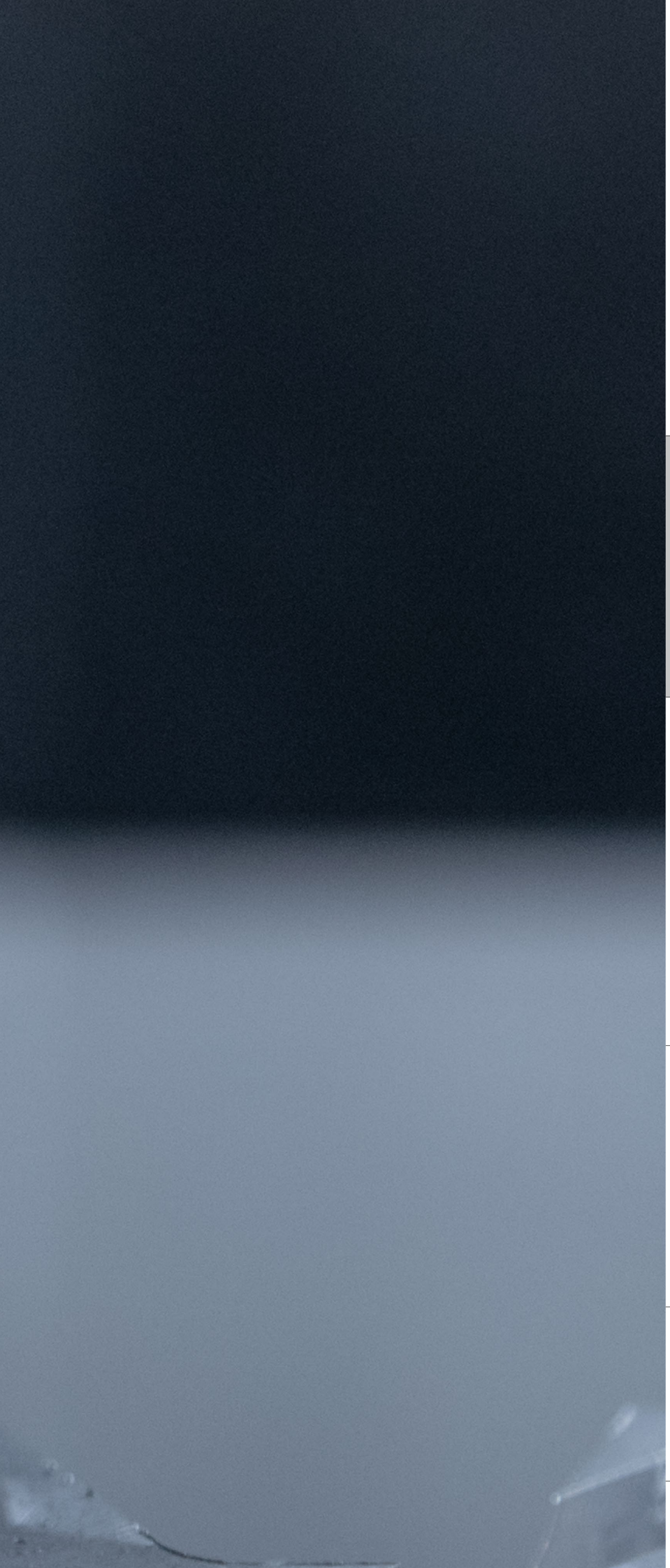

Table of contents

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		
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		

The thread types BSW, NPTF, Rp and Rc as well as hand taps and dies are now available in the online shop.

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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													

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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	
					UNI	ISO 2 6H	HSS-E HSS-PM	■				31
				Stabil	UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck	23	
					UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck		32
				Stabil	UNI DRY	ISO 2X 6HX	HSS-E	■		for dry machining or minimum quantity lubrication (MMS)	🛒	
				Stabil	UNI CNC	ISO 2X 6HX ISO 3X 6GX 7GX	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck	23	
					UNI NC	ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		32
				Stabil	UNI EL	ISO 2 6H	HSS-E	■		extra long, with double overall length	29	
Steel				Stabil	ST	ISO 2 6H	HSS-E		□		24	
				Stabil	ST	ISO 1 4H ISO 3 6G	HSS-E		□		🛒	
					FE	ISO 2 6H	HSS-E		□			32
					FE ES	ISO 2 6H	HSS-E		□	extra short		34
				Stabil	ST AZ	ISO 2 6H	HSS-E		□	with intermittent teeth, reduces friction	24	
				Stabil	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	24	
				Stabil	ST TS	ISO 2X 6HX	HSS-E	■		for high-speed machining, up to 100 m/min.	25	
				Stabil	HR	ISO 2X 6HX	HSS-PM	■			25	
				Stabil	VG	ISO 2X 6HX	HSS-E	■			25	
					FE-HF	ISO 2 6H	HSS-E	■				32
				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	
	✓				ST MMB	ISO 2 6H	HSS-E		□	Machine taps	30	
Stainless steel	✓			Stabil	VA	ISO 2 6H	HSS-E	■			26	
	✓				VA	ISO 2 6H	HSS-PM HSS-E	■	□			33
Non-ferrous metals	✓			Stabil	NW	ISO 2 6H	HSS-E	■			26	
	✓				AL	ISO 2 6H	HSS-E	■	□			33
	✓			Stabil	Soft	ISO 2 6H	HSS-E	■			🛒	
Heat-resistant	✓			Stabil	Ti	ISO 1X 4HX ISO 2X 6HX	HSS-PM	■			27	
	✓			DL	Ti	ISO 2X 6HX	HSS-E	■			28	
	✓			DL	Ni	ISO 2X 6HX	HSS-E	■			28	
Universal		✓		Salo-Rex	UNI	ISO 2 6H 7G	HSS-E	■		with thro' coolant	35+36	
		✓		Salo-Rex	UNI	ISO 1 4H ISO 3 6G	HSS-E	■			🛒	
		✓			UNI	ISO 2 6H	HSS-E HSS-PM	■				49
		✓		Salo-Rex	UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck	36	
		✓			UNI NCW	ISO 2 6H	HSS-PM	■		with Weldon flat for synchronised CNC machining without length compensation chuck		50
		✓		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	
		✓		Salo-Rex	UNI CNC	ISO 3 6G, 7G	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck	🛒	
		✓			UNI NC	ISO 2 6H	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck		49
		✓		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	🛒	
				Salo-Rex	UNI ES	ISO 2 6H	HSS-E	■		extra short	45	
				Salo-Rex	UNI EL	ISO 2 6H	HSS-E	■		extra long, with double overall length	47	
				SL	UNI	ISO 2 6H	HSS-E		□		🛒	
Steel				SL	ST	ISO 2 6H	HSS-E		□		🛒	
				SL	ST CNC	ISO 2X 6HX	HSS-E	■		for synchronised CNC machining with minimum length compensation chuck, with thro' coolant	39	
				SL	ST TS	ISO 2 6H	HSS-PM	■		for high-speed machining, up to 100 m/min.	🛒	
				SL	ST TS	ISO 2X 6HX	HSS-E	■		for high-speed machining, up to 100 m/min.	39	
				SL	ST ES	ISO 2 6H	HSS-E		□	extra short	46	
				SL	ST AUT/ES	ISO 2 6H	HSS-E		□	short version for automatic use; extra short	46	
				SL	ST EL	ISO 2 6H	HSS-E		□	extra long, with double overall length	48	
				SL	HR	ISO 2 6H	HSS-PM		□		39	
				Salo-Rex	ST	ISO 2 6H	HSS-E	■	□		40	
				Salo-Rex	ST	ISO 1 4H ISO 3 6G	HSS-E	■	□		🛒	
					FE	ISO 2 6H	HSS-E		□			50
					FE-HF	ISO 2 6H	HSS-E	■				50
				Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	40	
				Salo-Rex	ST ES	ISO 2 6H	HSS-E		□	extra short	🛒	
				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	
				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	
					VA	ISO 2 6H	HSS-E HSS-PM	■	□			50+51
				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	
				Salo-Rex	NW	ISO 2 6H	HSS-E	■			43	
					AL	ISO 2 6H	HSS-E	■	□			51
Heat-resistant				SL	Ti	ISO 2X	HSS-PM	■			44	
				SL	Ni	ISO 2X ISO 2 6H	HSS-PM	■			44	
Steel				TWIN	ST	ISO 2X 6HX	HSS-E		□		52	
				TWIN	ST AZ	ISO 2X 6HX	HSS-E		□	with intermittent teeth, reduces friction		
				TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extra short	56	
				TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	for left hand threads; extra short		
				TWIN	HR	ISO 2X 6HX	HSS-E	■				
				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	
					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	
				Spanlos	EC SN	ISO 2X 6HX ISO 3X 6GX	HSS-E HSS-PM	■		Thread formers with oil grooves and thro' coolant	60+61	
				Spanlos	NEO SN	ISO 2X 6HX	HSS-PM	■		Thread formers with oil grooves and thro' coolant	61	
					UNI	ISO 2X 6HX	HSS-E	■				62
					UNI SN	ISO 2X 6HX	HSS-E	■		Thread formers with lubrication grooves		62
Hand taps					ST	ISO 2X 6HX	HSS-E VHM		□		🛒	
					ERGO	ISO 2X 6HX	HSS-E		□		🛒	
					ERGO F.T.	ISO 2X 6HX	HSS-E	■			🛒	
Dies					FE	ISO 6g ISO 6e	HSS		□		🛒	
					FE	ISO 6g	HSS		□			🛒
					FE R_z=1	ISO 6g	HSS		□	Lapped Dies	🛒	
					FE LH	ISO 6g	HSS		□	for left hand threads	🛒	
					VA	ISO 6g	HSS-E		□		🛒	
					VA R_z=1	ISO 6g	HSS-E		□	Lapped 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	
					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	
				Salo-Rex	ST	ISO 1 4H	HSS-E		□			
					FE	ISO 2 6H	HSS-E		□			76
					FE-HF	ISO 2 6H	HSS-E	■				76
				Salo-Rex	ST TS	ISO 2 6H	HSS-E	■		for high-speed machining, up to 100 m/min.		
				Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	for left hand threads	71	
				SL	ST	ISO 2 6H	HSS-E		□		72	
				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	
					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	
				TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extra short	80	
				TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	for left hand threads	80	
				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	

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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
Machine thread formers				Spanlos	EC	ISO 2X 6HX	HSS-E	■			81	
				Spanlos	EC SN	ISO 2X 6HX	HSS-E	■		Thread formers with lubrication grooves	81	
					UNI	ISO 2X 6HX	HSS-E	■				82
					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		□			
					FE	ISO 6g	HSS		□			
					FE LH	ISO 6g	HSS		□	for left hand threads		
					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	
					UNI	ISO 228	HSS-E	■				84
Steel				Stabil	ST	ISO 228	HSS-E		□		83	
					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	
					UNI	ISO 228	HSS-E	■				87
				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	
		✓		SL	ST	ISO 228	HSS-E		□		🛒	
Stainless steel		✓		Salo-Rex	VA	ISO 228	HSS-E	■			86	
Steel			✓	TWIN	ST	ISO 228X	HSS-E		□		88	
			✓	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	
			✓	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	■			🛒	
	✓			Stabil	UNI	2B	HSS-E	■			90	
	✓				UNI	2B	HSS-E	■				91
Steel	✓			Stabil	ST	2B	HSS-E		□		🛒	
	✓				FE	2B	HSS-E		□			91
	✓				FE-HF	2B	HSS-E	■				91
Stainless steel	✓			Stabil	VA	2B	HSS-E	■			90	
	✓				VA	2B	HSS-E	■				91

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

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	
				Salo-Rex	UNI	2B +0,05	HSS-E	■				
					UNI	2B	HSS-E	■				93
Steel				Salo-Rex	ST	2B	HSS-E		□			
					FE	2B	HSS-E		□			93
					FE-HF	2B	HSS-E	■				93
Stainless steel				Salo-Rex	VA	2B	HSS-E	■			92	
					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	
				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	
				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	
					UNI	2B	HSS-E	■				99
Steel				Stabil	ST	2B	HSS-E		□			
					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	
					UNI	2B	HSS-E	■				102
Steel					FE	2B	HSS-E		□			102
Stainless steel				Salo-Rex	VA	2B	HSS-E	■			100	
					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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🛒 This article can be found in our online shop at cuttingtools.ceratizit.com

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

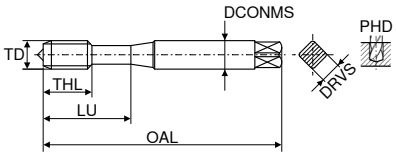
Shank extensions for taps	🛒	
Tapping Oil, Chlorine Free	🛒	

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

Through hole – Machine taps, right hand

M	Stabil

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.



DIN 371 with reinforced shank

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

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 501 ...		Article no. 22 503 ...		Article no. 22 505 ...		Article no. 22 508 ...		Article no. 22 510 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£		£		£		£	
M1	0.25	40	2.5	2.1	0.75	5	13	2	105.71	010 [1]								
M1,2	0.25	40	2.5	2.1	0.95	5	13	2	101.80	012 [1]								
M1,4	0.30	40	2.5	2.1	1.10	7	13	3	90.58	014 [1]								
M1,6	0.35	40	2.5	2.1	1.25	8	11	3	64.24	016								
M1,7	0.35	40	2.5	2.1	1.35	6	11	2	98.39	017								
M1,8	0.35	40	2.5	2.1	1.45	6	11	2	136.41	018								
M2	0.40	45	2.8	2.1	1.60	7	12	2			46.18	020			45.67	020	56.83	020
M2	0.40	45	2.8	2.1	1.60	8	8	3	47.27	020								
M2,2	0.45	45	2.8	2.1	1.75	7	12	2	48.95	022								
M2,5	0.45	50	2.8	2.1	2.05	9	14	2	46.11	025					45.34	025	54.78	025
M3	0.50	56	3.5	2.7	2.50	11	18	3	30.65	030	38.07	030	38.07	030	36.68	030	42.20	030
M3,5	0.60	56	4.0	3.0	2.90	12	20	3	37.78	035					37.37	035		
M4	0.70	63	4.5	3.4	3.30	13	21	3	27.04	040	36.46	040	36.46	040	38.84	040	42.20	040
M5	0.80	70	6.0	4.9	4.20	15	25	3	28.34	050	36.91	050	36.91	050	37.37	050	43.41	050
M6	1.00	80	6.0	4.9	5.00	17	30	3	28.34	060	45.05	060	45.05	060	40.35	060	44.46	060
M7	1.00	80	7.0	5.5	6.00	17	30	3	45.67	070								
M8	1.25	90	8.0	6.2	6.80	20	35	3	33.56	080	49.17	080	49.17	080	42.88	080	49.48	080
M10	1.50	100	10.0	8.0	8.50	22	39	3	40.26	100	73.52	100	69.69	100	52.23	100	60.04	100
M12	1.75	110	12.0	9.0	10.20	24	44	3	55.82	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					

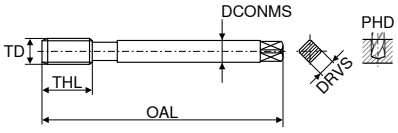
1) Tol. ISO 1 4H ≤ M1.4

DIN 376 can be found on the next page

6

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
0°
≤ 1100 N/mm²
≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 502 ...		U0 Article no. 22 504 ...		U0 Article no. 22 509 ...		U0 Article no. 22 511 ...	
	mm	mm	mm	mm	mm	mm		£		£		£		£	
M3	0.50	56	2.2		2.5	11	3	62.10	**030**						
M4	0.70	63	2.8	2.1	3.3	13	3	41.33	**040**						
M5	0.80	70	3.5	2.7	4.2	15	3	38.82	**050**						
M6	1.00	80	4.5	3.4	5.0	17	3	38.99	**060**						
M8	1.25	90	6.0	4.9	6.8	20	3	43.24	**080**						
M10	1.50	100	7.0	5.5	8.5	22	3	50.74	**100**						
M12	1.75	110	9.0	7.0	10.2	24	3	49.98	**120**	80.34	**120**	60.63	**120**	67.54	**120**
M14	2.00	110	11.0	9.0	12.0	26	3	63.20	**140**	140.32	**140**			112.87	**140**
M16	2.00	110	12.0	9.0	14.0	27	3	70.12	**160**	104.59	**160**	88.48	**160**	118.84	**160**
M18	2.50	125	14.0	11.0	15.5	30	3	131.49	**180**	222.42	**180**				
M20	2.50	140	16.0	12.0	17.5	32	3	104.32	**200**	226.33	**200**	131.42	**200**		
M22	2.50	140	18.0	14.5	19.5	32	3	176.82	**220**	343.85	**220**				
M24	3.00	160	18.0	14.5	21.0	34	3	139.44	**240**	289.65	**240**				
M27	3.00	160	20.0	16.0	24.0	36	3	199.89	**270**						
M30	3.50	180	22.0	18.0	26.5	40	4	226.91	**300**						
M33	3.50	180	25.0	20.0	29.5	40	4	565.65	**330**						
M36	4.00	200	28.0	22.0	32.0	50	4	651.23	**360**						
M42	4.50	200	32.0	24.0	37.5	56	4	1,236.83	**420**						
M48	5.00	250	36.0	29.0	43.0	65	4	1,306.36	**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				

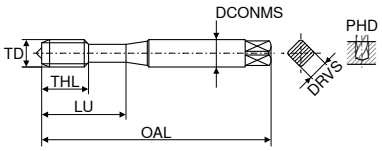
Through hole – Machine taps, right hand

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

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

M	Stabil

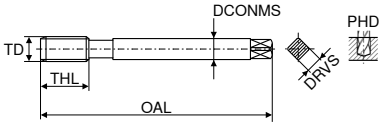
UNI NCW	UNI CNC	UNI CNC	UNI CNC
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2X 6HX	ISO 3X 6GX	7GX
TiN	TiN GS	TiN GS	TiN GS



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	Article no. 22 148 ...	Article no. 22 542 ...	Article no. 22 596 ...	Article no. 22 592 ...
	£	£	£	£
M3	63.63 030			
M3		44.05 030		
M4	66.97 040			
M4		46.46 040	52.18 040	56.45 040
M5	68.01 050	48.53 050	53.04 050	58.69 050
M6	84.84 060	61.60 060	66.54 060	74.96 060
M8	93.57 080			
M8		65.84 080	72.65 080	82.21 080
M10	112.87 100			
M10		83.38 100	89.48 100	97.93 100
M12	138.57 120			
M16	194.53 160			

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes
	mm	mm	mm	mm	mm	mm	mm	
M3	0.50	70	6.0	4.9	2.5	6	18	3
M3	0.50	56	3.5	2.7	2.5	6	18	3
M4	0.70	70	6.0	4.9	3.3	7	21	3
M4	0.70	63	4.5	3.4	3.3	7	21	3
M5	0.80	70	6.0	4.9	4.2	8	25	3
M6	1.00	80	6.0	4.9	5.0	10	30	3
M8	1.25	90	8.0	6.2	6.8	14	35	3
M8	1.25	90	8.0	6.2	6.8	14	35	4
M10	1.50	100	10.0	8.0	8.5	16	39	3
M10	1.50	100	10.0	8.0	8.5	16	39	4
M12	1.75	110	10.0	8.0	10.2	18		3
M16	2.00	110	12.0	9.0	14.0	22		3



DIN 376 with reduced shank

	U0	U0	U0
TD	Article no. 22 543 ...	Article no. 22 597 ...	Article no. 22 593 ...
	£	£	£
M12	95.76 120	106.20 120	117.96 120
M14	270.61 140		
M16	136.11 160		
M20	237.82 200		

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes
	mm	mm	mm	mm	mm	mm	
M12	1.75	110	9	7	10.2	18	4
M14	2.00	110	11	9	12.0	20	4
M16	2.00	110	12	9	14.0	22	4
M20	2.50	140	16	12	17.5	25	4

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				

6

Through hole – Machine taps, right/left hand

▲ AZ = with intermittent teeth, reduces friction

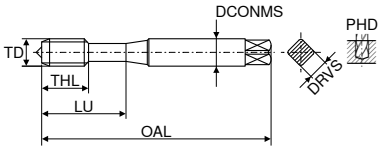
▲ LH = for left hand threads

M | Stabil

ST | ST AZ | ST LH

B 4–5

ISO 2 6H

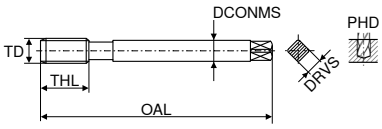


DIN 371 with reinforced shank

HSS-E
∢ 0°
≤ 750 N/mm²
≤ 4xD

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							
M2	0.40	45	2.8	2.1	1.60	7	12	2	31.55	**020**	46.18	**020**		
M2,3	0.40	45	2.8	2.1	1.90	7	12	2	35.45	**023**				
M2,5	0.45	50	2.8	2.1	2.05	9	14	2	31.98	**025**				
M2,6	0.45	50	2.8	2.1	2.15	9	14	2	35.45	**026**				
M3	0.50	56	3.5	2.7	2.50	11	18	3	26.16	**030**	43.16	**030**	46.94	**030**
M3,5	0.60	56	4.0	3.0	2.90	12	20	3	28.19	**035**				
M4	0.70	63	4.5	3.4	3.30	13	21	3	26.74	**040**	43.16	**040**	48.32	**040**
M5	0.80	70	6.0	4.9	4.20	15	25	3	28.19	**050**	39.21	**050**	50.17	**050**
M6	1.00	80	6.0	4.9	5.00	17	30	3	28.19	**060**	40.69	**060**	50.17	**060**
M8	1.25	90	8.0	6.2	6.80	20	35	3	33.40	**080**	45.05	**080**	56.83	**080**
M10	1.50	100	10.0	8.0	8.50	22	39	3	39.21	**100**	54.34	**100**	72.65	**100**
M12	1.75	110	12.0	9.0	10.20	24	44	3	44.90	**120**				



DIN 376 with reduced shank

U0

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							
M3	0.50	56	2.2		2.5	11	3	32.41	**030**				
M4	0.70	63	2.8	2.1	3.3	13	3	32.11	**040**				
M5	0.80	70	3.5	2.7	4.2	15	3	33.40	**050**				
M6	1.00	80	4.5	3.4	5.0	17	3	33.86	**060**				
M8	1.25	90	6.0	4.9	6.8	20	3	36.03	**080**				
M10	1.50	100	7.0	5.5	8.5	22	3	40.84	**100**				
M12	1.75	110	9.0	7.0	10.2	24	3	49.82	**120**	76.00	**120**	86.23	**120**
M14	2.00	110	11.0	9.0	12.0	26	3	62.93	**140**				
M16	2.00	110	12.0	9.0	14.0	27	3	69.69	**160**	113.77	**160**	130.41	**160**
M18	2.50	125	14.0	11.0	15.5	30	3	101.69	**180**				
M20	2.50	140	16.0	12.0	17.5	32	3	105.62	**200**	162.55	**200**	192.79	**200**
M22	2.50	140	18.0	14.5	19.5	32	3	159.96	**220**				
M24	3.00	160	18.0	14.5	21.0	34	3	136.11	**240**				
M27	3.00	160	20.0	16.0	24.0	36	3	186.53	**270**				
M30	3.50	180	22.0	18.0	26.5	40	4	225.58	**300**				

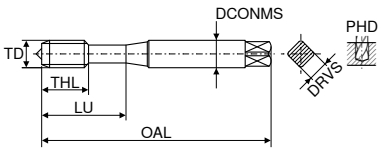
Steel	**10-20**	**10-20**	**10-20**
Stainless steel			
Cast iron			
Non ferrous metals	**10-20**	**10-20**	**10-20**
Heat resistant alloys			
Hardened materials			

Through hole – Machine taps, right hand

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

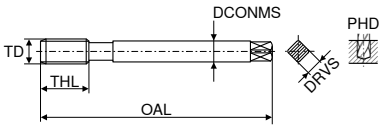
M	Stabil

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	Article no. 22 092 ...	Article no. 22 053 ...	Article no. 22 055 ...	Article no. 22 120 ...
	£	£	£	£
M2	0.40 45 2.8 2.1 1.60 8 9.5 2	71.64 020		
M2	0.40 45 2.8 2.1 1.60 4 12.0 2	61.58 020		54.78 020
M2,2	0.45 45 2.8 2.1 1.75 7 12.0 2	71.64 022		
M2,5	0.45 50 2.8 2.1 2.05 9 14.0 2	69.90 025		
M2,5	0.45 50 2.8 2.1 2.05 5 15.0 2	61.58 025		54.78 025
M3	0.50 56 3.5 2.7 2.50 11 18.0 2	35.60 030	46.89 030	
M3	0.50 56 3.5 2.7 2.50 6 18.0 3	48.32 030		40.84 030
M3,5	0.60 56 4.0 3.0 2.90 12 20.0 2	57.25 035		
M4	0.70 63 4.5 3.4 3.30 13 21.0 2	35.90 040	68.43 040	
M4	0.70 63 4.5 3.4 3.30 7 21.0 3	56.30 040		44.17 040
M5	0.80 70 6.0 4.9 4.20 15 25.0 2	37.78 050	48.53 050	
M5	0.80 70 6.0 4.9 4.20 8 25.0 3	59.14 050		46.07 050
M6	1.00 80 6.0 4.9 5.00 17 30.0 3	39.21 060	59.14 060	
M6	1.00 80 6.0 4.9 5.00 10 30.0 3	76.56 060		56.37 060
M8	1.25 90 8.0 6.2 6.80 20 35.0 3	46.33 080	64.08 080	
M8	1.25 90 8.0 6.2 6.80 14 35.0 4	81.07 080		59.54 080
M10	1.50 100 10.0 8.0 8.50 22 39.0 3	56.45 100	90.67 100	
M10	1.50 100 10.0 8.0 8.50 16 39.0 4	109.82 100		85.13 100
M12	1.75 110 12.0 9.0 10.20 24 44.0 3	95.44 120		



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 093 ... £	U0 Article no. 22 121 ... £
	mm	mm	mm	mm	mm	mm			
M12	1.75	110	9	7	10.2	18	4	119.41 120	101.27 120
M16	2.00	110	12	9	14.0	22	4	176.82 160	138.57 160
M20	2.50	140	16	12	17.5	25	4	254.36 200	235.64 200

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

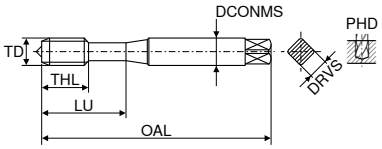
M | Stabil

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



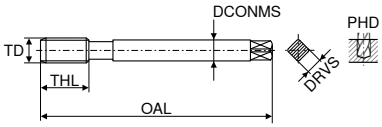
DIN 371 with reinforced shank

HSS-E | HSS-E | HSS-E | HSS-E

0° | 0° | 0° | 0°

≤ 900 N/mm² ≤ 4xD | ≤ 900 N/mm² ≤ 4xD | ≤ 500 N/mm² ≤ 4xD | ≤ 500 N/mm² ≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 056 ... £		U0 Article no. 22 038 ... £		U0 Article no. 22 058 ... £		U0 Article no. 22 060 ... £	
	mm	mm	mm	mm	mm	mm	mm									
M1,6	0.35	40	2.5	2.1	1.25	6	11	2			69.43	016				
M2	0.40	45	2.8	2.1	1.60	7	12	2	36.46	020	57.10	020	35.02	020	42.00	020
M2,3	0.40	45	2.8	2.1	1.90	7	12	2					39.76	023	44.47	023
M2,5	0.45	50	2.8	2.1	2.05	9	14	2	35.06	025	54.44	025	35.02	025	42.73	025
M2,6	0.45	50	2.8	2.1	2.15	9	14	2					40.26	026	44.47	026
M3	0.50	56	3.5	2.7	2.50	11	18	3	28.81	030	44.90	030	27.04	030	35.45	030
M3,5	0.60	56	4.0	3.0	2.90	12	20	3	40.41	035			28.38	035	37.78	035
M4	0.70	63	4.5	3.4	3.30	13	21	3	30.22	040	48.53	040	27.38	040	35.49	040
M5	0.80	70	6.0	4.9	4.20	15	25	3	31.98	050	49.54	050	28.38	050	35.32	050
M6	1.00	80	6.0	4.9	5.00	17	30	3	33.40	060	62.47	060	28.38	060	35.75	060
M8	1.25	90	8.0	6.2	6.80	20	35	3	36.35	080	68.01	080	34.58	080	43.28	080
M10	1.50	100	10.0	8.0	8.50	22	39	3	44.47	100	84.25	100	41.13	100	54.34	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 057 ... £		U0 Article no. 22 039 ... £		U0 Article no. 22 059 ... £		U0 Article no. 22 061 ... £	
	mm	mm	mm	mm	mm	mm									
M12	1.75	110	9	7.0	10.2	24	3	56.30	120	99.67	120	52.30	120	65.10	120
M14	2.00	110	11	9.0	12.0	26	3	77.85	140	144.25	140				
M16	2.00	110	12	9.0	14.0	27	3	79.66	160	141.36	160	73.81	160	79.10	160
M18	2.50	125	14	11.0	15.5	30	3	195.07	180						
M20	2.50	140	16	12.0	17.5	32	3	116.14	200	241.74	200				
M22	2.50	140	18	14.5	19.5	32	3	306.02	220						
M24	3.00	160	18	14.5	21.0	34	3	159.65	240						
M27	3.00	160	20	16.0	24.0	36	3	334.80	270						
M30	3.50	180	22	18.0	26.5	40	4	257.85	300						

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

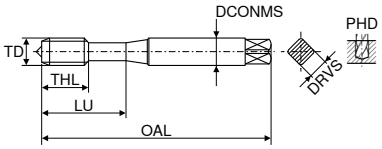
Through hole – Machine taps, right hand

M | Stabil

Ti | B 4–5 | ISO 1X 4HX | TiN

Ti | B 4–5 | ISO 2X 6HX | vap.

Ti | B 4–5 | ISO 2X 6HX | TiN



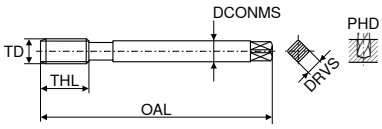
DIN 371 with reinforced shank

HSS-PM | 0° | ≤ 44 HRC | ≤ 4xD

HSS-PM | 0° | ≤ 1400 N/mm² | ≤ 4xD

HSS-PM | 0° | ≤ 44 HRC | ≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 081 ...		U0 Article no. 22 075 ...		U0 Article no. 22 077 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£		£	
M1	0.25	40	2.5	2.1	0.75	5	6.5	2	168.52	**010**				
M1,6	0.35	40	2.5	2.1	1.25	8	9.5	3			94.51	**016**		
M2	0.40	45	2.8	2.1	1.60	8	9.5	3	140.70	**020**	120.74	**020**		
M2,5	0.45	50	2.8	2.1	2.05	9	14.0	3			114.98	**025**		
M3	0.50	56	3.5	2.7	2.50	11	18.0	3	85.23	**030**	80.25	**030**	85.23	**030**
M3,5	0.60	56	4.0	3.0	2.90	12	20.0	3			59.50	**035**		
M4	0.70	63	4.5	3.4	3.30	13	21.0	3	86.89	**040**	86.59	**040**	86.89	**040**
M5	0.80	70	6.0	4.9	4.20	15	25.0	3	89.11	**050**	85.23	**050**	89.11	**050**
M6	1.00	80	6.0	4.9	5.00	17	30.0	3	89.11	**060**	85.23	**060**	89.11	**060**
M8	1.25	90	8.0	6.2	6.80	20	35.0	3	102.66	**080**	99.06	**080**	102.66	**080**
M10	1.50	100	10.0	8.0	8.50	22	39.0	3			119.40	**100**	120.37	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 140 ...		U0 Article no. 22 142 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M12	1.75	110	9	7	10.2	24	3	145.13	**120**	143.48	**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

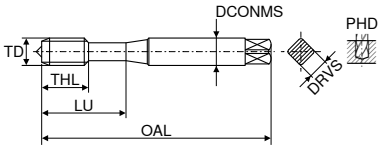
M | DL

Ti | Ni

D 4–5 | D 4–5

ISO 2X 6HX | ISO 2X 6HX

TiCN | TiCN

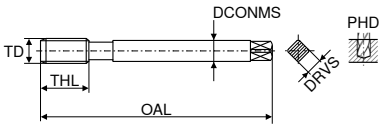


DIN 371 with reinforced shank

HSS-E
◁ 15°
≤ 1200 N/mm²
≤ 4xD

HSS-E
◁ 15°
≤ 1600 N/mm²
≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 159 ...		U0 Article no. 22 297 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
M3	0.50	56	3.5	2.7	2.5	11	18	2	50.42	**030**	64.90	**030**
M4	0.70	63	4.5	3.4	3.3	13	21	3	54.78	**040**	67.59	**040**
M5	0.80	70	6.0	4.9	4.2	15	25	3	55.36	**050**	69.32	**050**
M6	1.00	80	6.0	4.9	5.0	17	30	3	72.53	**060**	87.71	**060**
M8	1.25	90	8.0	6.2	6.8	20	35	3	79.66	**080**	97.34	**080**
M10	1.50	100	10.0	8.0	8.5	22	39	3	99.80	**100**	121.89	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 160 ...		U0 Article no. 22 298 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M12	1.75	110	9	7.0	10.2	24	3	115.21	**120**	140.36	**120**
M14	2.00	110	11	9.0	12.0	26	3			208.98	**140**
M16	2.00	110	12	9.0	14.0	27	3	162.25	**160**	196.80	**160**
M20	2.50	140	16	12.0	17.5	32	3	280.37	**200**	335.57	**200**
M24	3.00	160	18	14.5	21.0	34	3	330.63	**240**		

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

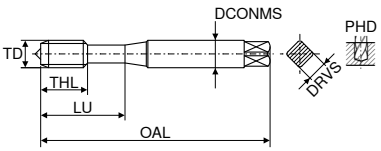
Through hole – Machine taps, right hand

▲ 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

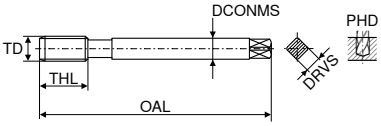


DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

HSS-E
0°
≤ 950 N/mm²
≤ 4xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 514 ...		U0 Article no. 22 233 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
M3	0.50	100	3.5	2.7	2.5	11	18	3	67.70	030	70.62	030
M4	0.70	125	4.5	3.4	3.3	13	21	3	67.70	040	67.59	040
M5	0.80	140	6.0	4.9	4.2	15	25	3	75.82	050	73.76	050
M6	1.00	160	6.0	4.9	5.0	17	30	3	82.51	060	77.19	060
M8	1.25	180	8.0	6.2	6.8	20	35	3	88.63	080	92.14	080



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 515 ...		U0 Article no. 22 234 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M6	1.00	160	4.5	3.4	5.0	17	3	80.04	060	77.19	060
M8	1.25	180	6.0	4.9	6.8	20	3	98.37	080	92.14	080
M10	1.50	200	7.0	5.5	8.5	22	3	105.74	100	102.52	100
M12	1.75	224	9.0	7.0	10.2	24	3	116.14	120	123.62	120
M14	2.00	224	11.0	9.0	12.0	26	3	203.81	140	199.84	140
M16	2.00	224	12.0	9.0	14.0	27	3	229.10	160	192.23	160
M18	2.50	250	14.0	11.0	15.5	30	3	308.55	180	288.32	180
M20	2.50	280	16.0	12.0	17.5	32	3	272.97	200	259.34	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		

6

Through hole – Machine taps, right hand

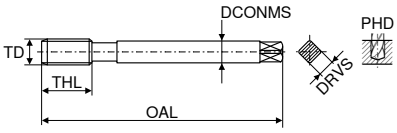
▲ MMB = Nut taps

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 ... £	
	mm	mm	mm	mm	mm	mm			
M3	0.50	70	2.2		2.5	16	3	50.42	**030**
M4	0.70	90	2.8	2.1	3.3	22	3	50.42	**040**
M5	0.80	100	3.5	2.7	4.2	24	3	52.75	**050**
M6	1.00	110	4.5	3.4	5.0	30	3	52.75	**060**
M8	1.25	125	6.0	4.9	6.8	38	3	65.10	**080**
M10	1.50	140	7.0	5.5	8.5	45	3	73.95	**100**
M12	1.75	180	9.0	7.0	10.2	50	3	99.37	**120**
M16	2.00	200	12.0	9.0	14.0	63	3	142.52	**160**

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

Through hole – Machine taps, right hand

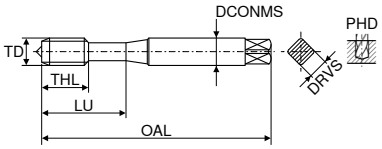
M

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

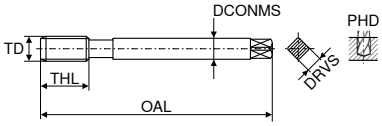


DIN 371 with reinforced shank

HSS-E | HSS-E | HSS-PM

0° ≤ 1000 N/mm² ≤ 3xD | 0° ≤ 1000 N/mm² ≤ 3xD | 0° ≤ 1000 N/mm² ≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 110 ... £		T9 Article no. 23 112 ... £		T9 Article no. 23 010 ... £	
	mm	mm	mm	mm	mm	mm	mm							
M2	0.40	45	2.8	2.1	1.60	7	12.0	2	27.31	020	31.98	020		
M2	0.40	45	2.8	2.1	1.60	4	13.5	2					9.18	020
M2,5	0.45	50	2.8	2.1	2.05	9	14.0	2	26.37	025	30.95	025		
M3	0.50	56	3.5	2.7	2.50	11	18.0	3	20.81	030	25.94	030	11.53	030
M4	0.70	63	4.5	3.4	3.30	13	21.0	3	21.25	040	29.51	040	10.52	040
M5	0.80	70	6.0	4.9	4.20	15	25.0	3	21.67	050	29.78	050	11.76	050
M6	1.00	80	6.0	4.9	5.00	17	30.0	3	21.81	060	37.64	060	14.10	060
M8	1.25	90	8.0	6.2	6.80	20	35.0	3	24.95	080	40.41	080	15.66	080
M10	1.50	100	10.0	8.0	8.50	22	39.0	3	30.22	100	55.22	100	20.70	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 111 ... £		T9 Article no. 23 113 ... £		T9 Article no. 23 021 ... £	
	mm	mm	mm	mm	mm	mm							
M3	0.50	56	2.2		2.5	11	3	8.18	030				
M4	0.70	63	2.8	2.1	3.3	13	3	8.05	040				
M5	0.80	70	3.5	2.7	4.2	15	3	8.05	050				
M6	1.00	80	4.5	3.4	5.0	17	3	8.39	060				
M8	1.25	90	6.0	4.9	6.8	20	3	9.85	080				
M10	1.50	100	7.0	5.5	8.5	22	3	11.42	100				
M12	1.75	110	9.0	7.0	10.2	24	3	13.66	120	61.02	120	24.73	120
M14	2.00	110	11.0	9.0	12.0	26	3	19.81	140	39.61	14000		
M14	2.00	110	11.0	9.0	12.0	20	4					37.49	140
M16	2.00	110	12.0	9.0	14.0	27	3	20.25	160	79.92	160	34.81	160
M18	2.50	125	14.0	11.0	15.5	30	3			62.85	18000		
M18	2.50	125	14.0	11.0	15.5	25	4					60.99	180
M20	2.50	140	16.0	12.0	17.5	32	3	32.23	200	141.94	200	63.01	200
M22	2.50	140	18.0	14.5	19.5	32	3			93.08	22000		
M24	3.00	160	18.0	14.5	21.0	34	3			150.79	240		
M27	3.00	160	20.0	16.0	24.0	36	3			116.39	27000		
M30	3.50	180	22.0	18.0	26.5	40	4			130.55	30000		
M33	3.50	180	25.0	20.0	29.5	40	4			171.24	33000		
M36	4.00	200	28.0	22.0	32.0	50	4			209.74	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			

6

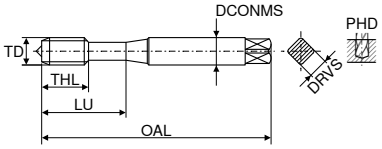
Through hole – Machine taps, right hand

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

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

M

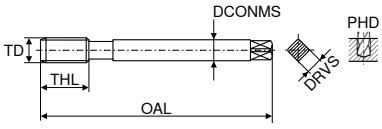
UNI NC	UNI NCW	FE	FE-HF
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN GS	TiCN		TiCN



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	Article no. 23 114 ...	Article no. 23 116 ...	Article no. 23 212 ...	Article no. 23 310 ...
mm	£	£	£	£
M1,6			27.75 016	
M2			18.39 020	
M2,5			15.99 025	
M3		33.13 030		
M3	27.75 030		12.67 030	26.16 030
M3,5			14.10 035	
M4		37.94 040		
M4	29.35 040		12.67 040	27.38 040
M5	30.22 050		12.70 050	28.19 050
M5		37.78 050		
M6	43.48 060		12.70 060	37.78 060
M6		37.78 060		
M8	46.94 080		16.54 080	40.77 080
M8		47.74 080		
M10	58.97 100		19.82 100	51.17 100
M10		57.73 100		

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes
	mm	mm	mm	mm	mm	mm	mm	
M1,6	0.35	40	2.5	2.1	1.25	6	11	2
M2	0.40	45	2.8	2.1	1.60	7	12	2
M2,5	0.45	50	2.8	2.1	2.05	9	14	2
M3	0.50	70	6.0	4.9	2.50	6	18	3
M3	0.50	56	3.5	2.7	2.50	11	18	3
M3,5	0.60	56	4.0	3.0	2.90	12	20	3
M4	0.70	70	6.0	4.9	3.30	7	21	3
M4	0.70	63	4.5	3.4	3.30	13	21	3
M5	0.80	70	6.0	4.9	4.20	15	25	3
M5	0.80	70	6.0	4.9	4.20	8	25	3
M6	1.00	80	6.0	4.9	5.00	17	30	3
M6	1.00	80	6.0	4.9	5.00	10	30	3
M8	1.25	90	8.0	6.2	6.80	20	35	3
M8	1.25	90	8.0	6.2	6.80	14	35	3
M10	1.50	100	10.0	8.0	8.50	22	39	3
M10	1.50	100	10.0	8.0	8.50	16	39	3



DIN 376 with reduced shank

	T9	T9	T9	T9			
TD	Article no. 23 115 ...	Article no. 23 117 ...	Article no. 23 213 ...	Article no. 23 311 ...	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes
	£	£	£	£	mm	mm	mm	mm	mm	mm	
M12		73.23 120			1.75	110	10	8	10.2	18	3
M12	68.01 120		26.74 120	60.45 120	1.75	110	9	7	10.2	24	3
M14			32.41 140		2.00	110	11	9	12.0	26	3
M16		144.44 160			2.00	110	12	9	14.0	22	3
M16	90.49 160		40.69 160	83.83 160	2.00	110	12	9	14.0	27	3
M20	167.79 200		63.50 200	148.04 200	2.50	140	16	12	17.5	32	3

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

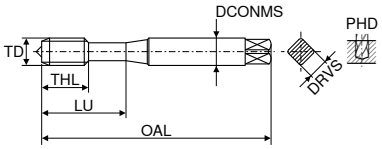
VA | VA | VA | AL | AL

B | B | B | B | B

4–5 | 4–5 | 4–5 | 4–5 | 4–5

ISO 2 6H | ISO 2 6H | ISO 2 6H | ISO 2 6H | ISO 2 6H

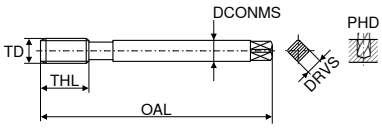
nitr. | nitr. | TiN | | CrN



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
TD	Article no. 23 450 ...	Article no. 23 410 ...	Article no. 23 412 ...	Article no. 23 610 ...	Article no. 23 612 ...
	£	£	£	£	£
M2		20.64 020	32.73 020		
M2,5		26.37 025	27.70 025		
M3	10.75 030	13.83 030	25.94 030	12.67 030	23.84 030
M4	10.85 040	13.83 040	29.51 040	12.67 040	24.70 040
M5	11.76 050	14.39 050	29.78 050	12.70 050	25.27 050
M6	11.86 060	14.39 060	38.78 060	12.70 060	25.27 060
M8	13.32 080	18.31 080	41.61 080	16.54 080	28.38 080
M10	15.11 100	22.09 100	56.88 100	19.82 100	35.45 100

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
M2,5	0.45	50	2.8	2.1	2.05	9	14	2
M3	0.50	56	3.5	2.7	2.50	11	18	3
M4	0.70	63	4.5	3.4	3.30	13	21	3
M5	0.80	70	6.0	4.9	4.20	15	25	3
M6	1.00	80	6.0	4.9	5.00	17	30	3
M8	1.25	90	8.0	6.2	6.80	20	35	3
M10	1.50	100	10.0	8.0	8.50	22	39	3



DIN 376 with reduced shank

	T9	T9	T9	T9	T9
TD	Article no. 23 451 ...	Article no. 23 411 ...	Article no. 23 413 ...	Article no. 23 611 ...	Article no. 23 613 ...
	£	£	£	£	£
M12	26.97 120	29.51 120	64.08 120	26.74 120	43.62 120
M14	35.70 140				
M16	37.72 160	45.05 160	79.92 160		
M20	56.40 200	68.56 200	139.16 200		
M24		90.67 240			

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
M14	2.00	110	11	9.0	12.0	26	3
M16	2.00	110	12	9.0	14.0	27	3
M20	2.50	140	16	12.0	17.5	32	3
M24	3.00	160	18	14.5	21.0	34	3

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

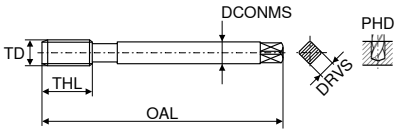
▲ ES = extra short

M

FE
ES

B
4–5

ISO 2
6H



DIN 376 with reduced shank

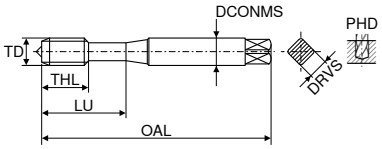
HSS-E
0°
≤ 850 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 210 ...	
	mm	mm	mm	mm	mm	mm		£	
M2	0.40	36	2.8	2.1	1.60	8	2	14.39	**020**
M2,5	0.45	40	2.8	2.1	2.05	9	2	11.26	**025**
M3	0.50	40	3.5	2.7	2.50	10	3	8.27	**030**
M4	0.70	45	4.5	3.4	3.30	12	3	8.27	**040**
M5	0.80	50	6.0	4.9	4.20	14	3	9.28	**050**
M6	1.00	56	6.0	4.9	5.00	16	3	9.42	**060**
M8	1.25	63	6.0	4.9	6.80	20	3	11.26	**080**
M10	1.50	70	7.0	5.5	8.50	22	3	14.70	**100**
M12	1.75	75	9.0	7.0	10.20	24	3	19.47	**120**
M16	2.00	80	12.0	9.0	14.00	27	3	33.40	**160**

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

Blind hole – Machine taps, right hand

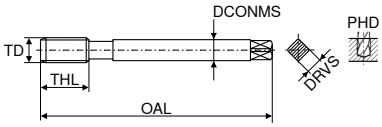
M | Salo-Rex



DIN 371 with reinforced shank

	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
				
	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
	Article no. 22 518 ...	Article no. 22 532 ...	Article no. 22 520 ...	Article no. 22 522 ...

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	4.0	12	2	36.88	020			53.92	020
M2,2	0.45	45	2.8	2.1	1.75	4.5	12	2	41.55	022				
M2,3	0.40	45	2.8	2.1	1.90	4.5	12	2	45.05	023				
M2,5	0.45	50	2.8	2.1	2.05	5.0	15	2	34.58	025				
M2,6	0.45	50	2.8	2.1	2.15	5.0	15	2	42.73	026				
M3	0.50	56	3.5	2.7	2.50	6.0	18	3	31.55	030	35.90	030	38.50	030	38.22	030
M3,5	0.60	56	4.0	3.0	2.90	7.0	20	3	33.86	035						
M4	0.70	63	4.5	3.4	3.30	7.0	21	3	32.11	040	37.78	040	41.13	040	41.13	040
M5	0.80	70	6.0	4.9	4.20	8.0	25	3	32.08	050	39.34	050	42.13	050	41.83	050
M6	1.00	80	6.0	4.9	5.00	10.0	30	3	33.40	060	53.92	060	49.54	060	49.54	060
M7	1.00	80	7.0	5.5	6.00	10.0	30	3	50.99	070						
M8	1.25	90	8.0	6.2	6.80	14.0	35	3	37.93	080	61.58	080	54.78	080	54.44	080
M10	1.50	100	10.0	8.0	8.50	16.0	39	3	46.49	100	92.97	100	65.54	100	65.54	100
M12	1.75	110	12.0	9.0	10.20	18.0	44	3	53.18	120			81.54	120	81.54	120



DIN 376 with reduced shank

	U0	U0	U0	U0
	Article no. 22 519 ...	Article no. 22 533 ...	Article no. 22 521 ...	Article no. 22 523 ...

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	£		£		£		£	
	mm	mm	mm	mm	mm	mm									
M3	0.50	56	2.2		2.5	6	3	52.36	030						
M4	0.70	63	2.8	2.1	3.3	7	3	49.98	040						
M5	0.80	70	3.5	2.7	4.2	8	3	37.78	050						
M6	1.00	80	4.5	3.4	5.0	10	3	39.23	060						
M8	1.25	90	6.0	4.9	6.8	14	3	43.48	080						
M10	1.50	100	7.0	5.5	8.5	16	3	55.36	100						
M12	1.75	110	9.0	7.0	10.2	18	3	58.27	120	69.13	120	76.26	120	76.26	120
M14	2.00	110	11.0	9.0	12.0	20	3	74.68	140			148.77	140	168.38	140
M16	2.00	110	12.0	9.0	14.0	22	3	82.21	160	125.38	160	112.87	160	112.87	160
M18	2.50	125	14.0	11.0	15.5	25	3	118.84	180			233.76	180	256.12	180
M20	2.50	140	16.0	12.0	17.5	25	3	123.19	200	192.79	200	191.76	200	244.93	200
M22	2.50	140	18.0	14.5	19.5	27	4	176.82	220			343.85	220		
M24	3.00	160	18.0	14.5	21.0	30	4	155.85	240			299.26	240		
M27	3.00	160	20.0	16.0	24.0	30	4	204.68	270						
M30	3.50	180	22.0	18.0	26.5	35	4	262.79	300						
M33	3.50	180	25.0	20.0	29.5	35	4	516.42	330						
M36	4.00	200	28.0	22.0	32.0	40	4	427.37	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				

6

Blind hole – Machine taps, right hand

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

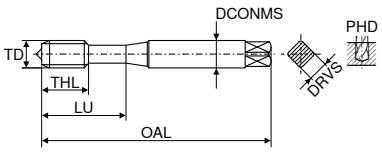
M | Salo-Rex

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



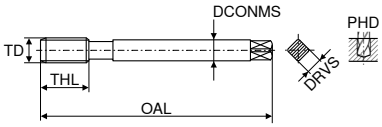
DIN 371 with reinforced shank

HSS-PM | HSS-E | HSS-E | HSS-E

∢ 42° ≤ 1100 N/mm² ≤ 3xD

U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 149 ... £		Article no. 22 524 ... £		Article no. 22 534 ... £		Article no. 22 526 ... £	
	mm	mm	mm	mm	mm	mm	mm									
M3	0.50	70	6.0	4.9	2.5	6	18	3	65.54	030						
M3	0.50	56	3.5	2.7	2.5	6	18	3			32.27	030			37.78	030
M4	0.70	63	4.5	3.4	3.3	7	21	3			32.98	040			41.13	040
M4	0.70	70	6.0	4.9	3.3	7	21	3	71.20	040						
M5	0.80	70	6.0	4.9	4.2	8	25	3	72.53	050	33.86	050	52.30	050	42.13	050
M6	1.00	80	6.0	4.9	5.0	10	30	3	89.94	060	34.30	060	50.14	060	49.54	060
M8	1.25	90	8.0	6.2	6.8	14	35	3	102.12	080	39.21	080	58.97	080	54.78	080
M10	1.50	100	10.0	8.0	8.5	16	39	3	124.50	100	47.80	100	69.13	100	65.54	100



DIN 376 with reduced shank

U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 149 ... £		Article no. 22 525 ... £		Article no. 22 535 ... £		Article no. 22 527 ... £	
	mm	mm	mm	mm	mm	mm									
M12	1.75	110	10	8.0	10.2	18	3	147.74	120						
M12	1.75	110	9	7.0	10.2	18	4			59.72	120	77.15	120	77.73	120
M14	2.00	110	11	9.0	12.0	20	4			112.87	140	114.72	140		
M16	2.00	110	12	9.0	14.0	22	3	201.93	160						
M16	2.00	110	12	9.0	14.0	22	4			84.84	160	115.35	160	112.87	160
M18	2.50	125	14	11.0	15.5	25	4			179.55	180				
M20	2.50	140	16	12.0	17.5	25	4			126.66	200	170.54	200	191.76	200
M22	2.50	140	18	14.5	19.5	27	5			246.64	220				
M24	3.00	160	18	14.5	21.0	30	5			215.16	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

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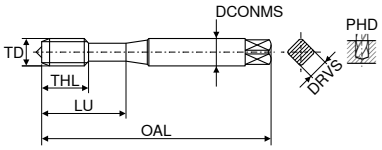
UNI CNC | C 2–3 | ISO 2X 6HX | TiN

UNI CNC | C 2–3 | ISO 2 6H | TiN GS

UNI CNC | E 1,5–2 | ISO 2 6H | TiN GS

UNI CNC | C 2–3 | 7G | TiN GS



DIN 371 with reinforced shank

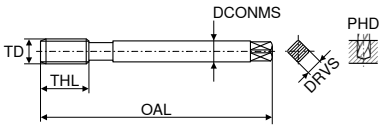
HSS-E ◁ 50° ≤ 1100 N/mm² ≤ 3xD

HSS-E ◁ 45° ≤ 1100 N/mm² ≤ 3xD

HSS-E ◁ 45° ≤ 1100 N/mm² ≤ 3xD

HSS-E ◁ 45° ≤ 1100 N/mm² ≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 416 ...		U0 Article no. 22 544 ...		U0 Article no. 22 546 ...		U0 Article no. 22 594 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£		£		£	
M3	0.50	56	3.5	2.7	2.5	6	18	3	58.32	030	51.27	030			61.47	030
M4	0.70	63	4.5	3.4	3.3	7	21	3	61.02	040	52.30	040			62.47	040
M5	0.80	70	6.0	4.9	4.2	8	25	3	62.75	050	53.60	050	76.26	050	64.79	050
M6	1.00	80	6.0	4.9	5.0	10	30	3	75.82	060	56.22	060	77.24	060	69.72	060
M8	1.25	90	8.0	6.2	6.8	14	35	3	84.25	080	70.89	080	99.67	080	85.13	080
M10	1.50	100	10.0	8.0	8.5	16	39	3	104.38	100	80.91	100	115.21	100	95.58	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 417 ...		U0 Article no. 22 545 ...			U0 Article no. 22 595 ...	
	mm	mm	mm	mm	mm	mm		£		£			£	
M12	1.75	110	9	7	10.2	18	3	122.87	120					
M12	1.75	110	9	7	10.2	18	4			108.68	120		129.16	120
M14	2.00	110	11	9	12.0	20	3	175.43	140					
M14	2.00	110	11	9	12.0	20	4			130.88	140		152.41	140
M16	2.00	110	12	9	14.0	22	3	341.73	160					
M16	2.00	110	12	9	14.0	22	4			144.98	160		168.38	160
M20	2.50	140	16	12	17.5	25	3	292.89	200					
M20	2.50	140	16	12	17.5	25	4			208.30	200		241.30	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				

6

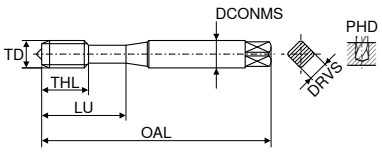
Blind hole – Machine taps, right hand

▲ 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

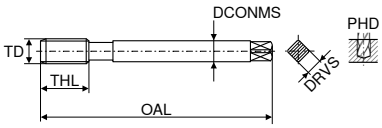


DIN 371 with reinforced shank

HSS-E
∢ 42°
≤ 1100 N/mm²
≤ 3xD

HSS-E
∢ 42°
≤ 1100 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 566 ...		U0 Article no. 22 449 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
M3	0.50	56	3.5	2.7	2.5	6	18	3	45.18	**030**		
M4	0.70	63	4.5	3.4	3.3	7	21	3	48.53	**040**		
M5	0.80	70	6.0	4.9	4.2	8	25	3	49.32	**050**	79.85	**050**
M6	1.00	80	6.0	4.9	5.0	10	30	3	56.22	**060**	92.92	**060**
M8	1.25	90	8.0	6.2	6.8	14	35	3	59.15	**080**	102.52	**080**
M10	1.50	100	10.0	8.0	8.5	16	39	3	84.70	**100**	124.51	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 567 ...		U0 Article no. 22 450 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M12	1.75	110	9	7	10.2	18	4	100.40	**120**	135.03	**120**
M16	2.00	110	12	9	14.0	22	4	156.16	**160**	192.23	**160**
M20	2.50	140	16	12	17.5	25	4	287.18	**200**	314.27	**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.

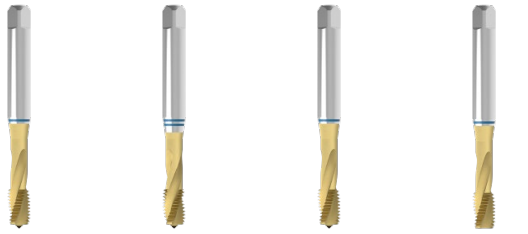
M | SL

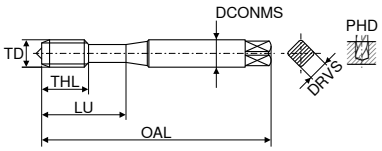
ST TS | HR | ST CNC | ST CNC

C 2–3

ISO 2X 6HX | ISO 2 6H | ISO 2X 6HX | ISO 2X 6HX

TiN | TiN | TiN | TiN

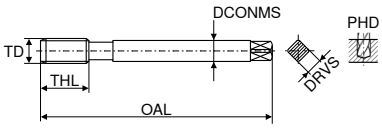




DIN 371 with reinforced shank

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

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 406 ... £		U0 Article no. 22 072 ... £		U0 Article no. 22 328 ... £		U0 Article no. 22 443 ... £	
	mm	mm	mm	mm	mm	mm	mm									
M3	0.50	56	3.5	2.7	2.5	6	18	2	54.79	030			50.09	030		
M3	0.50	56	3.5	2.7	2.5	11	18	3			48.53	030				
M4	0.70	63	4.5	3.4	3.3	13	21	3			48.32	040				
M4	0.70	63	4.5	3.4	3.3	7	21	3	58.32	040			52.23	040		
M5	0.80	70	6.0	4.9	4.2	15	25	3			50.99	050				
M5	0.80	70	6.0	4.9	4.2	8	25	3	60.12	050			54.32	050	79.85	050
M6	1.00	80	6.0	4.9	5.0	17	30	3			61.47	060				
M6	1.00	80	6.0	4.9	5.0	10	30	3	73.27	060			67.18	060	92.92	060
M8	1.25	90	8.0	6.2	6.8	20	35	3			66.83	080				
M8	1.25	90	8.0	6.2	6.8	14	35	3	81.62	080			75.82	080	101.75	080
M10	1.50	100	10.0	8.0	8.5	22	39	3			93.41	100				
M10	1.50	100	10.0	8.0	8.5	16	39	3	99.96	100			92.92	100	123.62	100
M12	1.75	110	12.0	9.0	10.2	24	44	3			105.62	120				



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 407 ... £		U0 Article no. 22 329 ... £		U0 Article no. 22 444 ... £	
	mm	mm	mm	mm	mm	mm							
M12	1.75	110	9	7	10.2	18	3	119.32	120	108.81	120	137.60	120
M16	2.00	110	12	9	14.0	22	3	167.82	160	157.18	160	195.29	160
M20	2.50	140	16	12	17.5	25	3	274.56	200	259.34	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

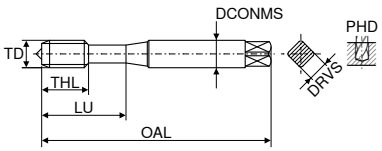
▲ LH = for left hand threads

M | Salo-Rex

ST | C 2–3 | ISO 2 6H

ST | C 2–3 | ISO 2 6H | TiN

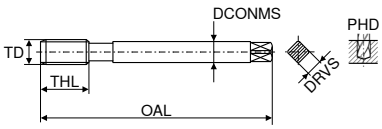
ST LH | C 2–3 | ISO 2 6H



DIN 371 with reinforced shank

HSS-E
∢ 42°
≤ 750 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 082 ...		U0 Article no. 22 084 ...		U0 Article no. 22 138 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£		£	
M2	0.40	45	2.8	2.1	1.60	4.0	12	2	35.32	020	51.17	020		
M2,3	0.40	45	2.8	2.1	1.90	4.5	12	2	38.80	023				
M2,5	0.45	50	2.8	2.1	2.05	5.0	15	2	33.51	025				
M3	0.50	56	3.5	2.7	2.50	6.0	18	3	29.65	030	36.03	030	58.69	030
M3,5	0.60	56	4.0	3.0	2.90	7.0	20	3	32.66	035				
M4	0.70	63	4.5	3.4	3.30	7.0	21	3	29.65	040	38.36	040	52.02	040
M5	0.80	70	6.0	4.9	4.20	8.0	25	3	30.22	050	38.80	050	56.83	050
M6	1.00	80	6.0	4.9	5.00	10.0	30	3	31.55	060	47.66	060	54.78	060
M8	1.25	90	8.0	6.2	6.80	14.0	35	3	37.48	080	52.02	080	66.54	080
M10	1.50	100	10.0	8.0	8.50	16.0	39	3	43.05	100	71.55	100	76.56	100
M12	1.75	110	12.0	9.0	10.20	18.0	44	3	49.17	120				



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 083 ...		U0 Article no. 22 085 ...		U0 Article no. 22 139 ...	
	mm	mm	mm	mm	mm	mm		£		£		£	
M3	0.50	56	2.2		2.5	6	3	38.78	030				
M4	0.70	63	2.8	2.1	3.3	7	3	39.21	040				
M5	0.80	70	3.5	2.7	4.2	8	3	40.39	050				
M6	1.00	80	4.5	3.4	5.0	10	3	47.94	060				
M8	1.25	90	6.0	4.9	6.8	14	3	44.62	080				
M10	1.50	100	7.0	5.5	8.5	16	3			90.07	100		
M12	1.75	110	9.0	7.0	10.2	18	3	56.83	120	85.42	120	105.74	120
M14	2.00	110	11.0	9.0	12.0	20	3	70.12	140				
M16	2.00	110	12.0	9.0	14.0	22	3	78.01	160	109.82	160	154.29	160
M18	2.50	125	14.0	11.0	15.5	25	3	114.62	180				
M20	2.50	140	16.0	12.0	17.5	25	3	117.66	200	185.36	200	226.33	200
M22	2.50	140	18.0	14.5	19.5	27	4	156.88	220				
M24	3.00	160	18.0	14.5	21.0	30	4	148.77	240				
M30	3.50	180	22.0	18.0	26.5	35	4	254.08	300				
M33	3.50	180	25.0	20.0	29.5	35	4	368.82	330				
M36	4.00	200	28.0	22.0	32.0	40	4	368.82	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.

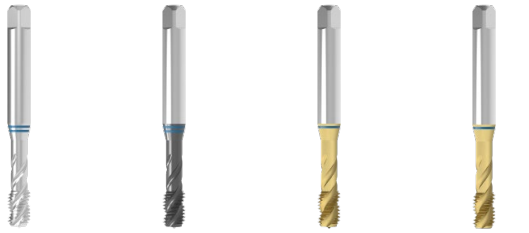
M | Salo-Rex

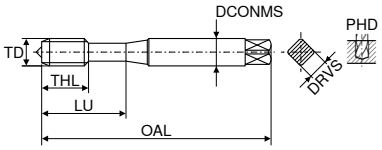
HR | HR | ST TS | ST TS

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

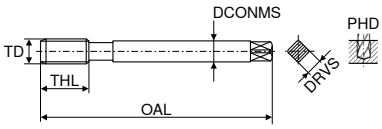




DIN 371 with reinforced shank

HSS-PM ◁ 42° ≤ 1400 N/mm² ≤ 3xD | HSS-PM ◁ 42° ≤ 1400 N/mm² ≤ 3xD | HSS-E ◁ 40° ≤ 1100 N/mm² ≤ 2xD | HSS-E ◁ 40° ≤ 1100 N/mm² ≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 498 ...		U0 Article no. 22 499 ...		U0 Article no. 22 044 ...		U0 Article no. 22 046 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£		£		£	
M3	0.50	56	3.5	2.7	2.5	6	18	3	34.58	030	43.48	030				
M4	0.70	63	4.5	3.4	3.3	7	21	3	32.41	040	43.48	040	56.37	040		
M5	0.80	70	6.0	4.9	4.2	8	25	3	33.40	050	46.33	050	61.60	050	96.78	050
M6	1.00	80	6.0	4.9	5.0	10	30	3	33.51	060	48.53	060	64.50	060	126.39	060
M8	1.25	90	8.0	6.2	6.8	14	35	3	40.20	080	60.14	080	73.65	080	128.42	080
M10	1.50	100	10.0	8.0	8.5	16	39	3	48.09	100	68.70	100	90.22	100	174.78	100



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 045 ...		U0 Article no. 22 047 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M12	1.75	110	9	7	10.2	18	4	108.68	120	191.46	120
M16	2.00	110	12	9	14.0	22	4	157.19	160	293.59	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				

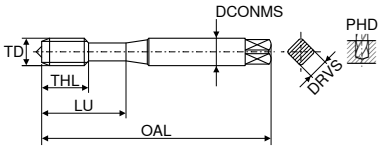
Blind hole – Machine taps, right hand

M | Salo-Rex

VA | C 2–3 | ISO 2 6H | vap.

VA | E 1,5–2 | ISO 2 6H | TiN GS

VA | C 2–3 | ISO 2 6H | TiN GS



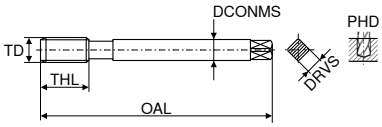
DIN 371 with reinforced shank

HSS-E ◁ 42° ≤ 900 N/mm² ≤ 3xD

HSS-E ◁ 45° ≤ 900 N/mm² ≤ 3xD

HSS-E ◁ 45° ≤ 900 N/mm² ≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 090 ...	£		U0 Article no. 22 042 ...	£		U0 Article no. 22 040 ...	£	
	mm	mm	mm	mm	mm	mm	mm										
M1,6	0.35	40	2.5	2.1	1.25	4	11	2							89.94		**016**
M2	0.40	45	2.8	2.1	1.60	4	12	2	55.43		**020**				49.98		**020**
M2,5	0.45	50	2.8	2.1	2.05	5	15	2	44.62		**025**						
M2,5	0.45	50	2.8	2.1	2.05	5	15	3							47.89		**025**
M3	0.50	56	3.5	2.7	2.50	6	18	3	33.40		**030**				52.30		**030**
M4	0.70	63	4.5	3.4	3.30	7	21	3	34.58		**040**				52.02		**040**
M5	0.80	70	6.0	4.9	4.20	8	25	3	35.02		**050**	77.24		**050**	54.44		**050**
M6	1.00	80	6.0	4.9	5.00	10	30	3	34.93		**060**	79.62		**060**	56.83		**060**
M8	1.25	90	8.0	6.2	6.80	14	35	3	40.77		**080**	100.40		**080**	71.74		**080**
M10	1.50	100	10.0	8.0	8.50	16	39	3	49.82		**100**	116.51		**100**	81.94		**100**



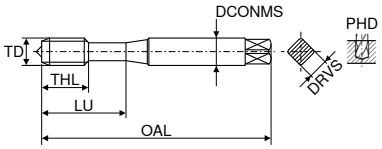
DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 091 ...	£		U0 Article no. 22 041 ...	£	
	mm	mm	mm	mm	mm	mm							
M12	1.75	110	9	7.0	10.2	18	4	61.60		**120**	110.86		**120**
M14	2.00	110	11	9.0	12.0	20	4	90.67		**140**	133.06		**140**
M16	2.00	110	12	9.0	14.0	22	4	87.31		**160**	147.74		**160**
M20	2.50	140	16	12.0	17.5	25	4	130.45		**200**	211.80		**200**
M22	2.50	140	18	14.5	19.5	27	5	279.75		**220**			
M24	3.00	160	18	14.5	21.0	30	5	165.61		**240**			
M30	3.50	180	22	18.0	26.5	35	5	350.38		**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

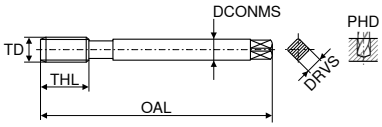


DIN 371 with reinforced shank

	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

	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
	Article no. 22 326 ...	Article no. 22 324 ...	Article no. 22 086 ...	Article no. 22 088 ...
	£	£	£	£

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	4	12	2	48.70	020	65.80	020	39.23	020	46.89	020
M2,5	0.45	50	2.8	2.1	2.05	5	15	2	45.67	025	63.64	025	36.35	025	46.94	025
M3	0.50	56	3.5	2.7	2.50	6	18	2	37.28	030	55.27	030				
M3	0.50	56	3.5	2.7	2.50	6	18	3					29.65	030	38.78	030
M4	0.70	63	4.5	3.4	3.30	7	21	2	37.28	040	59.71	040				
M4	0.70	63	4.5	3.4	3.30	7	21	3					29.65	040	40.84	040
M5	0.80	70	6.0	4.9	4.20	8	25	2	38.61	050	61.86	050				
M5	0.80	70	6.0	4.9	4.20	8	25	3					32.41	050	41.13	050
M6	1.00	80	6.0	4.9	5.00	10	30	2	38.61	060	85.43	060				
M6	1.00	80	6.0	4.9	5.00	10	30	3					31.55	060	42.29	060
M8	1.25	90	8.0	6.2	6.80	14	35	2	46.09	080	92.92	080				
M8	1.25	90	8.0	6.2	6.80	14	35	3					37.48	080	46.18	080
M10	1.50	100	10.0	8.0	8.50	16	39	2	54.32	100	116.56	100				
M10	1.50	100	10.0	8.0	8.50	16	39	3					43.88	100	54.78	100



DIN 376 with reduced shank

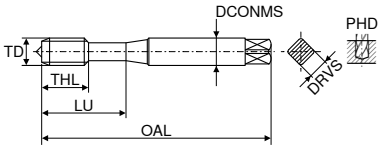
													U0		U0	
													Article no. 22 087 ...		Article no. 22 089 ...	
													£		£	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes									
	mm	mm	mm	mm	mm	mm										
M12	1.75	110	9	7	10.2	18	3						56.83	120	69.72	120
M16	2.00	110	12	9	14.0	22	3						78.01	160	96.03	160

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

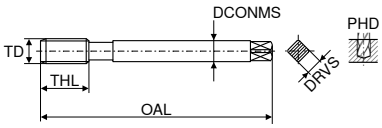
M | SL



DIN 371 with reinforced shank

	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
				
	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		£		£		£		£	
M3	0.50	56	3.5	2.7	2.5	11	18	2			48.32	030			67.59	030
M3	0.50	56	3.5	2.7	2.5	11	18	3					107.67	030		
M3	0.50	56	3.5	2.7	2.5	6	18	3	48.32	030						
M3,5	0.60	56	4.0	3.0	2.9	12	20	3			52.87	035				
M4	0.70	63	4.5	3.4	3.3	7	21	3	50.42	040						
M4	0.70	63	4.5	3.4	3.3	13	21	3			53.92	040	107.67	040	70.62	040
M5	0.80	70	6.0	4.9	4.2	8	25	3	50.84	050						
M5	0.80	70	6.0	4.9	4.2	15	25	3			54.34	050	96.33	050	73.27	050
M6	1.00	80	6.0	4.9	5.0	10	30	3	54.90	060						
M6	1.00	80	6.0	4.9	5.0	17	30	3			72.65	060	112.87	060	92.14	060
M8	1.25	90	8.0	6.2	6.8	14	35	3	60.03	080						
M8	1.25	90	8.0	6.2	6.8	20	35	3			79.03	080	166.06	080	100.86	080
M10	1.50	100	10.0	8.0	8.5	16	39	3	83.67	100						
M10	1.50	100	10.0	8.0	8.5	22	39	3			97.34	100	145.26	100	126.32	100
M12	1.75	110	12.0	9.0	10.2	18	44	3	94.42	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 ...	
	mm	mm	mm	mm	mm	mm		£		£		£	
M12	1.75	110	9	7.0	10.2	24	3	110.41	120			146.44	120
M12	1.75	110	9	7.0	10.2	24	4			188.86	120		
M14	2.00	110	11	9.0	12.0	26	3					215.15	140
M14	2.00	110	11	9.0	12.0	26	4			277.54	140		
M16	2.00	110	12	9.0	14.0	27	3	154.87	160			201.37	160
M16	2.00	110	12	9.0	14.0	27	5			228.07	160		
M20	2.50	140	16	12.0	17.5	32	3	265.84	200			350.84	200
M24	3.00	160	18	14.5	21.0	34	3	306.36	240				

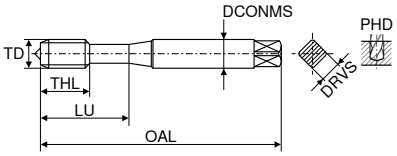
Steel	2-5	6-8		
Stainless steel		4-10		
Cast iron				
Non ferrous metals		10-12		
Heat resistant alloys	2-6	4-6	2-4	2-4
Hardened materials				

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			
M3	0.50	40	3.5	2.7	2.5	6	18	3	28.19	**030**
M3,5	0.60	45	4.0	3.0	2.9	7	20	3	35.49	**035**
M4	0.70	45	4.5	3.4	3.3	7	22	3	28.61	**040**
M5	0.80	50	6.0	4.9	4.2	9	25	3	28.19	**050**
M6	1.00	56	6.0	4.9	5.0	10	28	3	30.95	**060**
M8	1.25	63	6.0	4.9	6.8	14		3	35.45	**080**
M10	1.50	70	7.0	5.5	8.5	16		3	40.69	**100**
M12	1.75	75	9.0	7.0	10.2	18		4	52.58	**120**
M16	2.00	80	12.0	9.0	14.0	22		4	83.38	**160**

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

▲ AUT = short version for automatic use

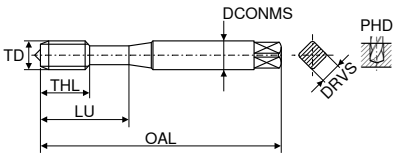
▲ ES = extra short

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					
M3	0.50	40	3.5	2.7	2.5	10	18	2	25.27	030	30.65	030
M4	0.70	45	4.5	3.4	3.3	12	22	3	25.09	040	31.55	040
M5	0.80	50	6.0	4.9	4.2	14	25	3	25.94	050	31.67	050
M6	1.00	56	6.0	4.9	5.0	16	28	3	26.51	060	34.43	060
M8	1.25	63	6.0	4.9	6.8	20		3	30.22	080	38.94	080
M10	1.50	70	7.0	5.5	8.5	22		3	38.80	100	47.74	100
M12	1.75	75	9.0	7.0	10.2	24		3	49.32	120		
M14	2.00	80	11.0	9.0	12.0	26		3	71.55	140		
M16	2.00	80	12.0	9.0	14.0	27		3	78.24	160		
M20	2.50	95	16.0	12.0	17.5	32		3	116.66	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

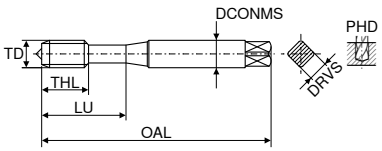
M | Salo-Rex

UNI EL | ST EL

C 2–3 | C 2–3

ISO 2 6H | ISO 2 6H

vap.

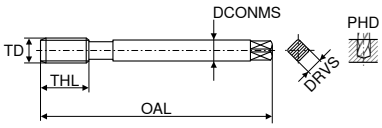


DIN 371 with reinforced shank

HSS-E ◁ 42° ≤ 1100 N/mm² ≤ 3xD

HSS-E ◁ 42° ≤ 750 N/mm² ≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 538 ... £		U0 Article no. 22 422 ... £	
	mm	mm	mm	mm	mm	mm	mm					
M3	0.50	100	3.5	2.7	2.5	6	18	3	57.38	**030**	71.88	**030**
M4	0.70	125	4.5	3.4	3.3	7	21	3	57.29	**040**	70.22	**040**
M5	0.80	140	6.0	4.9	4.2	8	25	3	64.42	**050**	78.46	**050**
M6	1.00	160	6.0	4.9	5.0	10	30	3	67.70	**060**	81.62	**060**
M8	1.25	180	8.0	6.2	6.8	14	35	3	77.15	**080**	98.28	**080**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 539 ... £		U0 Article no. 22 423 ... £	
	mm	mm	mm	mm	mm	mm					
M6	1.00	160	4.5	3.4	5.0	10	3	86.14	**060**	81.62	**060**
M8	1.25	180	6.0	4.9	6.8	14	3	104.02	**080**	98.28	**080**
M10	1.50	200	7.0	5.5	8.5	16	3	89.94	**100**	107.85	**100**
M12	1.75	224	9.0	7.0	10.2	18	3	111.72	**120**	140.36	**120**
M14	2.00	224	11.0	9.0	12.0	20	3	194.53	**140**	204.42	**140**
M16	2.00	224	12.0	9.0	14.0	22	3	164.03	**160**	198.32	**160**
M18	2.50	250	14.0	11.0	15.5	25	3	304.63	**180**	300.51	**180**
M20	2.50	280	16.0	12.0	17.5	25	3	260.02	**200**	268.48	**200**

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

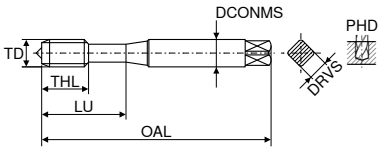
▲ EL = extra long, with double overall length

M | SL

ST
EL

E
1,5–2

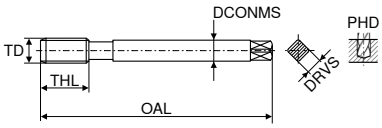
ISO 2
6H



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				
M3	0.50	100	3.5	2.7	2.5	11	18	2		54.87	**030**
M4	0.70	125	4.5	3.4	3.3	13	21	3		54.87	**040**
M5	0.80	140	6.0	4.9	4.2	15	25	3		63.06	**050**
M6	1.00	160	6.0	4.9	5.0	17	30	3		66.24	**060**
M8	1.25	180	8.0	6.2	6.8	20	35	3		77.69	**080**



DIN 376 with reduced shank

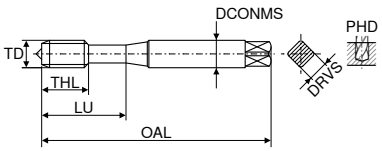
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 080 ...	£	
	mm	mm	mm	mm	mm	mm				
M6	1.00	160	4.5	3.4	5.0	17	3		67.70	**060**
M8	1.25	180	6.0	4.9	6.8	20	3		81.07	**080**
M10	1.50	200	7.0	5.5	8.5	22	3		86.88	**100**
M12	1.75	224	9.0	7.0	10.2	24	3		110.41	**120**
M14	2.00	224	11.0	9.0	12.0	26	3		159.96	**140**
M16	2.00	224	12.0	9.0	14.0	27	3		159.65	**160**
M20	2.50	280	16.0	12.0	17.5	32	3		221.08	**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

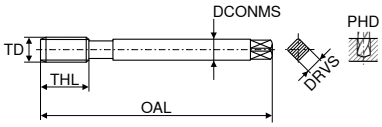
M



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 ◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	HSS-E ◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	HSS-PM ◁ 50° ≤ 1000 N/mm² ≤ 2,5xD	HSS-E ◁ 45° ≤ 1000 N/mm² ≤ 3xD	HSS-E ◁ 45° ≤ 1000 N/mm² ≤ 3xD
	T9	T9	T9	T9	T9
TD	Article no. 23 118 ...	Article no. 23 120 ...	Article no. 23 026 ...	Article no. 23 122 ...	Article no. 23 124 ...
	£	£	£	£	£
M2	28.61 020	32.66 020			
M2,5	27.50 025	32.11 025			
M3	21.81 030	27.38 030	13.09 030	28.81 030	30.95 030
M4	22.68 040	30.65 040	13.09 040	30.95 040	32.08 040
M5	23.40 050	31.67 050	14.10 050	32.11 050	34.43 050
M6	24.70 060	39.44 060	16.33 060	40.77 060	46.49 060
M8	27.95 080	43.05 080	19.37 080	44.62 080	49.98 080
M10	31.98 100	57.70 100	24.40 100	56.37 100	63.50 100

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	4	12	2
M2,5	0.45	50	2.8	2.1	2.05	5	14	2
M3	0.50	56	3.5	2.7	2.50	6	18	3
M4	0.70	63	4.5	3.4	3.30	7	21	3
M5	0.80	70	6.0	4.9	4.20	8	25	3
M6	1.00	80	6.0	4.9	5.00	10	30	3
M8	1.25	90	8.0	6.2	6.80	14	35	3
M10	1.50	100	10.0	8.0	8.50	16	39	3



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						
M3	0.50	56	2.2		2.5	6	3	9.51 030				
M4	0.70	63	2.8	2.1	3.3	7	3	8.62 040				
M5	0.80	70	3.5	2.7	4.2	8	3	8.39 050				
M6	1.00	80	4.5	3.4	5.0	10	3	8.28 060				
M8	1.25	90	6.0	4.9	6.8	14	3	8.72 080				
M10	1.50	100	7.0	5.5	8.5	16	3	11.76 100				
M12	1.75	110	9.0	7.0	10.2	18	3	13.32 120	62.69 120			
M12	1.75	110	9.0	7.0	10.2	18	4			28.87 120	66.83 120	73.81 120
M14	2.00	110	11.0	9.0	12.0	20	3		42.96 14000			
M14	2.00	110	11.0	9.0	12.0	20	4			41.52 140		
M16	2.00	110	12.0	9.0	14.0	22	3	19.58 160	80.08 160			
M16	2.00	110	12.0	9.0	14.0	22	4			41.52 160	89.18 160	98.20 160
M18	2.50	125	14.0	11.0	15.5	25	3		67.94 18000			
M20	2.50	140	16.0	12.0	17.5	25	3	29.54 200	155.65 200	47.57 200		
M20	2.50	140	16.0	12.0	17.5	25	4				161.69 200	179.99 200
M22	2.50	140	18.0	14.5	19.5	27	4		99.59 22000			
M24	3.00	160	18.0	14.5	21.0	34	4		150.79 240			
M27	3.00	160	20.0	16.0	24.0	30	4		124.57 27000			
M30	3.50	180	22.0	18.0	26.5	35	4		138.33 30000			
M33	3.50	180	25.0	20.0	29.5	35	4		199.46 33000			
M36	4.00	200	28.0	22.0	32.0	40	4		216.72 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

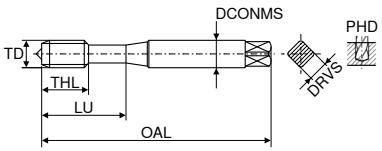
M

UNI NCW | FE | FE-HF | VA

C 2–3

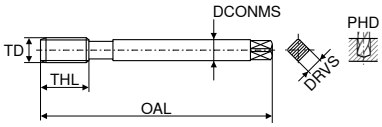
ISO 2 6H

TiCN (UNI NCW, FE-HF)



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	Article no. 23 126 ...	Article no. 23 216 ...	Article no. 23 312 ...	Article no. 23 414 ...
	£	£	£	£
M2	0.40 45 2.8 2.1 1.60 4 12 2	12.52 020		20.79 020
M2,5	0.45 50 2.8 2.1 2.05 5 14 2	25.27 025		27.50 025
M3	0.50 56 3.5 2.7 2.50 6 18 3	12.67 030	26.37 030	13.83 030
M3	0.50 70 6.0 4.9 2.50 6 18 3	33.13 030		
M4	0.70 63 4.5 3.4 3.30 7 21 3	12.67 040	28.81 040	13.83 040
M4	0.70 70 6.0 4.9 3.30 7 21 3	37.94 040		
M5	0.80 70 6.0 4.9 4.20 8 25 3	37.78 050	12.70 050	29.65 050	14.39 050
M6	1.00 80 6.0 4.9 5.00 10 30 3	37.78 060	12.70 060	40.84 060	14.39 060
M8	1.25 90 8.0 6.2 6.80 14 35 3	47.74 080	16.54 080	44.62 080	18.31 080
M10	1.50 100 10.0 8.0 8.50 16 39 3	57.73 100	19.82 100	55.64 100	22.09 100



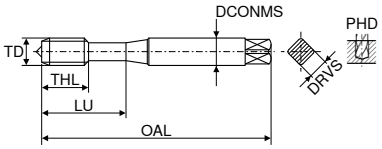
DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 127 ... £	T9 Article no. 23 217 ... £	T9 Article no. 23 313 ... £	T9 Article no. 23 415 ... £
	mm	mm	mm	mm	mm	mm					
M12	1.75	110	10	8.0	10.2	18	3	73.23 120			
M12	1.75	110	9	7.0	10.2	18	3		26.74 120	64.37 120	29.51 120
M14	2.00	110	11	9.0	12.0	20	3		32.41 140		
M16	2.00	110	12	9.0	14.0	22	3	144.44 160	40.69 160	86.88 160	45.05 160
M20	2.50	140	16	12.0	17.5	25	3		63.92 200	155.59 200	68.56 200
M24	3.00	160	18	14.5	21.0	30	4				93.57 240

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

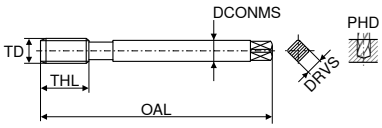


DIN 371 with reinforced shank

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

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
Article no. 23 416 ...	Article no. 23 426 ...	Article no. 23 456 ...	Article no. 23 616 ...	Article no. 23 614 ...
£	£	£	£	£

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	4	12	2	33.56	**020**								
M2,5	0.45	50	2.8	2.1	2.05	5	14	2	32.11	**025**								
M3	0.50	56	3.5	2.7	2.50	6	18	3	27.38	**030**	11.76	**030**	13.09	**030**	12.67	**030**	26.93	**030**
M4	0.70	63	4.5	3.4	3.30	7	21	3	30.65	**040**	11.86	**040**	14.33	**040**	12.67	**040**	26.93	**040**
M5	0.80	70	6.0	4.9	4.20	8	25	3	31.67	**050**	12.20	**050**	14.55	**050**	12.70	**050**	27.95	**050**
M6	1.00	80	6.0	4.9	5.00	10	30	3	40.63	**060**	12.42	**060**	18.69	**060**	12.70	**060**	27.95	**060**
M8	1.25	90	8.0	6.2	6.80	14	35	3	43.05	**080**	14.55	**080**	20.04	**080**	16.54	**080**	32.98	**080**
M10	1.50	100	10.0	8.0	8.50	16	39	3	60.57	**100**	17.46	**100**	27.64	**100**	19.82	**100**	40.39	**100**



DIN 376 with reduced shank

	T9	T9	T9	T9	T9
	Article no. 23 417 ...	Article no. 23 427 ...	Article no. 23 457 ...	Article no. 23 617 ...	Article no. 23 615 ...
	£	£	£	£	£

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes								
	mm	mm	mm	mm	mm	mm									
M12	1.75	110	9	7.0	10.2	18	3			28.87	**120**	39.62	**120**	26.74	**120**	49.98	**120**
M12	1.75	110	9	7.0	10.2	18	4	65.82	**120**								
M14	2.00	110	11	9.0	12.0	20	4			38.06	**140**						
M16	2.00	110	12	9.0	14.0	22	3			41.41	**160**	49.80	**160**				
M16	2.00	110	12	9.0	14.0	22	4	80.08	**160**								
M20	2.50	140	16	12.0	17.5	25	3			61.67	**200**	98.92	**200**				
M20	2.50	140	16	12.0	17.5	25	4	126.10	**200**								
M24	3.00	160	18	14.5	21.0	30	4			78.00	**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

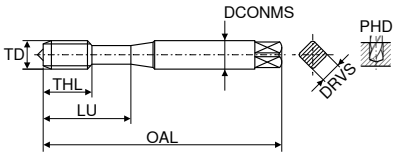
M | TWIN

ST | HR | AMPCO

C 2–3

ISO 2X 6HX

nitr.



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	Article no. 22 028 ...	Article no. 22 006 ...	Article no. 22 030 ...
	£	£	£

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes					
	mm	mm	mm	mm	mm	mm	mm						
M1,2	0.25	40	2.5	2.1	0.95	5	13	2	48.32	**012** [1]			
M1,4	0.30	40	2.5	2.1	1.10	6	13	2	39.21	**014** [1]			
M1,6	0.35	40	2.5	2.1	1.25	6	11	2	35.06	**016**			
M1,7	0.35	40	2.5	2.1	1.35	6	11	2	38.80	**017**			
M1,8	0.35	40	2.5	2.1	1.45	6	11	2	36.03	**018**			
M2	0.40	45	2.8	2.1	1.60	7	12	3	30.22	**020**			
M2,2	0.45	45	2.8	2.1	1.75	7	12	3	30.79	**022**			
M2,3	0.40	45	2.8	2.1	1.90	7	12	3	35.02	**023**			
M2,5	0.45	50	2.8	2.1	2.05	9	14	3	29.65	**025**			
M2,6	0.45	50	2.8	2.1	2.15	9	14	3	31.98	**026**			
M3	0.50	56	3.5	2.7	2.50	11	18	3	24.70	**030**	35.06	**030**	35.45	**030**
M3,5	0.60	56	4.0	3.0	2.90	12	20	3	25.27	**035**				
M4	0.70	63	4.5	3.4	3.30	13	21	3	24.66	**040**	35.92	**040**	36.18	**040**
M5	0.80	70	6.0	4.9	4.20	15	25	3	25.27	**050**	38.36	**050**	36.21	**050**
M6	1.00	80	6.0	4.9	5.00	17	30	3	25.09	**060**	37.93	**060**	35.45	**060**
M7	1.00	80	7.0	5.5	6.00	17	30	3	36.33	**070**				
M8	1.25	90	8.0	6.2	6.80	20	35	3	28.38	**080**	41.61	**080**	40.80	**080**
M10	1.50	100	10.0	8.0	8.50	22	39	3	36.35	**100**	52.75	**100**	51.87	**100**
M12	1.75	110	12.0	9.0	10.20	24	44	3	46.18	**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

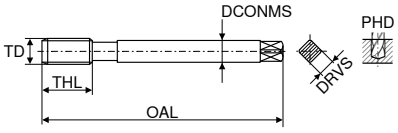
M | TWIN

ST | HR | AMPCO

C 2–3

ISO 2X 6HX

nitr.



DIN 376 with reduced shank



HSS-E | HSS-E | HSS-PM

0° | 0° | 0°

≤ 750 N/mm² | ≤ 1400 N/mm² | ≤ 800 N/mm²

≤ 2xD | ≤ 2xD | ≤ 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		£		£		£	
M4	0.70	63	2.8	2.1	3.3	13	3	32.11	**040**				
M5	0.80	70	3.5	2.7	4.2	15	3	32.41	**050**				
M6	1.00	80	4.5	3.4	5.0	17	3	32.41	**060**				
M8	1.25	90	6.0	4.9	6.8	20	3	40.84	**080**				
M10	1.50	100	7.0	5.5	8.5	22	3	46.18	**100**				
M12	1.75	110	9.0	7.0	10.2	24	3	46.94	**120**	65.84	**120**		
M12	1.75	110	9.0	7.0	10.2	24	4					89.85	**120**
M14	2.00	110	11.0	9.0	12.0	26	3	64.95	**140**				
M16	2.00	110	12.0	9.0	14.0	27	3	69.30	**160**	95.90	**160**		
M16	2.00	110	12.0	9.0	14.0	27	4					130.43	**160**
M18	2.50	125	14.0	11.0	15.5	30	4	102.27	**180**				
M20	2.50	140	16.0	12.0	17.5	32	4	104.16	**200**			173.74	**200**
M22	2.50	140	18.0	14.5	19.5	32	4	142.52	**220**				
M24	3.00	160	18.0	14.5	21.0	34	4	141.05	**240**			212.09	**240**
M33	3.50	180	25.0	20.0	29.5	40	4	278.91	**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			

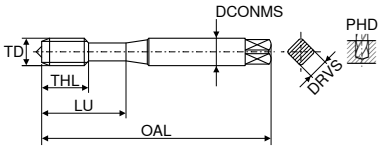
6

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.

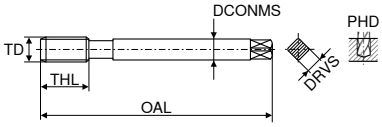


DIN 371 with reinforced shank

HSS-E
0°
≤ 1050 N/mm²
≤ 2xD

HSS-E
0°
≤ 1050 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 032 ...		U0 Article no. 22 036 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
M2	0.40	45	2.8	2.1	1.60	7	12	3	31.55	**020**		
M2,5	0.45	50	2.8	2.1	2.05	9	14	3	32.41	**025**		
M3	0.50	56	3.5	2.7	2.50	11	18	3	27.18	**030**		
M3,5	0.60	56	4.0	3.0	2.90	12	20	3	29.65	**035**		
M4	0.70	63	4.5	3.4	3.30	13	21	3	27.79	**040**		
M5	0.80	70	6.0	4.9	4.20	15	25	3	29.65	**050**	43.73	**050**
M6	1.00	80	6.0	4.9	5.00	17	30	3	29.65	**060**	43.62	**060**
M8	1.25	90	8.0	6.2	6.80	20	35	3	34.09	**080**	49.11	**080**
M10	1.50	100	10.0	8.0	8.50	22	39	3	40.77	**100**	58.55	**100**



DIN 376 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 033 ...		U0 Article no. 22 037 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M4	0.70	63	2.8	2.1	3.3	13	3	43.28	**040**		
M5	0.80	70	3.5	2.7	4.2	15	3	35.32	**050**		
M6	1.00	80	4.5	3.4	5.0	17	3	34.93	**060**		
M8	1.25	90	6.0	4.9	6.8	20	3	38.22	**080**		
M10	1.50	100	7.0	5.5	8.5	22	3	43.28	**100**		
M12	1.75	110	9.0	7.0	10.2	24	3	52.30	**120**	67.26	**120**
M14	2.00	110	11.0	9.0	12.0	26	3	64.42	**140**	92.97	**140**
M16	2.00	110	12.0	9.0	14.0	27	3	74.53	**160**	91.92	**160**
M18	2.50	125	14.0	11.0	15.5	30	4	110.41	**180**		
M20	2.50	140	16.0	12.0	17.5	32	4	110.41	**200**	141.48	**200**
M22	2.50	140	18.0	14.5	19.5	32	4	164.44	**220**		
M24	3.00	160	18.0	14.5	21.0	34	4	146.87	**240**		

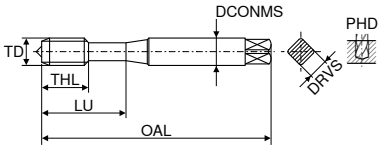
Steel		
Stainless steel		
Cast iron	**10-20**	**10-20**
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

M | TWIN

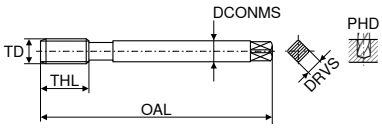
HT | D 4–5 | ISO 2X 6HX | OSM

HT | C 2–3 | ISO 2X 6HX | TiCN



DIN 371 with reinforced shank

									Solid carbide 0° ≤ 63 HRC ≤ 1,5xD		HSS-PM 0° 44 - 52 HRC ≤ 1,5xD	
									U0		U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	**Article no. 22 806 ...**		**Article no. 22 227 ...**	
	mm	mm	mm	mm	mm	mm	mm		£		£	
M3	0.50	63	4.5	3.4	2.55	6	18	4	174.90	**030**		
M4	0.70	63	4.5	3.4	3.40	8	20	4	174.90	**040**		
M5	0.80	70	6.0	4.9	4.30	10	26	4	200.76	**050**		
M6	1.00	80	6.0	4.9	5.00	10	30	4			151.64	**060**
M6	1.00	80	6.0	4.9	5.10	12	28	4	211.37	**060**		
M8	1.25	90	8.0	6.2	6.80	14	35	5			163.26	**080**
M8	1.25	90	8.0	6.2	6.90	15	35	5	242.16	**080**		
M10	1.50	100	10.0	8.0	8.50	18	38	5	307.09	**100**		
M10	1.50	100	10.0	8.0	8.50	16	39	5			204.42	**100**
M12	1.75	110	12.0	9.0	10.40	21	41	5	568.13	**120**		
M16	2.00	110	16.0	12.0	14.20	24	44	6	807.09	**160**		



DIN 376 with reduced shank

								U0	
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	**Article no. 22 228 ...**	
	mm	mm	mm	mm	mm	mm		£	
M12	1.75	110	9	7	10.4	18	5	254.78	**120**
M16	2.00	110	12	9	14.2	22	6	350.84	**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

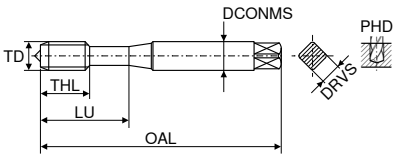
▲ ES = extra short

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			
M2	0.40	36	2.8	2.1	1.60	8		3	38.78	**020**
M2,5	0.45	40	2.8	2.1	2.05	9		3	38.78	**025**
M3	0.50	40	3.5	2.7	2.50	10	18	3	29.89	**030**
M4	0.70	45	4.5	3.4	3.30	12	22	3	29.89	**040**
M5	0.80	50	6.0	4.9	4.20	14	25	3	29.89	**050**
M6	1.00	56	6.0	4.9	5.00	16	28	3	31.98	**060**
M8	1.25	63	6.0	4.9	6.80	20		3	36.53	**080**
M10	1.50	70	7.0	5.5	8.50	22		3	48.01	**100**
M12	1.75	75	9.0	7.0	10.20	24		3	48.32	**120**

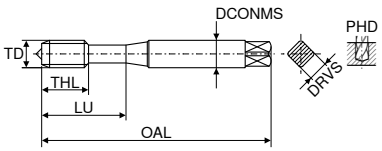
Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
Hardened materials	

Through hole / Blind hole – Machine taps, right hand

▲ EL = extra long, with double overall length

M | TWIN

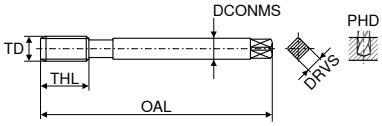
HR EL | C 2–3 | ISO 2X 6HX | nitr.



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			
M3	0.50	100	3.5	2.7	2.5	11	18	3	69.13	**030**
M4	0.70	125	4.5	3.4	3.3	13	21	3	69.13	**040**
M5	0.80	140	6.0	4.9	4.2	15	25	3	74.53	**050**
M6	1.00	160	6.0	4.9	5.0	17	30	3	78.15	**060**
M8	1.25	180	8.0	6.2	6.8	20	35	3	90.07	**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			
M10	1.50	200	7	5.5	8.5	22	3	104.02	**100**
M12	1.75	224	9	7.0	10.2	24	3	123.48	**120**
M16	2.00	224	12	9.0	14.0	27	3	192.79	**160**
M20	2.50	280	16	12.0	17.5	32	4	265.41	**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

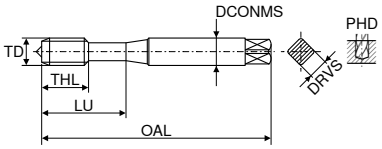
M

GG

C
2–3

ISO 2X
6HX

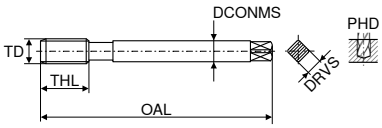
TiCN



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		£	
M3	0.50	56	3.5	2.7	2.5	11	18	3	25.94	**030**
M4	0.70	63	4.5	3.4	3.3	13	21	3	29.51	**040**
M5	0.80	70	6.0	4.9	4.2	15	25	3	29.78	**050**
M6	1.00	80	6.0	4.9	5.0	17	30	3	38.78	**060**
M8	1.25	90	8.0	6.2	6.8	20	35	3	41.61	**080**
M10	1.50	100	10.0	8.0	8.5	22	39	3	56.88	**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		£	
M12	1.75	110	9	7	10.2	24	3	64.08	**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

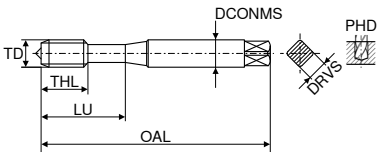
M | Spanlos

EC | C 2–3 | ISO 2X 6HX | Ti200

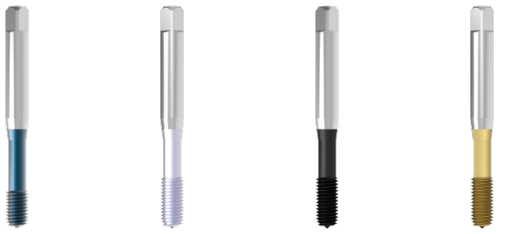
EC | C 2–3 | ISO 2X 6HX | HCr

EC | C 2–3 | ISO 2X 6HX | TiN GS

EC | C 2–3 | ISO 2X 6HX | TiN



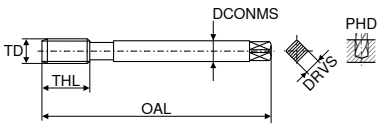
DIN 2174 with reinforced shank



HSS-PM ≤ 1400 N/mm² ≤ 1,5xD | HSS-E ≤ 1100 N/mm² ≤ 1,5xD | HSS-E ≤ 1100 N/mm² ≤ 1,5xD | HSS-E ≤ 1100 N/mm² ≤ 1,5xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	U0 Article no. 22 112 ... £		U0 Article no. 22 128 ... £		U0 Article no. 22 136 ... £		U0 Article no. 22 100 ... £	
	mm	mm	mm	mm	mm	mm	mm								
M1	0.25	40	2.5	2.1	0.90	5	6.5							80.04	**010** [1]
M1,2	0.25	40	2.5	2.1	1.10	5	6.5							73.40	**012** [1]
M1,4	0.30	40	2.5	2.1	1.28	6	9.0							69.13	**014** [1]
M1,6	0.35	40	2.5	2.1	1.47	6	9.0							67.26	**016**
M1,7	0.35	40	2.5	2.1	1.57	6	9.0							69.13	**017**
M2	0.40	45	2.8	2.1	1.85	7	10.0			82.21	**020**			44.90	**020**
M2,5	0.45	50	2.8	2.1	2.30	9	14.0					74.96	**025**		
M2,5	0.45	50	2.8	2.1	2.33	9	14.0			69.13	**025**			45.47	**025**
M2,6	0.45	50	2.8	2.1	2.43	9	14.0							47.80	**026**
M3	0.50	56	3.5	2.7	2.80	6	18.0	71.74	**030**						
M3	0.50	56	3.5	2.7	2.80	11	18.0			50.17	**030**	61.47	**030**	41.41	**030**
M3,5	0.60	56	4.0	3.0	3.25	12	20.0							39.76	**035**
M4	0.70	63	4.5	3.4	3.70	13	21.0			52.02	**040**	61.58	**040**	42.43	**040**
M4	0.70	63	4.5	3.4	3.70	7	21.0	75.25	**040**						
M5	0.80	70	6.0	4.9	4.65	15	25.0			54.78	**050**	65.10	**050**	44.46	**050**
M5	0.80	70	6.0	4.9	4.65	8	25.0	80.04	**050**						
M6	1.00	80	6.0	4.9	5.60	10	30.0	95.76	**060**						
M6	1.00	80	6.0	4.9	5.60	17	30.0			54.78	**060**	72.21	**060**	50.99	**060**
M8	1.25	90	8.0	6.2	7.40	20	35.0							56.08	**080**
M8	1.25	90	8.0	6.2	7.45	20	35.0			61.58	**080**	78.60	**080**		
M8	1.25	90	8.0	6.2	7.45	14	35.0	108.68	**080**						
M10	1.50	100	10.0	8.0	9.35	16	39.0	136.11	**100**						
M10	1.50	100	10.0	8.0	9.35	22	39.0			82.21	**100**	94.36	**100**	70.77	**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 ... £	
	mm	mm	mm	mm	mm	mm		
M12	1.75	110	9	7	11.25	24	86.88	**120**
M16	2.00	110	12	9	15.10	27	130.41	**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

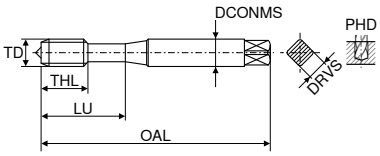
EC SN | C 2–3 | ISO 2X 6HX | nitr.

EC SN | C 2–3 | ISO 2X 6HX | HCr

EC SN | C 2–3 | ISO 3X 6GX | TiN

EC SN | C 2–3 | ISO 2X 6HX | TiN GS

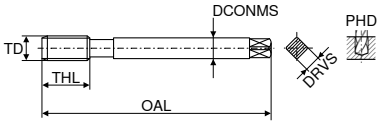
EC SN | C 2–3 | ISO 2X 6HX | TiN



DIN 2174 with reinforced shank

HSS-E ≤ 1100 N/mm² ≤ 3xD | HSS-E ≤ 1100 N/mm² ≤ 3xD | HSS-E ≤ 1100 N/mm² ≤ 3xD | HSS-E ≤ 1100 N/mm² ≤ 3xD | HSS-E ≤ 1100 N/mm² ≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 104 ... £		U0 Article no. 22 107 ... £		U0 Article no. 22 108 ... £		U0 Article no. 22 154 ... £		U0 Article no. 22 105 ... £	
	mm	mm	mm	mm	mm	mm	mm											
M2	0.40	45	2.8	2.1	1.85	7	10	3									52.75	020
M2,5	0.45	50	2.8	2.1	2.33	9	14	3									49.17	025
M3	0.50	56	3.5	2.7	2.80	11	18	3					43.16	030	64.85	030		
M3	0.50	56	3.5	2.7	2.80	11	18	4	32.27	030	44.46	030					45.48	030
M3,5	0.60	56	4.0	3.0	3.25	12	20	3									49.17	035
M4	0.70	63	4.5	3.4	3.70	13	21	4					46.33	040	68.01	040		
M4	0.70	63	4.5	3.4	3.70	13	21	5	38.22	040	45.18	040					47.23	040
M5	0.80	70	6.0	4.9	4.65	15	25	4					49.17	050	70.60	050		
M5	0.80	70	6.0	4.9	4.65	15	25	5	39.34	050	47.80	050					48.81	050
M6	1.00	80	6.0	4.9	5.60	17	30	4					55.22	060	77.85	060		
M6	1.00	80	6.0	4.9	5.60	17	30	5	40.20	060	48.32	060					55.79	060
M8	1.25	90	8.0	6.2	7.45	20	35	6	48.32	080	56.45	080	63.06	080	84.41	080	61.60	080
M10	1.50	100	10.0	8.0	9.35	22	39	6	62.61	100	71.64	100	76.56	100	102.71	100	76.86	100



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 106 ... £	
	mm	mm	mm	mm	mm	mm			
M12	1.75	110	9	7	11.25	24	6	105.91	120
M14	2.00	110	11	9	13.10	26	5	184.80	140
M16	2.00	110	12	9	15.10	27	7	155.15	160

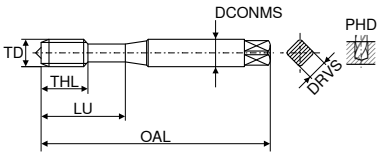
Steel	8-30	8-30	8-30	8-30	8-30
Stainless steel	8-15	8-15	8-15	8-15	8-15
Cast iron					
Non ferrous metals	10-30	10-30	12-25	12-25	12-25
Heat resistant alloys					
Hardened materials					

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

▲ SN = Thread formers with lubrication grooves

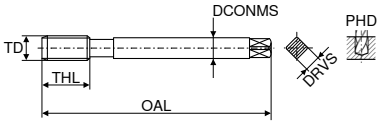
M | Spanlos

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

	HSS-PM ≤ 1400 N/mm² ≤ 3xD		HSS-PM ≤ 1400 N/mm² ≤ 3xD		HSS-PM ≤ 1100 N/mm² ≤ 3xD		HSS-PM ≤ 1100 N/mm² ≤ 3xD	
	U0		U0		U0		U0	
TD	Article no. 22 114 ...		Article no. 22 118 ...		Article no. 22 452 ...		Article no. 22 453 ...	
TP / OAL / DCONMS / DRVS / PHD / THL / LU / Flutes	£		£		£		£	
M2 0.40 45 2.8 2.1 1.85 4 12 3	107.36	020						
M2,5 0.45 50 2.8 2.1 2.33 5 14 3	83.97	025						
M3 0.50 56 3.5 2.7 2.80 6 18 3	79.10	030						
M3 0.50 56 3.5 2.7 2.80 11 18 4					71.39	030		
M4 0.70 63 4.5 3.4 3.70 13 21 4					73.40	040		
M4 0.70 63 4.5 3.4 3.70 7 21 4	81.54	040						
M5 0.80 70 6.0 4.9 4.65 8 25 4	89.07	050	111.85	050				
M5 0.80 70 6.0 4.9 4.65 15 25 4					78.09	050	97.67	050
M6 1.00 80 6.0 4.9 5.60 10 30 4	106.20	060	130.88	060				
M6 1.00 80 6.0 4.9 5.60 17 30 5					98.45	060	118.98	060
M8 1.25 90 8.0 6.2 7.45 20 35 5					110.34	080	133.36	080
M8 1.25 90 8.0 6.2 7.45 14 35 5	118.98	080	147.00	080				
M10 1.50 100 10.0 8.0 9.35 22 39 5					142.78	100	170.85	100
M10 1.50 100 10.0 8.0 9.35 16 39 5	152.41	100	185.95	100				



DIN 2174 with reduced shank

							U0	U0	U0
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 115 ...	Article no. 22 452 ...	Article no. 22 454 ...
	mm	mm	mm	mm	mm	mm		£	£	£
M12	1.75	110	9	7	11.25	18	5	161.69 120		
M12	1.75	110	9	7	11.25	24	6		166.29 120	199.84 120
M16	2.00	110	12	9	15.10	27	6		269.98 160	305.06 160

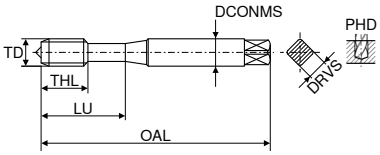
Steel	8-30	8-30	5-30	5-30
Stainless steel	8-15	8-15	5-15	5-15
Cast iron				
Non ferrous metals	12-25	12-25	5-10	5-10
Heat resistant alloys			5-20	5-20
Hardened materials				

6

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

▲ SN = Thread formers with lubrication grooves

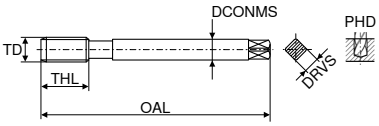
M



DIN 2174 with reinforced shank

	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
				
	HSS-E ◁ 0° ≤ 850 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 850 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 850 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 850 N/mm² ≤ 3xD
	T9	T9	T9	T9
	Article no. 23 810 ...	Article no. 23 812 ...	Article no. 23 814 ...	Article no. 23 816 ...
	£	£	£	£

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes								
	mm	mm	mm	mm	mm	mm	mm									
M2	0.40	45	2.8	2.1	1.85	7	12		39.66	020	44.47	020				
M2	0.40	45	2.8	2.1	1.85	7	12	3					45.05	020	50.75	020
M2,5	0.45	50	2.8	2.1	2.33	9	14	3					40.84	025	44.47	025
M2,5	0.45	50	2.8	2.1	2.33	9	14		35.32	025	39.23	025				
M3	0.50	56	3.5	2.7	2.80	11	18	3					27.38	030	32.20	030
M3	0.50	56	3.5	2.7	2.80	11	18		25.71	030	28.61	030				
M4	0.70	63	4.5	3.4	3.70	13	21	4					58.66	040	32.20	040
M4	0.70	63	4.5	3.4	3.70	13	21		26.08	040	29.22	040				
M5	0.80	70	6.0	4.9	4.65	15	25	4					61.86	050	34.87	050
M5	0.80	70	6.0	4.9	4.65	15	25		27.95	050	30.22	050				
M6	1.00	80	6.0	4.9	5.60	17	30	4					70.99	060	34.87	060
M6	1.00	80	6.0	4.9	5.60	17	30		33.56	060	30.22	060				
M8	1.25	90	8.0	6.2	7.45	20	35	5					74.16	080	41.26	080
M8	1.25	90	8.0	6.2	7.45	20	35		37.48	080	34.51	080				
M10	1.50	100	10.0	8.0	9.35	22	39	5					47.86	100	51.59	100
M10	1.50	100	10.0	8.0	9.35	22	39		49.98	100	44.47	100				



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes								
	mm	mm	mm	mm	mm	mm									
M12	1.75	110	9	7.0	11.25	24		57.10	120	55.64	120				
M12	1.75	110	9	7.0	11.25	24	5					62.57	120	62.57	120
M16	2.00	110	12	9.0	15.10	27	6					119.41	160	127.55	160
M16	2.00	110	12	9.0	15.10	27		107.36	160	109.01	160				
M18	2.50	125	14	11.0	16.80	30	6					138.53	18000		
M20	2.50	140	16	12.0	18.80	32	6					128.85	20000		
M24	3.00	160	18	14.5	22.60	34	6					172.14	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

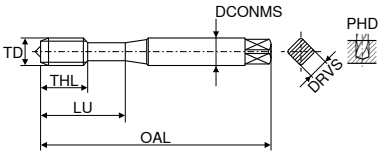
EG M | Stabil

UNI

B
4–5

6H mod

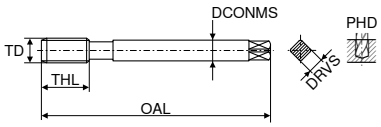
nitr. + vap.



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			
EG-M2,5	0.45	56	3.5	2.7	2.65	11	18	3	50.59	**025**
EG-M3	0.50	63	4.5	3.4	3.15	10	21	3	42.64	**030**
EG-M4	0.70	70	6.0	4.9	4.20	12	25	3	44.67	**040**
EG-M5	0.80	80	6.0	4.9	5.25	13	30	3	42.99	**050**
EG-M6	1.00	90	8.0	6.2	6.30	17	35	3	43.83	**060**
EG-M8	1.25	100	10.0	8.0	8.40	18	39	3	51.41	**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			
EG-M10	1.50	100	9	7.0	10.50	22	3	69.57	**100**
EG-M12	1.75	110	11	9.0	12.50	26	3	81.54	**120**
EG-M16	2.00	125	14	11.0	16.50	27	3	115.05	**160**
EG-M20	2.50	160	18	14.5	20.75	34	3	162.52	**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

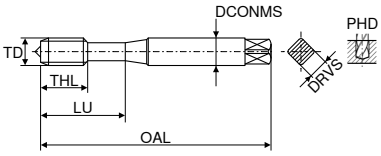
EG M | Salo-Rex

Soft | UNI

C 2–3 | C 2–3

6H mod | 6H mod

CH | vap.

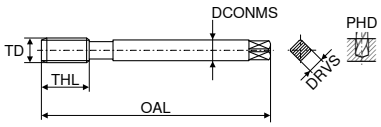


DIN 40435 with reinforced shank

HSS-E
42°
≤ 500 N/mm²
≤ 3xD

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 280 ...		U0 Article no. 22 664 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
EG-M2,5	0.45	56	3.5	2.7	2.65	5	18	2	69.32	025		
EG-M2,5	0.45	56	3.5	2.7	2.65	5	18	3			48.53	025
EG-M3	0.50	63	4.5	3.4	3.15	5	21	2	67.18	030		
EG-M3	0.50	63	4.5	3.4	3.15	5	21	3			43.45	030
EG-M4	0.70	70	6.0	4.9	4.20	8	25	2	67.18	040		
EG-M4	0.70	70	6.0	4.9	4.20	8	25	3			44.32	040
EG-M5	0.80	80	6.0	4.9	5.25	8	30	2	91.25	050		
EG-M5	0.80	80	6.0	4.9	5.25	8	30	3			41.83	050
EG-M6	1.00	90	8.0	6.2	6.30	10	35	2	92.92	060		
EG-M6	1.00	90	8.0	6.2	6.30	10	35	3			46.18	060
EG-M8	1.25	100	10.0	8.0	8.40	16	39	2	116.56	080		
EG-M8	1.25	100	10.0	8.0	8.40	16	39	3			50.83	080



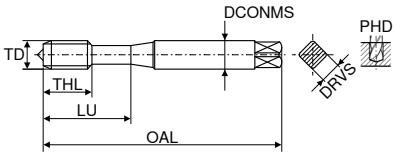
DIN 40435 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 665 ...	
	mm	mm	mm	mm	mm	mm		£	
EG-M10	1.50	100	9	7.0	10.50	15	5	67.84	100
EG-M12	1.75	110	11	9.0	12.50	20	4	83.25	120
EG-M16	2.00	125	14	11.0	16.50	20	5	116.95	160
EG-M20	2.50	160	18	14.5	20.75	30	4	169.53	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



DIN 371 with reinforced shank

	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
			
	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 ...
	£	£	£

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	61.58	**040**	72.65	**040**		
M4x0,5	0.50	63	4.5	3.4	3.5	5	21	3					72.65	**040**
M5x0,5	0.50	70	6.0	4.9	4.5	11	25	3	61.58	**050**	72.65	**050**		
M6x0,5	0.50	80	6.0	4.9	5.5	13	30	3	66.54	**060**	89.94	**060**		
M6x0,75	0.75	80	6.0	4.9	5.2	13	30	3	66.54	**062**	89.94	**062**		
M6x0,75	0.75	80	6.0	4.9	5.2	8	30	3					86.23	**062**
M6x0,5	0.50	80	6.0	4.9	5.5	5	30	3					86.23	**060**
M5x0,5	0.50	70	6.0	4.9	4.5	5	25	3					72.65	**050**
M8x1	1.00	90	8.0	6.2	7.0	17	35	3	64.79	**084**	86.23	**080**		
M10x1	1.00	90	10.0	8.0	9.0	18	35	4	66.54	**102**	98.37	**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

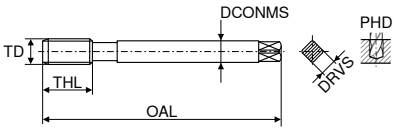
6

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° | ∢ 0° | ∢ 0° | ∢ 0° | ∢ 0°

≤ 750 N/mm² ≤ 4xD | ≤ 1100 N/mm² ≤ 4xD | ≤ 1100 N/mm² ≤ 4xD | ≤ 1100 N/mm² ≤ 4xD | ≤ 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		£		£		£		£		£	
M6x0,75	0.75	80	4.5	3.4	5.2	13	3					46.18	062				
M6x0,5	0.50	80	4.5	3.4	5.5	13	3					100.68	060				
M8x0,75	0.75	80	6.0	4.9	7.2	14	3	109.56	082			50.26	082				
M8x1	1.00	90	6.0	4.9	7.0	17	3	82.21	084			47.36	084	76.56	080		
M8x1	1.00	90	6.0	4.9	7.0	10	4			98.37	080					86.23	080
M10x1	1.00	90	7.0	5.5	9.0	18	4	86.14	102			47.94	102	82.21	100		
M10x0,75	0.75	90	7.0	5.5	9.2	18	4					69.61	100				
M10x1,25	1.25	100	7.0	5.5	8.8	16	4									114.72	102
M10x1,25	1.25	100	7.0	5.5	8.8	22	3					104.76	104				
M10x1	1.00	90	7.0	5.5	9.0	10	4			105.75	100					104.02	100
M12x1	1.00	100	9.0	7.0	11.0	18	4	109.56	120			56.83	120	111.28	121		
M12x1,5	1.50	100	9.0	7.0	10.5	22	3	114.72	124			53.33	124	83.09	120		
M12x1,25	1.25	100	9.0	7.0	10.8	22	3					76.10	122				
M12x1,5	1.50	100	9.0	7.0	10.5	15	4			122.03	120					116.21	120
M14x1,5	1.50	100	11.0	9.0	12.5	22	3	148.77	144			74.53	144	112.74	140		
M14x1	1.00	100	11.0	9.0	13.0	18	4					145.69	140				
M14x1,5	1.50	100	11.0	9.0	12.5	15	4			170.17	140					138.57	140
M16x1,5	1.50	100	12.0	9.0	14.5	22	3	148.77	162			84.56	162	116.14	160		
M16x1,5	1.50	100	12.0	9.0	14.5	15	4			172.15	160					159.07	160
M18x1	1.00	110	14.0	11.0	17.0	20	5					230.54	180				
M18x1,5	1.50	110	14.0	11.0	16.5	25	4	172.15	182			103.01	182				
M18x2	2.00	125	14.0	11.0	16.0	26	3					192.06	184				
M18x1,5	1.50	110	14.0	11.0	16.5	17	4			211.37	180					196.40	180
M20x1,5	1.50	125	16.0	12.0	18.5	25	4	196.40	202			112.74	202	173.74	200		
M20x1	1.00	125	16.0	12.0	19.0	20	5					256.82	200				
M20x1,5	1.50	125	16.0	12.0	18.5	17	4			265.41	200					246.64	200
M22x1,5	1.50	125	18.0	14.5	20.5	25	4					117.66	222	254.36	220		
M26x1,5	1.50	140	18.0	14.5	24.5	28	4					176.33	260				
M24x2	2.00	140	18.0	14.5	22.0	27	4					245.81	244				
M25x1,5	1.50	140	18.0	14.5	23.5	28	4					414.60	250				
M24x1,5	1.50	140	18.0	14.5	22.5	27	4					135.68	242				
M27x2	2.00	140	20.0	16.0	25.0	28	4					434.79	272				
M28x1,5	1.50	140	20.0	16.0	26.5	28	5					198.30	280				
M30x1,5	1.50	150	22.0	18.0	28.5	28	5					214.29	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

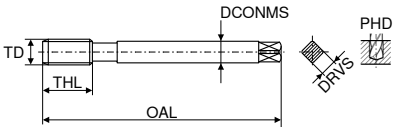
MF

UNI

B
4–5

ISO 2
6H

TiN



DIN 374 with reduced shank

HSS-PM

0°
≤ 1000 N/mm²
≤ 3xD

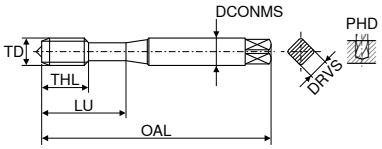
6

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 041 ...	
	mm	mm	mm	mm	mm	mm		£	
M8x1	1.00	90	6	4.9	7.0	17	3	20.48	**081**
M10x1	1.00	90	7	5.5	9.0	18	4	23.39	**102**
M10x1,25	1.25	100	7	5.5	8.8	22	3	25.07	**104**
M12x1	1.00	100	9	7.0	11.0	18	4	28.87	**120**
M12x1,25	1.25	100	9	7.0	10.8	22	3	30.11	**122**
M12x1,5	1.50	100	9	7.0	10.5	22	3	26.86	**121**
M14x1,5	1.50	100	11	9.0	12.5	22	3	33.13	**144**
M14x1,25	1.25	100	11	9.0	12.8	22	3	34.81	**142**
M16x1,5	1.50	100	12	9.0	14.5	22	3	37.49	**162**
M18x1,5	1.50	110	14	11.0	16.5	17	4	49.58	**182**
M20x1,5	1.50	125	16	12.0	18.5	17	4	66.92	**202**
M24x1,5	1.50	140	18	14.5	22.5	27	4	72.30	**242**
M24x2	2.00	140	18	14.5	22.0	27	4	82.38	**244**
M22x1,5	1.50	125	18	14.5	20.5	25	4	63.01	**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

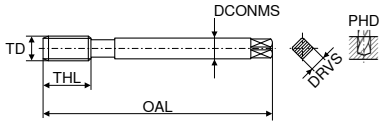
MF



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 ◁ 0° ≤ 1000 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 1000 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 850 N/mm² ≤ 3xD	HSS-E ◁ 0° ≤ 1100 N/mm² ≤ 4xD	HSS-E ◁ 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		£		£		£		£		£	
M4x0,5	0.50	63	4.5	3.4	3.5	10	21	3	35.02	040	39.76	040	20.24	040				
M6x0,75	0.75	80	6.0	4.9	5.2	13	30	3	37.36	062	49.32	062	20.24	062	55.22	062	49.82	062
M6x0,5	0.50	80	6.0	4.9	5.5	13	30	3	37.36	060	49.32	060	20.92	060				
M5x0,5	0.50	70	6.0	4.9	4.5	11	25	3	35.32	050	40.84	050	20.92	050	42.29	050	40.84	050



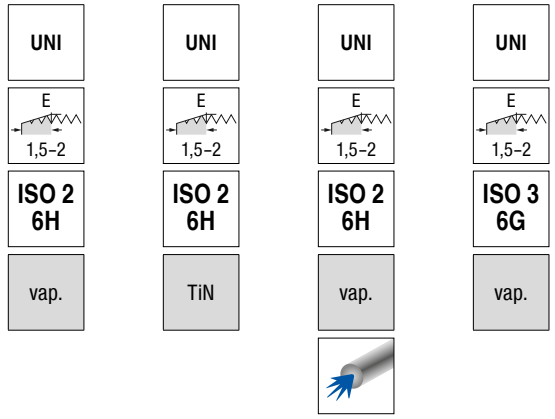
DIN 374 with reduced shank

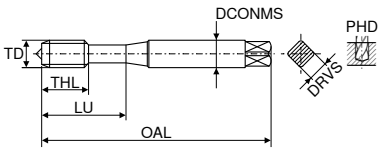
TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 23 141 ...		Article no. 23 143 ...		Article no. 23 241 ...		Article no. 23 341 ...		Article no. 23 441 ...	
	mm	mm	mm	mm	mm	mm		£		£		£		£		£	
M8x0,75	0.75	80	6	4.9	7.0	14	3							56.30	082		
M8x0,5	0.50	80	6	8.0	7.5	14	3					27.75	080				
M8x1	1.00	90	6	4.9	7.0	17	3	35.92	084			22.25	084	54.34	084	52.75	084
M8x1	1.00	90	6	4.9	7.0	17	4			49.54	084						
M8x0,75	0.75	80	6	4.9	7.2	14	3	39.34	082	51.59	082	23.54	082			55.01	082
M10x0,75	0.75	90	7	5.5	9.2	18	4	56.37	100	70.18	100	32.98	100				
M10x1,25	1.25	100	7	5.5	8.8	22	3	47.74	104	64.85	104	27.18	104				
M10x1	1.00	90	7	5.5	9.0	18	4	37.36	102	53.03	102	26.31	102	60.45	102	56.30	102
M12x1,5	1.50	100	9	7.0	10.5	22	3	40.84	124	56.30	124	29.07	124	65.36	124	60.14	124
M12x1,25	1.25	100	9	7.0	10.8	22	3	48.32	122	65.84	122	31.67	122				
M12x1	1.00	100	9	7.0	11.0	18	4	43.05	120	62.03	120	29.78	120	68.01	120	64.85	120
M14x1	1.00	100	11	9.0	13.0	18	4	58.55	140	74.53	140	37.36	140				
M14x1,5	1.50	100	11	9.0	12.5	22	3	54.34	144	74.82	144	35.90	144	82.94	144	81.07	144
M16x1	1.00	100	12	9.0	15.0	18	4	65.82	160	86.88	160	49.54	160				
M16x1,5	1.50	100	12	9.0	14.5	22	3	65.82	162	86.88	162	45.48	162	95.29	162	92.70	162
M18x1	1.00	110	14	11.0	17.0	20	5					64.95	180				
M18x1,5	1.50	110	14	11.0	16.5	25	4	74.53	182	107.36	182	59.14	182				
M20x1,5	1.50	125	16	12.0	18.5	25	4	86.88	202	135.97	202	65.54	202				
M20x1	1.00	125	16	12.0	19.0	20	5					70.02	200				
M26x1,5	1.50	140	18	14.5	24.5	28	4					112.59	260				
M24x1,5	1.50	140	18	14.5	22.5	27	4	108.09	242	148.04	242	87.73	242				
M22x1,5	1.50	125	18	14.5	20.5	25	4	91.92	222	141.21	222	75.25	222				
M28x1,5	1.50	140	20	16.0	26.5	28	5					127.83	280				
M30x1,5	1.50	150	22	18.0	28.5	28	5					143.97	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

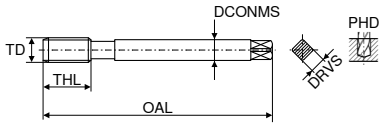




DIN 371 with reinforced shank

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

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 441 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
M4x0,5	0.50	63	4.5	3.4	3.50	5	21	3	68.43	040
M6x0,75	0.75	80	6.0	4.9	5.25	8	30	3	68.43	062
M5x0,5	0.50	70	6.0	4.9	4.50	5	25	3	61.91	050



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 555 ...		U0 Article no. 22 556 ...		U0 Article no. 22 491 ...		U0 Article no. 22 490 ...	
	mm	mm	mm	mm	mm	mm		£		£		£		£	
M8x1	1.0	90	6	4.9	7.0	10	3	51.15	080	69.72	080			68.43	080
M10x1	1.0	90	7	5.5	9.0	10	4	58.55	100	89.77	100			74.53	100
M12x1,5	1.5	100	9	7.0	10.5	15	5	65.84	120	101.69	120	109.56	120	82.21	120
M14x1,5	1.5	100	11	9.0	12.5	15	5	81.80	140	128.14	140	144.98	140	105.74	140
M16x1,5	1.5	100	12	9.0	14.5	15	5	99.95	160	136.70	160	148.77	160	129.16	160
M18x1,5	1.5	110	14	11.0	16.5	17	5							147.00	180
M20x1,5	1.5	125	16	12.0	18.5	17	5					226.33	200	172.15	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				

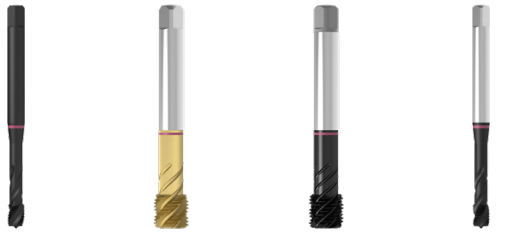
6

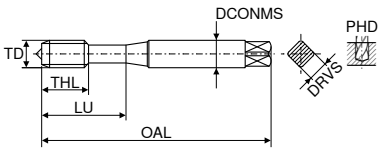
Blind hole – Machine taps, right hand

▲ 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

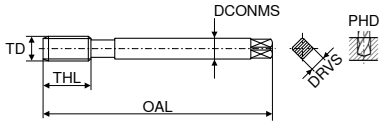




DIN 371 with reinforced shank

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		£				£	
M4x0,5	0.50	63	4.5	3.4	3.5	5	21	3	68.43	040				
M5x0,5	0.50	70	6.0	4.9	4.5	5	25	3	61.91	050			72.80	050
M6x0,75	0.75	80	6.0	4.9	5.2	8	30	3	68.43	062			72.80	062
M6x0,5	0.50	80	6.0	4.9	5.5	5	30	3	68.43	060			72.80	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		£		£		£		£	
M6x0,75	0.75	80	4.5	3.4	5.2	8	3	59.26	062						
M8x0,75	0.75	80	6.0	4.9	7.2	8	3	55.36	080					76.56	082
M8x1	1.00	90	6.0	4.9	7.0	10	3	50.17	082	69.72	080	105.74	084	90.07	084
M10x0,75	0.75	90	7.0	5.5	9.2	10	4	114.72	101						
M10x1	1.00	90	7.0	5.5	9.0	10	3	53.60	100	89.77	100				
M10x1	1.00	90	7.0	5.5	9.0	10	4					117.57	102	104.16	102
M10x1,25	1.25	100	7.0	5.5	8.8	16	3	130.79	102						
M12x1	1.00	100	9.0	7.0	11.0	11	4	69.72	120	118.84	121			121.89	120
M12x1,25	1.25	100	9.0	7.0	10.8	15	4	105.71	122						
M12x1,5	1.50	100	9.0	7.0	10.5	15	4	65.84	124	101.69	120				
M12x1,5	1.50	100	9.0	7.0	10.5	15	5					137.59	124	116.51	124
M14x1,5	1.50	100	11.0	9.0	12.5	15	5					171.27	144	148.77	144
M14x1,5	1.50	100	11.0	9.0	12.5	15	4	81.80	140	118.98	140				
M16x1,5	1.50	100	12.0	9.0	14.5	15	4	99.95	160	136.70	160				
M16x1,5	1.50	100	12.0	9.0	14.5	15	5					196.40	162	172.15	162
M18x1,5	1.50	110	14.0	11.0	16.5	17	5							208.30	182
M18x1,5	1.50	110	14.0	11.0	16.5	17	4	122.33	180	200.17	182				
M20x1,5	1.50	125	16.0	12.0	18.5	17	5					293.59	202	256.54	202
M20x1,5	1.50	125	16.0	12.0	18.5	17	4	166.06	200	254.36	202				
M22x1,5	1.50	125	18.0	14.5	20.5	17	4	161.98	220						
M26x1,5	1.50	140	18.0	14.5	24.5	20	5	230.40	260						
M24x1,5	1.50	140	18.0	14.5	22.5	20	5	178.69	240						
M28x1,5	1.50	140	20.0	16.0	26.5	20	5	268.31	280						
M30x1,5	1.50	150	22.0	18.0	28.5	22	6	270.20	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

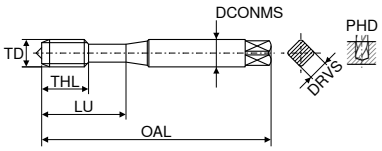
▲ LH = for left hand threads

MF | Salo-Rex

ST LH | ST

C 2–3

ISO 2 6H | ISO 2 6H

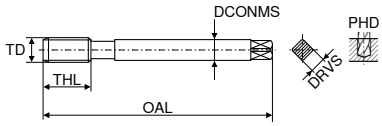


DIN 371 with reinforced shank

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 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
M2,5x0,35	0.35	50	2.8	2.1	2.15	5.0	15	2	105.74	**025**
M3x0,35	0.35	56	3.5	2.7	2.65	4.5	18	3	66.54	**030**
M3,5x0,35	0.35	56	4.0	3.0	3.15	5.0	20	3	89.94	**035**
M4x0,5	0.50	63	4.5	3.4	3.50	5.0	21	3	59.72	**040**
M5x0,5	0.50	70	6.0	4.9	4.50	5.0	25	3	59.72	**050**
M6x0,75	0.75	80	6.0	4.9	5.20	8.0	30	3	59.72	**060**
M8x0,75	0.75	80	8.0	6.2	7.20	8.0	30	3	68.43	**080**
M8x1	1.00	90	8.0	6.2	7.00	10.0	35	3	59.72	**082**



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 601 ...		U0 Article no. 22 186 ...	
	mm	mm	mm	mm	mm	mm		£		£	
M6x0,75	0.75	80	4.5	3.4	5.2	8	3			52.75	**060**
M8x0,75	0.75	80	6.0	4.9	7.2	8	3			53.92	**080**
M8x1	1.00	90	6.0	4.9	7.0	10	3	98.37	**082**	48.32	**082**
M10x1	1.00	90	7.0	5.5	9.0	10	3	102.12	**100**	51.27	**100**
M12x1,5	1.50	100	9.0	7.0	10.5	15	4			60.57	**122**
M12x1	1.00	100	9.0	7.0	11.0	11	4	123.48	**120**	63.06	**120**
M14x1,5	1.50	100	11.0	9.0	12.5	15	4	134.83	**140**	79.66	**140**
M16x1,5	1.50	100	12.0	9.0	14.5	15	4	159.96	**160**	95.74	**160**
M18x1,5	1.50	110	14.0	11.0	16.5	17	4	183.34	**180**	123.63	**180**
M20x1,5	1.50	125	16.0	12.0	18.5	17	4	215.16	**200**	122.90	**200**
M22x1,5	1.50	125	18.0	14.5	20.5	17	4			140.61	**220**
M26x1,5	1.50	140	18.0	14.5	24.5	20	5			216.59	**260**
M24x1,5	1.50	140	18.0	14.5	22.5	20	5			151.95	**240**

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

6

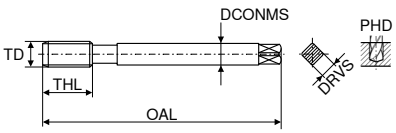
Blind hole – Machine taps, right hand

MF | SL

ST

C
2–3

ISO 2
6H



DIN 374 with reduced shank

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

U0

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 182 ...	
	mm	mm	mm	mm	mm	mm		£	
M6x0,75	0.75	80	4.5	3.4	5.2	13	3	54.34	**062**
M8x0,75	0.75	80	6.0	4.9	7.2	14	3	54.78	**082**
M8x1	1.00	90	6.0	4.9	7.0	17	3	49.32	**084**
M10x1	1.00	90	7.0	5.5	9.0	18	3	52.75	**102**
M10x0,75	0.75	90	7.0	5.5	9.2	18	3	87.31	**100**
M10x1,25	1.25	100	7.0	5.5	8.8	22	3	76.00	**104**
M9x1	1.00	90	7.0	5.5	8.0	17	3	74.96	**090**
M11x1	1.00	90	8.0	6.2	10.0	18	3	81.95	**110**
M12x1,25	1.25	100	9.0	7.0	10.8	22	3	83.67	**122**
M12x1,5	1.50	100	9.0	7.0	10.5	22	3	61.60	**124**
M12x1	1.00	100	9.0	7.0	11.0	18	3	64.79	**120**
M14x1	1.00	100	11.0	9.0	13.0	18	4	85.29	**140**
M14x1,5	1.50	100	11.0	9.0	12.5	22	3	82.81	**144**
M16x1	1.00	100	12.0	9.0	15.0	18	4	99.95	**160**
M16x1,5	1.50	100	12.0	9.0	14.5	22	3	97.93	**162**
M15x1	1.00	100	12.0	9.0	14.0	18	4	110.41	**150**
M18x1,5	1.50	110	14.0	11.0	16.5	25	4	123.29	**182**
M18x2	2.00	125	14.0	11.0	16.0	26	3	199.30	**184**
M18x1	1.00	110	14.0	11.0	17.0	20	4	137.59	**180**
M20x1	1.00	125	16.0	12.0	19.0	20	4	136.11	**200**
M20x2	2.00	140	16.0	12.0	18.0	27	3	171.27	**204**
M20x1,5	1.50	125	16.0	12.0	18.5	25	4	124.63	**202**
M22x2	2.00	140	18.0	14.5	20.0	27	4	176.33	**224**
M24x1,5	1.50	140	18.0	14.5	22.5	27	4	155.85	**242**
M24x1	1.00	140	18.0	14.5	23.0	20	5	187.99	**240**
M24x2	2.00	140	18.0	14.5	22.0	27	4	184.06	**244**
M22x1,5	1.50	125	18.0	14.5	20.5	25	4	143.38	**222**
M25x1,5	1.50	140	18.0	14.5	23.5	28	4	261.47	**252**
M22x1	1.00	125	18.0	14.5	21.0	20	4	176.33	**220**
M27x1,5	1.50	140	20.0	16.0	25.5	28	4	227.19	**270**
M28x2	2.00	140	20.0	16.0	26.0	28	4	297.07	**282**
M27x2	2.00	140	20.0	16.0	25.0	28	4	254.08	**272**
M30x1,5	1.50	150	22.0	18.0	28.5	28	5	259.58	**302**
M32x1,5	1.50	150	22.0	18.0	30.5	28	6	297.07	**320**
M30x2	2.00	150	22.0	18.0	28.0	28	4	273.83	**304**
M33x2	2.00	160	25.0	20.0	31.0	30	4	363.01	**332**
M36x2	2.00	170	28.0	22.0	34.0	30	5	462.26	**362**
M36x3	3.00	200	28.0	22.0	33.0	42	4	427.09	**364**
M34x1,5	1.50	170	28.0	22.0	32.5	30	6	403.25	**340**

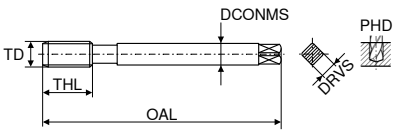
Steel	**10-20**
Stainless steel	
Cast iron	
Non ferrous metals	**10-20**
Heat resistant alloys	
hardened materials	

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

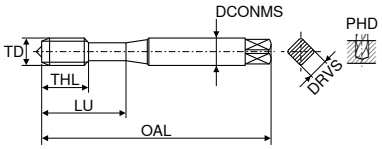
6

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 182 ...	£
	mm	mm	mm	mm	mm	mm			
M40x1,5	1.50	170	32.0	24.0	38.5	30	6	451.50	**400**
M42x3	3.00	200	32.0	24.0	39.0	45	4	577.43	**424**
M42x2	2.00	170	32.0	24.0	40.0	30	6	545.92	**422**
M45x1,5	1.50	180	36.0	29.0	43.5	32	6	536.32	**450**
M48x2	2.00	190	36.0	29.0	46.0	32	6	753.78	**482**
M48x3	3.00	225	36.0	29.0	45.0	50	5	772.97	**484**
M48x1,5	1.50	190	36.0	29.0	46.5	32	6	628.28	**480**
M45x3	3.00	200	36.0	29.0	42.0	45	5	737.21	**454**
M52x2	2.00	190	40.0	32.0	50.0	32	6	906.88	**522**

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

Blind hole – Machine taps, right hand

MF | Salo-Rex



DIN 371 with reinforced shank

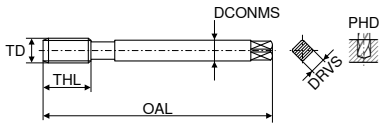
NW	VA	VA
C	E	E
2–3	1,5–2	1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	vap.	TiN GS

HSS-E
◁ 42°
≤ 500 N/mm²
≤ 3xD

HSS-E
◁ 42°
≤ 750 N/mm²
≤ 3xD

HSS-E
◁ 45°
≤ 900 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 176 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
M4x0,5	0.50	63	4.5	3.4	3.5	5	21	3	89.18	**040**
M6x0,75	0.75	80	6.0	4.9	5.2	8	30	3	73.65	**062**
M6x0,5	0.50	80	6.0	4.9	5.5	5	30	3	73.65	**060**
M5x0,5	0.50	70	6.0	4.9	4.5	5	25	3	73.65	**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		£		£		£	
M8x1	1.00	90	6	4.9	7.0	10	3	54.18	**081**	53.33	**082**	92.70	**084**
M8x0,75	0.75	80	6	4.9	7.2	8	3					77.44	**082**
M10x1	1.00	90	7	5.5	9.0	10	4			62.61	**100**	103.32	**102**
M10x1	1.00	90	7	5.5	9.0	10	3	56.66	**100**				
M12x1	1.00	100	9	7.0	11.0	11	4	69.30	**120**	81.94	**121**	123.63	**120**
M12x1,5	1.50	100	9	7.0	10.5	15	4	60.57	**122**				
M12x1,5	1.50	100	9	7.0	10.5	15	5			69.72	**120**	118.10	**124**
M14x1,5	1.50	100	11	9.0	12.5	15	5			85.72	**140**	150.65	**144**
M14x1,5	1.50	100	11	9.0	12.5	15	4	89.18	**140**				
M16x1,5	1.50	100	12	9.0	14.5	15	4	95.74	**160**				
M16x1,5	1.50	100	12	9.0	14.5	15	5			104.16	**160**	174.78	**162**
M18x1,5	1.50	110	14	11.0	16.5	17	5					211.80	**182**
M18x1,5	1.50	110	14	11.0	16.5	17	4	135.68	**180**				
M20x1,5	1.50	125	16	12.0	18.5	17	4	122.90	**200**				
M20x1,5	1.50	125	16	12.0	18.5	17	5			145.26	**200**	261.93	**202**
M26x1,5	1.50	140	18	14.5	24.5	20	6			345.73	**260**		
M28x1,5	1.50	140	20	16.0	26.5	20	6			407.43	**280**		
M30x1,5	1.50	150	22	18.0	28.5	22	6			400.67	**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

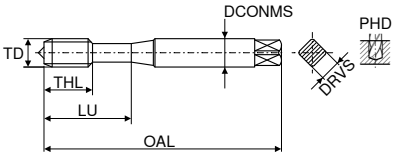
MF

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		£	
M8x1	1.00	90	6	4.9	7.0	10	35	3	20.04	**081**
M10x1	1.00	90	7	5.5	9.0	10	35	4	26.19	**102**
M10x1,25	1.25	100	7	5.5	8.8	16	39	4	25.52	**104**
M12x1	1.00	100	9	7.0	11.0	11	40	4	29.77	**120**
M12x1,25	1.25	100	9	7.0	10.8	15	40	5	32.46	**122**
M12x1,5	1.50	100	9	7.0	10.5	15	40	5	28.87	**121**
M14x1	1.00	100	11	9.0	12.8	11	40	4	34.81	**140**
M14x1,5	1.50	100	11	9.0	12.5	15	40	5	34.14	**144**
M16x1,5	1.50	100	12	9.0	14.5	15	44	5	44.21	**162**
M18x1,5	1.50	110	14	11.0	16.5	17	44	5	57.53	**182**
M20x1,5	1.50	125	16	12.0	18.5	17	44	5	65.69	**202**
M22x1,5	1.50	125	18	14.5	20.5	17	44	5	72.30	**222**
M24x1,5	1.50	140	18	14.5	22.5	20	48	5	73.63	**242**
M24x2	2.00	140	18	14.5	22.0	20	48	5	85.73	**244**

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

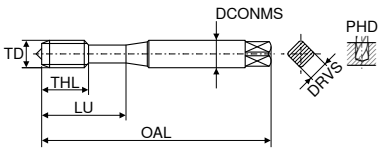
6

Blind hole – Machine taps, right hand

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

MF

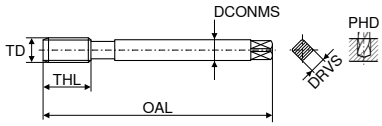
UNI	UNI	UNI NC	FE	FE-HF
C 2–3	C 2–3	E 1,5–2	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	TiN	TiN GS		TiCN



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
TD	Article no. 23 144 ...	Article no. 23 146 ...	Article no. 23 148 ...	Article no. 23 242 ...	Article no. 23 342 ...
	£	£	£	£	£
M4x0,5	38.22 040	43.60 040		21.67 040	
M6x0,75	38.22 062	49.75 062	60.72 062	21.67 062	55.22 062
M6x0,5	38.22 060	49.75 060	60.72 060	22.11 060	
M5x0,5	38.22 050	43.60 050	46.46 050	22.11 050	44.47 050

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	5	21	3
M6x0,75	0.75	80	6.0	4.9	5.2	8	30	3
M6x0,5	0.50	80	6.0	4.9	5.5	5	30	3
M5x0,5	0.50	70	6.0	4.9	4.5	5	25	3



DIN 374 with reduced shank

	T9	T9	T9	T9	T9
TD	Article no. 23 145 ...	Article no. 23 147 ...	Article no. 23 149 ...	Article no. 23 243 ...	Article no. 23 343 ...
	£	£	£	£	£
M4x0,5	14.10 040				
M5x0,5	14.10 050				
M6x0,75	15.00 062				
M8x0,75	17.01 082	53.03 082	64.79 082	25.09 082	
M8x1	12.42 084	49.75 084	60.72 084	23.66 084	55.64 084
M8x0,5				53.33 080	
M8x0,75					66.54 082
M10x1,25	14.43 104	71.74 104		50.56 104	
M10x0,75	27.42 100	82.21 100		58.69 100	
M10x1			70.12 102		
M10x1	12.99 102	56.66 102		27.50 102	62.57 102
M12x1,25	20.59 122	80.91 122		56.66 122	
M12x1,5	15.44 124	64.37 124		30.65 124	69.69 124
M12x1,5			77.15 124		
M12x1	17.46 120	66.54 120	79.66 120	32.41 120	71.55 120
M14x1	23.05 140	86.88 140		56.66 140	
M14x1,5			98.94 144		
M14x1,5	20.92 144	80.91 144		38.22 144	89.94 144
M16x1	24.73 160	95.29 160		65.42 160	
M16x1,5			110.41 162		
M16x1,5	23.95 162	95.29 162		48.37 162	104.31 162
M18x1,5	33.24 182	109.01 182		62.76 182	
M18x1,5			139.75 182		
M20x1,5	30.56 202	141.21 202		70.02 202	
M20x1,5			183.03 202		
M24x1,5	49.47 242	167.79 242		94.42 242	
M22x1,5	45.33 222	157.19 222		81.07 222	

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes
	mm	mm	mm	mm	mm	mm	
M4x0,5	0.50	63	2.8	2.1	3.5	5	3
M5x0,5	0.50	70	3.5	2.7	4.5	5	3
M6x0,75	0.75	80	4.5	3.4	5.2	8	3
M8x0,75	0.75	80	6.0	4.9	7.2	8	3
M8x1	1.00	90	6.0	4.9	7.0	10	3
M8x0,5	0.50	80	6.0	8.0	7.5	6	3
M8x0,75	0.75	80	6.0	4.9	7.0	8	3
M10x1,25	1.25	100	7.0	5.5	8.8	16	3
M10x0,75	0.75	90	7.0	5.5	9.2	10	4
M10x1	1.00	90	7.0	5.5	9.0	10	4
M10x1	1.00	90	7.0	5.5	9.0	10	3
M12x1,25	1.25	100	9.0	7.0	10.8	15	4
M12x1,5	1.50	100	9.0	7.0	10.5	15	4
M12x1,5	1.50	100	9.0	7.0	10.5	15	5
M12x1	1.00	100	9.0	7.0	11.0	11	4
M14x1	1.00	100	11.0	9.0	13.0	11	4
M14x1,5	1.50	100	11.0	9.0	12.5	15	5
M14x1,5	1.50	100	11.0	9.0	12.5	15	4
M16x1	1.00	100	12.0	9.0	15.0	12	4
M16x1,5	1.50	100	12.0	9.0	14.5	15	5
M16x1,5	1.50	100	12.0	9.0	14.5	15	4
M18x1,5	1.50	110	14.0	11.0	16.5	17	4
M18x1,5	1.50	110	14.0	11.0	16.5	17	5
M20x1,5	1.50	125	16.0	12.0	18.5	17	4
M20x1,5	1.50	125	16.0	12.0	18.5	17	5
M24x1,5	1.50	140	18.0	14.5	22.5	20	5
M22x1,5	1.50	125	18.0	14.5	20.5	17	4

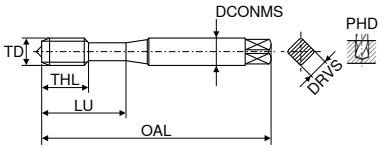
Steel	2-25	5-45	5-45	5-25	5-45
Stainless steel	2-8	5-15	5-15		
Cast iron	5-20	10-25	10-25		
Non ferrous metals	10-20	15-40	15-40		
Heat resistant alloys					
Hardened materials					

Blind hole – Machine taps, right hand

MF

VA
C
2–3
ISO 2
6H

VA
E
1,5–2
ISO 2
6H
TiN

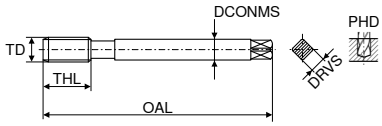


DIN 371 with reinforced shank

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 ... £	
	mm	mm	mm	mm	mm	mm	mm			
M6x0,75	0.75	80	6	4.9	5.2	8	30	3	49.75	**062**
M5x0,5	0.50	70	6	4.9	4.5	5	25	3	43.16	**050**



DIN 374 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 447 ... £		T9 Article no. 23 443 ... £	
	mm	mm	mm	mm	mm	mm					
M8x1	1.00	90	6	4.9	7.0	10	3	32.46	**084**	49.75	**084**
M8x0,75	0.75	80	6	4.9	7.2	8	3			53.03	**082**
M10x1	1.00	90	7	5.5	9.0	10	4	34.58	**102**	57.10	**102**
M12x1,5	1.50	100	9	7.0	10.5	15	5	41.86	**124**	64.37	**124**
M12x1	1.00	100	9	7.0	11.0	11	4	44.66	**120**	66.83	**120**
M14x1,5	1.50	100	11	9.0	12.5	15	5	54.05	**144**	81.53	**144**
M16x1,5	1.50	100	12	9.0	14.5	15	5	63.68	**162**	91.92	**162**
M18x1,5	1.50	110	14	11.0	16.5	17	5	78.57	**182**		
M20x1,5	1.50	125	16	12.0	18.5	17	5	85.50	**202**		

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

6

Through hole / Blind hole – Machine taps, right hand

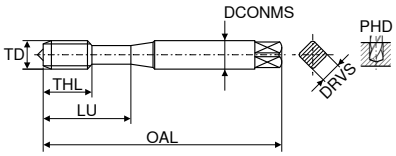
MF | TWIN

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

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 144 ... £		U0 Article no. 22 146 ... £		U0 Article no. 22 817 ... £	
	mm	mm	mm	mm	mm	mm	mm							
M3x0,35	0.35	56	3.5	2.7	2.65	8	18	3	54.78	**030**				
M4x0,5	0.50	63	4.5	3.4	3.50	10	21	3	52.02	**040**	58.69	**040**		
M5x0,5	0.50	70	6.0	4.9	4.50	11	25	3	52.02	**050**	58.69	**050**		
M6x0,5	0.50	80	6.0	4.9	5.50	13	30	3	52.02	**060**	58.69	**060**		
M6x0,75	0.75	80	6.0	4.9	5.20	13	30	3	52.02	**062**	58.69	**062**		
M8x1	1.00	90	8.0	6.2	7.00	17	35	3	52.02	**084**				
M8x1	1.00	90	8.0	6.2	7.10	15	35	5					403.70	**080**
M10x1	1.00	100	10.0	8.0	9.10	18	38	5					512.07	**100**
M10x1	1.00	90	10.0	8.0	9.00	18	35	4	52.02	**104**				
M12x1,5	1.50	110	12.0	9.0	10.60	21	41	5					597.90	**120**
M14x1,5	1.50	110	14.0	11.0	12.60	24	44	6					699.01	**140**
M16x1,5	1.50	110	16.0	12.0	14.60	24	44	6					795.92	**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

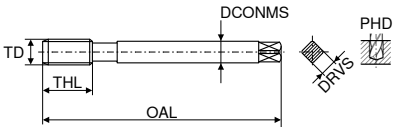
MF | TWIN

ST | HR | GG

C 2–3

ISO 2X 6HX

nitr.





DIN 374 with reduced shank

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

HSS-E
0°
≤ 1400 N/mm²
≤ 2xD

HSS-E
0°
≤ 1050 N/mm²
≤ 2xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 171 ...	£	U0 Article no. 22 209 ...	£	U0 Article no. 22 173 ...	£
	mm	mm	mm	mm	mm	mm							
M4x0,5	0.50	63	2.8	2.1	3.5	10	3	40.77	042				
M5x0,5	0.50	70	3.5	2.7	4.5	11	3	50.42	050			46.94	050
M6x0,75	0.75	80	4.5	3.4	5.2	13	3	46.18	062			51.27	062
M6x0,5	0.50	80	4.5	3.4	5.5	13	3	46.33	060			58.97	060
M8x0,75	0.75	80	6.0	4.9	7.2	14	3	51.87	082			89.94	080
M8x1	1.00	90	6.0	4.9	7.0	17	3	41.19	084	58.69	082	89.94	082
M10x1	1.00	90	7.0	5.5	9.0	18	4	43.16	104	58.69	100	50.56	100
M10x1,25	1.25	100	7.0	5.5	8.8	22	3	51.27	106				
M10x0,75	0.75	90	7.0	5.5	9.2	18	4	66.97	102				
M11x1	1.00	90	8.0	6.2	10.0	18	4	75.38	110				
M12x1	1.00	100	9.0	7.0	11.0	18	4	49.17	122			59.14	120
M12x1,25	1.25	100	9.0	7.0	10.8	22	4	61.47	124				
M12x1,5	1.50	100	9.0	7.0	10.5	22	4	49.17	126	69.13	120	54.87	124
M14x1	1.00	100	11.0	9.0	13.0	18	4	75.38	140			85.84	140
M14x1,25	1.25	100	11.0	9.0	12.8	22	4	69.72	142				
M14x1,5	1.50	100	11.0	9.0	12.5	22	4	72.34	144	89.94	140	78.01	142
M16x1	1.00	100	12.0	9.0	15.0	18	5	78.01	160				
M16x1,5	1.50	100	12.0	9.0	14.5	22	4	70.12	162	98.37	160	79.66	160
M18x1	1.00	110	14.0	11.0	17.0	20	5	101.69	180				
M18x2	2.00	125	14.0	11.0	16.0	26	4	113.77	184				
M18x1,5	1.50	110	14.0	11.0	16.5	25	4	94.01	182	114.72	180	108.38	180
M20x1	1.00	125	16.0	12.0	19.0	20	5	110.41	200				
M20x2	2.00	140	16.0	12.0	18.0	27	4	142.52	204				
M20x1,5	1.50	125	16.0	12.0	18.5	25	4	103.01	202	147.00	200	114.62	200
M24x2	2.00	140	18.0	14.5	22.0	27	4	140.61	244				
M22x2	2.00	140	18.0	14.5	20.0	27	4	156.88	224				
M22x1	1.00	125	18.0	14.5	21.0	20	5	151.95	220				
M24x1	1.00	140	18.0	14.5	23.0	20	6	174.60	240				
M26x1,5	1.50	140	18.0	14.5	24.5	28	4	175.78	260			171.27	260
M24x1,5	1.50	140	18.0	14.5	22.5	27	4	122.90	242			139.44	240
M25x1,5	1.50	140	18.0	14.5	23.5	28	4	227.19	250				
M22x1,5	1.50	125	18.0	14.5	20.5	25	4	110.41	222			121.89	220
M28x1,5	1.50	140	20.0	16.0	26.5	28	5					203.06	280
M27x2	2.00	140	20.0	16.0	25.0	28	4	190.74	274				
M27x1,5	1.50	140	20.0	16.0	25.5	28	5	203.67	272				
M30x2	2.00	150	22.0	18.0	28.0	28	4	238.24	302				
M32x2	2.00	150	22.0	18.0	30.0	28	5	328.90	322				
M32x1,5	1.50	150	22.0	18.0	30.5	28	6	237.65	320				
M30x1,5	1.50	150	22.0	18.0	28.5	28	5	196.98	300			223.00	300
M33x2	2.00	160	25.0	20.0	31.0	30	5	268.31	332				
M36x2	2.00	170	28.0	22.0	34.0	30	5	330.19	362				
M36x1,5	1.50	170	28.0	22.0	34.5	30	6	295.18	360				
M35x1,5	1.50	170	28.0	22.0	33.5	30	6	367.52	350				
M42x1,5	1.50	170	32.0	24.0	40.5	30	6	433.48	420				
M42x3	3.00	200	32.0	24.0	39.0	45	5	526.00	424				
M40x2	2.00	170	32.0	24.0	38.0	30	6	381.33	402				
M50x1,5	1.50	190	36.0	29.0	48.5	32	8	557.37	500				
M52x1,5	1.50	190	40.0	32.0	50.5	32	8	639.75	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

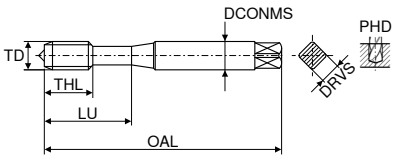
▲ ES = extra short

▲ LH = for left hand threads

MF | TWIN

ST ES | C 2–3 | ISO 2X 6HX

ST LH/ES | C 2–3 | ISO 2X 6HX



DIN 2181 with reinforced shank

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

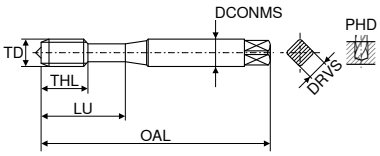
TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 179 ... £		U0 Article no. 22 200 ... £	
	mm	mm	mm	mm	mm	mm	mm					
M2,5x0,35	0.35	40	2.8	2.1	2.15	9		3	78.15	025		
M3x0,35	0.35	40	3.5	2.7	2.65	8	18	3	50.17	030		
M4x0,35	0.35	45	4.5	3.4	3.65	9	22	3	72.65	040		
M4x0,5	0.50	45	4.5	3.4	3.50	9	22	3	50.17	042		
M4,5x0,5	0.50	50	6.0	4.9	4.00	10	24	3	84.25	045		
M5x0,5	0.50	50	6.0	4.9	4.50	11	25	3	50.17	050		
M6x0,5	0.50	56	6.0	4.9	5.50	12	27	3	52.02	060		
M6x0,75	0.75	56	6.0	4.9	5.20	12	27	3	50.17	062	69.13	062
M7x0,75	0.75	56	6.0	4.9	6.20	14		3	56.83	070		
M8x0,5	0.50	56	6.0	4.9	7.50	14		4	69.13	080		
M8x0,75	0.75	56	6.0	4.9	7.20	14		3	56.83	082		
M8x1	1.00	63	6.0	4.9	7.00	17		3	50.17	084	69.13	084
M9x1	1.00	63	7.0	5.5	8.00	17		4	69.13	090		
M10x0,75	0.75	63	7.0	5.5	9.20	18		4	74.53	100		
M10x1	1.00	63	7.0	5.5	9.00	18		4	52.02	102	72.65	102
M10x1,25	1.25	70	7.0	5.5	8.80	22		3	68.43	104		
M11x1	1.00	63	8.0	6.2	10.00	18		4	82.21	110		
M12x1	1.00	70	9.0	7.0	11.00	18		4	61.58	120	86.23	120
M12x1,25	1.25	70	9.0	7.0	10.80	20		4	69.13	122		
M12x1,5	1.50	70	9.0	7.0	10.50	20		4	59.72	124	84.25	124
M13x1	1.00	70	11.0	9.0	12.00	18		4	90.07	130		
M14x1	1.00	70	11.0	9.0	13.00	18		4	82.21	140		
M14x1,25	1.25	70	11.0	9.0	12.80	20		4	82.21	142		
M14x1,5	1.50	70	11.0	9.0	12.50	20		4	78.15	144	111.28	144
M15x1	1.00	70	12.0	9.0	14.00	18		5	100.11	150		
M16x1	1.00	70	12.0	9.0	15.00	18		5	93.57	160		
M16x1,5	1.50	70	12.0	9.0	14.50	20		4	86.23	162	121.73	162
M18x1	1.00	80	14.0	11.0	17.00	18		5	121.73	180		
M18x1,5	1.50	80	14.0	11.0	16.50	22		4	102.12	182	140.37	182
M18x2	2.00	80	14.0	11.0	16.00	22		4	121.73	184		
M20x1,5	1.50	80	16.0	12.0	18.50	22		4	118.84	202	164.44	202
M20x2	2.00	80	16.0	12.0	18.00	22		4	129.16	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

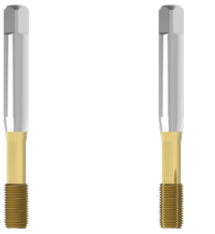
▲ SN = Thread formers with lubrication grooves

MF | Spanlos



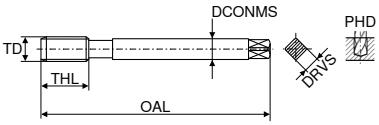
DIN 2174 with reinforced shank

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



	HSS-E ≤ 1100 N/mm² ≤ 1,5xD	HSS-E ≤ 1100 N/mm² ≤ 3xD
	U0	U0
	Article no. 22 204 ...	Article no. 22 205 ...
	£	£

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	3.8	10	21		111.28	**040**		
M4x0,5	0.50	63	4.5	3.4	3.8	10	21	4			125.38	**040**
M5x0,5	0.50	70	6.0	4.9	4.8	11	25		95.58	**050**		
M5x0,5	0.50	70	6.0	4.9	4.8	11	25	4			111.28	**050**
M6x0,5	0.50	80	6.0	4.9	5.8	13	30		111.28	**060**		
M6x0,5	0.50	80	6.0	4.9	5.8	13	30	5			125.38	**060**
M6x0,75	0.75	80	6.0	4.9	5.7	13	30		88.32	**062**		
M6x0,75	0.75	80	6.0	4.9	5.7	13	30	4			100.11	**062**
M8x0,75	0.75	80	8.0	6.2	7.7	14	30		114.72	**080**		
M8x0,75	0.75	80	8.0	6.2	7.7	14	30	5			111.28	**080**
M8x1	1.00	90	8.0	6.2	7.6	17	35		105.74	**082**		
M8x1	1.00	90	8.0	6.2	7.6	17	35	5			118.84	**082**
M10x1	1.00	90	10.0	8.0	9.6	18	35		100.11	**100**		
M10x1	1.00	90	10.0	8.0	9.6	18	35	5			109.56	**100**



DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes				
	mm	mm	mm	mm	mm	mm					
M12x1	1.0	100	9	7	11.60	18		94.58	**120**		
M12x1	1.0	100	9	7	11.60	18	6			98.30	**120**
M12x1,5	1.5	100	9	7	11.35	22		89.03	**124**		
M12x1,5	1.5	100	9	7	11.35	22	6			103.73	**124**
M14x1,5	1.5	100	11	9	13.35	22		139.44	**140**		
M14x1,5	1.5	100	11	9	13.35	22	6			144.98	**140**
M16x1,5	1.5	100	12	9	15.35	22		142.80	**160**		
M16x1,5	1.5	100	12	9	15.35	22	6			155.31	**160**
M20x1,5	1.5	125	16	12	19.35	25		201.20	**200**		
M20x1,5	1.5	125	16	12	19.35	25	6			213.12	**200**

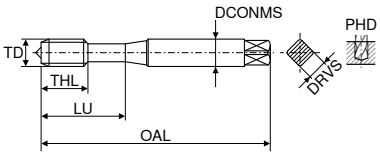
Steel	**8-30**	**8-30**
Stainless steel	**8-15**	**8-15**
Cast iron		
Non ferrous metals	**12-25**	**12-25**
Heat resistant alloys		
Hardened materials		

6

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

▲ SN = Thread formers with lubrication grooves

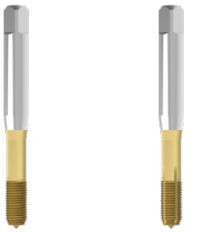
MF



DIN 2174 with reinforced shank

UNI
C
2–3
ISO 2X
6HX
TiN

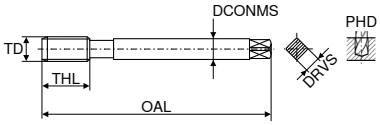
UNI SN
C
2–3
ISO 2X
6HX
TiN



HSS-E
≤ 850 N/mm²
≤ 3xD

HSS-E
≤ 850 N/mm²
≤ 3xD

TD	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 840 ... £		T9 Article no. 23 842 ... £	
	mm	mm	mm	mm	mm	mm	mm					
M4x0,5	0.50	63	4.5	3.4	3.80	10	21		62.03	040		
M4x0,5	0.50	63	4.5	3.4	3.80	10	21	4			69.43	040
M5x0,5	0.50	70	6.0	4.9	4.80	11	25		52.58	050		
M5x0,5	0.50	70	6.0	4.9	4.80	11	25	4			61.58	050
M6x0,5	0.50	80	6.0	4.9	5.80	13	30		62.03	060		
M6x0,5	0.50	80	6.0	4.9	5.80	13	30	5			69.90	060
M8x1	1.00	90	8.0	6.2	7.60	17	35		59.72	084		
M8x1	1.00	90	8.0	6.2	7.60	17	35	5			66.54	084
M10x1	1.00	90	10.0	8.0	9.60	18	35		68.01	102		
M10x1	1.00	90	10.0	8.0	9.60	18	35	5			73.81	102
M10x1,25	1.25	100	10.0	8.0	9.45	18	39		80.91	104		
M10x1,25	1.25	100	10.0	8.0	9.45	18	39	5			89.94	104



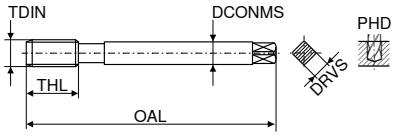
DIN 2174 with reduced shank

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 841 ... £		T9 Article no. 23 843 ... £	
	mm	mm	mm	mm	mm	mm					
M12x1,25	1.25	100	9	7	11.45	22		86.88	122		
M12x1,25	1.25	100	9	7	11.45	22	6			98.20	122
M12x1,5	1.50	100	9	7	11.35	22		78.60	124		
M12x1,5	1.50	100	9	7	11.35	22	6			87.62	124
M14x1,5	1.50	100	11	9	13.35	22		97.34	144		
M14x1,5	1.50	100	11	9	13.35	22	6			108.81	144
M16x1,5	1.50	100	12	9	15.35	22		109.01	162		
M16x1,5	1.50	100	12	9	15.35	22	6			126.84	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		

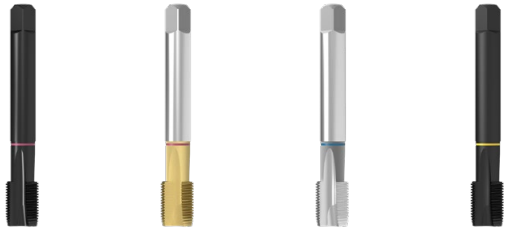
Through hole – Machine taps, right hand

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
0°
≤ 1100 N/mm² ≤ 4xD

HSS-E
0°
≤ 1100 N/mm² ≤ 4xD

HSS-E
0°
≤ 750 N/mm² ≤ 4xD

HSS-E
0°
≤ 900 N/mm² ≤ 4xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 632 ... £		U0 Article no. 22 630 ... £		U0 Article no. 22 346 ... £		U0 Article no. 22 352 ... £	
	mm	mm	mm	mm	mm	mm									
1/8-28	0.907	90	7	5.5	8.80	18	3	62.37	**012**	102.12	**012**	49.82	**012**	61.99	**012**
1/4-19	1.337	100	11	9.0	11.80	22	3	82.73	**025**	134.83	**025**	66.28	**025**	81.54	**025**
3/8-19	1.337	100	12	9.0	15.25	22	3	102.71	**037**	156.16	**037**	79.62	**037**	103.01	**037**
1/2-14	1.814	125	16	12.0	19.00	25	4	131.64	**050**	241.30	**050**	110.86	**050**	135.68	**050**
3/4-14	1.814	140	20	16.0	24.50	28	4	219.10	**075**			177.96	**075**	201.20	**075**
1-11	2.309	160	25	20.0	30.75	30	4	326.48	**100**			252.92	**100**	310.88	**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

UNI

B

4–5

ISO 228

nitr. + vap.

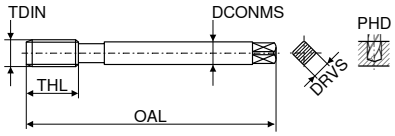
UNI

B

4–5

ISO 228

TiN



DIN 5156 with reduced shank

HSS-E

0°

≤ 1100 N/mm²

≤ 3xD

HSS-E

0°

≤ 1100 N/mm²

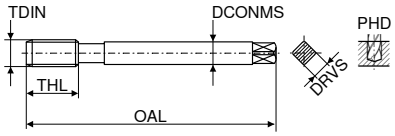
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 161 ... £		T9 Article no. 23 160 ... £	
	mm	mm	mm	mm	mm	mm					
1/8-28	0.907	90	7	5.5	8.80	18	3	38.35	**012**	56.37	**012**
1/4-19	1.337	100	11	9.0	11.80	22	3	51.59	**025**	74.53	**025**
3/8-19	1.337	100	12	9.0	15.25	22	3	65.82	**037**	87.62	**037**
1/2-14	1.814	125	16	12.0	19.00	25	4	86.23	**050**	134.51	**050**
3/4-14	1.814	140	20	16.0	24.50	28	4	140.93	**075**	175.48	**075**
1-11	2.309	160	25	20.0	30.75	30	4	192.20	**100**	324.97	**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
	Article no. 22 633 ...	Article no. 22 634 ...	Article no. 22 635 ...	Article no. 22 636 ...	Article no. 22 639 ...

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	£		£		£		£		£	
	mm	mm	mm	mm	mm	mm											
1/8-28	0.907	90	7	5.5	8.80	10	3	61.78	**012**	91.51	**012**						
1/8-28	0.907	90	7	5.5	8.80	10	4					63.49	**012**	91.51	**012**	100.11	**012**
1/4-19	1.337	100	11	9.0	11.80	15	4	88.57	**025**	116.21	**025**						
1/4-19	1.337	100	11	9.0	11.80	15	5					85.22	**025**	116.21	**025**	130.41	**025**
3/8-19	1.337	100	12	9.0	15.25	15	4	107.55	**037**	162.55	**037**						
3/8-19	1.337	100	12	9.0	15.25	15	5					104.70	**037**	162.55	**037**	161.69	**037**
1/2-14	1.814	125	16	12.0	19.00	17	4	142.15	**050**	230.40	**050**						
1/2-14	1.814	125	16	12.0	19.00	17	5					135.68	**050**	230.40	**050**	211.37	**050**
5/8-14	1.814	125	18	14.5	21.00	17	4	176.23	**062**								
5/8-14	1.814	125	18	14.5	21.00	17	5							300.99	**062**		
3/4-14	1.814	140	20	16.0	24.50	20	4	220.52	**075**								
3/4-14	1.814	140	20	16.0	24.50	20	5									315.96	**075**
7/8-14	1.814	150	22	18.0	28.25	22	5	301.17	**087**								
1-11	2.309	160	25	20.0	30.75	24	5	339.83	**100**								
1-11	2.309	160	25	20.0	30.75	24	6									482.28	**100**
1 1/4-11	2.309	170	32	24.0	39.50	25	6	534.78	**125**								
1 1/2-11	2.309	190	36	29.0	45.25	27	6	764.78	**150**								

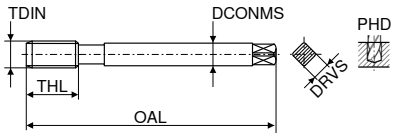
Steel	**6-20**	**6-25**	**6-25**	**6-25**	**6-25**
Stainless steel	**4-8**	**5-10**	**4-10**	**4-10**	**4-10**
Cast iron	**6-15**	**10-20**	**6-20**	**6-20**	**6-20**
Non ferrous metals		**12-25**	**12-25**	**12-25**	**12-25**
Heat resistant alloys					
Hardened materials					

6

Blind hole – Machine taps, right hand

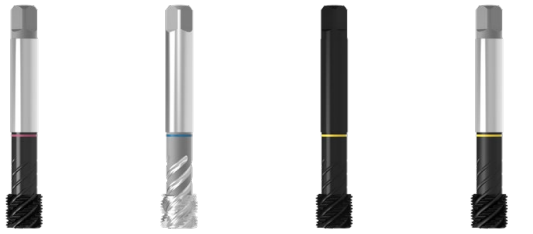
▲ CNC = for synchronised CNC machining with minimum length compensation chuck

G | Salo-Rex



DIN 5156 with reduced shank

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



HSS-E
45°
≤ 1100 N/mm²
≤ 3xD

HSS-E
42°
≤ 750 N/mm²
≤ 3xD

HSS-E
42°
≤ 900 N/mm²
≤ 3xD

HSS-E
45°
≤ 900 N/mm²
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 624 ... £		U0 Article no. 22 354 ... £		U0 Article no. 22 355 ... £		U0 Article no. 22 358 ... £	
	mm	mm	mm	mm	mm	mm									
1/8-28	0.907	90	7	5.5	8.80	10	3			56.83	**012**			112.44	**012**
1/8-28	0.907	90	7	5.5	8.80	10	4	110.86	**012**			63.92	**012**		
1/4-19	1.337	100	11	9.0	11.80	15	4			78.01	**025**				
1/4-19	1.337	100	11	9.0	11.80	15	5	145.85	**025**			86.74	**025**	147.74	**025**
3/8-19	1.337	100	12	9.0	15.25	15	4			95.74	**037**				
3/8-19	1.337	100	12	9.0	15.25	15	5	172.15	**037**			104.16	**037**	174.78	**037**
1/2-14	1.814	125	16	12.0	19.00	17	4			122.90	**050**				
1/2-14	1.814	125	16	12.0	19.00	17	5	258.28	**050**			141.48	**050**	261.93	**050**
5/8-14	1.814	125	18	14.5	21.00	17	5					194.53	**062**		
3/4-14	1.814	140	20	16.0	24.50	20	4			196.11	**075**				
3/4-14	1.814	140	20	16.0	24.50	20	5					218.34	**075**		
1-11	2.309	160	25	20.0	30.75	24	5			303.33	**100**				
1-11	2.309	160	25	20.0	30.75	24	6					336.88	**100**		

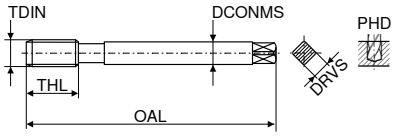
Steel	**6-25**	**10-20**		**5-12**
Stainless steel	**5-10**		**5-10**	**5-10**
Cast iron	**10-20**			
Non ferrous metals	**12-25**	**10-20**		
Heat resistant alloys				
Hardened materials				

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 ◁ 35° ≤ 1100 N/mm² ≤ 2,5xD

HSS-E ◁ 35° ≤ 1100 N/mm² ≤ 2,5xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 163 ...	£	T9 Article no. 23 162 ...	£
	mm	mm	mm	mm	mm	mm					
1/8-28	0.907	90	7	5.5	8.80	10	3	43.28	**012**	58.69	**012**
1/4-19	1.337	100	11	9.0	11.80	15	4	56.88	**025**	80.91	**025**
3/8-19	1.337	100	12	9.0	15.25	15	4	72.65	**037**	95.29	**037**
1/2-14	1.814	125	16	12.0	19.00	17	4	90.49	**050**	143.38	**050**
3/4-14	1.814	140	20	16.0	24.50	20	4	150.36	**075**	184.63	**075**
1-11	2.309	160	25	20.0	30.75	24	5	227.36	**100**	356.91	**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

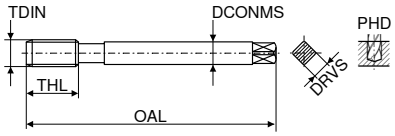
G | TWIN

ST | HR

C 2–3 | C 2–3

ISO 228 X | ISO 228 X

nitr.



DIN 5156 with reduced shank

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

HSS-E
0°
≤ 1400 N/mm²
≤ 2xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 347 ...		U0 Article no. 22 339 ...	
	mm	mm	mm	mm	mm	mm		£		£	
1/16-28	0.907	90	6	4.9	6.80	17	3	56.88	**006**		
1/8-28	0.907	90	7	5.5	8.80	18	4	53.03	**012**	61.58	**012**
1/4-19	1.337	100	11	9.0	11.80	22	4	65.10	**025**	84.25	**025**
3/8-19	1.337	100	12	9.0	15.25	22	4	79.03	**037**	105.75	**037**
1/2-14	1.814	125	16	12.0	19.00	25	4	108.38	**050**	144.98	**050**
3/4-14	1.814	140	20	16.0	24.50	28	4	165.61	**075**	226.33	**075**
1-11	2.309	160	25	20.0	30.75	30	5	254.08	**100**	312.18	**100**
1 1/8-11	2.309	170	28	22.0	35.50	30	5	361.57	**112**	441.18	**112**
1 1/4-11	2.309	170	32	24.0	39.50	30	6	418.66	**125**	523.40	**125**
1 3/8-11	2.309	180	36	29.0	41.75	32	6	513.35	**137**	650.34	**137**
1 1/2-11	2.309	190	36	29.0	45.25	32	6	566.98	**150**	724.87	**150**
1 3/4-11	2.309	190	40	32.0	51.00	32	6			971.52	**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

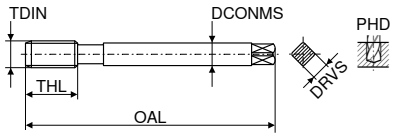
▲ SN = Thread formers with lubrication grooves

G | Spanlos

EC | EC SN

ISO 228 | ISO 228

TiN | TiN



DIN 2189 with reduced shank

HSS-E
≤ 1100 N/mm²
≤ 1,5xD

HSS-E
≤ 1100 N/mm²
≤ 3xD

U0

U0

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	Article no. 22 360 ...		Article no. 22 359 ...	
	mm	mm	mm	mm	mm	mm		£		£	
1/8-28	0.907	90	7	5.5	9.25	18		90.94	**012**		
1/8-28	0.907	90	7	5.5	9.25	18	5			103.29	**012**
1/4-19	1.337	100	11	9.0	12.55	22		116.95	**025**		
1/4-19	1.337	100	11	9.0	12.55	22	6			131.91	**025**
3/8-19	1.337	100	12	9.0	16.05	22		157.63	**037**		
3/8-19	1.337	100	12	9.0	16.05	22	6			176.63	**037**
1/2-14	1.814	125	16	12.0	20.10	25		211.94	**050**		
1/2-14	1.814	125	16	12.0	20.10	25	6			237.65	**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

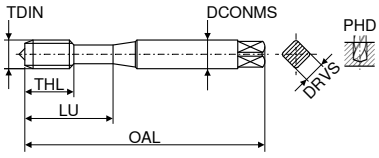
UNC | Stabil

UNI | VA | Ti

B 4–5 | B 4–5 | B 4–5

2B | 2B | 2BX

nitr. + vap. | nitr. | TiN



DIN 371 with reinforced shank

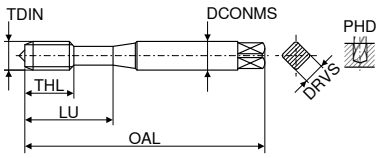
HSS-E | HSS-E | HSS-PM

0° | 0° | 0°

≤ 1100 N/mm² | ≤ 900 N/mm² | ≤ 44 HRC

≤ 4xD | ≤ 4xD | ≤ 4xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 572 ... £		U0 Article no. 22 250 ... £		U0 Article no. 22 269 ... £	
	mm	mm	mm	mm	mm	mm	mm							
Nr. 2-56	0.454	45	2.8	2.1	1.85	7	12	2	83.09	**002**				
Nr. 4-40	0.635	56	3.5	2.7	2.35	11	18	2	45.76	**004**				
Nr. 4-40	0.635	56	3.5	2.7	2.35	11	18	3					103.35	**004**
Nr. 6-32	0.794	56	4.0	3.0	2.85	12	20	3	38.82	**006**	39.76	**006**	92.71	**006**
Nr. 8-32	0.794	63	4.5	3.4	3.50	13	21	3	39.21	**008**	39.37	**008**	92.71	**008**
Nr. 10-24	1.058	70	6.0	4.9	3.90	15	25	3	42.40	**010**	39.21	**010**	99.06	**010**
Nr. 12-24	1.058	80	6.0	4.9	4.50	16	30	3	51.26	**012**				
1/4-20	1.270	80	7.0	5.5	5.10	17	30	3	44.72	**025**	49.75	**025**	103.35	**025**
5/16-18	1.411	90	8.0	6.2	6.60	20	35	3	53.30	**031**	50.99	**031**	111.37	**031**
3/8-16	1.588	100	10.0	8.0	8.00	22	39	3	58.82	**037**	51.87	**037**	131.04	**037**



DIN 371 with reinforced shank

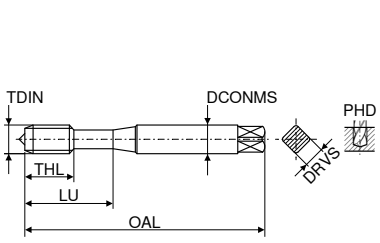
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 573 ... £	
	mm	mm	mm	mm	mm	mm			
1/2-13	1.954	110	9	7.0	10.80	25	3	72.14	**050**
5/8-11	2.309	110	12	9.0	13.50	27	3	98.30	**062**
3/4-10	2.540	125	14	11.0	16.50	30	3	120.84	**075**
7/8-9	2.822	140	18	14.5	19.50	32	3	155.39	**087**
1-8	3.175	160	18	14.5	22.25	36	3	199.67	**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

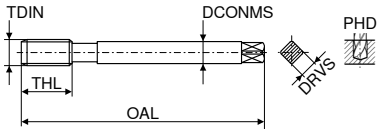
UNI	FE	FE-HF	VA
B 4–5	B 4–5	B 4–5	B 4–5
2B	2B	2B	2B
TiN		TiCN	nitr.



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
Article no. 23 170 ...	Article no. 23 270 ...	Article no. 23 370 ...	Article no. 23 470 ...

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	£		£		£		£	
	mm	mm	mm	mm	mm	mm	mm									
Nr. 4-40	0.635	56	3.5	2.7	2.30	11	18	2	30.22	**004**	25.09	**004**	32.41	**004**	29.22	**004**
Nr. 6-32	0.794	56	4.0	3.0	2.85	12	20	3	29.22	**006**	23.84	**006**	30.78	**006**	26.51	**006**
Nr. 8-32	0.794	63	4.5	3.4	3.50	13	21	3	29.22	**008**	23.25	**008**	30.78	**008**	25.94	**008**
Nr. 10-24	1.058	70	6.0	4.9	3.90	15	25	3	30.22	**010**	25.09	**010**	32.54	**010**	29.22	**010**
1/4-20	1.270	80	7.0	5.5	5.20	17	30	3	39.66	**025**	26.16	**025**	45.05	**025**	30.65	**025**
5/16-18	1.411	90	8.0	6.2	6.60	20	35	3	43.60	**031**	29.23	**031**	48.32	**031**	34.93	**031**
3/8-16	1.588	100	10.0	8.0	8.00	22	39	3	50.75	**037**	33.56	**037**	58.27	**037**	40.39	**037**



DIN 376 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 171 ... £		T9 Article no. 23 271 ... £		T9 Article no. 23 371 ... £		T9 Article no. 23 471 ... £	
	mm	mm	mm	mm	mm	mm									
7/16-14	1.814	100	8	6.2	9.40	22	3	60.14	**043**	42.13	**043**	65.84	**043**	50.56	**043**
1/2-13	1.954	110	9	7.0	10.75	25	3	65.84	**050**	46.07	**050**	74.82	**050**	55.36	**050**
5/8-11	2.309	110	12	9.0	13.50	27	3	83.83	**062**	59.26	**062**	90.49	**062**	71.33	**062**
3/4-10	2.540	125	14	11.0	16.50	30	3	126.84	**075**	74.82	**075**	144.25	**075**	91.53	**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

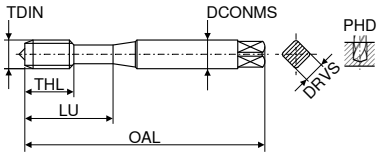
UNC | Salo-Rex

UNI | VA

C 2–3 | C 2–3

2B | 2B

vap. | vap.

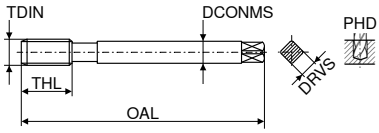


DIN 371 with reinforced shank

HSS-E
◁ 42°
≤ 1100 N/mm²
≤ 3xD

HSS-E
◁ 42°
≤ 900 N/mm²
≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 582 ... £		U0 Article no. 22 266 ... £	
	mm	mm	mm	mm	mm	mm	mm					
Nr. 2-56	0.454	45	2.8	2.1	1.85	4.5	12	2	68.86	**002**		
Nr. 4-40	0.635	56	3.5	2.7	2.35	6.0	18	2	40.69	**004**		
Nr. 6-32	0.794	56	4.0	3.0	2.85	7.0	20	3	37.36	**006**	39.37	**006**
Nr. 8-32	0.794	63	4.5	3.4	3.50	8.0	21	3	38.50	**008**	42.00	**008**
Nr. 10-24	1.058	70	6.0	4.9	3.90	10.0	25	3	40.97	**010**	46.33	**010**
1/4-20	1.270	80	7.0	5.5	5.10	13.0	30	3	44.47	**025**	46.65	**025**
5/16-18	1.411	90	8.0	6.2	6.60	14.0	35	3	46.89	**031**	53.60	**031**
3/8-16	1.588	100	10.0	8.0	8.00	16.0	39	3	51.87	**037**	55.43	**037**



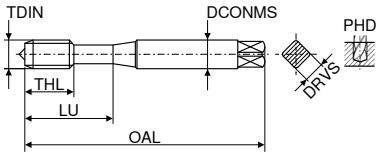
DIN 376 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 583 ... £		U0 Article no. 22 267 ... £	
	mm	mm	mm	mm	mm	mm					
7/16-14	1.814	100	8	6.2	9.40	18	3	99.06	**043**		
7/16-14	1.814	100	8	6.2	9.40	18	4			116.92	**043**
1/2-13	1.954	110	9	7.0	10.80	20	3	72.80	**050**		
1/2-13	1.954	110	9	7.0	10.80	20	4			81.54	**050**
9/16-12	2.117	110	11	9.0	12.25	20	3	105.04	**056**		
5/8-11	2.309	110	12	9.0	13.50	22	3	95.29	**062**		
5/8-11	2.309	110	12	9.0	13.50	22	4			103.49	**062**
3/4-10	2.540	125	14	11.0	16.50	25	3	123.19	**075**		
3/4-10	2.540	125	14	11.0	16.50	25	4			129.00	**075**
7/8-9	2.822	140	18	14.5	19.50	27	4	147.31	**087**		
1-8	3.175	160	18	14.5	22.25	30	4	199.30	**100**		
1-8	3.175	160	18	14.5	22.25	30	5			218.34	**100**

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

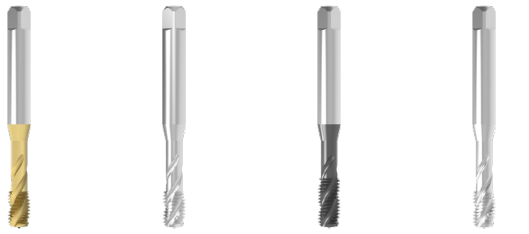
Blind hole – Machine taps, right hand

UNC



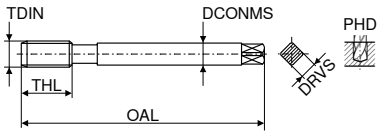
DIN 371 with reinforced shank

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



	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	Article no. 23 172 ...	Article no. 23 272 ...	Article no. 23 372 ...	Article no. 23 472 ...
	£	£	£	£
Nr. 4-40			33.64 004	
Nr. 4-40	32.08 004	26.16 004		30.65 004
Nr. 6-32	30.08 006	24.41 006		28.81 006
Nr. 6-32			32.54 006	
Nr. 8-32	32.41 008	25.09 008		29.78 008
Nr. 8-32			34.43 008	
Nr. 10-24	33.40 010	26.31 010		31.67 010
Nr. 10-24			34.93 010	
1/4-20	43.16 025	29.51 025		35.45 025
1/4-20			47.94 025	
5/16-18	43.16 031	30.65 031		37.48 031
5/16-18			49.98 031	
3/8-16	52.87 037	35.02 037		41.83 037
3/8-16			58.30 037	

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes
	mm	mm	mm	mm	mm	mm	mm	
Nr. 4-40	0.635	56	3.5	2.7	2.30	11	18	2
Nr. 4-40	0.635	56	3.5	2.7	2.30	6	18	2
Nr. 6-32	0.794	56	4.0	3.0	2.85	7	20	3
Nr. 6-32	0.794	56	4.0	3.0	2.85	12	20	3
Nr. 8-32	0.794	63	4.5	3.4	3.50	8	21	3
Nr. 8-32	0.794	63	4.5	3.4	3.50	13	21	3
Nr. 10-24	1.058	70	6.0	4.9	3.90	10	25	3
Nr. 10-24	1.058	70	6.0	4.9	3.90	15	25	3
1/4-20	1.270	80	7.0	5.5	5.20	13	30	3
1/4-20	1.270	80	7.0	5.5	5.20	17	30	3
5/16-18	1.411	90	8.0	6.2	6.60	14	35	3
5/16-18	1.411	90	8.0	6.2	6.60	20	35	3
3/8-16	1.588	100	10.0	8.0	8.00	16	39	3
3/8-16	1.588	100	10.0	8.0	8.00	22	39	3



DIN 376 with reduced shank

	T9	T9	T9	T9
TDIN	Article no. 23 173 ...	Article no. 23 273 ...	Article no. 23 373 ...	Article no. 23 473 ...
	£	£	£	£
7/16-14			74.11 043	
7/16-14	66.83 043	47.31 043		57.81 043
1/2-13	70.77 050	47.52 050		57.10 050
1/2-13			78.67 050	
5/8-11	86.88 062	66.54 062		80.04 062
5/8-11			96.03 062	
3/4-10	128.98 075	81.53 075		98.20 075
3/4-10			150.36 075	

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes
	mm	mm	mm	mm	mm	mm	
7/16-14	1.814	100	8	6.2	9.40	22	3
7/16-14	1.814	100	8	6.2	9.40	18	3
1/2-13	1.954	110	9	7.0	10.75	20	3
1/2-13	1.954	110	9	7.0	10.75	25	3
5/8-11	2.309	110	12	9.0	13.50	22	3
5/8-11	2.309	110	12	9.0	13.50	27	3
3/4-10	2.540	125	14	11.0	16.50	25	3
3/4-10	2.540	125	14	11.0	16.50	30	3

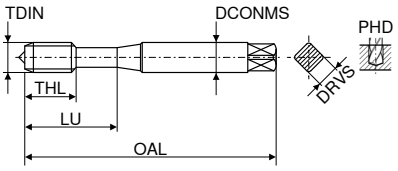
Steel	5-45	5-25	5-45	
Stainless steel	5-15			3-10
Cast iron	10-25			
Non ferrous metals	15-40			
Heat resistant alloys				
Hardened materials				

6

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

▲ SN = Thread formers with lubrication grooves

UNC | Spanlos



DIN 2174 with reduced shank

	EC	EC SN
	C 2–3	C 2–3
	2BX	2BX
	TiN	TiN

	HSS-E ≤ 1100 N/mm² ≤ 1,5xD	HSS-E ≤ 1100 N/mm² ≤ 3xD
	U0	U0
TDIN	Article no. 22 270 ...	Article no. 22 271 ...
	£	£

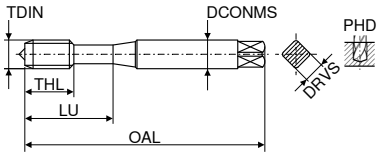
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes				
	mm	mm	mm	mm	mm	mm	mm					
Nr. 4-40	0.635	56	3.5	2.7	2.55	11	18		53.33	**004**		
Nr. 4-40	0.635	56	3.5	2.7	2.55	11	18	3			61.91	**004**
Nr. 6-32	0.794	56	4.0	3.0	3.15	12	20		49.98	**006**		
Nr. 6-32	0.794	56	4.0	3.0	3.15	12	20	3			57.38	**006**
Nr. 8-32	0.794	63	4.5	3.4	3.80	13	21		50.26	**008**		
Nr. 8-32	0.794	63	4.5	3.4	3.80	13	21	4			57.38	**008**
Nr. 10-24	1.058	70	6.0	4.9	4.35	15	25		56.08	**010**		
Nr. 10-24	1.058	70	6.0	4.9	4.35	15	25	4			63.50	**010**
1/4-20	1.270	80	7.0	5.5	5.75	17	30		64.95	**025**		
1/4-20	1.270	80	7.0	5.5	5.75	17	30	4			73.52	**025**
5/16-18	1.411	90	8.0	6.2	7.30	20	35		68.01	**031**		
5/16-18	1.411	90	8.0	6.2	7.30	20	35	5			78.98	**031**
3/8-16	1.588	100	10.0	8.0	8.80	22	39		83.67	**037**		
3/8-16	1.588	100	10.0	8.0	8.80	22	39	5			92.39	**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

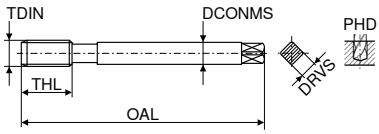
UNI | B 4–5 | 2B | nitr. + vap.



DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 668 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
EG Nr. 4-40	0.635	63	4.5	3.4	3.1	13	21	3	59.26	**004**
EG Nr. 6-32	0.794	70	6.0	4.9	3.8	14	25	3	62.10	**006**
EG Nr. 8-32	0.794	80	6.0	4.9	4.4	16	30	3	61.14	**008**
EG Nr. 10-24	1.058	80	7.0	5.5	5.2	17	30	3	65.82	**010**
EG 1/4-20	1.270	90	8.0	6.2	6.7	20	35	3	68.28	**025**
EG 5/16-18	1.411	100	10.0	8.0	8.4	22	39	3	74.96	**031**



DIN 376 with reduced shank

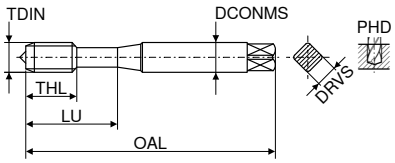
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 670 ...	
	mm	mm	mm	mm	mm	mm		£	
EG 3/8-16	1.588	100	9	7.0	10.00	22	3	86.88	**037**
EG 7/16-14	1.814	110	11	9.0	11.60	26	3	106.20	**043**
EG 1/2-13	1.954	110	12	9.0	13.30	27	3	110.69	**050**
EG 5/8-11	2.309	125	14	11.0	16.50	30	3	139.91	**062**
EG 3/4-10	2.540	140	18	14.5	19.75	32	3	181.45	**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

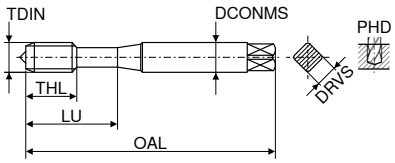
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 672 ... £	
	mm	mm	mm	mm	mm	mm	mm			
EG Nr. 4-40	0.635	63	4.5	3.4	3.1	7	21	3	59.72	**004**
EG Nr. 6-32	0.794	70	6.0	4.9	3.8	8	25	3	59.26	**006**
EG Nr. 8-32	0.794	80	6.0	4.9	4.4	8	30	3	61.14	**008**
EG Nr. 10-24	1.058	80	7.0	5.5	5.2	10	30	3	65.82	**010**
EG 1/4-20	1.270	90	8.0	6.2	6.7	14	35	3	72.65	**025**
EG 5/16-18	1.411	100	10.0	8.0	8.4	16	39	3	76.26	**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

U0

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	Article no. 22 166 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
Nr. 4-40	0.635	56	3.5	2.7	2.30	11	18	2	80.91	**004**
Nr. 6-32	0.794	56	4.0	3.0	2.85	12	20	3	82.40	**006**
Nr. 8-32	0.794	63	4.5	3.4	3.50	13	21	3	80.08	**008**
Nr. 10-24	1.058	70	6.0	4.9	3.90	15	25	3	85.84	**010**
1/4-20	1.270	80	7.0	5.5	5.25	17	30	3	109.82	**025**
3/8-16	1.588	100	10.0	8.0	8.10	22	39	3	132.64	**037**

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

6

Through hole – Machine taps, right hand

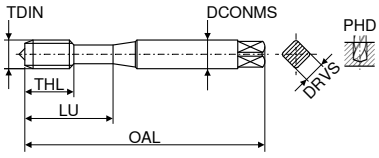
UNF | Stabil

UNI | Ti

B 4–5 | B 4–5

2B | 2BX

nitr. + vap. | TiN

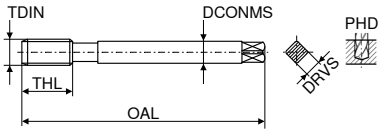


DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

HSS-PM
0°
≤ 44 HRC
≤ 4xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 602 ...		U0 Article no. 22 317 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
Nr. 4-48	0.529	56	3.5	2.7	2.40	11	18	2	54.10	**004**		
Nr. 4-48	0.529	56	3.5	2.7	2.40	11	18	3			106.94	**004**
Nr. 5-44	0.577	56	3.5	2.7	2.70	11	18	3			110.26	**005**
Nr. 6-40	0.635	56	4.0	3.0	2.95	12	20	3	48.50	**006**	95.32	**006**
Nr. 8-36	0.706	63	4.5	3.4	3.50	13	21	3	47.27	**008**	101.98	**008**
Nr. 10-32	0.794	70	6.0	4.9	4.10	15	25	3	48.54	**010**	102.66	**010**
1/4-28	0.907	80	7.0	5.5	5.50	17	30	3	55.28	**025**	106.94	**025**
5/16-24	1.058	90	8.0	6.2	6.90	17	35	3	66.54	**031**	121.73	**031**
3/8-24	1.058	90	10.0	8.0	8.50	18	35	3			135.30	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 603 ...		U0 Article no. 22 421 ...	
	mm	mm	mm	mm	mm	mm		£		£	
7/16-20	1.270	100	8	6.2	9.90	22	3	74.58	**043**		
1/2-20	1.270	100	9	7.0	11.50	22	3	72.14	**050**	174.59	**050**
9/16-18	1.411	100	11	9.0	12.90	22	3	108.38	**056**		
5/8-18	1.411	100	12	9.0	14.50	22	3	99.98	**062**		
3/4-16	1.588	110	14	11.0	17.50	25	4	124.59	**075**		
7/8-14	1.814	125	18	14.5	20.50	25	4	162.52	**087**		
1-12	2.117	140	18	14.5	23.25	28	4	212.37	**100**		
1 1/8-12	2.117	150	22	18.0	26.50	28	4	549.10	**112**		
1 1/4-12	2.117	150	22	18.0	29.75	28	4	612.69	**125**		
1 3/8-12	2.117	170	28	22.0	33.00	30	5	676.21	**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

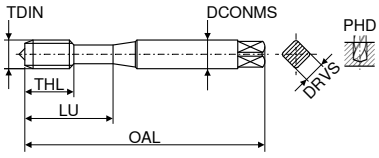
UNF

UNI | FE | VA

B 4–5

2B

TiN | | nitr.



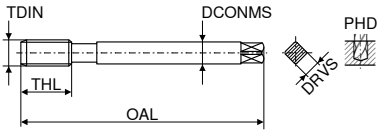
DIN 371 with reinforced shank

HSS-E | HSS-E | HSS-E

0° | 0° | 0°

≤ 1100 N/mm² ≤ 3xD | ≤ 850 N/mm² ≤ 3xD | ≤ 1100 N/mm² ≤ 3xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 180 ...	£	T9 Article no. 23 280 ...	£	T9 Article no. 23 480 ...	£
	mm	mm	mm	mm	mm	mm	mm							
Nr. 10-32	0.794	70	6	4.9	4.1	15	25	3	35.02	**010**	29.51	**010**	33.56	**010**
1/4-28	0.907	80	7	5.5	5.5	17	30	3	44.62	**025**	31.55	**025**	37.94	**025**
5/16-24	1.058	90	8	6.2	6.9	17	35	3	49.54	**031**	35.02	**031**	41.83	**031**
3/8-24	1.058	90	10	8.0	8.5	18	35	4	53.03	**037**	36.46	**037**	43.73	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 181 ...	£	T9 Article no. 23 281 ...	£	T9 Article no. 23 481 ...	£
	mm	mm	mm	mm	mm	mm							
7/16-20	1.270	100	8	6.2	9.9	22	3	65.10	**043**	46.65	**043**	55.01	**043**
1/2-20	1.270	100	9	7.0	11.5	22	3	65.84	**050**	46.65	**050**	55.01	**050**
9/16-18	1.411	100	11	9.0	12.9	22	3	91.39	**056**	63.06	**056**	69.43	**056**
5/8-18	1.411	100	12	9.0	14.5	22	3	82.94	**062**	57.10	**062**	61.58	**062**
3/4-16	1.588	110	14	11.0	17.5	25	4	128.42	**075**	74.53	**075**	97.20	**075**

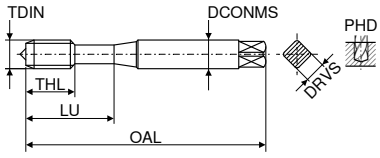
Steel	**5-45**	**5-25**	
Stainless steel	**5-15**		**3-10**
Cast iron	**10-25**		
Non ferrous metals	**15-40**		
Heat resistant alloys			
Hardened materials			

6

Blind hole – Machine taps, right hand

UNF | Salo-Rex

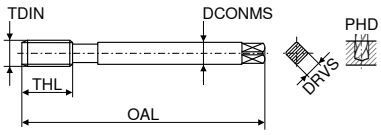
VA	UNI	UNI
E 1,5–2	C 2–3	E 1,5–2
2B	2B	2B +0,05
vap.	vap.	vap.



DIN 371 with reinforced shank

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

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	U0 Article no. 22 308 ... £		U0 Article no. 22 606 ... £		U0 Article no. 22 307 ... £	
	mm	mm	mm	mm	mm	mm	mm							
Nr. 2-64	0.397	45	2.8	2.1	1.85	4.5	12	2	87.71	**002**				
Nr. 4-48	0.529	56	3.5	2.7	2.40	6.0	18	2	59.72	**004**	58.69	**004**		
Nr. 6-40	0.635	56	4.0	3.0	2.95	7.0	20	3	58.69	**006**	44.47	**006**		
Nr. 6-40	0.635	56	4.0	3.0	3.00	7.0	20	3					82.21	**006**
Nr. 8-36	0.706	63	4.5	3.4	3.50	8.0	21	3	72.92	**008**	44.46	**008**		
Nr. 10-32	0.794	70	6.0	4.9	4.10	10.0	25	3	61.58	**010**	46.89	**010**		
Nr. 10-32	0.794	70	6.0	4.9	4.15	10.0	25	3					86.23	**010**
1/4-28	0.907	80	7.0	5.5	5.50	10.0	30	3	64.79	**025**	49.82	**025**		
1/4-28	0.907	80	7.0	5.5	5.55	10.0	30	3					89.94	**025**
5/16-24	1.058	90	8.0	6.2	6.90	10.0	35	3	71.64	**031**	68.43	**031**		
5/16-24	1.058	90	8.0	6.2	6.95	10.0	35	3					104.02	**031**
3/8-24	1.058	90	10.0	8.0	8.50	10.0	35	3	73.95	**037**				
3/8-24	1.058	90	10.0	8.0	8.55	10.0	35	3					104.02	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 607 ... £		U0 Article no. 22 409 ... £	
	mm	mm	mm	mm	mm	mm					
7/16-20	1.270	100	8	6.2	9.90	13	3	72.80	**043**		
7/16-20	1.270	100	8	6.2	9.95	13	4			130.88	**043**
1/2-20	1.270	100	9	7.0	11.50	13	4	73.81	**050**		
1/2-20	1.270	100	9	7.0	11.55	13	5			125.38	**050**
9/16-18	1.411	100	11	9.0	12.90	15	4	109.38	**056**		
9/16-18	1.411	100	11	9.0	12.95	15	5			177.80	**056**
5/8-18	1.411	100	12	9.0	14.50	15	4	97.34	**062**		
5/8-18	1.411	100	12	9.0	14.55	15	5			161.69	**062**
3/4-16	1.588	110	14	11.0	17.50	17	4	134.23	**075**		
3/4-16	1.588	110	14	11.0	17.55	17	5			217.03	**075**
7/8-14	1.814	125	18	14.5	20.50	17	4	157.35	**087**		
1-12	2.117	140	18	14.5	23.25	20	4	220.36	**100**		
1-12	2.117	140	18	14.5	23.30	20	5			347.61	**100**
1 1/8-12	2.117	150	22	18.0	26.50	22	4	310.44	**112**		
1 1/4-12	2.117	150	22	18.0	29.75	22	5	359.25	**125**		
1 3/8-12	2.117	170	28	22.0	33.00	24	5	416.33	**137**		

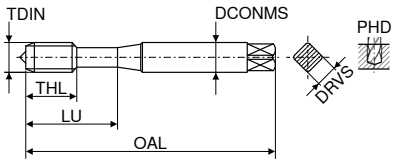
Steel		**6-20**	**6-20**
Stainless steel	**5-10**	**4-8**	**4-8**
Cast iron		**6-15**	**6-15**
Non ferrous metals			
Heat resistant alloys			
Hardened materials			

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					
Nr. 10-32	0.794	70	6	4.9	4.1	10	25	3	98.49	**010**	98.49	**010**
1/4-28	0.907	80	7	5.5	5.5	10	30	3	107.67	**025**	107.67	**025**
5/16-24	1.058	90	8	6.2	6.9	10	35	3	122.51	**031**	114.72	**031**
3/8-24	1.058	90	10	8.0	8.5	10	35	3	126.10	**037**	126.10	**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

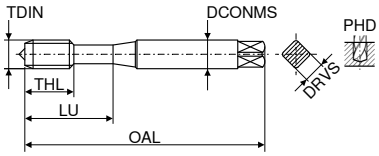
UNF

UNI | FE | VA

C 2–3

2B

TiN



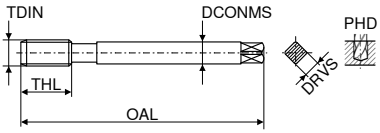
DIN 371 with reinforced shank

HSS-E
35°
≤ 1100 N/mm²
≤ 2,5xD

HSS-E
35°
≤ 850 N/mm²
≤ 2,5xD

HSS-E
35°
≤ 1100 N/mm²
≤ 2,5xD

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	LU	Flutes	T9 Article no. 23 182 ... £		T9 Article no. 23 282 ... £		T9 Article no. 23 482 ... £	
	mm	mm	mm	mm	mm	mm	mm							
Nr. 10-32	0.794	70	6	4.9	4.1	10	25	3	36.88	**010**	31.08	**010**	36.47	**010**
1/4-28	0.907	80	7	5.5	5.5	10	30	3	46.33	**025**	33.56	**025**	40.39	**025**
5/16-24	1.058	90	8	6.2	6.9	10	35	3	49.98	**031**	35.06	**031**	42.18	**031**
3/8-24	1.058	90	10	8.0	8.5	10	35	3	55.64	**037**	38.94	**037**	46.65	**037**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	T9 Article no. 23 183 ... £		T9 Article no. 23 283 ... £		T9 Article no. 23 483 ... £	
	mm	mm	mm	mm	mm	mm							
7/16-20	1.270	100	8	6.2	9.9	13	3	66.83	**043**	47.31	**043**	57.81	**043**
1/2-20	1.270	100	9	7.0	11.5	13	4	70.77	**050**	48.68	**050**	58.55	**050**
9/16-18	1.411	100	11	9.0	12.9	15	4	95.29	**056**	74.53	**056**	81.80	**056**
5/8-18	1.411	100	12	9.0	14.5	15	4	86.14	**062**	65.36	**062**	70.56	**062**
3/4-16	1.588	110	14	11.0	17.5	17	4	136.70	**075**	88.32	**075**	97.20	**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

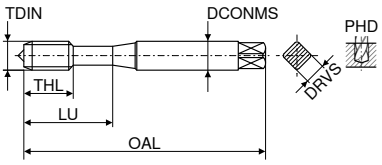
UNF | Spanlos

EC
SN

C
2–3

2BX

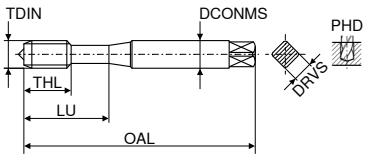
TiN



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 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
Nr. 4-48	0.529	56	3.5	2.7	2.62	11	18	3	68.73	**004**
Nr. 6-40	0.635	56	4.0	3.0	3.22	12	20	3	64.08	**006**
Nr. 8-36	0.706	63	4.5	3.4	3.85	13	21	4	66.24	**008**
Nr. 10-32	0.794	70	6.0	4.9	4.45	15	25	4	70.77	**010**
1/4-28	0.907	80	7.0	5.5	5.95	17	30	4	82.96	**025**



DIN 2174 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 313 ...	
	mm	mm	mm	mm	mm	mm		£	
7/16-20	1.27	100	8	6.2	10.55	22	6	123.63	**043**
1/2-20	1.27	100	9	7.0	12.15	22	6	127.12	**050**

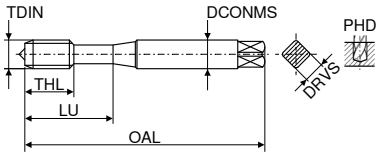
Steel	**8-30**
Stainless steel	**8-15**
Cast iron	
Non ferrous metals	**12-25**
Heat resistant alloys	
Hardened materials	

6

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

EG UNF | Stabil

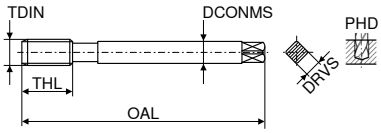
UNI | B 4–5 | 2B | nitr. + vap.



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		£	
EG Nr. 4-48	0.529	56	4	3.0	3.0	9	20	3	75.64	**004**
EG Nr. 6-40	0.635	70	6	4.9	3.7	11	25	3	74.58	**006**
EG Nr. 8-36	0.706	80	6	4.9	4.4	13	30	3	72.90	**008**
EG Nr. 10-32	0.794	80	6	4.9	5.1	13	30	3	77.73	**010**
EG 1/4-28	0.907	90	8	6.2	6.6	17	35	3	82.94	**025**



DIN 374 with reduced shank

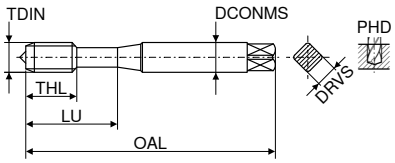
TDIN	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 677 ...	
	mm	mm	mm	mm	mm	mm		£	
EG 3/8-24	1.058	90	8	6.2	9.80	18	4	101.52	**037**
EG 7/16-20	1.270	100	9	7.0	11.50	22	3	128.42	**043**
EG 1/2-20	1.270	100	11	9.0	13.10	22	3	120.84	**050**
EG 5/8-18	1.411	110	14	11.0	16.25	25	4	193.66	**062**
EG 3/4-16	1.588	125	16	12.0	19.50	25	4	239.98	**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			
EG Nr. 4-48	0.529	56	4	3.0	3.0	7	20	3	76.56	**004**
EG Nr. 6-40	0.635	70	6	4.9	3.7	8	25	3	74.39	**006**
EG Nr. 8-36	0.706	80	6	4.9	4.4	8	30	3	76.26	**008**
EG Nr. 10-32	0.794	80	6	4.9	5.1	8	30	3	82.21	**010**
EG 1/4-28	0.907	90	8	6.2	6.6	10	35	3	90.67	**025**

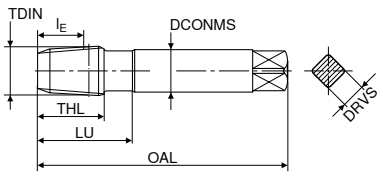
Steel	**6-20**
Stainless steel	**4-8**
Cast iron	**6-15**
Non ferrous metals	
Heat resistant alloys	
Hardened materials	

Blind hole – Machine taps, right hand

NPT | Salo-Rex

VA | C | 2–3 | vap.

VA | C | 2–3 | TiN

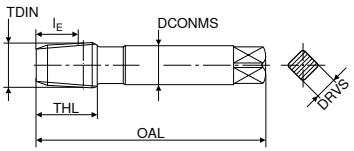


DIN 371 with reinforced shank

HSS-E
35°
≤ 900 N/mm²

HSS-E
42°
≤ 1100 N/mm²

TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	LU	Flutes	U0 Article no. 22 364 ...		U0 Article no. 22 365 ...	
	mm	mm	mm	mm	mm	mm	mm		£		£	
1/16-27	0.941	90	8	6.2	9.24	13.0	26.0	3	98.47	**006**		
1/8-27	0.941	90	10	8.0	9.28	13.0	26.0	3	113.88	**012**		
1/8-27	0.941	90	10	8.0	9.28	12.0	26.0	4			153.84	**012**
1/4-18	1.411	100	14	11.0	13.55	19.5	34.5	3	133.02	**025**		
1/4-18	1.411	100	14	11.0	13.55	18.0	34.5	4			158.33	**025**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	Flutes	U0 Article no. 22 371 ...		U0 Article no. 22 372 ...	
	mm	mm	mm	mm	mm	mm		£		£	
3/8-18	1.411	110	14	11	13.86	19.5	3	181.30	**037**		
3/8-18	1.411	110	14	11	13.86	18.0	5			303.02	**037**
1/2-14	1.814	140	16	12	18.11	25.0	5	263.50	**050**		
1/2-14	1.814	140	16	12	18.11	23.0	5			350.58	**050**
3/4-14	1.814	150	20	16	18.59	26.0	5	381.33	**075**		
1-11,5	2.209	170	25	20	22.31	32.0	5	556.95	**100**		

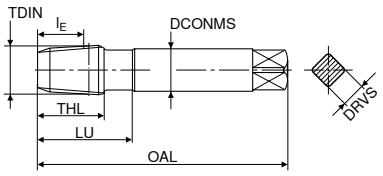
Steel		**2-4**
Stainless steel	**2-4**	**2-4**
Cast iron		
Non ferrous metals		
Heat resistant alloys		
Hardened materials		

Through hole / Blind hole – Machine taps, right hand

NPT | TWIN

VG

C
2–3

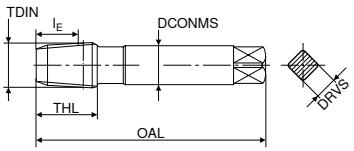


DIN 371 with reinforced shank

HSS-E
0°
≤ 1100 N/mm²

6

TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	LU	Flutes	U0 Article no. 22 374 ...	
	mm	mm	mm	mm	mm	mm	mm		£	
1/16-27	0.941	90	8	6.2	9.24	13.0	26.0	3	86.14	**006**
1/8-27	0.941	90	10	8.0	9.28	13.0	26.0	3	110.56	**012**
1/4-18	1.411	100	14	11.0	13.55	19.5	34.5	3	114.72	**025**



DIN 374 with reduced shank

TDIN	TP	OAL	DCONMS	DRVS	l_E	THL	Flutes	U0 Article no. 22 375 ...	
	mm	mm	mm	mm	mm	mm		£	
3/8-18	1.411	110	14	11	13.86	19.5	3	144.11	**037**
1/2-14	1.814	140	16	12	18.11	25.0	5	194.53	**050**
3/4-14	1.814	150	20	16	18.59	26.0	5	252.33	**075**
1-11,5	2.209	170	25	20	22.31	30.0	5	351.41	**100**

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

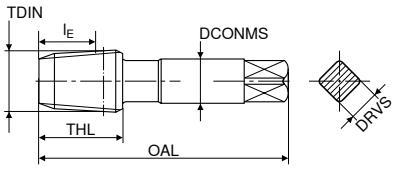
Through hole / Blind hole – Machine taps, right hand

▲ ES = extra short

NPT | TWIN

ST
ES

C
2–3



DIN 2181 with reduced shank

HSS-E
0°
≤ 750 N/mm²

U0

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Flutes	Article no. 22 361 ... £	
1/16-27	0.941	63	6	4.9	9.24	13.0	4	61.99	**006**
1/8-27	0.941	63	7	5.5	9.28	13.0	5	65.84	**012**
1/4-18	1.411	63	11	9.0	13.55	19.5	5	79.03	**025**
3/8-18	1.411	70	12	9.0	13.86	19.5	5	98.80	**037**
1/2-14	1.814	80	16	12.0	18.11	23.0	5	132.35	**050**
3/4-14	1.814	100	20	16.0	18.59	26.0	6	167.20	**075**
1-11,5	2.209	110	25	20.0	22.31	32.0	6	247.11	**100**
2-11,5	2.209	160	45	35.0	23.22	36.0	7	793.88	**200**

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

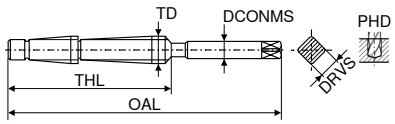
Through hole – Machine taps, right hand

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

Tr

ST

7H



Factory standard

HSS-E

5°
≤ 900 N/mm²
≤ 2xD

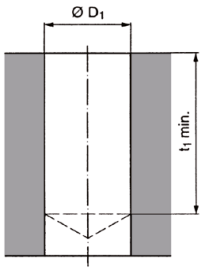
6

TD	TP	OAL	DCONMS	DRVS	PHD	THL	Flutes	U0 Article no. 22 402 ... £	
	mm	mm	mm	mm	mm	mm			
Tr 8	1.5	105	6	4.9	6.60	55	3	553.32	**080**
Tr 9	2.0	130	7	5.5	7.20	70	3	532.41	**090**
Tr 10	2.0	130	7	5.5	8.20	70	3	553.32	**102**
Tr 10	3.0	155	7	5.5	7.25	95	3	507.25	**103**
Tr 12	3.0	160	9	7.0	9.25	95	3	608.66	**123**
Tr 14	3.0	170	10	8.0	11.25	100	3	707.00	**143**
Tr 14	4.0	195	10	8.0	10.25	125	3	596.31	**144**
Tr 16	4.0	225	12	9.0	12.25	130	3	596.31	**164**
Tr 18	4.0	225	14	11.0	14.25	116	3	617.81	**184**
Tr 20	4.0	225	16	12.0	16.25	130	3	716.15	**204**
Tr 22	5.0	260	16	12.0	17.25	160	3	830.03	**225**
Tr 24	5.0	285	18	14.5	19.25	165	3	968.19	**245**

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

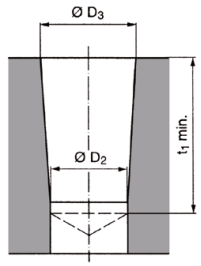
Core hole diameters for taper threads (taper 1:16)

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

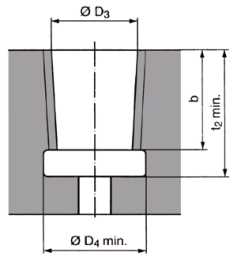


Taper 1:16

		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



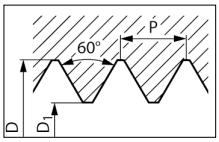
Taper 1:16

		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

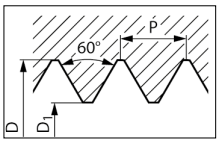
M ISO metric coarse threads 6H to DIN 13 and DIN ISO 965-1 (M1–M1,4 = 5H)



Thread nominal Ø		Ø D_1		Core hole
D	P	min.	max.	
M1	0,25	0,729	0,785	0,75
M1,1	0,25	0,829	0,885	0,85
M1,2	0,25	0,929	0,985	0,95
M1,4	0,3	1,075	1,142	1,1
M1,6	0,35	1,221	1,321	1,25
M1,8	0,35	1,421	1,521	1,45
M2	0,4	1,567	1,679	1,6
M2,2	0,45	1,713	1,838	1,75
M2,5	0,45	2,013	2,138	2,05
M3	0,5	2,459	2,599	2,5
M3,5	0,6	2,850	3,010	2,9
M4	0,7	3,242	3,422	3,3
M4,5	0,75	3,688	3,878	3,7
M5	0,8	4,134	4,334	4,2
M6	1,0	4,917	5,153	5
M7	1,0	5,917	6,153	6
M8	1,25	6,647	6,912	6,8
M9	1,25	7,647	7,912	7,8
M10	1,5	8,376	8,676	8,5
M11	1,5	9,376	9,676	9,5

Thread nominal Ø		Ø D_1		Core hole
D	P	min.	max.	
M12	1,75	10,106	10,441	10,2
M14	2,0	11,835	12,210	12
M16	2,0	13,835	14,210	14
M18	2,5	15,294	15,744	15,5
M20	2,5	17,294	17,744	17,5
M22	2,5	19,294	19,744	19,5
M24	3,0	20,752	21,252	21
M27	3,0	23,752	24,252	24
M30	3,5	26,211	26,771	26,5
M33	3,5	29,211	29,771	29,5
M36	4,0	31,670	32,270	32
M39	4,0	34,670	35,270	35
M42	4,5	37,129	37,799	37,5
M45	4,5	40,129	40,799	40,5
M48	5,0	42,587	43,297	43
M52	5,0	46,587	47,297	47
M56	5,5	50,046	50,796	50,5
M60	5,5	54,046	54,796	54,5
M64	6,0	57,505	58,305	58
M68	6,0	61,505	62,305	62

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



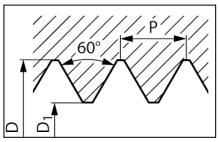
Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.	
M2	x	0,25	1,729	1,774	1,75
M2,2	x	0,25	1,929	1,974	1,95
M2,5	x	0,35	2,121	2,221	2,15
M3	x	0,35	2,621	2,721	2,65
M3,5	x	0,35	3,121	3,221	3,15
M4	x	0,35	3,621	3,721	3,65
M4	x	0,5	3,459	3,599	3,5
M4,5	x	0,5	3,959	4,099	4
M5	x	0,5	4,459	4,599	4,5
M6	x	0,5	5,459	5,599	5,5
M6	x	0,75	5,188	5,378	5,2
M8	x	0,75	7,188	7,378	7,2
M8	x	1,0	6,917	7,153	7
M10	x	0,75	9,188	9,378	9,2
M10	x	1,0	8,917	9,153	9
M10	x	1,25	8,647	8,912	8,8
M12	x	1,0	10,917	11,153	11
M12	x	1,5	10,376	10,676	10,5
M14	x	1,25	12,647	12,912	12,8
M16	x	1,0	14,917	15,153	15
M16	x	1,5	14,376	14,676	14,5

Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.	
M20	x	1,0	18,917	19,153	19
M20	x	1,5	18,376	18,676	18,5
M20	x	2,0	17,835	18,210	18
M24	x	1,5	22,376	22,676	22,5
M30	x	2,0	27,835	28,210	28
M36	x	1,5	34,376	34,676	34,5
M36	x	3,0	32,752	33,252	33
M42	x	2,0	39,835	40,210	40
M48	x	1,5	46,376	46,676	46,5
M48	x	3,0	44,752	45,252	45
M48	x	4,0	43,670	44,270	44
M56	x	1,5	54,376	54,676	54,5
M56	x	2,0	53,835	54,210	54
M56	x	3,0	52,752	53,252	53
M56	x	4,0	51,670	52,270	52
M64	x	3,0	60,752	61,252	61
M64	x	4,0	59,670	60,270	60
M72	x	4,0	67,670	68,270	68
M80	x	6,0	73,505	74,305	74
M95	x	6,0	88,505	89,305	89
M110	x	6,0	103,505	104,305	104

Dimensions in mm; P = Pitch

Thread former pilot hole diameter

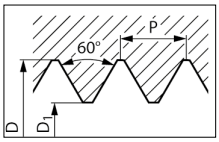
M ISO metric coarse threads 6H to DIN 13 and DIN ISO 965-1 (M1-M1,4 = 5H)



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



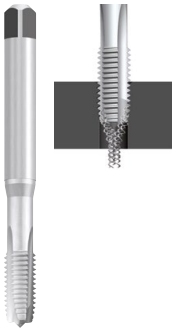
Thread nominal Ø			Ø D_1		Core hole
D	x	P	min.	max.	
M2	x	0,25	1,89		1,9
M2,2	x	0,25	2,09		2,1
M2,5	x	0,25	2,39		2,4
M2,5	x	0,35	2,35		2,35
M3	x	0,25	2,89		2,9
M3	x	0,35	2,85		2,85
M3,5	x	0,35	3,35		3,35
M3,5	x	0,5	3,27	3,32	3,3
M4	x	0,35	3,85		3,85
M4	x	0,5	3,77	3,82	3,8
M4,5	x	0,5	4,27	4,32	4,3
M5	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

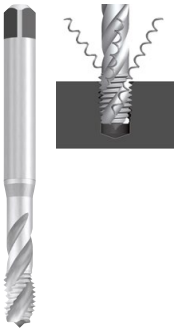
Tap Type Explanation

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

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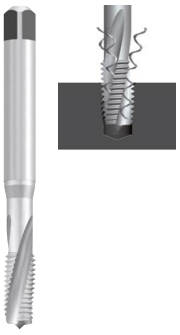
TWIN
Through and blind hole tap type TWIN

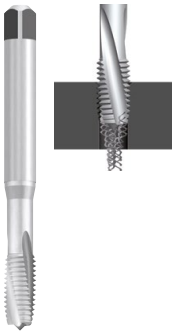
- for blind and through holes up to 2xD
- lead form C: 2–3 cutting leads, without spiral point
- lead form D: 3.5–5 cutting leads, without spiral point
- lead form E: 1.5–2 cutting leads, without spiral point
- straight Flutes
- for steel, short chipping and hardened materials to 55 (62) HRc
- also with 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

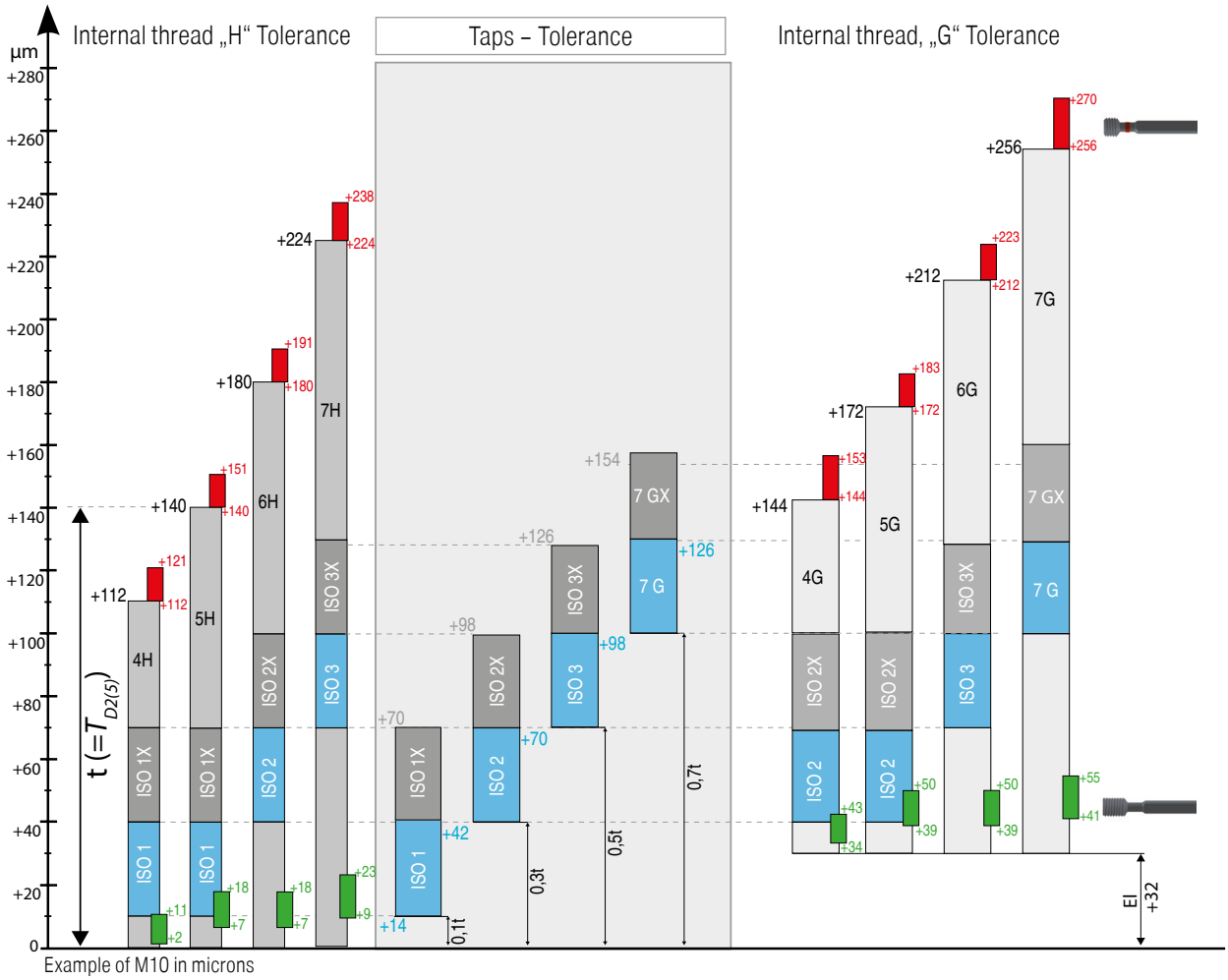


- for through holes up to 4xD
- lead form C: 3.5–5 cutting leads, without spiral point
- 15° left hand helix
- suitable for steel, titanium alloys and Inconel 718
- the chips are discharged in the direction of cut

Spanlos
Thread former type Spanlos

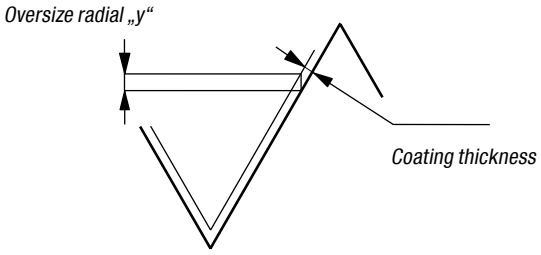
- for blind and through holes up to 3xD
- lead form C: 2–3 cutting leads, without spiral point
- for cold formable materials up to 1400 N/mm^2
- suitable for synchronised machining, with lubrication grooves and internal cooling

Thread tolerances and recommended manufacturing tolerances



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

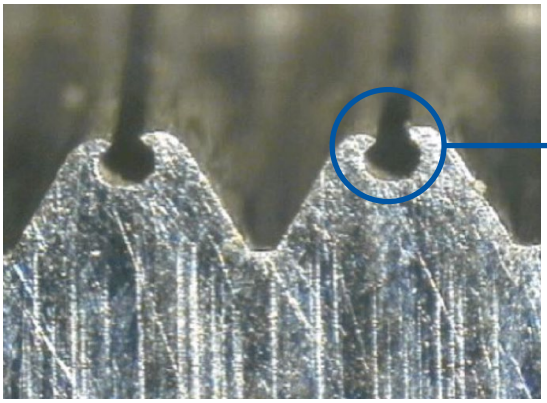


Application class of the tap designation according to		Tolerance class of the internal thread to be cut				
DIN	ISO					
4H	ISO1	4H	5H	–	–	–
6H	ISO2	4G	5G	6H	–	–
6G	ISO3	–	(4E)	6G	7H	8H
7G	–	–	–	(6E)	7G	8G

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

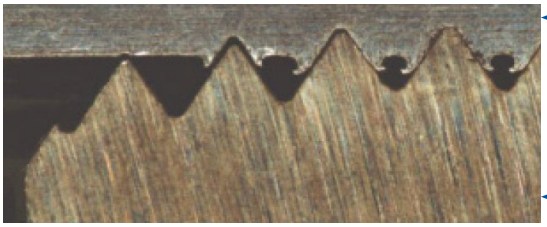
Spanlos thread forming taps for cold-formable materials up to 1400 N/mm² or at least 5 % elongation. The thread is produced by plastic deformation. The molded thread has very high strength.



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

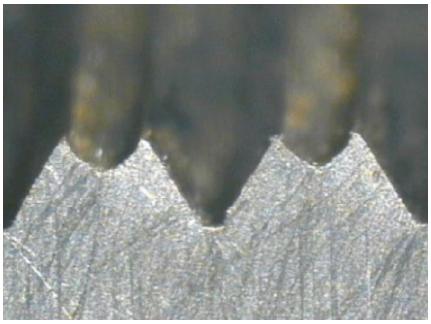
Incremental pressure forming



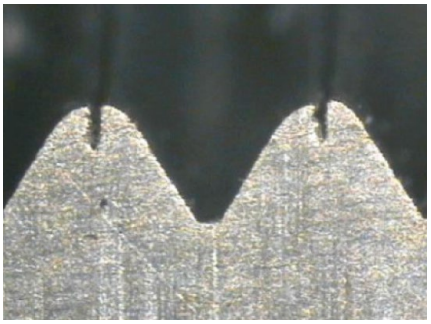
The thread profile is pressed gradually into the material via the start (leading edge) of the tap.

Properties

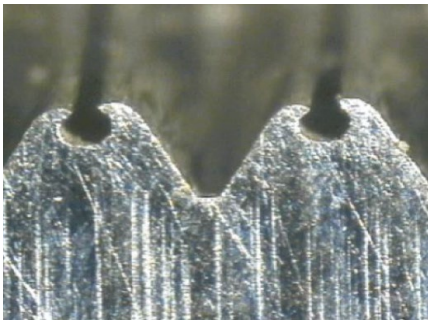
- one type can be used in different materials
- for through and blind holes
- very good thread surface quality
- high static and dynamic strength thread
- secure machining of deep and counterbored threads
- short machining times
- no chip problems
- no swarf
- high process security
- HSS-E and HSS-PM 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

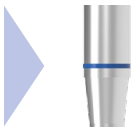
HCr
- hard chromed
- for use in non-ferrous metals or aluminum
- very low surface roughness

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

6

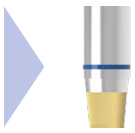
Coloured rings – overview

WNT \ Performance



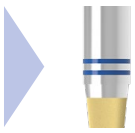
for steel up to 750 N/mm²

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



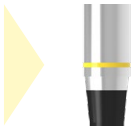
for steel to 1100 N/mm²

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



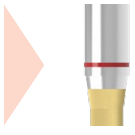
for steel up to 1400 N/mm²

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



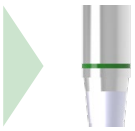
for corrosion and acid-resistant steels

Type VA for stainless steel



for cast iron materials

Type GG for cast iron

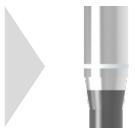


for aluminium and non-ferrous metal

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

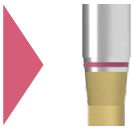
for heat resistant alloys

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