3

3BX

TiCN



DIN 371 with reinforced shank

HSS-E
15°
≤ 1200 N/mm²
≤ 2xD

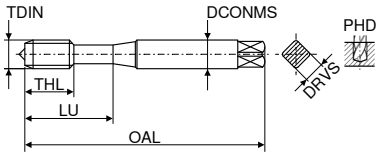
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 166 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2	74,51	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	76,09	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	75,04	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	78,96	**010**
1/4-20	1,270	80	7,0	5,5	5,25	17	30	3	101,30	**025**
3/8-16	1,588	100	10,0	8,0	8,10	22	39	3	122,90	**037**

Steel	**6-8**
Stainless steel	**4-10**
Cast iron	
Non ferrous metals	**10-12**
Heat resistant alloys	**4-6**
Hardened materials	

Through hole – Machine taps, right hand

UNF | Stabil

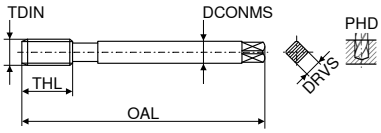
UNI	Ti
B 4–5	B 4–5
2B	2BX
nitr. + vap.	TiN



DIN 371 with reinforced shank

	HSS-E	HSS-PM
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD
	U0	U0

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	Article no. 22 602 ...	EUR	Article no. 22 317 ...	EUR
Nr. 4-48	0,529	56	3,5	2,7	2,40	11	18	2	51,82	004		
Nr. 4-48	0,529	56	3,5	2,7	2,40	11	18	3			73,12	004
Nr. 5-44	0,577	56	3,5	2,7	2,70	11	18	3			80,23	005
Nr. 6-40	0,635	56	4,0	3,0	2,95	12	20	3	45,99	006	63,79	006
Nr. 8-36	0,706	63	4,5	3,4	3,50	13	21	3	45,99	008	73,65	008
Nr. 10-32	0,794	70	6,0	4,9	4,10	15	25	3	47,37	010	66,77	010
1/4-28	0,907	80	7,0	5,5	5,50	17	30	3	52,03	025	75,04	025
5/16-24	1,058	90	8,0	6,2	6,90	17	35	3	58,71	031	85,74	031
3/8-24	1,058	90	10,0	8,0	8,50	18	35	3			90,72	037



DIN 374 with reduced shank

	U0	U0

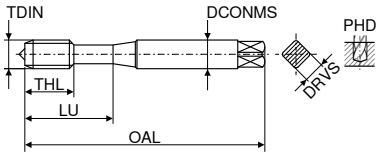
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	Article no. 22 603 ...	EUR	Article no. 22 421 ...	EUR
7/16-20	1,270	100	8	6,2	9,90	22	3	70,05	043		
1/2-20	1,270	100	9	7,0	11,50	22	3	66,77	050	110,20	050
9/16-18	1,411	100	11	9,0	12,90	22	3	102,90	056		
5/8-18	1,411	100	12	9,0	14,50	22	3	93,89	062		
3/4-16	1,588	110	14	11,0	17,50	25	4	118,70	075		
7/8-14	1,814	125	18	14,5	20,50	25	4	154,80	087		
1-12	2,117	140	18	14,5	23,25	28	4	200,30	100		
1 1/8-12	2,117	150	22	18,0	26,50	28	4	526,70	112		
1 1/4-12	2,117	150	22	18,0	29,75	28	4	577,60	125		
1 3/8-12	2,117	170	28	22,0	33,00	30	5	608,30	137		

Steel	6-20	2-5
Stainless steel	4-8	
Cast iron	6-15	
Non ferrous metals		
Heat resistant alloys		2-6
Hardened materials		

Through hole – Machine taps, right hand

UNF

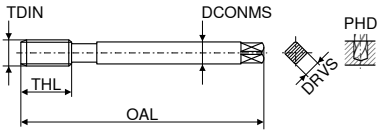
UNI	FE	VA
B 4–5	B 4–5	B 4–5
2B	2B	2B
TiN		nitr.



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 1100 N/mm² ≤ 3xD	◁ 0° ≤ 850 N/mm² ≤ 3xD	◁ 0° ≤ 1100 N/mm² ≤ 3xD
	T9	T9	T9

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 180 ...		Article no. 23 280 ...		Article no. 23 480 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
Nr. 10-32	0,794	70	6	4,9	4,1	15	25	3	22,01	**010**	26,70	**010**	18,14	**010**
1/4-28	0,907	80	7	5,5	5,5	17	30	3	28,12	**025**	28,74	**025**	20,48	**025**
5/16-24	1,058	90	8	6,2	6,9	17	35	3	31,28	**031**	31,79	**031**	22,62	**031**
3/8-24	1,058	90	10	8,0	8,5	18	35	4	34,14	**037**	33,12	**037**	23,64	**037**



DIN 374 with reduced shank

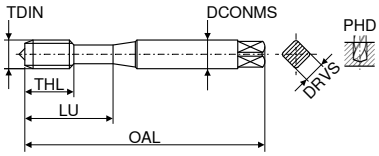
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 181 ...		Article no. 23 281 ...		Article no. 23 481 ...	
								T9		T9		T9	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
7/16-20	1,270	100	8	6,2	9,9	22	3	41,07	**043**	42,59	**043**	30,26	**043**
1/2-20	1,270	100	9	7,0	11,5	22	3	42,39	**050**	42,59	**050**	30,26	**050**
9/16-18	1,411	100	11	9,0	12,9	22	3	57,68	**056**	52,89	**056**	37,50	**056**
5/8-18	1,411	100	12	9,0	14,5	22	3	53,40	**062**	47,69	**062**	33,93	**062**
3/4-16	1,588	110	14	11,0	17,5	25	4	81,01	**075**	62,16	**075**	44,22	**075**

Steel	**5-45**	**5-25**	
Stainless steel	**5-15**		**3-10**
Cast iron	**10-25**		
Non ferrous metals	**15-40**		
Heat resistant alloys			
Hardened materials			

Blind hole – Machine taps, right hand

UNF | Salo-Rex

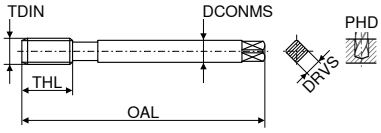
VA	UNI	UNI
E 1,5–2	C 2–3	E 1,5–2
2B	2B	2B +0,05
vap.	vap.	vap.



DIN 371 with reinforced shank

HSS-E	HSS-E	HSS-E
◁ 42° ≤ 900 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
U0	U0	U0

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 308 ...		Article no. 22 606 ...		Article no. 22 307 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
Nr. 2-64	0,397	45	2,8	2,1	1,85	4,5	12	2	63,59	**002**				
Nr. 4-48	0,529	56	3,5	2,7	2,40	6,0	18	2	47,90	**004**	45,99	**004**		
Nr. 6-40	0,635	56	4,0	3,0	2,95	7,0	20	3	45,99	**006**	40,80	**006**		
Nr. 6-40	0,635	56	4,0	3,0	3,00	7,0	20	3					64,32	**006**
Nr. 8-36	0,706	63	4,5	3,4	3,50	8,0	21	3	45,99	**008**	40,80	**008**		
Nr. 10-32	0,794	70	6,0	4,9	4,10	10,0	25	3	49,17	**010**	43,02	**010**		
Nr. 10-32	0,794	70	6,0	4,9	4,15	10,0	25	3					68,04	**010**
1/4-28	0,907	80	7,0	5,5	5,50	10,0	30	3	50,55	**025**	47,05	**025**		
1/4-28	0,907	80	7,0	5,5	5,55	10,0	30	3					71,22	**025**
5/16-24	1,058	90	8,0	6,2	6,90	10,0	35	3	56,38	**031**	53,09	**031**		
5/16-24	1,058	90	8,0	6,2	6,95	10,0	35	3					81,07	**031**
3/8-24	1,058	90	10,0	8,0	8,50	10,0	35	3	59,03	**037**				
3/8-24	1,058	90	10,0	8,0	8,55	10,0	35	3					81,07	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 607 ...		Article no. 22 409 ...	
	mm	mm	mm	mm	mm	mm		EUR		EUR	
7/16-20	1,270	100	8	6,2	9,90	13	3	66,77	**043**		
7/16-20	1,270	100	8	6,2	9,95	13	4			102,40	**043**
1/2-20	1,270	100	9	7,0	11,50	13	4	66,77	**050**		
1/2-20	1,270	100	9	7,0	11,55	13	5			98,56	**050**
9/16-18	1,411	100	11	9,0	12,90	15	4	100,40	**056**		
9/16-18	1,411	100	11	9,0	12,95	15	5			139,90	**056**
5/8-18	1,411	100	12	9,0	14,50	15	4	87,96	**062**		
5/8-18	1,411	100	12	9,0	14,55	15	5			127,20	**062**
3/4-16	1,588	110	14	11,0	17,50	17	4	120,90	**075**		
3/4-16	1,588	110	14	11,0	17,55	17	5			171,70	**075**
7/8-14	1,814	125	18	14,5	20,50	17	4	146,20	**087**		
1-12	2,117	140	18	14,5	23,25	20	4	207,70	**100**		
1-12	2,117	140	18	14,5	23,30	20	5			269,20	**100**
1 1/8-12	2,117	150	22	18,0	26,50	22	4	283,00	**112**		
1 1/4-12	2,117	150	22	18,0	29,75	22	5	323,20	**125**		
1 3/8-12	2,117	170	28	22,0	33,00	24	5	393,20	**137**		

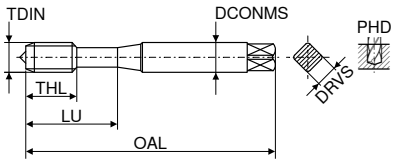
Steel		**6-20**	**6-20**
Stainless steel	**5-10**	**4-8**	**4-8**
Cast iron		**6-15**	**6-15**
Non ferrous metals			
Heat resistant alloys			
Hardened materials			

Blind hole – Machine taps, right hand

UNF | SL

Ti | C 2–3 | 2BX | vap.

Ti | C 2–3 | 3BX | vap.



DIN 371 with reinforced shank

HSS-PM
◁ 30°
≤ 1400 N/mm²
≤ 1,5xD

HSS-PM
◁ 30°
≤ 1400 N/mm²
≤ 1,5xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 302 ...		U0 Article no. 22 303 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
Nr. 10-32	0,794	70	6	4,9	4,1	10	25	3	89,44	**010**	89,44	**010**
1/4-28	0,907	80	7	5,5	5,5	10	30	3	97,18	**025**	97,18	**025**
5/16-24	1,058	90	8	6,2	6,9	10	35	3	115,50	**031**	105,00	**031**
3/8-24	1,058	90	10	8,0	8,5	10	35	3	114,50	**037**	114,50	**037**

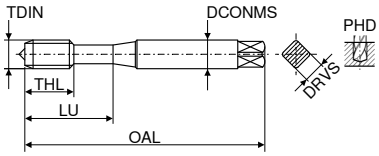
Steel	**2-5**	**2-5**
Stainless steel		
Cast iron		
Non ferrous metals		
Heat resistant alloys	**2-6**	**2-6**
Hardened materials		

6

Blind hole – Machine taps, right hand

UNF

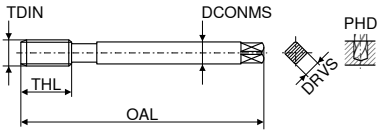
UNI	FE	VA
C 2–3	C 2–3	C 2–3
2B	2B	2B
TiN		



DIN 371 with reinforced shank

	HSS-E	HSS-E	HSS-E
	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 850 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD
	T9	T9	T9

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 23 182 ...		Article no. 23 282 ...		Article no. 23 482 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
Nr. 10-32	0,794	70	6	4,9	4,1	10	25	3	23,23	**010**	28,23	**010**	30,98	**010**
1/4-28	0,907	80	7	5,5	5,5	10	30	3	29,75	**025**	30,67	**025**	33,83	**025**
5/16-24	1,058	90	8	6,2	6,9	10	35	3	31,49	**031**	32,71	**031**	35,87	**031**
3/8-24	1,058	90	10	8,0	8,5	10	35	3	35,05	**037**	35,46	**037**	38,93	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 183 ...		Article no. 23 283 ...		Article no. 23 483 ...	
								T9		T9		T9	
	mm	mm	mm	mm	mm	mm		EUR		EUR		EUR	
7/16-20	1,270	100	8	6,2	9,9	13	3	42,19	**043**	43,92	**043**	48,40	**043**
1/2-20	1,270	100	9	7,0	11,5	13	4	44,53	**050**	44,53	**050**	48,81	**050**
9/16-18	1,411	100	11	9,0	12,9	15	4	60,12	**056**	62,16	**056**	68,48	**056**
5/8-18	1,411	100	12	9,0	14,5	15	4	54,41	**062**	54,62	**062**	60,12	**062**
3/4-16	1,588	110	14	11,0	17,5	17	4	86,31	**075**	73,88	**075**	81,32	**075**

Steel	**5-45**	**5-25**	
Stainless steel	**5-15**		**3-10**
Cast iron	**10-25**		
Non ferrous metals	**15-40**		
Heat resistant alloys			
Hardened materials			

Through hole / Blind hole – Machine thread formers, right hand

▲ SN = Thread formers with lubrication grooves

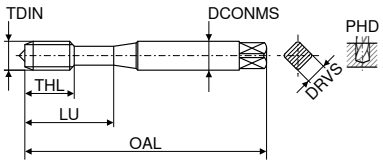
UNF | Spanlos

EC
SN

C
2–3

2BX

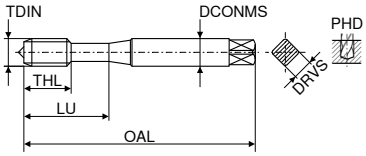
TiN



DIN 2174 with reduced shank

HSS-E
≤ 1100 N/mm²
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 312 ... EUR	
	mm	mm	mm	mm	mm	mm	mm			
Nr. 4-48	0,529	56	3,5	2,7	2,62	11	18	3	69,94	**004**
Nr. 6-40	0,635	56	4,0	3,0	3,22	12	20	3	64,96	**006**
Nr. 8-36	0,706	63	4,5	3,4	3,85	13	21	4	66,66	**008**
Nr. 10-32	0,794	70	6,0	4,9	4,45	15	25	4	72,06	**010**
1/4-28	0,907	80	7,0	5,5	5,95	17	30	4	84,57	**025**



DIN 2174 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 313 ... EUR	
	mm	mm	mm	mm	mm	mm			
7/16-20	1,27	100	8	6,2	10,55	22	6	126,20	**043**
1/2-20	1,27	100	9	7,0	12,15	22	6	129,30	**050**

Steel	**8-30**
Stainless steel	**8-15**
Cast iron	
Non ferrous metals	**12-25**
Heat resistant alloys	
Hardened materials	

6

Through hole – machine taps for wire thread inserts, right hand

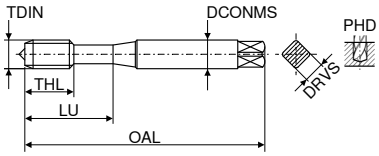
EG UNF | Stabil

UNI

B
4–5

2B

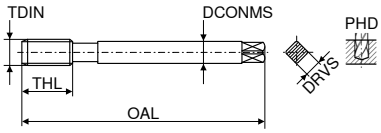
nitr. + vap.



DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 676 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
EG Nr. 4-48	0,529	56	4	3,0	3,0	9	20	3	72,59	**004**
EG Nr. 6-40	0,635	70	6	4,9	3,7	11	25	3	70,05	**006**
EG Nr. 8-36	0,706	80	6	4,9	4,4	13	30	3	70,05	**008**
EG Nr. 10-32	0,794	80	6	4,9	5,1	13	30	3	74,51	**010**
EG 1/4-28	0,907	90	8	6,2	6,6	17	35	3	79,59	**025**



DIN 374 with reduced shank

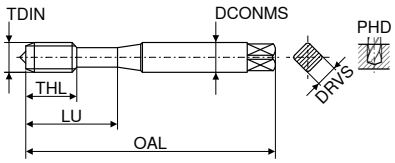
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 677 ...	
	mm	mm	mm	mm	mm	mm		EUR	
EG 3/8-24	1,058	90	8	6,2	9,80	18	4	97,18	**037**
EG 7/16-20	1,270	100	9	7,0	11,50	22	3	121,90	**043**
EG 1/2-20	1,270	100	11	9,0	13,10	22	3	114,50	**050**
EG 5/8-18	1,411	110	14	11,0	16,25	25	4	174,80	**062**
EG 3/4-16	1,588	125	16	12,0	19,50	25	4	223,60	**075**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – machine taps for wire thread inserts, right hand

EG UNF | Salo-Rex

UNI | E 1,5–2 | 2B | vap.



DIN 371 with reinforced shank

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 680 ...	
	mm	mm	mm	mm	mm	mm	mm		EUR	
EG Nr. 4-48	0,529	56	4	3,0	3,0	7	20	3	68,04	**004**
EG Nr. 6-40	0,635	70	6	4,9	3,7	8	25	3	67,51	**006**
EG Nr. 8-36	0,706	80	6	4,9	4,4	8	30	3	70,58	**008**
EG Nr. 10-32	0,794	80	6	4,9	5,1	8	30	3	74,51	**010**
EG 1/4-28	0,907	90	8	6,2	6,6	10	35	3	81,70	**025**

Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

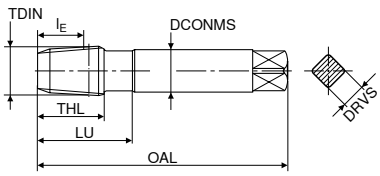
6

Blind hole – Machine taps, right hand

NPT | Salo-Rex

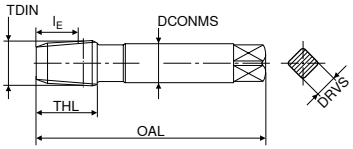
VA | C 2–3 | vap.

VA | C 2–3 | TiN



DIN 371 with reinforced shank

									HSS-E ◁ 35° ≤ 900 N/mm²		HSS-E ◁ 42° ≤ 1100 N/mm²	
									U0		U0	
TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	LU	Flutes	**Article no. 22 364 ...**		**Article no. 22 365 ...**	
	mm	mm	mm	mm	mm	mm	mm		EUR		EUR	
1/16-27	0,941	90	8	6,2	9,24	13,0	26,0	3	92,62	**006**		
1/8-27	0,941	90	10	8,0	9,28	13,0	26,0	3	107,00	**012**		
1/8-27	0,941	90	10	8,0	9,28	12,0	26,0	4			139,90	**012**
1/4-18	1,411	100	14	11,0	13,55	19,5	34,5	3	125,00	**025**		
1/4-18	1,411	100	14	11,0	13,55	18,0	34,5	4			143,10	**025**



DIN 374 with reduced shank

									U0		U0	
TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	Flutes		**Article no. 22 371 ...**		**Article no. 22 372 ...**	
	mm	mm	mm	mm	mm	mm			EUR		EUR	
3/8-18	1,411	110	14	11	13,86	19,5	3		153,70	**037**		
3/8-18	1,411	110	14	11	13,86	18,0	5				232,10	**037**
1/2-14	1,814	140	16	12	18,11	25,0	5		223,60	**050**		
1/2-14	1,814	140	16	12	18,11	23,0	5				328,50	**050**
3/4-14	1,814	150	20	16	18,59	26,0	5		301,00	**075**		
1-11,5	2,209	170	25	20	22,31	32,0	5		440,90	**100**		

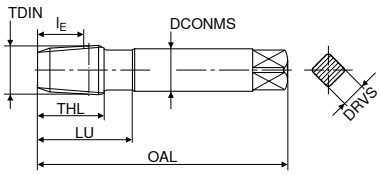
Steel		**2-4**
Stainless steel	**2-4**	**2-4**
Cast iron		
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

NPT | TWIN

VG

C
2–3

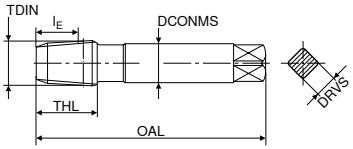


DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²

6

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	LU mm	Flutes	U0 Article no. 22 374 ... EUR	
1/16-27	0,941	90	8	6,2	9,24	13,0	26,0	3	66,77	**006**
1/8-27	0,941	90	10	8,0	9,28	13,0	26,0	3	86,80	**012**
1/4-18	1,411	100	14	11,0	13,55	19,5	34,5	3	91,88	**025**



DIN 374 with reduced shank

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Flutes	U0 Article no. 22 375 ... EUR	
3/8-18	1,411	110	14	11	13,86	19,5	3	114,50	**037**
1/2-14	1,814	140	16	12	18,11	25,0	5	153,70	**050**
3/4-14	1,814	150	20	16	18,59	26,0	5	198,20	**075**
1-11,5	2,209	170	25	20	22,31	30,0	5	271,30	**100**

Steel	**2-6**
Stainless steel	
Cast iron	**4-6**
Non ferrous metals	**4-6**
Heat resistant alloys	
Hardened materials	

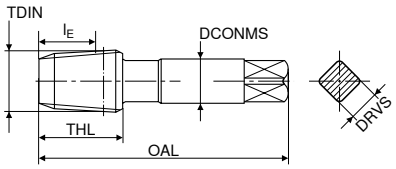
Through hole / Blind hole – Machine taps, right hand

▲ ES = extra short

NPT | TWIN

ST
ES

C
2–3



DIN 2181 with reduced shank

HSS-E
0°
≤ 750 N/mm²

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Flutes	U0 Article no. 22 361 ... EUR	
1/16-27	0,941	63	6	4,9	9,24	13,0	4	56,91	**006**
1/8-27	0,941	63	7	5,5	9,28	13,0	5	59,87	**012**
1/4-18	1,411	63	11	9,0	13,55	19,5	5	71,22	**025**
3/8-18	1,411	70	12	9,0	13,86	19,5	5	89,44	**037**
1/2-14	1,814	80	16	12,0	18,11	23,0	5	119,80	**050**
3/4-14	1,814	100	20	16,0	18,59	26,0	6	150,50	**075**
1-11,5	2,209	110	25	20,0	22,31	32,0	6	224,60	**100**
2-11,5	2,209	160	45	35,0	23,22	36,0	7	711,20	**200**

Steel	**4-6**
Stainless steel	
Cast iron	
Non ferrous metals	**4-6**
Heat resistant alloys	
Hardened materials	

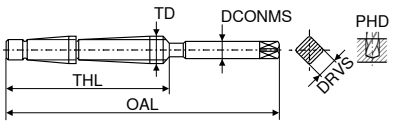
Through hole – Machine taps, right hand

- single finishing trapezoidal taps (2 steps)
- do not reverse

Tr

ST

7H



Factory standard

HSS-E
5°
≤ 900 N/mm²
≤ 2xD

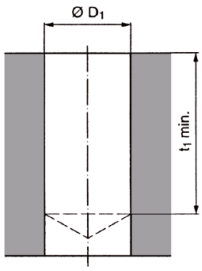
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 402 ... EUR	
	mm	mm	mm	mm	mm	mm			
Tr 8	1,5	105	6	4,9	6,60	55	3	498,10	**080**
Tr 9	2,0	130	7	5,5	7,20	70	3	498,10	**090**
Tr 10	2,0	130	7	5,5	8,20	70	3	498,10	**102**
Tr 10	3,0	155	7	5,5	7,25	95	3	458,90	**103**
Tr 12	3,0	160	9	7,0	9,25	95	3	550,10	**123**
Tr 14	3,0	170	10	8,0	11,25	100	3	637,90	**143**
Tr 14	4,0	195	10	8,0	10,25	125	3	539,50	**144**
Tr 16	4,0	225	12	9,0	12,25	130	3	539,50	**164**
Tr 18	4,0	225	14	11,0	14,25	116	3	556,40	**184**
Tr 20	4,0	225	16	12,0	16,25	130	3	644,40	**204**
Tr 22	5,0	260	16	12,0	17,25	160	3	750,40	**225**
Tr 24	5,0	285	18	14,5	19,25	165	3	868,00	**245**

Steel	●
Stainless steel	
Cast iron	
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

6

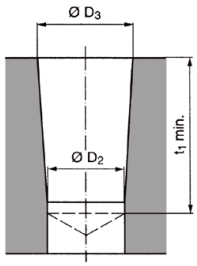
Core hole diameters for taper threads (taper 1:16)

Pre-drilling of cylindrical holes without reamer



		NPT		NPTF				Rc	
Ø D_1 inch	Pitch Gg/1"	Ø D_1 mm	t_1 min. mm	Ø D_1 mm	t_1 min. mm	Ø D_1 inch	Pitch Gg/1"	Ø D_1 mm	t_1 min. mm
1/16	27	6,15	12	6,1	12	1/16	28	6,2	11,9
1/8	27	8,5	12	8,45	12	1/8	28	8,2	11,9
1/4	18	11	17,5	10,9	17,5	1/4	19	10,85	16,3
3/8	18	14,5	17,6	14,3	17,6	3/8	19	14,5	18,1
1/2	14	17,85	22,9	17,6	22,9	1/2	14	18	24
3/4	14	23,2	23	23	23	3/4	14	23,5	25,3
1	11½	29,5	27,4	28,75	27,4	1	11	29,5	30,6
1¼	11½	37,8	28,1	37,5	28,1				
1½	11½	44	28,4	43,75	28,4				
2	11½	56	28,4	55,75	28,4				

Pre-drilling of cylindrical holes and conical boring with reamer

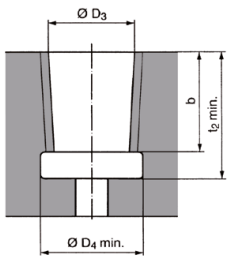


Taper 1:16

		NPT			NPTF		
Ø D_1 inch	Pitch Gg/1"	Ø D_2 mm	Ø D_3 mm	t_1 min. mm	Ø D_2 mm	Ø D_3 mm	t_1 min. mm
1/16	27	5,95	6,39	12	5,95	6,41	12
1/8	27	8,25	8,74	12	8,25	8,76	12
1/4	18	10,75	11,36	17,5	10,75	11,4	17,5
3/8	18	14,1	14,8	17,6	14,1	14,84	17,6
1/2	14	17,5	18,32	22,9	17,5	18,33	22,9
3/4	14	22,7	23,67	23	22,7	23,68	23
1	11½	28,6	29,69	27,4	28,6	29,72	27,4
1¼	11½	37,3	38,45	28,1	37,3	38,48	28,1
1½	11½	43,4	44,52	28,4	43,4	44,5	28,4
2	11½	55,5	56,56	28,4	55,5	56,59	28,4

		Rc		
Ø D_1 inch	Pitch Gg/1"	Ø D_2 mm	Ø D_3 mm	t_1 min. mm
1/16	28	6,1	6,56	11,9
1/8	28	8,1	8,57	11,9
1/4	19	10,75	11,45	17,7
3/8	19	14,25	14,95	18,1
1/2	14	17,75	18,63	24
3/4	14	23	24,12	25,3
1	11	29	30,29	30,6

Recommendation for the pre-drilling of blind hole threads



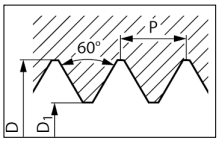
Taper 1:16

		NPT				NPTF			
Ø D_1 inch	Pitch Gg/1"	Ø D_3 mm	b mm	t_2 min. mm	Ø D_4 mm	Ø D_3 mm	b mm	t_2 min. mm	Ø D_4 min. mm
1/16	27	6,39	7	10	7,6	6,41	8	11	7,4
1/8	27	8,74	7	10	10	8,76	8	11	9,8
1/4	18	11,36	10,2	14,5	13,1	11,4	11,6	15,5	12,9
3/8	18	14,8	10,6	15	16,5	14,84	12	16	16,3
1/2	14	18,32	13,8	19	20,5	18,33	15,6	20,5	20,3
3/4	14	23,67	14,2	20	25,8	23,68	16	21,5	25,6
1	11½	29,69	17	24	32,2	29,72	19,2	26	32
1¼	11½	38,45	17,5	24,5	41	38,48	19,7	26,5	40,8
1½	11½	44,52	17,5	24,5	47,2	44,5	19,7	26,5	47
2	11½	56,56	18	25	59,2	56,59	20,2	27	59

		Rc			
Ø D_1 inch	Pitch Gg/1"	Ø D_3 mm	b mm	t_2 min. mm	Ø D_4 min. mm
1/16	28	6,56	5,6	9,5	7,6
1/8	28	8,57	5,6	9,5	9,6
1/4	19	11,45	8,4	14	13
3/8	19	14,95	8,8	14,4	16,5
1/2	14	18,63	11,4	19	20,6
3/4	14	24,12	12,7	20,3	26
1	11	30,29	14,5	24,3	32,8

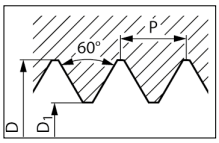
Tapped hole pilot diameter

M ISO metric coarse threads 6H to DIN 13 and DIN ISO 965-1 (M1–M1,4 = 5H)



Thread nominal Ø		Ø D_1		Core hole	Thread nominal Ø		Ø D_1		Core hole
D	P	min.	max.		D	P	min.	max.	
M1	0,25	0,729	0,785	0,75	M12	1,75	10,106	10,441	10,2
M1,1	0,25	0,829	0,885	0,85	M14	2,0	11,835	12,210	12
M1,2	0,25	0,929	0,985	0,95	M16	2,0	13,835	14,210	14
M1,4	0,3	1,075	1,142	1,1	M18	2,5	15,294	15,744	15,5
M1,6	0,35	1,221	1,321	1,25	M20	2,5	17,294	17,744	17,5
M1,8	0,35	1,421	1,521	1,45	M22	2,5	19,294	19,744	19,5
M2	0,4	1,567	1,679	1,6	M24	3,0	20,752	21,252	21
M2,2	0,45	1,713	1,838	1,75	M27	3,0	23,752	24,252	24
M2,5	0,45	2,013	2,138	2,05	M30	3,5	26,211	26,771	26,5
M3	0,5	2,459	2,599	2,5	M33	3,5	29,211	29,771	29,5
M3,5	0,6	2,850	3,010	2,9	M36	4,0	31,670	32,270	32
M4	0,7	3,242	3,422	3,3	M39	4,0	34,670	35,270	35
M4,5	0,75	3,688	3,878	3,7	M42	4,5	37,129	37,799	37,5
M5	0,8	4,134	4,334	4,2	M45	4,5	40,129	40,799	40,5
M6	1,0	4,917	5,153	5	M48	5,0	42,587	43,297	43
M7	1,0	5,917	6,153	6	M52	5,0	46,587	47,297	47
M8	1,25	6,647	6,912	6,8	M56	5,5	50,046	50,796	50,5
M9	1,25	7,647	7,912	7,8	M60	5,5	54,046	54,796	54,5
M10	1,5	8,376	8,676	8,5	M64	6,0	57,505	58,305	58
M11	1,5	9,376	9,676	9,5	M68	6,0	61,505	62,305	62

MF ISO metric fine threads 6H to DIN 13 and DIN ISO 965-1



Thread nominal Ø			Ø D_1		Core hole	Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.		D	x	P	min.	max.	
M2	x	0,25	1,729	1,774	1,75	M20	x	1,0	18,917	19,153	19
M2,2	x	0,25	1,929	1,974	1,95	M20	x	1,5	18,376	18,676	18,5
M2,5	x	0,35	2,121	2,221	2,15	M20	x	2,0	17,835	18,210	18
M3	x	0,35	2,621	2,721	2,65	M24	x	1,5	22,376	22,676	22,5
M3,5	x	0,35	3,121	3,221	3,15	M30	x	2,0	27,835	28,210	28
M4	x	0,35	3,621	3,721	3,65	M36	x	1,5	34,376	34,676	34,5
M4	x	0,5	3,459	3,599	3,5	M36	x	3,0	32,752	33,252	33
M4,5	x	0,5	3,959	4,099	4	M42	x	2,0	39,835	40,210	40
M5	x	0,5	4,459	4,599	4,5	M48	x	1,5	46,376	46,676	46,5
M6	x	0,5	5,459	5,599	5,5	M48	x	3,0	44,752	45,252	45
M6	x	0,75	5,188	5,378	5,2	M48	x	4,0	43,670	44,270	44
M8	x	0,75	7,188	7,378	7,2	M56	x	1,5	54,376	54,676	54,5
M8	x	1,0	6,917	7,153	7	M56	x	2,0	53,835	54,210	54
M10	x	0,75	9,188	9,378	9,2	M56	x	3,0	52,752	53,252	53
M10	x	1,0	8,917	9,153	9	M56	x	4,0	51,670	52,270	52
M10	x	1,25	8,647	8,912	8,8	M64	x	3,0	60,752	61,252	61
M12	x	1,0	10,917	11,153	11	M64	x	4,0	59,670	60,270	60
M12	x	1,5	10,376	10,676	10,5	M72	x	4,0	67,670	68,270	68
M14	x	1,25	12,647	12,912	12,8	M80	x	6,0	73,505	74,305	74
M16	x	1,0	14,917	15,153	15	M95	x	6,0	88,505	89,305	89
M16	x	1,5	14,376	14,676	14,5	M110	x	6,0	103,505	104,305	104

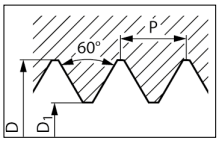
Dimensions in mm; P = Pitch

Thread former pilot hole diameter

M ISO metric coarse threads 6H to DIN 13 and DIN ISO 965-1 (M1–M1,4 = 5H)

Thread nominal Ø		Ø D_1		Core hole
D	P	min.	max.	
M1	0,25	0,89		0,9
M1,2	0,25	1,09		1,1
M1,4	0,3	1,26		1,26
M1,6	0,35	1,45		1,45
M1,8	0,35	1,65		1,65
M2	0,4	1,83	1,86	1,85
M2,2	0,45	2,00	2,04	2,0
M2,5	0,45	2,30	2,34	2,3
M3	0,5	2,77	2,82	2,8
M3,5	0,6	3,23	3,28	3,25
M4	0,7	3,68	3,73	3,7
M4,5	0,75	4,15	4,21	4,15
M5	0,8	4,63	4,68	4,65

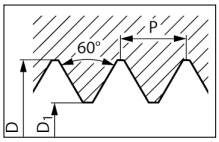
Thread nominal Ø		Ø D_1		Core hole
D	P	min.	max.	
M6	1	5,51	5,59	5,55
M7	1	6,51	6,59	6,55
M8	1,25	7,39	7,48	7,4
M9	1,25	8,39	8,48	8,4
M10	1,5	9,25	9,35	9,3
M11	1,5	10,25	10,35	10,3
M12	1,75	11,12	11,25	11,2
M14	2	13,00	13,15	13,0
M16	2	15,00	15,15	15,0
M18	2,5	16,72	16,90	16,8
M20	2,5	18,72	18,90	18,8
M22	2,5	20,72	20,9	20,8
M24	3	22,46	22,7	22,5



MF ISO metric fine threads 6H to DIN 13 and DIN ISO 965-1

Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.	
M2	x	0,25	1,89		1,9
M2,2	x	0,25	2,09		2,1
M2,5	x	0,25	2,39		2,4
M2,5	x	0,35	2,35		2,35
M3	x	0,25	2,89		2,9
M3	x	0,35	2,85		2,85
M3,5	x	0,35	3,35		3,35
M3,5	x	0,5	3,27	3,32	3,3
M4	x	0,35	3,85		3,85
M4	x	0,5	3,77	3,82	3,8
M4,5	x	0,5	4,27	4,32	4,3
M5	x	0,5	4,77	4,82	4,8
M5	x	0,75	4,65	4,71	4,65
M5,5	x	0,5	5,27	5,32	5,3
M6	x	0,5	5,78	5,83	5,8
M6	x	0,75	5,65	5,71	5,65
M7	x	0,5	6,78	6,83	6,8
M7	x	0,75	6,65	6,71	6,65
M8	x	0,5	7,78	7,83	7,8
M8	x	0,75	7,65	7,71	7,65
M8	x	1,0	7,51	7,59	7,55
M9	x	0,5	8,78	8,83	8,8
M9	x	0,75	8,65	8,71	8,65
M9	x	1,0	8,51	8,59	8,55
M10	x	0,5	9,78	9,83	9,8
M10	x	0,75	9,65	9,71	9,65
M10	x	1,0	9,51	9,59	9,55
M10	x	1,25	9,39	9,48	9,4
M11	x	0,75	10,65	10,71	10,7
M11	x	1,0	10,51	10,59	10,5
M12	x	0,75	11,66	11,72	11,7

Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.	
M12	x	1,0	11,52	11,6	11,5
M12	x	1,25	11,4	11,49	11,4
M12	x	1,5	11,26	11,36	11,3
M13	x	0,75	12,66	12,72	12,7
M13	x	1,0	12,52	12,6	12,5
M13	x	1,5	12,26	12,36	12,3
M14	x	0,75	13,66	13,72	13,7
M14	x	1,0	13,52	13,6	13,5
M14	x	1,25	13,4	13,49	13,4
M14	x	1,5	13,26	13,36	13,3
M15	x	0,75	14,66	14,72	14,7
M15	x	1,0	14,52	14,6	14,5
M15	x	1,5	14,26	14,36	14,3
M16	x	0,75	15,66	15,72	15,7
M16	x	1,0	15,52	15,6	15,5
M16	x	1,5	15,26	15,36	15,3
M18	x	1,0	17,52	17,6	17,5
M18	x	1,5	17,26	17,36	17,3
M18	x	2,0	17	17,15	17
M20	x	1,0	19,52	19,6	19,5
M20	x	1,5	19,26	19,36	19,3
M20	x	2,0	19	19,15	19
M22	x	1,5	21,26	21,36	21,3
M22	x	2,0	21	21,15	21
M24	x	1,5	23,26	23,38	23,3
M24	x	2,0	23,01	23,16	23
M25	x	1,5	24,26	24,38	24,3
M26	x	1,5	25,26	25,38	25,3
M27	x	2,0	26,01	26,16	26
M28	x	1,5	27,26	27,38	27,25
M30	x	1,5	29,26	29,38	29,25
M30	x	2,0	29,01	29,16	29

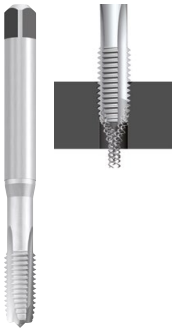


Dimensions in mm; P = Pitch

Tap Type Explanation

Stabil

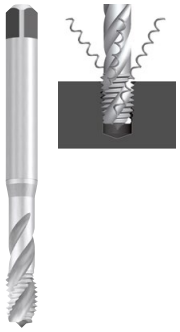
Through hole tap type Stabil



- for through holes up to 4xD
- lead form B: 3,5–5 cutting leads, with spiral point
- straight Flutes
- also suitable for synchronised machining, with Wedlon flat and with extra long version
- due to the special geometry of the flutes, the chips are removed in the direction of cut

Salo-Rex

Blind hole tap type Salo-Rex



- for blind holes up to 3xD
- lead form C: 2–3 cutting leads, without spiral point
- lead form E: 1,5–2 cutting leads, without spiral point
- (35°, 42°, 45°, 50°) right hand helix
- also suitable for syncronised machining, with Weldon flat, with extra long version and through coolant
- the high helix angle ensures chips are discharged effectively against the direction of cut

6

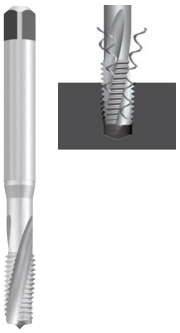
TWIN

Through and blind hole tap type TWIN

- for blind and through holes up to 2xD
- lead form C: 2–3 cutting leads, without spiral point
- lead form D: 3,5–5 cutting leads, without spiral point
- lead form E: 1,5–2 cutting leads, without spiral point
- straight Flutes
- for steel, short chipping and hardened materials to 55 (62) HRc
- also with extra long version and through coolant

SL

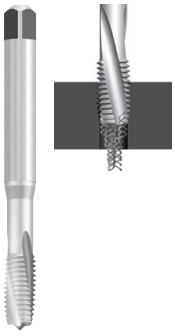
Blind hole tap type SL



- for blind holes up to 2xD
- lead form C: 2–3 cutting leads, without spiral point
- lead form E: 1,5–2 cutting leads, without spiral point
- (15°, 25°, 30°) slow right hand helix
- for steel, titanium alloys and Inconel 718
- also suitable for synchronised machining, with extra long version and through coolant
- also suitable for difficult operating conditions such as cross holes

DL

Through hole tap type DL



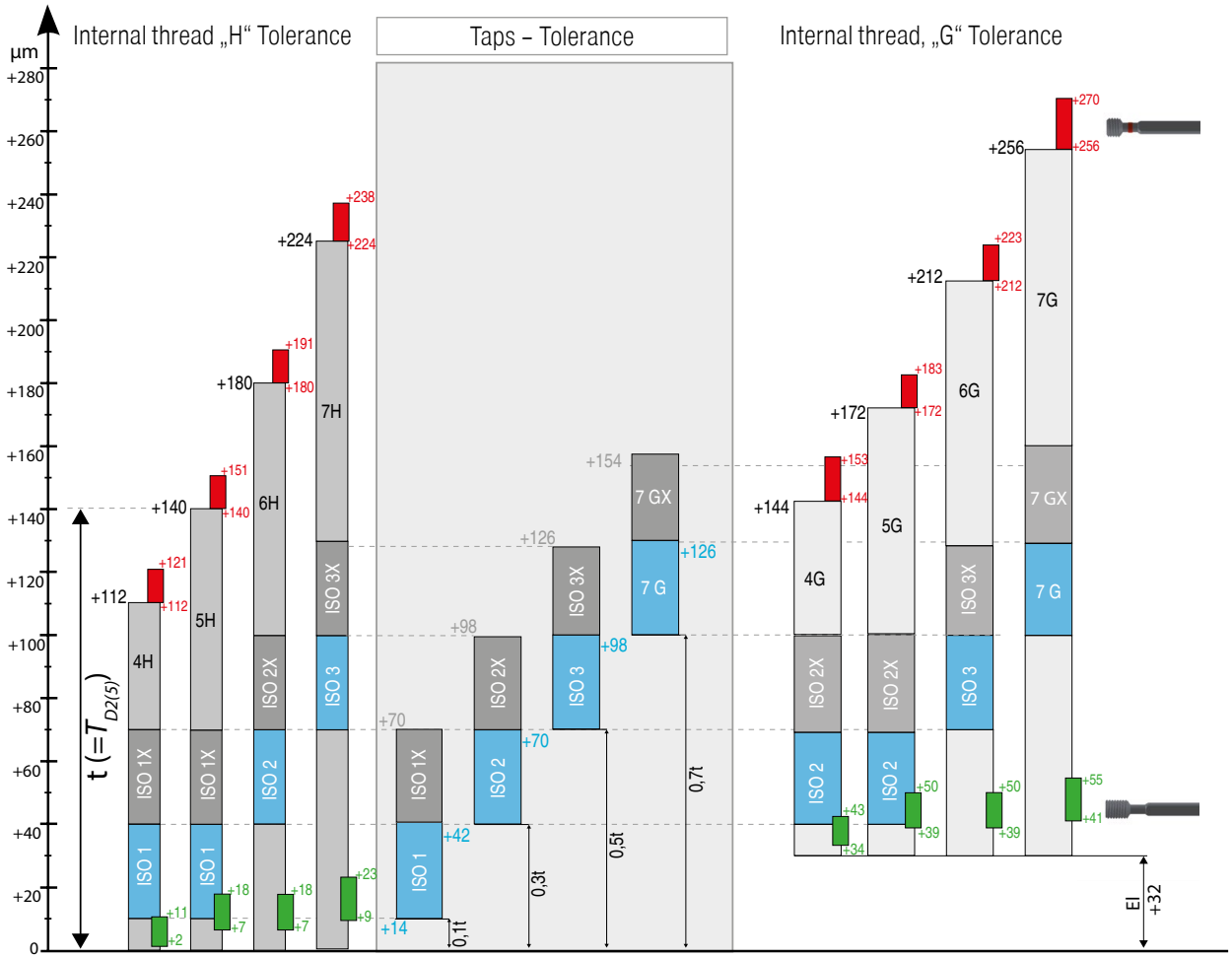
- for through holes up to 4xD
- lead form C: 3,5–5 cutting leads, without spiral point
- 15° left hand helix
- suitable for steel, titanium alloys and Inconel 718
- the chips are discharged in the direction of cut

Spanlos

Thread former type Spanlos

- for blind and through holes up to 3xD
- lead form C: 2–3 cutting leads, without spiral point
- for cold formable materials up to 1400 N/mm^2
- suitable for synchronised machining, with lubrication grooves and internal cooling

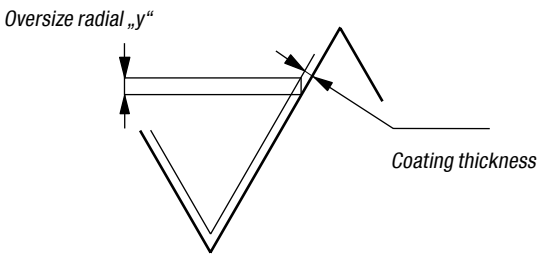
Thread tolerances and recommended manufacturing tolerances



Example of M10 in microns

Workpieces to be plated require oversize taps.
The interference depends on the coating thickness and the flank angle.

at	60° Flank angle	Oversize ≙ 4 x coating thickness
	55° Flank angle	Oversize ≙ 4.331 x coating thickness
	30° Flank angle	Oversize ≙ 7.727 x coating thickness

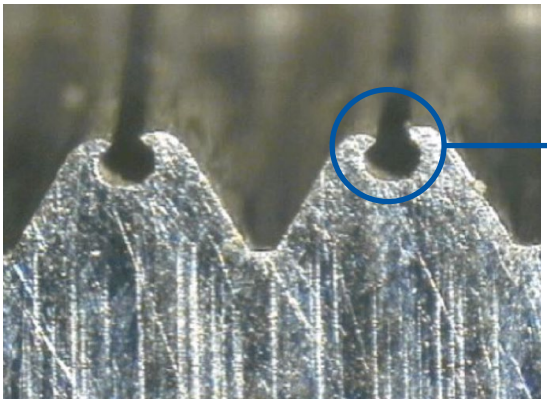


Application class of the tap designation according to		Tolerance class of the internal thread to be cut				
DIN	ISO					
4H	ISO1	4H	5H	–	–	–
6H	ISO2	4G	5G	6H	–	–
6G	ISO3	–	(4E)	6G	7H	8H
7G	–	–	–	(6E)	7G	8G

For special applications, e.g. abrasive cast iron materials or plastics other dimensions have to be chosen which are determined on previous experience. In such cases an „X“ is added to the short designation of the tolerance, e.g. ISO 2X, however the tolerance zone assignment may be limited (6HX for tolerance zone 6H and 5G). In addition it should be taken into account that the dimensions of the internal thread do not only depend on the dimensions of the tap but on the material to be machined and all production conditions. For first taps and intermediate taps no thread dimensions are determined.

Thread formers

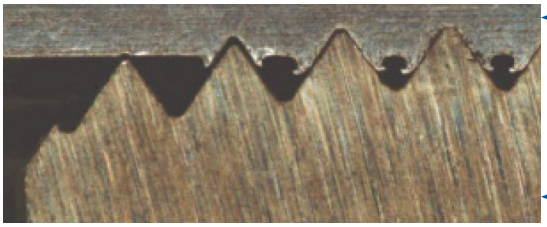
Spanlos thread forming taps for cold-formable materials up to 1400 N/mm² or at least 5 % elongation. The thread is produced by plastic deformation. The molded thread has very high strength.



Prior to forming a thread, you should ensure that a molded thread is acceptable. In certain sectors, the forming of a thread is **not** permitted. Dirt or bacteria can settle in the formed crown.

Important

Incremental pressure forming



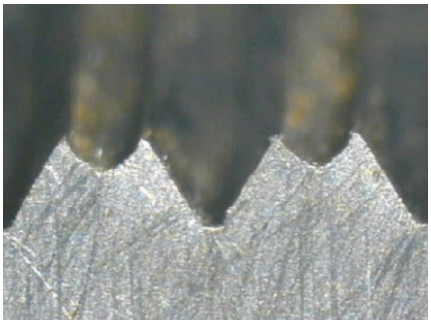
Workpiece

Thread formers

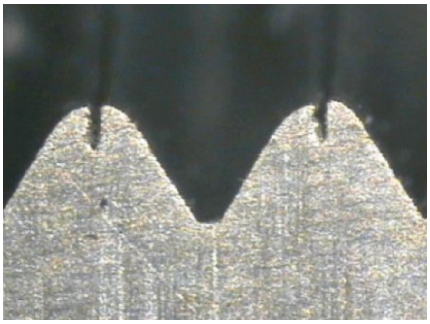
The thread profile is pressed gradually into the material via the start (leading edge) of the tap.

Properties

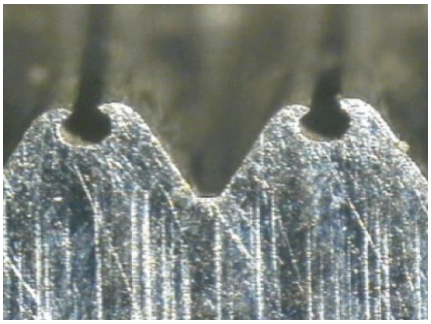
- one type can be used in different materials
- for through and blind holes
- very good thread surface quality
- high static and dynamic strength thread
- secure machining of deep and counterbored threads
- short machining times
- no chip problems
- no swarf
- high process security
- HSS-E and HSS-PM taps for materials up to 33 HRC with a minimum elongation of 5 %



Underformed – core hole too large



Overformed – core hole too small



Perfect form – core hole correct

Troubleshooting

Poor tool life

Cause

- overload fractures of the cutting edge on the lead
- hardness or tool material not suitable for the application
- core hole too small, or work hardened
- insufficient lubrication or incorrect application parameters

Remedy

- a longer lead or more flutes for the same lead length, giving a greater number of cutting teeth
- in reground tools the hardness can be reduced, apply correct parameters for regrinding
- increase frequency of changes or regrinding of the drill
- use the correct operating parameters for drilling
- select the correct lubricant and ensure adequate supply

Axial thread error

Cause

- selected geometry is not suitable
- spindle speed is wrong compared with feed (synchronisation error)
- blind hole taps are used with high feed pressure
- through hole taps are used with low feed pressure

Remedy

- check programming and pitch control or machine synchronisation
- use tapping chuck with length compensation
- increase retraction feed pessure
- increase feed pessure

Oversize thread

Cause

- thread tolerances of tool and thread gauge do not match
- burred tool edges after regrinding
- cold pressure welding

Remedy

- check the correct tolerances for tool and thread gauge
- carefully deburr
- use appropriate (positive) geometry
- reduce cutting speed
- use different surface treatment or coating
- use tapping chuck with length compensation
- use appropriate lubricant

Broken tool

Cause

- tool is worn
- tool has hit the bottom of the hole
- weld deposits
- core hole too small
- chip trapping
- incorrect cutting speed
- chip trapping in the flute
- insufficient cooling / lubrication

Remedy

- employ set taps
- use a tool with lower helix
- use tools with a shorter / longer lead
- check the pre-drilling depth and the thread depth
- drill core hole deeper
- correct cutting speed
- use a different coating or surface treatment
- use tool holder with length compensation
- use suitable lubricant
- use correct core hole
- change geometry and / or flute type
- note chip shape and chip formation

Coatings

vap.
- vaporised
- vaporisation (vapour-deposition) prevents cold welds from forming on the tool and increases the surface hardness and thus the wear resistance

nitr.
- nitrided
- nitriding increases wear resistance and offers low friction properties

vap. + nitr.
- vaporized + nitrated
- combination of increased surface hardness and lubricant carrier

TiN
- TiN coating
- maximum application temperature: 450 °C

TiN GS
- titanium nitride low friction layer
- high wear resistance with low friction properties
- maximum application temperature: 450 °C

TiCN
- TiCN multilayer coating
- maximum application temperature: 450 °C

Ti200
- TiN coating
- well suited for high cutting speeds during thread forming
- maximum application temperature: 450 °C

OSM
- hard material layer and anti-friction layer
- for use in high-strength steels

CH
- amorphous carbon layer
- for use in non-ferrous metals or aluminum
- reduces the material adhesion

HCr
- hard chromed
- for use in non-ferrous metals or aluminum
- very low surface roughness

CrN
- chromium-nitrogen coating
- very wear-resistant coating
- especially suitable for use in aluminum, but also for P, M and S materials

6

Coloured rings – overview

WNT \ Performance

for steel up to 750 N/mm²

Type ST uncoated tap for steel up to 750 N/mm² tensile strength

for steel to 1100 N/mm²

Type ST and VG coated tap for steel up to 1100 N/mm² tensile strength

for steel up to 1400 N/mm²

Type HR for steel up to 1400 N/mm² tensile strength

for corrosion and acid-resistant steels

Type VA for stainless steel

for cast iron materials

Type GG for cast iron

for aluminium and non-ferrous metal

Type NW, Soft and Ms for aluminium, short-chipping brass and soft materials

for heat resistant alloys

Type Ti, Ni and AMPCO for heat-resistant steel, titanium and Inconel

for hardened steels

Type HT for hard machining

for universal application up to 1100 N/mm²

Type UNI for the all-purpose use