Prodotti nuovi per i tecnici dell‘asportazione truciolo

NEW Foro passante – Maschi a macchina destri, tipo Stabil NW

M → pag. 26

MF → pag. 64

G → pag. 82

- Massima convenienza nella lavorazione di metalli non ferrosi
- Il rivestimento monolayer DLC con spessore di 1 – 2 µm garantisce un attrito minimo e di conseguenza un'ottima evacuazione del truciolo
- 4xD

NEW Foro cieco – Maschi a macchina destri, tipo Salo-Rex NW

M → pag. 42

MF → pag. 73

G → pag. 85

- Massima convenienza nella lavorazione di metalli non ferrosi
- Il rivestimento monolayer DLC con spessore di 1 – 2 µm garantisce un attrito minimo e di conseguenza un'ottima evacuazione del truciolo
- 3xD

NEW Foro passante – Maschi a macchina destri, tipo Stabil HR

M → pag. 25

- Lo specialista per la produzione di filetti in acciai altamente resistenti
- Ottimi risultati grazie al nuovo rivestimento di materiale duro/carbonio
- 4xD

NEW Foro cieco – Maschi a macchina destri, tipo SL HR

M → pag. 38

- Lo specialista per la produzione di filetti in acciai altamente resistenti
- Ottimi risultati grazie al nuovo rivestimento di materiale duro/carbonio
- 2xD

Foratura dal pieno e lavorazione di fori

1 Punte – foratura HSS

2 Punte – foratura in metallo duro integrale

3 Punte – foratura ad inserti

4 Alesatori e svasatori

5 Testine modulari

Filettatura

6 Maschi, taglio e rullatura

7 Fresatura circolare e di filetti

8 Filettatura

Tornitura

9 Utensili di tornitura

10 Utensili multifunzione EcoCut e FreeTurn

11 Utensili di scanalatura e troncatura

12 Mini-utensili per tornitura e filettatura

Fresatura

13 Frese HSS

14 Frese in m.d.i.

15 Frese ad inserti

Tecnologie di bloccaggio

16 Attacchi fissi, rotanti e accessori

17 Bloccaggio pezzo

18 Schede materiali ed elenco degli articoli

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WNT \ Performance

Utensili di qualità premium per la massima performance.

Gli utensili di qualità premium della linea prodotti **WNT Performance** sono stati sviluppati per applicazioni speciali e sono caratterizzati da eccellenti prestazioni. Se nella vostra produzione avete massime esigenze in termini di prestazione e desiderate ottenere ottimi risultati, vi consigliamo gli utensili premium di questa linea prodotti.

WNT \ Standard

Utensili di qualità per applicazioni standard

Gli utensili di qualità della linea prodotti **WNT-Standard** uniscono elevate prestazioni e affidabilità, caratteristiche molto apprezzate dai nostri clienti in tutto il mondo. Gli utensili di questa linea prodotti sono la scelta preferenziale per numerose applicazioni standard e garantiscono ottimi risultati.

Legenda

Forma d'imbocco

B 4–5	Forma B (con imbocco corretto, imbocco 4 – 5 filetti)
C 2–3	Forma C (senza imbocco corretto, imbocco 2 – 3 filetti)
D 4–5	Forma D (senza imbocco corretto, imbocco 4 – 5 filetti)
E 1,5–2	Forma E (senza imbocco corretto, imbocco 1,5 – 2 filetti)

Angolo dell'elica

∢ 42°	Esempio: angolo dell'elica 42°

Tolleranze

ISO 2 6H	Per informazioni sulle tolleranze vedere → **pag. 113.**

Resistenza alla trazione del materiale da lavorare

≤ 1100 N/mm²	Esempio fino a 1.100 N/mm²

Materiale da taglio

HSS	Acciaio rapido
HSS-E	Acciaio superrapido ad elevate prestazioni
HSS-PM	Acciaio superrapido sinterizzato ad elevate prestazioni
VHM	Metallo duro integrale

Anelli colorati

WNT \ Performance

Per informazioni riguardo agli anelli colorati identificativi vedere → **pag. 116.**

Tipi di filetti

M	Per informazioni sui tipi di filetti vedere → **pag. 3.**

Tipo di refrigerazione

	Refrig. interna

I dati di taglio dipendono in grande misura dalle condizioni esterne, come ad es. dalla stabilità del fissaggio utensile e pezzo, dal materiale e dal tipo di macchina. I parametri indicati rappresentano dati di taglio possibili che vanno aumentati o ridotti a seconda dell'impiego.

Tipi di maschi

Tipo di utensile

WNT \ Performance

Stabil	Per filetti passanti fino a 4xD	Salo-Rex	Per filetti ciechi fino a ca. 3xD, con elica accentuata per un' evacuazione truciolo sicura	TWIN	Con scanalature diritte per filetti passanti e filetti ciechi fino a 2xD
DL	Con elica sinistra per filetti passanti fino a 4xD	SL	Per filetti ciechi fino a 2xD, con elica con 15°, 25° o 30°	Spanlos	Maschi a rullare per filetti passanti e filetti ciechi 3xD

Per informazioni più dettagliate sui tipi di utensili vedere → **pag. 112.**

Campo d'impiego

WNT \ Performance

UNI	Per l'impiego universale	ST	Per acciai di buona lavorabilità	VG	Per acciai bonificati e resistenti al calore < 1100 N/mm²
HR	Per acciai ad elevata resistenza fino a < 1400 N/mm²	GG	Per ghisa	VA	Per qualità di acciaio resistenti alla corrosione e agli acidi fino a 1100 N/mm²
NW	Per alluminio	Soft	Per materiali teneri	Ms	Per ottone a truciolo corto
Ti	Per titanio e leghe di titanio	Ni	specifico per Inconel 718	AMPCO	Per leghe Ampco
HT	Per acciai temprati e getti in ghisa fino a 55 HRC	EC	Maschi a rullare Spanlos per l'impiego universale	NEO	Maschi a rullare Spanlos per leghe resistenti al calore
ERGO	Maschi a mano per acciai inossidabili, resistenti al calore e acciai bonificati fino a 1100 N/mm²	ERGO F.T.	Maschi a mano per acciai fino a 1400 N/mm², acciai al tungsteno, getti in ghisa	FE	Filiere per acciaio

WNT \ Standard

UNI	Per applicazioni fino a 1000 N/mm²	FE	Per acciai fino a 850 N/mm²	FE-HF	Per acciai ad elevata resistenza fino a 1100 N/mm²
VA	Per acciai inossidabili e acciai resistenti agli acidi	GG	Per ghisa	AL	per alluminio e leghe di alluminio

Caratteristiche particolari

CNC	Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	NC	Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	NCW	Con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale
AZ	con denti alternati, riduce l'attrito	S	Con rastremazione conica posteriore, per filetti profondi	DRY	Per lavorazione a secco o con refrigerazione minimale
TS	Per lavorazione ad elevate velocità, fino a 100 m/min.	LH	Per filetti sinistri	EL	Serie extralunga con lunghezza totale doppia
AUT	Esecuzione corta per lavorazione su macchine automatiche	SN	Maschi a rullare con scanalature di lubrificazione	ES	extracorto
MMB	Maschi a macchina per dadi	R_z=1	Filiere lappate		

Tipi di filetti

M	Filetto ISO metrico standard DIN 13	UNF	Filetto unificato fine ASME - B1.1	NPTF	Filetto gas conico americano con guarnizione (1:16) ANSI/ASME B1.20.3
EG M	Filetto ISO metrico standard per filetti riportati DIN 8140-2	EG UNF	EG Filetto unificato grosso per filetti riportati ASME B18.29.1	Rp	Filetto Whitworth cilindrico per tubi DIN EN 10226-1 (ISO7-1)
MF	Filetto ISO metrico fine DIN 13	UNJC	Filetto unificato grosso ASME – B1.15 e ISO 3161	Rc	Filetto Whitworth conico per tubi (1:16) DIN EN 10226-2 (ISO7-1)
G	Filetto Whitworth per tubi DIN-EN-ISO 228	UNJF	Filetto unificato extrafine ASME – B1.15 und ISO 3161	Tr	Filetto ISO metrico trapezoidale DIN 103
UNC	Filetto unificato grosso ASME – B1.1	BSW	Filetto Whitworth BS84		I maschi per filetti BSW, NPTF, Rp, Rc, i maschi a mano e le filiere sono disponibili nello shop online.
EG UNC	EG Filetto unificato grosso per filetti riportati ASME B18.29.1	NPT	Filetto gas conico americano con guarnizione (1:16) ANSI/ASME B1.20.1		

6

Toolfinder – WNT Performance

Maschi a rullare

Per materiali adatti alla deformazione a freddo	Foro passante e foro cieco

Maschi HSS

Per impiego universale fino a 1100 N/mm²	Foro passante Foro cieco
Per acciaio fino a 750 N/mm²	Foro passante Foro cieco Foro passante e foro cieco
Per acciaio ad alta resistenza fino a 1400 N/mm²	Foro passante Foro cieco Foro passante e foro cieco
Per acciai inossidabili e acciai resistenti agli acidi	Foro passante Foro cieco
Per ghisa	Foro passante e foro cieco
Per materiali resistenti al calore	Foro passante Foro cieco
Per alluminio e metalli non ferrosi	Foro passante Foro cieco Foro passante e foro cieco
Per materiali duri	Foro passante e foro cieco

Utensili per altre applicazioni si trovano nella panoramica dei maschi a → **pagg. 8–20.**

Per prolunghe per maschi e oli da taglio vedere lo shop online all'indirizzo cuttingtools.ceratizit.com

WNT \ Performance

Tipo di utensile	Campo d'impiego	M	EG M	MF	G	UNC	EG UNC	UNJC	UNF	EG UNF	UNJF	BSW	NPT	NPTF	Rp	Tr
Spanlos	EC	57+58		80	88	93			102							
Stabil	UNI	21–23	61	63+64	82	89	94		97	103						
Salo-Rex	UNI	34–37	62	67+68	84+85	91	95		99	104						
Stabil	ST	24+25		64	82											108
Salo-Rex	ST	39+40		69+70	85											
TWIN	ST	51+52		78–79	87								107			
Stabil	HR	25														
Salo-Rex	HR	40														
TWIN	HR	51+52		77+78	87											
Stabil	VA	26			82	89										
Salo-Rex	VA	41		72	85	91			99				105			
TWIN	GG	53		78												
Stabil	Ti	27				89			97							
SL	Ti	43						96	100							
Stabil	NW	26		64	82											
Salo-Rex	NW	42		73	85											
TWIN	AMPCO	51+52														
TWIN	HT	54		77												

Questo articolo è disponibile nel nostro shop online all'indirizzo cuttingtools.ceratizit.com

6

Toolfinder – WNT Standard

Maschi a rullare

Per materiali adatti alla deformazione a freddo	Foro passante e foro cieco

Maschi HSS

Per applicazioni fino a 1000 N/mm²	Foro passante Foro cieco
Per acciai fino a 850 N/mm²	Foro passante Foro cieco
Per acciaio ad alta resistenza fino a 1100 N/mm²	Foro passante Foro cieco
Per acciai inossidabili e acciai resistenti agli acidi	Foro passante Foro cieco
Per ghisa	Foro passante e foro cieco
Per alluminio e metalli non ferrosi	Foro passante Foro cieco

Utensili per altre applicazioni si trovano nella panoramica dei maschi a → **pagg. 8–20.**

Per prolunghe per maschi e oli da taglio vedere lo shop online all'indirizzo cuttingtools.ceratizit.com

Campo d'impiego	WNT \ Standard M	MF	G	UNC	UNF
UNI	60	81			
UNI	31+32	65+66	83	90	98
UNI	48+49	74	86	92	101
FE	32	66			
FE	49	75			
FE-HF	32			90	
FE-HF	49			92	
VA	33	66		90	98
VA	49+50	76		92	101
GG	56				
AL	33				
AL	50				

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Panoramica maschi

M – filetto ISO metrico

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Universale				Stabil	UNI	ISO 2 6H ISO 3 6G 7G	HSS-E	■			21+22	
Universale					UNI	ISO 2 6H	HSS-E HSS-PM	■				31
Universale				Stabil	UNI NCW	ISO 2 6H	HSS-PM	■		Con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale	23	
Universale					UNI NCW	ISO 2 6H	HSS-PM	■		Con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale		32
Universale				Stabil	UNI CNC	ISO 2X 6HX ISO 3X 6GX 7GX	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	23	
Universale					UNI NC	ISO 2 6H	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		32
Universale				Stabil	UNI EL	ISO 2 6H	HSS-E	■		Serie extralunga con lunghezza totale doppia	29	
Acciaio				Stabil	ST	ISO 2 6H	HSS-E		□		24	
Acciaio				Stabil	ST	ISO 1 4H ISO 3 6G	HSS-E		□			
Acciaio					FE	ISO 2 6H	HSS-E		□			32
Acciaio					FE ES	ISO 2 6H	HSS-E		□	extracorto		
Acciaio				Stabil	ST LH	ISO 2 6H	HSS-E		□	Per filetti sinistri	24	
Acciaio				Stabil	ST TS	ISO 2X 6HX	HSS-E	■		Per lavorazione ad elevate velocità, fino a 100 m/min.	25	
Acciaio				Stabil	HR	ISO 2X 6HX	HSS-PM	■			25	
Acciaio				Stabil	VG	ISO 2X 6HX	HSS-E	■			25	
Acciaio					FE-HF	ISO 2 6H	HSS-E	■				32

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Panoramica maschi

M – filetto ISO metrico

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Acciaio				Stabil	ST EL	ISO 2 6H	HSS-E		□	Serie extralunga con lunghezza totale doppia	29	
Acciaio					ST MMB	ISO 2 6H	HSS-E		□	Maschi a macchina per dadi	30	
Acciaio inossidabile				Stabil	VA	ISO 2 6H	HSS-E	■			26	
Acciaio inossidabile					VA	ISO 2 6H	HSS-PM HSS-E	■				33
Metalli non ferrosi				Stabil	NW	ISO 2 6H	HSS-E	■			26	
Metalli non ferrosi					AL	ISO 2 6H	HSS-E	■	□			33
Metalli non ferrosi				Stabil	Soft	ISO 2 6H	HSS-E	■				
Leghe resistenti al calore				Stabil	Ti	ISO 1X 4HX ISO 2X 6HX	HSS-PM	■			27	
Leghe resistenti al calore				DL	Ti	ISO 2X 6HX	HSS-E	■			28	
Leghe resistenti al calore				DL	Ni	ISO 2X 6HX	HSS-E	■			28	
Universale				Salo-Rex	UNI	ISO 2 6H 7G	HSS-E	■			34+35	
Universale				Salo-Rex	UNI	ISO 1 4H ISO 3 6G	HSS-E	■				
Universale					UNI	ISO 2 6H	HSS-E HSS-PM	■				48
Universale				Salo-Rex	UNI NCW	ISO 2 6H	HSS-PM	■		Con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale	35	
Universale					UNI NCW	ISO 2 6H	HSS-PM	■		Con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale		49
Universale				Salo-Rex	UNI CNC	ISO 2X 6HX ISO 2 6H, 7G	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	36	
Universale				Salo-Rex	UNI CNC	ISO 3 6G	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		
Universale					UNI NC	ISO 2 6H	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		48

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Panoramica maschi

M – filetto ISO metrico

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Universale				Salo-Rex	UNI DRY	ISO 2 6H	HSS-E	■		Per lavorazione a secco o con refrigerazione minimale (refrigerazione interna)	37	
Universale				Salo-Rex	UNI S	ISO 2 6H	HSS-E	■		Con rastremazione conica posteriore, per filetti profondi		
Universale				Salo-Rex	UNI ES	ISO 2 6H	HSS-E	■		extracorto	44	
Universale				Salo-Rex	UNI EL	ISO 2 6H	HSS-E	■		Serie extralunga con lunghezza totale doppia	46	
Universale				SL	UNI	ISO 2 6H	HSS-E		□			
Acciaio				SL	ST	ISO 2 6H	HSS-E		□			
Acciaio				SL	ST CNC	ISO 2X 6HX	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale (refrigerazione interna)	38	
Acciaio				SL	ST TS	ISO 2 6H	HSS-PM	■		Per lavorazione ad elevate velocità, fino a 100 m/min.		
Acciaio				SL	ST TS	ISO 2X 6HX	HSS-E	■		Per lavorazione ad elevate velocità, fino a 100 m/min.	38	
Acciaio				SL	ST ES	ISO 2 6H	HSS-E		□	extracorto	45	
Acciaio				SL	ST EL	ISO 2 6H	HSS-E		□	Serie extralunga con lunghezza totale doppia	47	
Acciaio				SL	HR	ISO 2 6H	HSS-PM		□		38	
Acciaio				Salo-Rex	ST	ISO 2 6H	HSS-E	■	□		39	
Acciaio				Salo-Rex	ST	ISO 1 4H ISO 3 6G	HSS-E	■	□			
Acciaio					FE	ISO 2 6H	HSS-E		□			49
Acciaio					FE-HF	ISO 2 6H	HSS-E	■				49
Acciaio				Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	Per filetti sinistri	39	
Acciaio				Salo-Rex	ST ES	ISO 2 6H	HSS-E		□	extracorto		
Acciaio				Salo-Rex	ST EL	ISO 2 6H	HSS-E		□	Serie extralunga con lunghezza totale doppia	46	

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Panoramica maschi

M – filetto ISO metrico

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Acciaio		■		Salo-Rex	HR	ISO 2 6H	HSS-PM	■	□		40	
Acciaio		■		Salo-Rex	ST TS	ISO 2 6H	HSS-E	■			40	
Acciaio inossidabile		■		Salo-Rex	VA	ISO 2 6H	HSS-E	■			41	
Acciaio inossidabile		■			VA	ISO 2 6H	HSS-E HSS-PM	■	□			49+50
Acciaio inossidabile		■		Salo-Rex	VA S	ISO 2 6H	HSS-E	■		Con rastremazione conica posteriore, per filetti profondi		
Metalli non ferrosi		■		Salo-Rex	Soft	ISO 2 6H	HSS-E	■	□		42	
Metalli non ferrosi		■		Salo-Rex	NW	ISO 2 6H	HSS-E	■			42	
Metalli non ferrosi		■			AL	ISO 2 6H	HSS-E	■	□			50
Leghe resistenti al calore		■		SL	Ti	ISO 2X 6HX	HSS-PM	■			43	
Leghe resistenti al calore		■		SL	Ni	ISO 2X 6HX ISO 2 6H	HSS-PM	■			43	
Acciaio			■	TWIN	ST	ISO 2X 6HX	HSS-E		□		51+52	
Acciaio			■	TWIN	ST AZ	ISO 2X 6HX	HSS-E		□	con denti alternati, riduce l'attrito		
Acciaio			■	TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extracorto		
Acciaio			■	TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	Per filetti sinistri, extracorti		
Acciaio			■	TWIN	HR	ISO 2X 6HX	HSS-E	■			51+52	
Acciaio			■	TWIN	HR EL	ISO 2X 6HX	HSS-E	■		Serie extralunga con lunghezza totale doppia	55	
Ghisa			■	TWIN	GG	ISO 2X 6HX	HSS-E	■			53	
Ghisa			■		GG	ISO 2X 6HX	HSS-E	■				56
Metalli non ferrosi			■	TWIN	Ms	ISO 2X 6HX	HSS-E		□			

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Panoramica maschi

M – filetto ISO metrico

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Metalli non ferrosi				TWIN	AMPCO	ISO 2X 6HX	HSS-PM		□		51+52	
Acciaio temprato				TWIN	HT	ISO 2X 6HX	VHM HSS-PM	■			54	
Maschi a rullare a macchina				Spanlos	EC	ISO 2X 6HX	HSS-E	■			57	
Maschi a rullare a macchina				Spanlos	EC SN	ISO 2X 6HX ISO 3X 6GX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione	58	
Maschi a rullare a macchina				Spanlos	NEO SN	ISO 2X 6HX	HSS-PM	■		Maschi a rullare con scanalature di lubrificazione	59	
Maschi a rullare a macchina					UNI	ISO 2X 6HX	HSS-E	■				60
Maschi a rullare a macchina					UNI SN	ISO 2X 6HX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione		60
Maschi a mano					ST	ISO 2X 6HX	HSS-E VHM		□			
Maschi a mano					ERGO	ISO 2X 6HX	HSS-E		□			
Maschi a mano					ERGO F.T.	ISO 2X 6HX	HSS-E	■				
Filiere					FE	ISO 6g ISO 6e	HSS		□			
Filiere					FE	ISO 6g	HSS		□			
Filiere					FE R_z=1	ISO 6g	HSS		□	Filiere lappate		
Filiere					FE LH	ISO 6g	HSS		□	Per filetti sinistri		
Filiere					VA	ISO 6g	HSS-E		□			
Filiere					VA R_z=1	ISO 6g	HSS-E		□	Filiere lappate		
Filiere					Ms R_z=1	ISO 6g	HSS		□	Filiere lappate		

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Panoramica maschi

EG M – Filetto ISO standard per filetti riportati (elicoil)

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Universale	■			Stabil	UNI	6H mod	HSS-E	■			61	
Universale		■		Stabil	UNI	6H mod	HSS-E	■			62	
Metalli non ferrosi		■		Stabil	Soft	6H mod	HSS-E	■			62	

MF – Filetto ISO metrico fine

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Universale	■			Stabil	UNI	ISO 2 6H	HSS-E	■			63+64	
Universale	■			Stabil	UNI	ISO 3 6G	HSS-E	■				
Universale	■				UNI	ISO 2 6H	HSS-PM HSS-E	■				65+66
Acciaio	■			Stabil	ST	ISO 2 6H	HSS-E		□			
Acciaio	■				FE	ISO 2 6H	HSS-E		□			66
Acciaio	■				FE-HF	ISO 2 6H	HSS-E	■				
Acciaio	■			Stabil	ST TS	ISO 2X 6HX	HSS-E	■		Per lavorazione ad elevate velocità, fino a 100 m/min.	64	
Acciaio	■			Stabil	ST LH	ISO 2 6H	HSS-E		□	Per filetti sinistri	64	
Acciaio inossidabile	■			Stabil	VA	ISO 2 6H	HSS-E	■				
Acciaio inossidabile	■				VA	ISO 2 6H	HSS-E	■				66
Metalli non ferrosi	■			Stabil	NW	ISO 2 6H	HSS-E	■			64	
Universale		■		Salo-Rex	UNI	ISO 2 6H ISO 3 6G	HSS-E	■			67+68	
Universale		■			UNI	ISO 2 6H	HSS-E HSS-PM	■				74
Universale		■		Salo-Rex	UNI CNC	ISO 3 6G	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		

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Panoramica maschi

MF – Filetto ISO metrico fine

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Universale		■		Salo-Rex	UNI CNC	7G ISO 2 6H	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	68	
Universale		■			UNI NC	ISO 2 6H	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		75
Acciaio		■		Salo-Rex	ST	ISO 2 6H	HSS-E		□		69	
Acciaio		■		Salo-Rex	ST	ISO 1 4H	HSS-E		□			
Acciaio		■			FE	ISO 2 6H	HSS-E		□			75
Acciaio		■			FE-HF	ISO 2 6H	HSS-E	■				
Acciaio		■		Salo-Rex	ST TS	ISO 2 6H	HSS-E	■		Per lavorazione ad elevate velocità, fino a 100 m/min.		
Acciaio		■		Salo-Rex	ST LH	ISO 2 6H	HSS-E		□	Per filetti sinistri	69	
Acciaio		■		SL	ST	ISO 2 6H	HSS-E		□		70+71	
Acciaio		■		SL	ST CNC	ISO 2X 6HX	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale		
Acciaio inossidabile		■		Salo-Rex	VA	ISO 2 6H	HSS-E	■			72+73	
Acciaio inossidabile		■			VA	ISO 2 6H	HSS-E HSS-PM	■				76
Metalli non ferrosi		■		Salo-Rex	NW	ISO 2 6H	HSS-E	■			73	
Acciaio			■	TWIN	ST	ISO 2X 6HX	HSS-E		□		77+78	
Acciaio			■	TWIN	ST ES	ISO 2X 6HX	HSS-E		□	extracorto	79	
Acciaio			■	TWIN	ST LH/ES	ISO 2X 6HX	HSS-E		□	Per filetti sinistri	79	
Acciaio			■	TWIN	HR	ISO 2X 6HX	HSS-E	■			77+78	
Ghisa			■	TWIN	GG	ISO 2X 6HX	HSS-E	■			78	
Acciaio temprato			■	TWIN	HT	ISO 2X 6HX	VHM	■			77	

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Panoramica maschi

MF – Filetto ISO metrico fine

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Maschi a rullare a macchina				Spanlos	EC	ISO 2X 6HX	HSS-E	■			80	
Maschi a rullare a macchina				Spanlos	EC SN	ISO 2X 6HX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione	80	
Maschi a rullare a macchina					UNI	ISO 2X 6HX	HSS-E	■				81
Maschi a rullare a macchina					UNI SN	ISO 2X 6HX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione		81
Maschi a mano					ST	ISO 2X 6HX	HSS-E		□			
Filiere					FE	ISO 6g	HSS		□			
Filiere					FE	ISO 6g	HSS		□			
Filiere					FE LH	ISO 6g	HSS		□	Per filetti sinistri		
Filiere					VA	ISO 6g	HSS-E		□			

G – Filetto Gas - Whitworth per tubi

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Universale				Stabil	UNI	ISO 228	HSS-E	■			82	
Universale					UNI	ISO 228	HSS-E	■				83
Acciaio				Stabil	ST	ISO 228	HSS-E		□		82	
Acciaio					FE	ISO 228	HSS-E		□			
Acciaio inossidabile				Stabil	VA	ISO 228	HSS-E	■			82	
Metalli non ferrosi				Stabil	NW	ISO 228	HSS-E	■			82	
Universale				Salo-Rex	UNI	ISO 228 ISO 228 +0,05	HSS-E	■			84	
Universale					UNI	ISO 228	HSS-E	■				86
Universale				Salo-Rex	UNI CNC	ISO 228	HSS-E	■		Per maschiatura rigida su macchine CNC con mandrino a compensazione assiale	85	

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Panoramica maschi

G – Filetto Gas - Whitworth per tubi

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Acciaio				Salo-Rex	ST	ISO 228	HSS-E		□		85	
Acciaio				SL	ST	ISO 228	HSS-E		□			
Acciaio inossidabile				Salo-Rex	VA	ISO 228	HSS-E	■			85	
Metalli non ferrosi				Salo-Rex	NW	ISO 228	HSS-E	■			85	
Acciaio				TWIN	ST	ISO 228X	HSS-E		□		87	
Acciaio				TWIN	HR	ISO 228X	HSS-E	■			87	
Ghisa				TWIN	GG	ISO 228X	HSS-E	■				
Maschi a rullare a macchina				Spanlos	EC	ISO 228	HSS-E	■			88	
Maschi a rullare a macchina				Spanlos	EC SN	ISO 228	HSS-E	■		Maschi a rullare con scanalature di lubrificazione	88	
Maschi a mano					ERGO	ISO 228	HSS-E		□			
Filiere					FE	ISO 228A	HSS		□			

UNC – Filetto unificato grosso

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
Universale				Stabil	UNI	3B	HSS-E	■				
Universale				Stabil	UNI	2B	HSS-E	■			89	
Universale					UNI	2B	HSS-E	■				90
Acciaio				Stabil	ST	2B	HSS-E		□			
Acciaio					FE-HF	2B	HSS-E	■				90
Acciaio inossidabile				Stabil	VA	2B	HSS-E	■			89	
Acciaio inossidabile					VA	2B	HSS-E	■				90

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Panoramica maschi

UNC – Filetto unificato grosso

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Leghe resistenti al calore	■			Stabil	Ti	2BX	HSS-PM	■			89	
Universale		■		Salo-Rex	UNI	2B	HSS-E	■			91	
Universale		■		Salo-Rex	UNI	2B +0,05	HSS-E	■				
Universale		■			UNI	2B	HSS-E	■				92
Acciaio		■		Salo-Rex	ST	2B	HSS-E		□			
Acciaio		■			FE-HF	2B	HSS-E	■				92
Acciaio inossidabile		■		Salo-Rex	VA	2B	HSS-E	■			91	
Acciaio inossidabile		■			VA	2B	HSS-E		□			92
Leghe resistenti al calore		■		SL	Ti	2BX	HSS-PM	■				
Ghisa			■	TWIN	GG	2BX	HSS-E	■				
Maschi a rullare a macchina			■	Spanlos	EC	2BX	HSS-E	■			93	
Maschi a rullare a macchina			■	Spanlos	EC SN	2BX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione	93	
Maschi a mano			■		ERGO	2BX	HSS-E		□			
Filiere			■		FE	2A	HSS-E		□			

EG UNC – Filetto unificato grosso EG per filetti riportati (elicoil)

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Universale	■			Stabil	UNI	2B	HSS-E	■			94	
Universale		■		Salo-Rex	UNI	2B	HSS-E	■			95	

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Panoramica maschi

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
UNJC – Filetto unificato grosso												
Leghe resistenti al calore		■		SL	Ti	3BX	HSS-E	■			96	
UNF – Filetto unificato fine												
Universale	■			Stabil	UNI	2B	HSS-E	■			97	
Universale	■				UNI	2B	HSS-E	■				98
Acciaio	■			Stabil	ST	2B	HSS-E		□			
Acciaio	■				FE	2B	HSS-E		□			98
Acciaio inossidabile	■				VA	2B	HSS-E	■				98
Leghe resistenti al calore	■			Stabil	Ti	2BX	HSS-PM	■			97	
Universale		■		Salo-Rex	UNI	2B 2B +0,05	HSS-E	■			99	
Universale		■			UNI	2B	HSS-E	■				101
Acciaio		■			FE	2B	HSS-E		□			
Acciaio inossidabile		■		Salo-Rex	VA	2B	HSS-E	■			99	
Acciaio inossidabile		■			VA	2B	HSS-E		□			101
Leghe resistenti al calore		■		SL	Ti	2BX 3BX	HSS-PM	■			100	
Ghisa			■	TWIN	GG	2BX	HSS-E	■				
Maschi a rullare			■	Spanlos	EC SN	2BX	HSS-E	■		Maschi a rullare con scanalature di lubrificazione	102	
Filiere			■		FE	2A	HSS		□			

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Panoramica maschi

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito	non rivestito	Commento	WNT \ Performance	WNT \ Standard
Filetto unificato fine EG per filetti riportati												
Universale	■			Stabil	UNI	2B	HSS-E	■			103	
Universale		■		Salo-Rex	UNI	2B	HSS-E	■			104	
UNJF – Filetto unificato extrafine												
Leghe resistenti al calore	■			DL	Ti	3BX	HSS-E	■				
Leghe resistenti al calore		■		SL	Ti	3BX	HSS-E	■				
BSW – Filetto British Standard Whitworth												
Universale	■			Stabil	UNI	med.	HSS-E	■				
Universale		■		Salo-Rex	UNI	med.	HSS-E	■				
NPT – Filetto gas conico americano												
Acciaio inossidabile		■		Salo-Rex	VA		HSS-E	■			105	
Acciaio			■	TWIN	VG		HSS-E		□		106	
Acciaio			■	TWIN	VG AZ		HSS-E		□	con denti alternati, riduce l'attrito		
Acciaio			■	TWIN	ST ES		HSS-E		□	extracorto	107	
Filiere					FE		HSS-E		□			

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Panoramica maschi

Campo d'impiego	Foro passante	Foro cieco	Foro passante e foro cieco	Tipo di utensile	Campo d'impiego / caratteristiche specifiche	Tolleranza	Materiale da taglio	rivestito ■	non rivestito □	Commento	WNT \ Performance	WNT \ Standard
NPTF – Filetto gas conico americano fine (senza guarnizione)												
Acciaio				TWIN	ST		HSS-E		□			
Acciaio				TWIN	VG		HSS-E		□			
Acciaio				TWIN	ST ES		HSS-E		□	extracorto		
Rp – Filetto Whitworth cilindrico per tubi												
Acciaio				TWIN	ST	X	HSS-E		□			
Rc – Filetto gas conico americano (BSPT)												
Acciaio				TWIN	VG		HSS-E		□			
Tr – Filetto ISO metrico trapezoidale												
Acciaio					ST	7H	HSS-E		□		108	

Accessori

Prolunghe per maschi	
Oli da taglio, senza cloro	

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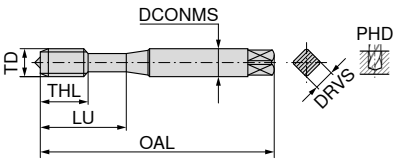
Foro passante – Maschi a macchina destri

M | Stabil



DIN 371 con codolo rinforzato

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

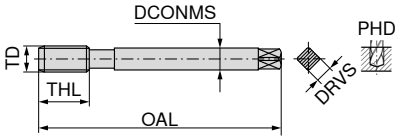
									HSS-E		HSS-E		HSS-E		HSS-E		HSS-E			
									◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD		◁ 0° ≤ 1100 N/mm² ≤ 4xD			
									22 501 ...		22 503 ...		22 505 ...		22 508 ...		22 510 ...			
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0		EUR U0			
M1	0,25	40	2,5	2,1	0,75	5	13	2	102,80	010 1)										
M1,2	0,25	40	2,5	2,1	0,95	5	13	2	97,58	012 1)										
M1,4	0,30	40	2,5	2,1	1,10	7	13	3	88,31	014 1)										
M1,6	0,35	40	2,5	2,1	1,25	8	11	3	62,01	016										
M1,7	0,35	40	2,5	2,1	1,35	6	11	2	95,40	017										
M1,8	0,35	40	2,5	2,1	1,45	6	11	2	131,00	018										
M2	0,40	45	2,8	2,1	1,60	7	12	2			42,67	020			45,07	020	52,40	020		
M2	0,40	45	2,8	2,1	1,60	7	12	3	45,07	020										
M2,2	0,45	45	2,8	2,1	1,75	7	12	2	48,03	022										
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	44,31	025					44,31	025	51,30	025		
M3	0,50	56	3,5	2,7	2,50	11	18	3	33,19	030	36,03	030	36,03	030	36,03	030	41,48	030		
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	36,45	035					36,68	035				
M4	0,70	63	4,5	3,4	3,30	13	21	3	30,12	040	37,54	040	37,54	040	36,45	040	41,70	040		
M5	0,80	70	6,0	4,9	4,20	15	25	3	30,89	050	38,09	050	38,09	050	36,68	050	42,67	050		
M6	1,00	80	6,0	4,9	5,00	17	30	3	31,33	060	43,01	060	43,01	060	37,54	060	43,76	060		
M7	1,00	80	7,0	5,5	6,00	17	30	3	43,76	070										
M8	1,25	90	8,0	6,2	6,80	20	35	3	35,47	080	48,25	080	48,25	080	42,47	080	48,03	080		
M10	1,50	100	10,0	8,0	8,50	22	39	3	42,57	100	67,24	100	67,24	100	51,30	100	58,62	100		
M12	1,75	110	12,0	9,0	10,20	24	44	3	62,65	120										
P										12		15		15		12		12		
M										7		9		9		7		7		
K										12		18		18		12		12		
N												12		12						
S																				
H																				
O																				

1) Tol. ISO 1 4H ≤ M1,4

Per versione DIN 376 vedere pagina successiva.

Foro passante – Maschi a macchina destri

M | Stabil



DIN 376 con codolo rastremato

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

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 502 ... EUR U0		22 504 ... EUR U0		22 509 ... EUR U0		22 511 ... EUR U0	
M3	0,50	56	2,2		2,5	11	3	61,45	030						
M4	0,70	63	2,8	2,1	3,3	13	3	40,93	040						
M5	0,80	70	3,5	2,7	4,2	15	3	39,08	050						
M6	1,00	80	4,5	3,4	5,0	17	3	38,32	060						
M8	1,25	90	6,0	4,9	6,8	20	3	42,02	080						
M10	1,50	100	7,0	5,5	8,5	22	3	48,69	100						
M12	1,75	110	9,0	7,0	10,2	24	3	47,60	120	77,39	120	58,95	120	66,59	120
M14	2,00	110	11,0	9,0	12,0	26	3	68,66	140	114,60	140				
M16	2,00	110	12,0	9,0	14,0	27	3	69,42	160	99,65	160	86,56	160	100,90	160
M18	2,50	125	14,0	11,0	15,5	30	3	136,50	180	180,00	180				
M20	2,50	140	16,0	12,0	17,5	32	3	106,20	200	185,50	200	132,10	200		
M22	2,50	140	18,0	14,5	19,5	32	3	170,40	220	275,10	220				
M24	3,00	160	18,0	14,5	21,0	34	3	138,60	240	234,70	240				
M27	3,00	160	20,0	16,0	24,0	36	3	193,20	270						
M30	3,50	180	22,0	18,0	26,5	40	4	227,10	300						
M33	3,50	180	25,0	20,0	29,5	40	4	524,00	330						
M36	4,00	200	28,0	22,0	32,0	50	4	624,40	360						
M42	4,50	200	32,0	24,0	37,5	56	4	1.189,00	420						
M48	5,00	250	36,0	29,0	43,0	65	4	1.200,00	480						
P									12		15		12		12
M									7		9		7		7
K									12		18		12		12
N											12				
S															
H															
O															

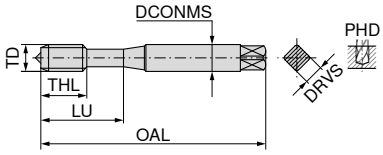
Foro passante – Maschi a macchina destri

▲ CNC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

▲ NCW = con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale

M | Stabil

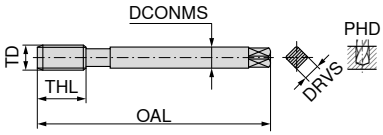
UNI NCW	UNI CNC	UNI CNC	UNI CNC
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2X 6HX	ISO 3X 6GX	7GX
TiN	TiN GS	TiN GS	TiN GS



DIN 371 con codolo rinforzato

	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
	22 148 ...	22 542 ...	22 596 ...	22 592 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0	
M3	0,50	70	6,0	4,9	2,5	6	18	3	51,52	030						
M3	0,50	56	3,5	2,7	2,5	6	18	3			39,08	030				
M4	0,70	70	6,0	4,9	3,3	7	21	3	53,59	040						
M4	0,70	63	4,5	3,4	3,3	7	21	3			41,48	040	50,00	040	50,00	040
M5	0,80	70	6,0	4,9	4,2	8	25	3	54,14	050	42,02	050	51,52	050	51,52	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	68,11	060	53,37	060	56,43	060	62,98	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	76,08	080						
M8	1,25	90	8,0	6,2	6,8	14	35	4			58,95	080	61,02	080	68,77	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	93,44	100						
M10	1,50	100	10,0	8,0	8,5	16	39	4			73,36	100	76,08	100	82,64	100
M12	1,75	110	10,0	8,0	10,2	18		3	113,50	120						
M16	2,00	110	12,0	9,0	14,0	22		3	158,30	160						



DIN 376 con codolo rastremato

	22 543 ...	22 597 ...	22 593 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0	
M12	1,75	110	9	7	10,2	18	4	85,37	120	92,90	120	100,10	120
M14	2,00	110	11	9	12,0	20	4	240,20	140				
M16	2,00	110	12	9	14,0	22	4	122,30	160				
M20	2,50	140	16	12	17,5	25	4	207,30	200				

P	15	15	15	15
M	8	9	9	9
K	15	18	18	18
N	22	12	12	12
S				
H				
O				

Foro passante – Maschi a macchina

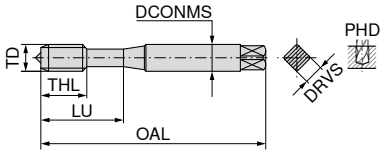
▲ LH = per filetti sinistri

M | Stabil

ST | ST LH

B 4–5 | B 4–5

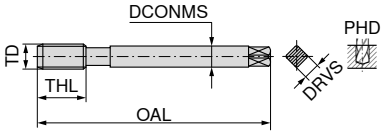
ISO 2 6H | ISO 2 6H



DIN 371 con codolo rinforzato

HSS-E, 0°, ≤ 750 N/mm², ≤ 4xD | HSS-E, 0°, ≤ 750 N/mm², ≤ 4xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 020 ... EUR U0		22 127 ... EUR U0	
M2	0,40	45	2,8	2,1	1,60	7	12	2	29,47	**020**		
M2,3	0,40	45	2,8	2,1	1,90	7	12	2	32,41	**023**		
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	29,47	**025**		
M2,6	0,45	50	2,8	2,1	2,15	9	14	2	32,41	**026**		
M3	0,50	56	3,5	2,7	2,50	11	18	3	23,91	**030**	38,09	**030**
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	25,53	**035**		
M4	0,70	63	4,5	3,4	3,30	13	21	3	24,23	**040**	39,73	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	3	25,53	**050**	40,93	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	25,53	**060**	40,93	**060**
M8	1,25	90	8,0	6,2	6,80	20	35	3	30,67	**080**	46,06	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	36,78	**100**	58,62	**100**



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 021 ... EUR U0		22 147 ... EUR U0	
M5	0,80	70	3,5	2,7	4,2	15	3	30,24	**050**		
M6	1,00	80	4,5	3,4	5,0	17	3	31,00	**060**		
M8	1,25	90	6,0	4,9	6,8	20	3	32,96	**080**		
M10	1,50	100	7,0	5,5	8,5	22	3	37,54	**100**		
M12	1,75	110	9,0	7,0	10,2	24	3	45,62	**120**	70,08	**120**
M14	2,00	110	11,0	9,0	12,0	26	3	62,01	**140**		
M16	2,00	110	12,0	9,0	14,0	27	3	64,84	**160**	106,90	**160**
M18	2,50	125	14,0	11,0	15,5	30	3	95,40	**180**		
M20	2,50	140	16,0	12,0	17,5	32	3	96,71	**200**	157,20	**200**
M22	2,50	140	18,0	14,5	19,5	32	3	149,60	**220**		
M24	3,00	160	18,0	14,5	21,0	34	3	127,70	**240**		
M27	3,00	160	20,0	16,0	24,0	36	3	174,60	**270**		
M30	3,50	180	22,0	18,0	26,5	40	4	207,30	**300**		

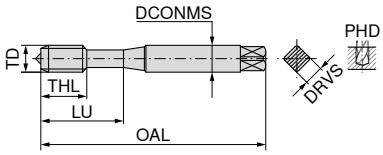
P	**12**	**12**
M		
K	**12**	**12**
N	**12**	**22**
S		
H		
O		

Foro passante – Maschi a macchina destri

▲ TS = per lavorazione ad elevate velocità, fino a 100 m/min

M | Stabil

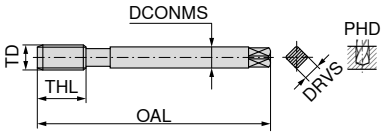
	ST TS	NEW HR	VG
	B 4–5	B 4–5	B 4–5
	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
	TiN	Al-TiNHD	TiN



DIN 371 con codolo rinforzato

	HSS-E	HSS-PM	HSS-E
	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1400 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD
	22 092 ...	22 468 ...	22 120 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0	
M2	0,40	45	2,8	2,1	1,60	7	12	2			75,30	**02000**		
M2	0,40	45	2,8	2,1	1,60	4	12	2	50,65	**020**			44,31	**020**
M2,5	0,45	50	2,8	2,1	2,05	9	14	2			75,30	**02500**		
M2,5	0,45	50	2,8	2,1	2,05	5	15	2	50,65	**025**			44,31	**025**
M3	0,50	56	3,5	2,7	2,50	11	18	2			48,97	**03000**		
M3	0,50	56	3,5	2,7	2,50	6	18	3	39,73	**030**			32,64	**030**
M4	0,70	63	4,5	3,4	3,30	13	21	2			51,09	**04000**		
M4	0,70	63	4,5	3,4	3,30	7	21	3	43,33	**040**			35,04	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	2			52,73	**05000**		
M5	0,80	70	6,0	4,9	4,20	8	25	3	47,37	**050**			37,33	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3			59,74	**06000**		
M6	1,00	80	6,0	4,9	5,00	10	30	3	57,63	**060**			45,41	**060**
M8	1,25	90	8,0	6,2	6,80	20	35	3			65,64	**08000**		
M8	1,25	90	8,0	6,2	6,80	14	35	4	72,70	**080**			48,03	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3			92,45	**10000**		
M10	1,50	100	10,0	8,0	8,50	16	39	4	78,81	**100**			68,77	**100**



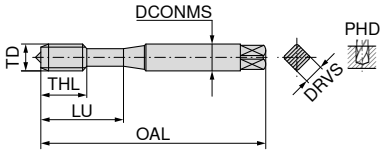
DIN 376 con codolo rastremato

	22 093 ...		22 121 ...	
	EUR U0		EUR U0	
M12 1,75 110 9 7 10,2 18 4	106,00	**120**	81,43	**120**
M16 2,00 110 12 9 14,0 22 4	137,50	**160**	113,50	**160**
M20 2,50 140 16 12 17,5 25 4	205,30	**200**	191,00	**200**

P	**65**	**8**	**10**
M		**8**	**8**
K	**65**		
N	**75**	**10**	**22**
S		**4**	
H			
O			

Foro passante – Maschi a macchina destri

M | Stabil

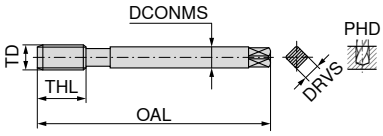


DIN 371 con codolo rinforzato

	VA	VA		NEW 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.	DLC

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 900 N/mm² ≤ 4xD	◁ 0° ≤ 900 N/mm² ≤ 4xD	◁ 0° ≤ 500 N/mm² ≤ 4xD	◁ 0° ≤ 880 N/mm² ≤ 4xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 056 ... EUR U0		22 038 ... EUR U0		22 058 ... EUR U0		22 464 ... EUR U0	
M1,6	0,35	40	2,5	2,1	1,25	6	11	2			58,62	016				
M2	0,40	45	2,8	2,1	1,60	7	12	2	33,40	020	48,03	020	32,41	020	43,67	02000
M2,3	0,40	45	2,8	2,1	1,90	7	12	2					37,33	023		
M2,5	0,45	50	2,8	2,1	2,05	9	14	2	32,96	025	46,61	025	32,41	025	43,67	02500
M2,6	0,45	50	2,8	2,1	2,15	9	14	2					37,00	026		
M3	0,50	56	3,5	2,7	2,50	11	18	3	26,75	030	39,95	030	25,76	030	33,48	03000
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	30,01	035			26,75	035		
M4	0,70	63	4,5	3,4	3,30	13	21	3	28,06	040	42,02	040	25,76	040	33,98	04000
M5	0,80	70	6,0	4,9	4,20	15	25	3	29,04	050	43,33	050	26,75	050	34,47	05000
M6	1,00	80	6,0	4,9	5,00	17	30	3	30,24	060	53,92	060	26,75	060	34,47	06000
M8	1,25	100	8,0	6,2	6,80	20	35	3							40,30	08000
M8	1,25	90	8,0	6,2	6,80	20	35	3	33,63	080	59,71	080	31,87	080		
M10	1,50	110	10,0	8,0	8,50	22	39	3							50,77	10000
M10	1,50	100	10,0	8,0	8,50	22	39	3	41,48	100	74,12	100	38,09	100		



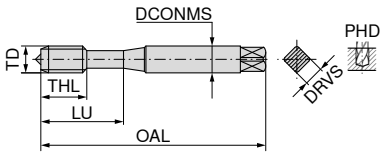
DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 057 ... EUR U0		22 039 ... EUR U0		22 059 ... EUR U0		22 465 ... EUR U0	
M12	1,75	110	9	7,0	10,2	24	3	52,73	120	88,31	120	48,03	120	61,14	12000
M14	2,00	110	11	9,0	12,0	26	3	72,70	140	126,60	140				
M16	2,00	110	12	9,0	14,0	27	3	75,31	160	124,50	160	68,11	160	78,92	16000
M18	2,50	125	14	11,0	15,5	30	3	145,10	180						
M20	2,50	140	16	12,0	17,5	32	3	108,20	200	209,60	200			125,90	20000
M22	2,50	140	18	14,5	19,5	32	3	229,30	220						
M24	3,00	160	18	14,5	21,0	34	3	147,40	240						
M27	3,00	160	20	16,0	24,0	36	3	247,80	270						
M30	3,50	180	22	18,0	26,5	40	4	237,90	300						
P									8		10		15		
M									6		8		6		
K															
N															15
S															
H															
O															

Foro passante – Maschi a macchina destri

M | Stabil

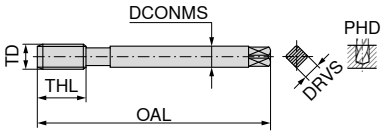
Ti	Ti	Ti
B 4–5	B 4–5	B 4–5
ISO 1X 4HX	ISO 2X 6HX	ISO 2X 6HX
TiN	vap.	TiN



DIN 371 con codolo rinforzato

	HSS-PM	HSS-PM	HSS-PM
	0° ≤ 44 HRC ≤ 4xD	0° ≤ 1400 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD
	22 081 ...	22 075 ...	22 077 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 081 ... EUR U0		22 075 ... EUR U0		22 077 ... EUR U0	
M1,6	0,35	40	2,5	2,1	1,25	8	9,5	3			108,20	016		
M2	0,40	45	2,8	2,1	1,60	8	9,5	3	77,94	020	86,56	020		
M2,5	0,45	50	2,8	2,1	2,05	9	14,0	3			84,82	025		
M3	0,50	56	3,5	2,7	2,50	11	18,0	3	53,59	030	59,38	030	56,76	030
M3,5	0,60	56	4,0	3,0	2,90	12	20,0	3			67,90	035		
M4	0,70	63	4,5	3,4	3,30	13	21,0	3	55,13	040	62,33	040	58,95	040
M5	0,80	70	6,0	4,9	4,20	15	25,0	3	56,76	050	62,33	050	59,38	050
M6	1,00	80	6,0	4,9	5,00	17	30,0	3	63,30	060	64,08	060	60,80	060
M8	1,25	90	8,0	6,2	6,80	20	35,0	3	76,08	080	73,36	080	70,08	080
M10	1,50	100	10,0	8,0	8,50	22	39,0	3			85,37	100	84,15	100



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 140 ... EUR U0		22 142 ... EUR U0	
M12	1,75	110	9	7	10,2	24	3	103,40	120	92,12	120

P	7	5	7
M	7	5	7
K			
N			
S	5	3	5
H			
O			

Foro passante – Maschi a macchina destri

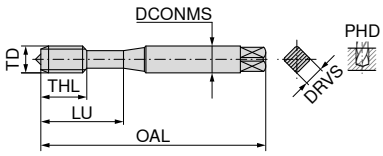
M | DL

Ti | Ni

D 4–5 | D 4–5

ISO 2X 6HX | ISO 2X 6HX

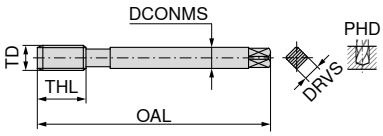
TiCN | TiCN



DIN 371 con codolo rinforzato

HSS-E ◁ 15° ≤ 1200 N/mm² ≤ 4xD | HSS-E ◁ 15° ≤ 1600 N/mm² ≤ 4xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanala-ture	22 159 ... EUR U0		22 297 ... EUR U0	
M3	0,50	56	3,5	2,7	2,5	11	18	2	47,48	030	56,76	030
M4	0,70	63	4,5	3,4	3,3	13	21	3	51,95	040	59,27	040
M5	0,80	70	6,0	4,9	4,2	15	25	3	52,28	050	60,70	050
M6	1,00	80	6,0	4,9	5,0	17	30	3	69,86	060	76,75	060
M8	1,25	90	8,0	6,2	6,8	20	35	3	76,75	080	85,14	080
M10	1,50	100	10,0	8,0	8,5	22	39	3	94,42	100	106,60	100



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanala-ture	22 160 ... EUR U0		22 298 ... EUR U0	
M12	1,75	110	9	7,0	10,2	24	3	109,00	120	123,40	120
M16	2,00	110	12	9,0	14,0	27	3	154,00	160	172,40	160
M20	2,50	140	16	12,0	17,5	32	3	266,30	200	294,70	200
M24	3,00	160	18	14,5	21,0	34	3	312,20	240		

P	7	
M	7	
K		
N	22	22
S	5	2
H		
O		

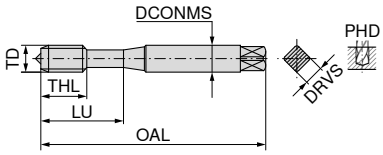
Foro passante – Maschi a macchina destri

▲ EL = extralungo con lunghezza totale doppia

M | Stabil

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

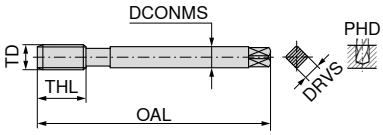
ST EL | B 4–5 | ISO 2 6H



DIN 371 con codolo rinforzato

	HSS-E	HSS-E
	0°	0°
	≤ 1100 N/mm²	≤ 950 N/mm²
	≤ 4xD	≤ 4xD
	22 514 ...	**22 233 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M3	0,50	100	3,5	2,7	2,5	11	18	3	63,30	**030**	61,79	**030**
M4	0,70	125	4,5	3,4	3,3	13	21	3	63,30	**040**	59,27	**040**
M5	0,80	140	6,0	4,9	4,2	15	25	3	70,08	**050**	64,74	**050**
M6	1,00	160	6,0	4,9	5,0	17	30	3	77,29	**060**	67,57	**060**
M8	1,25	180	8,0	6,2	6,8	20	35	3	82,64	**080**	80,56	**080**



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	**22 515 ...** EUR U0		**22 234 ...** EUR U0	
M6	1,00	160	4,5	3,4	5,0	17	3	64,40	**060**	67,57	**060**
M8	1,25	180	6,0	4,9	6,8	20	3	79,58	**080**	80,56	**080**
M10	1,50	200	7,0	5,5	8,5	22	3	87,32	**100**	89,72	**100**
M12	1,75	224	9,0	7,0	10,2	24	3	108,20	**120**	108,20	**120**
M14	2,00	224	11,0	9,0	12,0	26	3	163,80	**140**	174,60	**140**
M16	2,00	224	12,0	9,0	14,0	27	3	209,60	**160**	168,10	**160**
M18	2,50	250	14,0	11,0	15,5	30	3	250,00	**180**	253,30	**180**
M20	2,50	280	16,0	12,0	17,5	32	3	219,40	**200**	228,20	**200**

P	**12**	**12**
M	**7**	
K	**12**	**12**
N		**22**
S		
H		
O		

Foro passante – Maschi a macchina destri

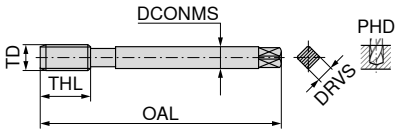
▲ MMB = maschi a macchina per dadi

M

ST
MMB

≈ 20

ISO 2
6H



DIN 357 con codolo rastremato

HSS-E
0°
≤ 850 N/mm²
≤ 1xD

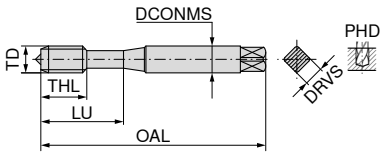
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 098 ... EUR U0	
M3	0,50	70	2,2		2,5	16	3	46,61	**030**
M4	0,70	90	2,8	2,1	3,3	22	3	46,61	**040**
M5	0,80	100	3,5	2,7	4,2	24	3	48,79	**050**
M6	1,00	110	4,5	3,4	5,0	30	3	48,79	**060**
M8	1,25	125	6,0	4,9	6,8	38	3	60,26	**080**
M10	1,50	140	7,0	5,5	8,5	45	3	68,77	**100**
M12	1,75	180	9,0	7,0	10,2	50	3	92,12	**120**
M16	2,00	200	12,0	9,0	14,0	63	3	131,00	**160**

P	**15**
M	
K	
N	
S	
H	
O	

Foro passante – Maschi a macchina destri

M

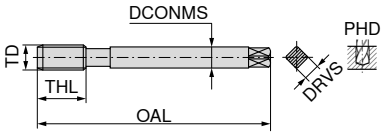
UNI	UNI	UNI
B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H
nitr. + vap.	TiN	TiN



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-PM
	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD
	23 110 ...	23 112 ...	23 010 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 110 ... EUR T9		23 112 ... EUR T9		23 010 ... EUR T9	
M2	0,40	45	2,8	2,1	1,60	7	12,0	2	12,31	020	14,48	020		
M2	0,40	45	2,8	2,1	1,60	4	13,5	2					10,03	020
M2,5	0,45	50	2,8	2,1	2,05	9	14,0	2	12,10	025	16,14	025		
M3	0,50	56	3,5	2,7	2,50	11	18,0	3	8,20	030	10,44	030	12,51	030
M4	0,70	63	4,5	3,4	3,30	13	21,0	3	8,36	040	11,38	040	11,48	040
M5	0,80	70	6,0	4,9	4,20	15	25,0	3	8,36	050	11,48	050	12,83	050
M6	1,00	80	6,0	4,9	5,00	17	30,0	3	8,52	060	14,59	060	15,31	060
M8	1,25	90	8,0	6,2	6,80	20	35,0	3	9,87	080	15,82	080	17,06	080
M10	1,50	100	10,0	8,0	8,50	22	39,0	3	11,79	100	19,55	100	22,54	100



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 111 ... EUR T9		23 113 ... EUR T9		23 021 ... EUR T9	
M3	0,50	56	2,2		2,5	11	3	8,88	030				
M4	0,70	63	2,8	2,1	3,3	13	3	8,74	040				
M5	0,80	70	3,5	2,7	4,2	15	3	8,74	050				
M6	1,00	80	4,5	3,4	5,0	17	3	9,18	060				
M8	1,25	90	6,0	4,9	6,8	20	3	10,76	080				
M10	1,50	100	7,0	5,5	8,5	22	3	12,41	100				
M12	1,75	110	9,0	7,0	10,2	24	3	14,89	120	23,17	120	26,89	120
M14	2,00	110	11,0	9,0	12,0	26	3	21,52	140	40,32	14000		
M14	2,00	110	11,0	9,0	12,0	20	4					40,75	140
M16	2,00	110	12,0	9,0	14,0	27	3	22,03	160	32,78	160	37,86	160
M18	2,50	125	14,0	11,0	15,5	30	3			63,97	18000		
M18	2,50	125	14,0	11,0	15,5	25	4					66,30	180
M20	2,50	140	16,0	12,0	17,5	32	3	35,06	200	56,37	200	68,47	200
M22	2,50	140	18,0	14,5	19,5	32	3			94,73	22000		
M24	3,00	160	18,0	14,5	21,0	34	3			84,91	240		
M27	3,00	160	20,0	16,0	24,0	36	3			118,50	27000		
M30	3,50	180	22,0	18,0	26,5	40	4			132,90	30000		
M33	3,50	180	25,0	20,0	29,5	40	4			174,30	33000		
M36	4,00	200	28,0	22,0	32,0	50	4			213,50	36000		

P	12	15	15
M	7	9	9
K	12	18	18
N		12	12
S			
H			
O			

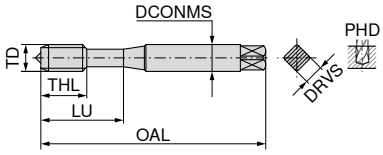
Foro passante – Maschi a macchina destri

▲ NCW = con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale

▲ NC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

M

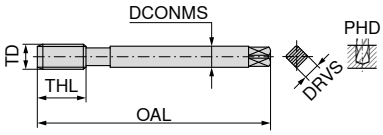
UNI NC	UNI NCW	FE	FE-HF
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN GS	TiCN		TiCN



DIN 371 con codolo rinforzato

	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
	23 114 ...	**23 116 ...**	**23 212 ...**	**23 310 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9	
M1,6	0,35	40	2,5	2,1	1,25	6	11	2					25,55	**016**		
M2	0,40	45	2,8	2,1	1,60	7	12	2					17,28	**020**		
M2,5	0,45	50	2,8	2,1	2,05	9	14	2					14,48	**025**		
M3	0,50	70	6,0	4,9	2,50	6	18	3			21,20	**030**				
M3	0,50	56	3,5	2,7	2,50	11	18	3	17,68	**030**			11,48	**030**	16,76	**030**
M3,5	0,60	56	4,0	3,0	2,90	12	20	3					12,93	**035**		
M4	0,70	70	6,0	4,9	3,30	7	21	3			24,20	**040**				
M4	0,70	63	4,5	3,4	3,30	13	21	3	19,23	**040**			11,48	**040**	17,79	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	3	19,35	**050**			11,90	**050**	18,00	**050**
M5	0,80	70	6,0	4,9	4,20	8	25	3			24,61	**050**				
M6	1,00	80	6,0	4,9	5,00	17	30	3	28,34	**060**			11,90	**060**	24,61	**060**
M6	1,00	80	6,0	4,9	5,00	10	30	3			24,61	**060**				
M8	1,25	90	8,0	6,2	6,80	20	35	3	29,99	**080**			15,41	**080**	26,58	**080**
M8	1,25	90	8,0	6,2	6,80	14	35	3			31,13	**080**				
M10	1,50	100	10,0	8,0	8,50	22	39	3	37,75	**100**			18,41	**100**	33,40	**100**
M10	1,50	100	10,0	8,0	8,50	16	39	3			37,54	**100**				



DIN 376 con codolo rastremato

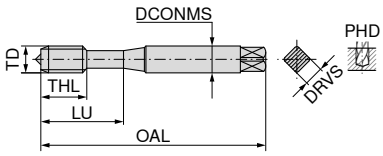
	23 115 ...	**23 117 ...**	**23 213 ...**	**23 311 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9	
M12	1,75	110	10	8	10,2	18	3			46,95	**120**				
M12	1,75	110	9	7	10,2	24	3	43,54	**120**			24,83	**120**	38,68	**120**
M14	2,00	110	11	9	12,0	26	3					29,89	**140**		
M16	2,00	110	12	9	14,0	22	3			63,19	**160**				
M16	2,00	110	12	9	14,0	27	3	59,05	**160**			37,65	**160**	53,68	**160**
M20	2,50	140	16	12	17,5	32	3	107,60	**200**			58,85	**200**	94,84	**200**

P	**15**	**15**	**12**	**15**
M	**9**	**8**		
K	**18**	**15**	**12**	**15**
N	**12**	**22**	**12**	**15**
S				
H				
O				

Foro passante – Maschi a macchina destri

M

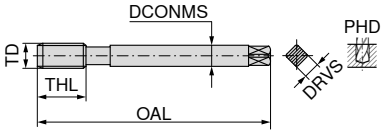


DIN 371 con codolo rinforzato

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

	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
	23 450 ...	**23 410 ...**	**23 412 ...**	**23 610 ...**	**23 612 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
M2	0,40	45	2,8	2,1	1,60	7	12	2			12,72	**020**	23,38	**020**				
M2,5	0,45	50	2,8	2,1	2,05	9	14	2			14,69	**025**	19,65	**025**				
M3	0,50	56	3,5	2,7	2,50	11	18	3	11,68	**030**	8,36	**030**	15,52	**030**	11,48	**030**	13,03	**030**
M4	0,70	63	4,5	3,4	3,30	13	21	3	11,79	**040**	8,36	**040**	17,28	**040**	11,48	**040**	13,45	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	3	12,72	**050**	8,71	**050**	17,68	**050**	11,90	**050**	13,85	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	12,93	**060**	8,71	**060**	23,17	**060**	11,90	**060**	13,85	**060**
M8	1,25	90	8,0	6,2	6,80	20	35	3	14,48	**080**	11,18	**080**	24,72	**080**	15,41	**080**	15,82	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	16,44	**100**	13,55	**100**	34,03	**100**	18,41	**100**	19,45	**100**



DIN 376 con codolo rastremato

	23 451 ...	**23 411 ...**	**23 413 ...**	**23 611 ...**	**23 613 ...**

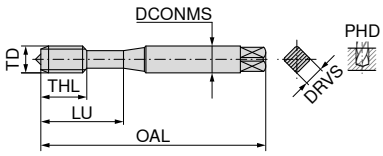
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
M12	1,75	110	9	7,0	10,2	24	3	29,27	**120**	18,00	**120**	37,54	**120**	24,83	**120**	24,41	**120**
M14	2,00	110	11	9,0	12,0	26	3	38,78	**140**								
M16	2,00	110	12	9,0	14,0	27	3	41,06	**160**	27,72	**160**	46,85	**160**				
M20	2,50	140	16	12,0	17,5	32	3	61,34	**200**	42,41	**200**	81,91	**200**				
M24	3,00	160	18	14,5	21,0	34	3			56,06	**240**						

P	**8**	**8**	**10**		
M	**6**	**6**	**8**		
K					
N	**22**	**22**	**24**	**15**	**15**
S					
H					
O					

6

Foro cieco – Maschi a macchina destri

M | Salo-Rex

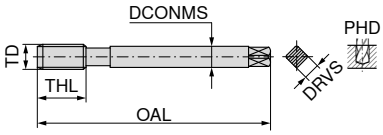


DIN 371 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 518 ... EUR U0		22 532 ... EUR U0		22 520 ... EUR U0		22 522 ... EUR U0	
M2	0,40	45	2,8	2,1	1,60	4,0	12	2	34,82	020			50,00	020		
M2,2	0,45	45	2,8	2,1	1,75	4,5	12	2	39,41	022						
M2,3	0,40	45	2,8	2,1	1,90	4,5	12	2	41,70	023						
M2,5	0,45	50	2,8	2,1	2,05	5,0	15	2	33,40	025						
M2,6	0,45	50	2,8	2,1	2,15	5,0	15	2	39,73	026						
M3	0,50	56	3,5	2,7	2,50	6,0	18	3	29,69	030	34,82	030	37,54	030	37,54	030
M3,5	0,60	56	4,0	3,0	2,90	7,0	20	3	32,09	035						
M4	0,70	63	4,5	3,4	3,30	7,0	21	3	31,33	040	34,82	040	40,17	040	40,17	040
M5	0,80	70	6,0	4,9	4,20	8,0	25	3	31,65	050	37,33	050	40,49	050	40,49	050
M6	1,00	80	6,0	4,9	5,00	10,0	30	3	32,64	060	50,00	060	47,70	060	47,70	060
M7	1,00	80	7,0	5,5	6,00	10,0	30	3	48,03	070						
M8	1,25	90	8,0	6,2	6,80	14,0	35	3	38,42	080	58,40	080	52,61	080	53,05	080
M10	1,50	100	10,0	8,0	8,50	16,0	39	3	46,06	100	86,56	100	62,65	100	62,65	100
M12	1,75	110	12,0	9,0	10,20	18,0	44	3	50,65	120			76,75	120	79,79	120



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 519 ... EUR U0		22 533 ... EUR U0		22 521 ... EUR U0		22 523 ... EUR U0	
M3	0,50	56	2,2		2,5	6	3	51,85	030						
M4	0,70	63	2,8	2,1	3,3	7	3	49,01	040						
M5	0,80	70	3,5	2,7	4,2	8	3	34,82	050						
M6	1,00	80	4,5	3,4	5,0	10	3	36,68	060						
M8	1,25	90	6,0	4,9	6,8	14	3	40,93	080						
M10	1,50	100	7,0	5,5	8,5	16	3	51,52	100						
M12	1,75	110	9,0	7,0	10,2	18	3	54,03	120	65,16	120	75,53	120	83,07	120
M14	2,00	110	11,0	9,0	12,0	20	3	72,58	140			121,10	140	136,50	140
M16	2,00	110	12,0	9,0	14,0	22	3	77,29	160	101,50	160	109,20	160	110,20	160
M18	2,50	125	14,0	11,0	15,5	25	3	117,90	180			189,90	180	206,30	180
M20	2,50	140	16,0	12,0	17,5	25	3	117,90	200	157,20	200	186,70	200	197,60	200
M22	2,50	140	18,0	14,5	19,5	27	4	163,80	220			275,10	220		
M24	3,00	160	18,0	14,5	21,0	30	4	147,40	240			240,20	240		
M27	3,00	160	20,0	16,0	24,0	30	4	194,40	270						
M30	3,50	180	22,0	18,0	26,5	35	4	250,00	300						
M33	3,50	180	25,0	20,0	29,5	35	4	479,20	330						
M36	4,00	200	28,0	22,0	32,0	40	4	397,30	360						

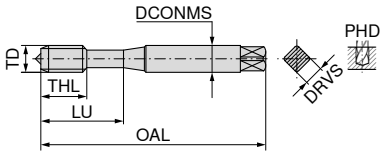
P	12	12	15	15
M	7	7	9	9
K	12	12	18	18
N			12	12
S				
H				
O				

Foro cieco – Maschi a macchina destri

▲ NCW = con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale

M | Salo-Rex

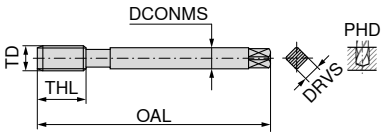
UNI NCW	UNI	UNI	UNI
C 2–3	E 1,5–2	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiN	vap.	vap.	TiN



DIN 371 con codolo rinforzato

	HSS-PM	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
	22 149 ...	**22 524 ...**	**22 534 ...**	**22 526 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0	
M3	0,50	70	6,0	4,9	2,5	6	18	3	52,73	**030**						
M3	0,50	56	3,5	2,7	2,5	6	18	3			31,00	**030**			35,04	**030**
M4	0,70	63	4,5	3,4	3,3	7	21	3			31,00	**040**			38,32	**040**
M4	0,70	70	6,0	4,9	3,3	7	21	3	57,63	**040**						
M5	0,80	70	6,0	4,9	4,2	8	25	3	59,71	**050**	32,41	**050**	48,79	**050**	39,08	**050**
M6	1,00	80	6,0	4,9	5,0	10	30	3	73,36	**060**	32,41	**060**	48,79	**060**	46,29	**060**
M8	1,25	90	8,0	6,2	6,8	14	35	3	81,98	**080**	37,00	**080**	54,14	**080**	50,65	**080**
M10	1,50	100	10,0	8,0	8,5	16	39	3	100,90	**100**	45,07	**100**	65,16	**100**	60,80	**100**



DIN 376 con codolo rastremato

	22 149 ...	22 525 ...	22 535 ...	22 527 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0	
M12	1,75	110	10	8,0	10,2	18	3	121,10	**120**						
M12	1,75	110	9	7,0	10,2	18	4			57,31	**120**	74,12	**120**	73,36	**120**
M14	2,00	110	11	9,0	12,0	20	4			93,44	**140**	108,20	**140**		
M16	2,00	110	12	9,0	14,0	22	3	162,60	**160**						
M16	2,00	110	12	9,0	14,0	22	4			80,11	**160**	106,90	**160**	105,50	**160**
M18	2,50	125	14	11,0	15,5	25	4			146,40	**180**				
M20	2,50	140	16	12,0	17,5	25	4			124,50	**200**	159,40	**200**	179,00	**200**
M22	2,50	140	18	14,5	19,5	27	5			199,80	**220**				
M24	3,00	160	18	14,5	21,0	30	5			174,60	**240**				

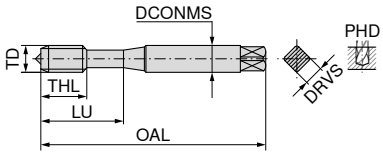
P	**15**	**12**	**12**	**15**
M	**8**	**7**	**7**	**9**
K	**15**	**12**	**12**	**18**
N	**22**			**12**
S				
H				
O				

Foro cieco – Maschi a macchina destri

▲ CNC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

M | Salo-Rex

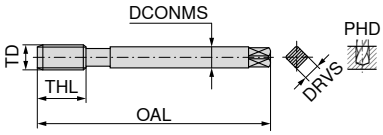
UNI CNC	UNI CNC	UNI CNC	UNI CNC
C 2–3	C 2–3	E 1,5–2	C 2–3
ISO 2X 6HX	ISO 2 6H	ISO 2 6H	7G
TiN	TiN GS	TiN GS	TiN GS



DIN 371 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 416 ... EUR U0		22 544 ... EUR U0		22 546 ... EUR U0		22 594 ... EUR U0	
M3	0,50	56	3,5	2,7	2,5	6	18	3	50,97	**030**	45,07	**030**			51,85	**030**
M4	0,70	63	4,5	3,4	3,3	7	21	3	53,37	**040**	46,06	**040**			52,40	**040**
M5	0,80	70	6,0	4,9	4,2	8	25	3	54,80	**050**	47,70	**050**	68,11	**050**	53,92	**050**
M6	1,00	80	6,0	4,9	5,0	10	30	3	66,25	**060**	49,34	**060**	68,77	**060**	58,95	**060**
M8	1,25	90	8,0	6,2	6,8	14	35	3	73,68	**080**	61,67	**080**	88,31	**080**	72,70	**080**
M10	1,50	100	10,0	8,0	8,5	16	39	3	91,26	**100**	70,08	**100**	101,50	**100**	80,66	**100**



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 417 ... EUR U0		22 545 ... EUR U0			22 595 ... EUR U0	
M12	1,75	110	9	7	10,2	18	3	107,50	**120**					
M12	1,75	110	9	7	10,2	18	4			95,40	**120**		108,20	**120**
M14	2,00	110	11	9	12,0	20	3	154,00	**140**					
M14	2,00	110	11	9	12,0	20	4			116,80	**140**		128,80	**140**
M16	2,00	110	12	9	14,0	22	3	149,60	**160**					
M16	2,00	110	12	9	14,0	22	4			127,70	**160**		139,70	**160**
M20	2,50	140	16	12	17,5	25	3	256,60	**200**					
M20	2,50	140	16	12	17,5	25	4			185,50	**200**		204,20	**200**

P	**15**	**15**	**15**	**15**
M	**9**	**9**	**9**	**9**
K	**18**	**18**	**18**	**18**
N	**22**	**12**	**12**	**12**
S				
H				
O				

Foro cieco – Maschi a macchina destri

▲ DRY = per lavorazione a secco o con refrigerazione minimale

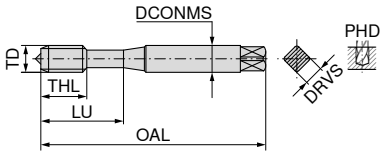
M | Salo-Rex

UNI DRY

C 2–3

ISO 2 6H

TiN

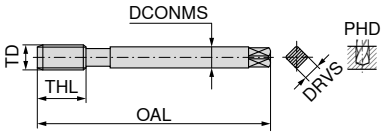


DIN 371 con codolo rinforzato

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

22 449 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
M5	0,80	70	6	4,9	4,2	8	25	3	69,86	**050**
M6	1,00	80	6	4,9	5,0	10	30	3	81,33	**060**
M8	1,25	90	8	6,2	6,8	14	35	3	89,72	**080**
M10	1,50	100	10	8,0	8,5	16	39	3	109,00	**100**



DIN 376 con codolo rastremato

22 450 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
M12	1,75	110	9	7	10,2	18	4	119,00	**120**
M16	2,00	110	12	9	14,0	22	4	168,10	**160**
M20	2,50	140	16	12	17,5	25	4	275,10	**200**

P	**12**
M	
K	**12**
N	**22**
S	
H	
O	

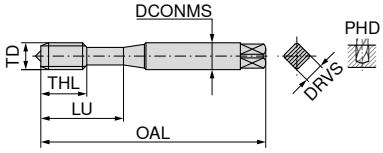
Foro cieco – Maschi a macchina destri

▲ CNC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

▲ TS = per lavorazione ad elevate velocità, fino a 100 m/min

M | SL

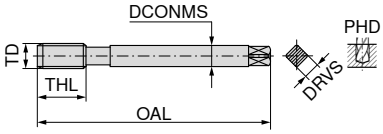
	ST TS	ST CNC	NEW HR	ST CNC
	C 2–3	C 2–3	C 2–3	C 2–3
	ISO 2X 6HX	ISO 2X 6HX	ISO 2 6H	ISO 2X 6HX
	TiN	TiN	Al-TiNHD	TiN



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-PM	HSS-E
	◁ 15° ≤ 1050 N/mm² ≤ 2xD	◁ 15° ≤ 1100 N/mm² ≤ 2xD	◁ 25° ≤ 1400 N/mm² ≤ 2xD	◁ 15° ≤ 1100 N/mm² ≤ 2xD
	22 406 ...	**22 328 ...**	**22 469 ...**	**22 443 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0	
M3	0,50	56	3,5	2,7	2,5	6	18	2	48,03	030	43,76	030				
M3	0,50	56	3,5	2,7	2,5	11	18	3					38,89	03000		
M4	0,70	63	4,5	3,4	3,3	13	21	3					46,04	04000		
M4	0,70	63	4,5	3,4	3,3	7	21	3	50,97	040	45,62	040				
M5	0,80	70	6,0	4,9	4,2	15	25	3					47,08	05000		
M5	0,80	70	6,0	4,9	4,2	8	25	3	52,61	050	47,48	050			69,86	050
M6	1,00	80	6,0	4,9	5,0	17	30	3					48,74	06000		
M6	1,00	80	6,0	4,9	5,0	10	30	3	64,08	060	58,62	060			81,33	060
M8	1,25	90	8,0	6,2	6,8	20	35	3					53,19	08000		
M8	1,25	90	8,0	6,2	6,8	14	35	3	71,49	080	66,25	080			89,07	080
M10	1,50	100	10,0	8,0	8,5	22	39	3					65,18	10000		
M10	1,50	100	10,0	8,0	8,5	16	39	3	87,32	100	81,33	100			108,20	100
M12	1,75	110	12,0	9,0	10,2	24	44	3					77,82	12000		



DIN 376 con codolo rastremato

	22 407 ...	22 329 ...		22 444 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0			EUR U0	
M12	1,75	110	9	7	10,2	18	3	104,30	120	95,18	120		121,10	120
M16	2,00	110	12	9	14,0	22	3	146,40	160	137,50	160		170,40	160
M20	2,50	140	16	12	17,5	25	3	239,10	200	228,20	200			

P	65	12	8	12
M		8	8	8
K	65	20		20
N	22	22	10	22
S			4	
H				
O				

Foro passante / foro cieco – Maschi a macchina

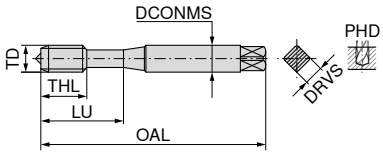
▲ LH = per filetti sinistri

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



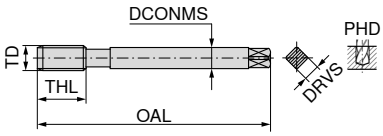
DIN 371 con codolo rinforzato

HSS-E | ◁ 42° | ≤ 750 N/mm² | ≤ 3xD

HSS-E | ◁ 42° | ≤ 750 N/mm² | ≤ 3xD

HSS-E | ◁ 42° | ≤ 750 N/mm² | ≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 082 ... EUR U0		22 084 ... EUR U0		22 138 ... EUR U0	
M2	0,40	45	2,8	2,1	1,60	4,0	12	2	32,41	**020**	41,70	**020**		
M2,3	0,40	45	2,8	2,1	1,90	4,5	12	2	36,03	**023**				
M2,5	0,45	50	2,8	2,1	2,05	5,0	15	2	31,44	**025**				
M3	0,50	56	3,5	2,7	2,50	6,0	18	3	27,40	**030**	34,05	**030**	47,37	**030**
M3,5	0,60	56	4,0	3,0	2,90	7,0	20	3	30,24	**035**				
M4	0,70	63	4,5	3,4	3,30	7,0	21	3	27,30	**040**	34,82	**040**	42,67	**040**
M5	0,80	70	6,0	4,9	4,20	8,0	25	3	27,73	**050**	35,04	**050**	46,06	**050**
M6	1,00	80	6,0	4,9	5,00	10,0	30	3	28,38	**060**	43,99	**060**	44,31	**060**
M8	1,25	90	8,0	6,2	6,80	14,0	35	3	34,05	**080**	49,34	**080**	53,37	**080**
M10	1,50	100	10,0	8,0	8,50	16,0	39	3	40,17	**100**	66,59	**100**	61,45	**100**



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 083 ... EUR U0		22 085 ... EUR U0		22 139 ... EUR U0	
M3	0,50	56	2,2		2,5	6	3	31,87	**030**				
M4	0,70	63	2,8	2,1	3,3	7	3	32,09	**040**				
M5	0,80	70	3,5	2,7	4,2	8	3	32,41	**050**				
M6	1,00	80	4,5	3,4	5,0	10	3	38,86	**060**				
M8	1,25	90	6,0	4,9	6,8	14	3	36,03	**080**				
M10	1,50	100	7,0	5,5	8,5	16	3			74,77	**100**		
M12	1,75	110	9,0	7,0	10,2	18	3	51,95	**120**	78,81	**120**	87,32	**120**
M14	2,00	110	11,0	9,0	12,0	20	3	65,93	**140**				
M16	2,00	110	12,0	9,0	14,0	22	3	72,04	**160**	101,50	**160**	125,60	**160**
M18	2,50	125	14,0	11,0	15,5	25	3	105,30	**180**				
M20	2,50	140	16,0	12,0	17,5	25	3	107,10	**200**	170,40	**200**	185,50	**200**
M22	2,50	140	18,0	14,5	19,5	27	4	147,40	**220**				
M24	3,00	160	18,0	14,5	21,0	30	4	137,50	**240**				
M30	3,50	180	22,0	18,0	26,5	35	4	235,80	**300**				
M33	3,50	180	25,0	20,0	29,5	35	4	341,80	**330**				
M36	4,00	200	28,0	22,0	32,0	40	4	341,80	**360**				

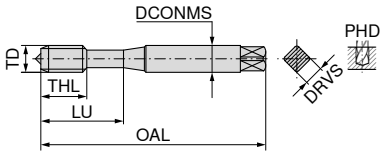
P	**12**	**15**	**12**
M			
K	**12**	**15**	**12**
N	**12**	**15**	**22**
S			
H			
O			

Foro cieco – Maschi a macchina destri

▲ TS = per lavorazione ad elevate velocità, fino a 100 m/min

M | Salo-Rex

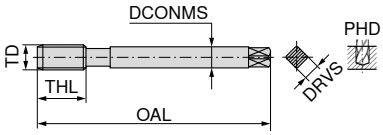
HR	HR	ST TS	ST TS
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
	OSM	TiN	TiN



DIN 371 con codolo rinforzato

	HSS-PM	HSS-PM	HSS-E	HSS-E
	◁ 42° ≤ 1400 N/mm² ≤ 3xD	◁ 42° ≤ 1400 N/mm² ≤ 3xD	◁ 40° ≤ 1100 N/mm² ≤ 3xD	◁ 40° ≤ 1100 N/mm² ≤ 3xD
	22 498 ...	**22 499 ...**	**22 046 ...**	**22 044 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0	
M3	0,50	56	3,5	2,7	2,5	6	18	3	32,09	**030**	40,72	**030**				
M4	0,70	63	4,5	3,4	3,3	7	21	3	30,24	**040**	40,72	**040**			49,66	**040**
M5	0,80	70	6,0	4,9	4,2	8	25	3	31,87	**050**	43,33	**050**	84,15	**050**	53,37	**050**
M6	1,00	80	6,0	4,9	5,0	10	30	3	31,44	**060**	44,75	**060**	109,20	**060**	56,76	**060**
M8	1,25	90	8,0	6,2	6,8	14	35	3	38,09	**080**	56,76	**080**	113,50	**080**	64,08	**080**
M10	1,50	100	10,0	8,0	8,5	16	39	3	46,06	**100**	64,08	**100**	154,00	**100**	79,58	**100**



DIN 376 con codolo rastremato

22 045 ...

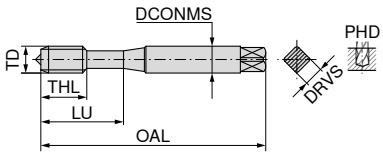
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
M5	0,80	70	6	4,9	4,2	8	3		
M6	1,00	80	6	4,9	5,0	10	3		
M8	1,25	90	8	6,2	6,8	14	3		
M10	1,50	100	10	8,0	8,5	16	3		
M12	1,75	110	9	7,0	10,2	18	4	95,40	**120**
M16	2,00	110	12	9,0	14,0	22	4	137,50	**160**

P	**6**	**8**	**65**	**65**
M	**6**	**8**		
K			**65**	**65**
N	**8**	**12**	**75**	**75**
S				
H				
O				

Foro cieco – Maschi a macchina destri

M | Salo-Rex

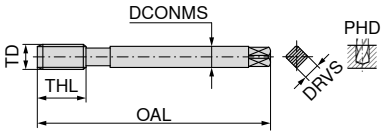
VA	VA	VA
C 2–3	E 1,5–2	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H
vap.	TiN GS	TiN GS



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 900 N/mm² ≤ 3xD	◁ 45° ≤ 900 N/mm² ≤ 3xD	◁ 45° ≤ 900 N/mm² ≤ 3xD
	22 090 ...	**22 042 ...**	**22 040 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0	
M1,6	0,35	40	2,5	2,1	1,25	4	11	2					83,50	**016**
M2	0,40	45	2,8	2,1	1,60	4	12	2	52,40	**020**			47,05	**020**
M2,5	0,45	50	2,8	2,1	2,05	5	15	2	41,48	**025**				
M2,5	0,45	50	2,8	2,1	2,05	5	15	3					44,75	**025**
M3	0,50	56	3,5	2,7	2,50	6	18	3	31,00	**030**			46,06	**030**
M4	0,70	63	4,5	3,4	3,30	7	21	3	31,87	**040**			46,61	**040**
M5	0,80	70	6,0	4,9	4,20	8	25	3	32,41	**050**	68,77	**050**	48,79	**050**
M6	1,00	80	6,0	4,9	5,00	10	30	3	32,64	**060**	69,54	**060**	50,00	**060**
M8	1,25	90	8,0	6,2	6,80	14	35	3	38,09	**080**	88,86	**080**	62,65	**080**
M10	1,50	100	10,0	8,0	8,50	16	39	3	46,06	**100**	102,20	**100**	72,70	**100**



DIN 376 con codolo rastremato

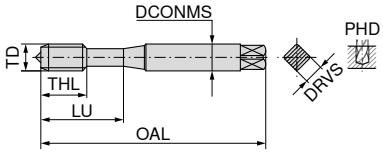
	22 091 ...		**22 041 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0			EUR U0	
M12	1,75	110	9	7,0	10,2	18	4	57,31	**120**		97,58	**120**
M14	2,00	110	11	9,0	12,0	20	4	84,15	**140**		117,90	**140**
M16	2,00	110	12	9,0	14,0	22	4	80,66	**160**		128,80	**160**
M20	2,50	140	16	12,0	17,5	25	4	124,50	**200**		187,80	**200**
M22	2,50	140	18	14,5	19,5	27	5	208,50	**220**			
M24	3,00	160	18	14,5	21,0	30	5	158,30	**240**			
M30	3,50	180	22	18,0	26,5	35	5	325,40	**300**			

P	**8**	**10**	**10**
M	**6**	**8**	**8**
K			
N			
S			
H			
O			

Foro cieco – Maschi a macchina destri

M | Salo-Rex

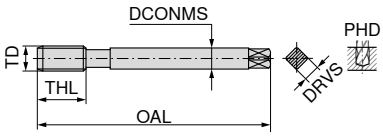


DIN 371 con codolo rinforzato

	Soft	Soft		NEW 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.	DLC

	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 38° ≤ 500 N/mm² ≤ 3xD	◁ 38° ≤ 880 N/mm² ≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 326 ... EUR U0		22 324 ... EUR U0		22 086 ... EUR U0		22 460 ... EUR U0	
M2	0,40	45	2,8	2,1	1,60	4	12	2	42,57	**020**	57,53	**020**	36,68	**020**	47,43	**02000**
M2,5	0,45	50	2,8	2,1	2,05	5	15	2	39,84	**025**	55,89	**025**	34,05	**025**		
M2,5	0,45	50	2,8	2,1	2,05	5	14	2							47,43	**02500**
M3	0,50	56	3,5	2,7	2,50	6	18	2	32,64	**030**	48,46	**030**				
M3	0,50	56	3,5	2,7	2,50	6	18	3					28,60	**030**	38,52	**03000**
M4	0,70	63	4,5	3,4	3,30	7	21	2	32,64	**040**	52,28	**040**				
M4	0,70	63	4,5	3,4	3,30	7	21	3					28,60	**040**	39,63	**04000**
M5	0,80	70	6,0	4,9	4,20	8	25	2	33,73	**050**	53,92	**050**				
M5	0,80	70	6,0	4,9	4,20	8	25	3					29,69	**050**	39,63	**05000**
M6	1,00	80	6,0	4,9	5,00	10	30	2	33,73	**060**	74,88	**060**				
M6	1,00	80	6,0	4,9	5,00	10	30	3					29,69	**060**	40,77	**06000**
M8	1,25	90	8,0	6,2	6,80	14	35	2	40,39	**080**	81,33	**080**				
M8	1,25	90	8,0	6,2	6,80	14	35	3					34,28	**080**	46,02	**08000**
M10	1,50	100	10,0	8,0	8,50	16	39	2	47,48	**100**	102,20	**100**				
M10	1,50	100	10,0	8,0	8,50	16	39	3					42,02	**100**	52,48	**10000**



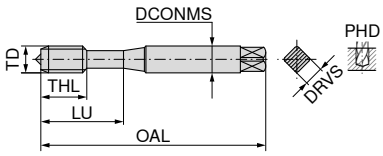
DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 087 ... EUR U0		22 461 ... EUR U0	
M12	1,75	110	9	7	10,2	18	3	52,73	**120**	66,33	**12000**
M14	2,00	110	11	9	12,0	20	3			95,26	**14000**
M16	2,00	110	12	9	14,0	22	3	75,31	**160**	92,52	**16000**
M20	2,50	140	16	12	17,5	25	3			132,70	**20000**

P	**15**		**15**	
M			**6**	
K				
N	**22**	**22**		**15**
S				
H				
O				

Foro cieco – Maschi a macchina destri

M | SL

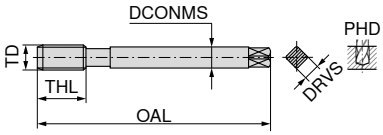


DIN 371 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 076 ... EUR U0		22 163 ... EUR U0		22 073 ... EUR U0		22 424 ... EUR U0	
M3	0,50	56	3,5	2,7	2,5	11	18	2			46,39	030			59,27	030
M3	0,50	56	3,5	2,7	2,5	11	18	3					100,10	030		
M3	0,50	56	3,5	2,7	2,5	6	18	3	44,75	030						
M3,5	0,60	56	4,0	3,0	2,9	12	20	3			49,88	035				
M4	0,70	63	4,5	3,4	3,3	7	21	3	46,06	040						
M4	0,70	63	4,5	3,4	3,3	13	21	3			50,97	040	100,10	040	61,79	040
M5	0,80	70	6,0	4,9	4,2	8	25	3	46,29	050						
M5	0,80	70	6,0	4,9	4,2	15	25	3			51,52	050	89,40	050	64,08	050
M6	1,00	80	6,0	4,9	5,0	10	30	3	50,65	060						
M6	1,00	80	6,0	4,9	5,0	17	30	3			68,66	060	105,50	060	80,56	060
M8	1,25	90	8,0	6,2	6,8	14	35	3	53,37	080						
M8	1,25	90	8,0	6,2	6,8	20	35	3			74,88	080	155,00	080	88,42	080
M10	1,50	100	10,0	8,0	8,5	16	39	3	77,29	100						
M10	1,50	100	10,0	8,0	8,5	22	39	3			92,12	100	134,20	100	110,20	100
M12	1,75	110	12,0	9,0	10,2	18	44	3	88,31	120						



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 164 ... EUR U0		22 124 ... EUR U0		22 425 ... EUR U0	
M12	1,75	110	9	7,0	10,2	24	3	104,30	120			128,80	120
M12	1,75	110	9	7,0	10,2	24	4			154,00	120		
M14	2,00	110	11	9,0	12,0	26	3					188,90	140
M14	2,00	110	11	9,0	12,0	26	4			206,30	140		
M16	2,00	110	12	9,0	14,0	27	3	146,40	160			176,90	160
M16	2,00	110	12	9,0	14,0	27	5			186,70	160		
M20	2,50	140	16	12,0	17,5	32	3	253,30	200			306,70	200
M24	3,00	160	18	14,5	21,0	34	3	289,20	240				

P	7	7		
M	7	7		
K				
N		22	22	22
S	5	5	2	2
H				
O				

Foro cieco – Maschi a macchina destri

▲ ES = extracorto

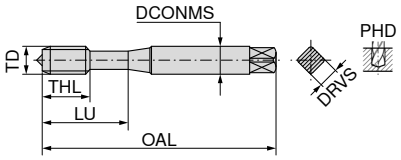
M | Salo-Rex

UNI ES

E 1,5–2

ISO 2 6H

vap.



DIN 352 con codolo rinforzato

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

22 500 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
M3	0,50	40	3,5	2,7	2,5	6	18	3	25,98	**030**
M4	0,70	45	4,5	3,4	3,3	7	22	3	26,75	**040**
M5	0,80	50	6,0	4,9	4,2	9	25	3	27,40	**050**
M6	1,00	56	6,0	4,9	5,0	10	28	3	28,38	**060**
M8	1,25	63	6,0	4,9	6,8	14		3	32,64	**080**
M10	1,50	70	7,0	5,5	8,5	16		3	38,86	**100**
M12	1,75	75	9,0	7,0	10,2	18		4	50,65	**120**
M16	2,00	80	12,0	9,0	14,0	22		4	80,11	**160**

P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

Foro cieco – Maschi a macchina destri

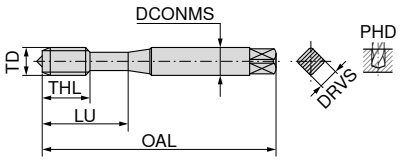
▲ ES = extracorto

M | SL

ST
ES

C
2–3

ISO 2
6H



DIN 352 con codolo rinforzato

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

22 016 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
M3	0,50	40	3,5	2,7	2,5	10	18	2	23,36	**030**
M4	0,70	45	4,5	3,4	3,3	12	22	3	23,47	**040**
M5	0,80	50	6,0	4,9	4,2	14	25	3	24,12	**050**
M6	1,00	56	6,0	4,9	5,0	16	28	3	24,88	**060**
M8	1,25	63	6,0	4,9	6,8	20		3	28,38	**080**
M10	1,50	70	7,0	5,5	8,5	22		3	36,03	**100**
M12	1,75	75	9,0	7,0	10,2	24		3	46,29	**120**

P	**12**
M	
K	**12**
N	**12**
S	
H	
O	

6

Foro cieco – Maschi a macchina destri

▲ EL = extralungo con lunghezza totale doppia

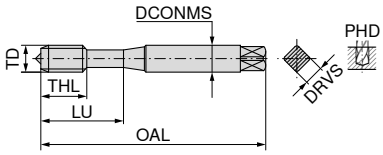
M | Salo-Rex

UNI EL | ST EL

C 2–3 | C 2–3

ISO 2 6H | ISO 2 6H

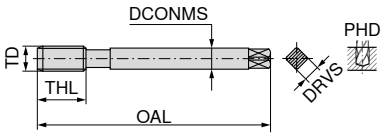
vap.



DIN 371 con codolo rinforzato

HSS-E ∢ 42° ≤ 1100 N/mm² ≤ 3xD | HSS-E ∢ 42° ≤ 750 N/mm² ≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 538 ... EUR U0		22 422 ... EUR U0	
M3	0,50	100	3,5	2,7	2,5	6	18	3	53,92	**030**	62,76	**030**
M4	0,70	125	4,5	3,4	3,3	7	21	3	53,92	**040**	61,45	**040**
M5	0,80	140	6,0	4,9	4,2	8	25	3	60,47	**050**	68,66	**050**
M6	1,00	160	6,0	4,9	5,0	10	30	3	63,64	**060**	71,49	**060**
M8	1,25	180	8,0	6,2	6,8	14	35	3	76,08	**080**	86,02	**080**



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 539 ... EUR U0		22 423 ... EUR U0	
M6	1,00	160	4,5	3,4	5,0	10	3	68,77	**060**	71,49	**060**
M8	1,25	180	6,0	4,9	6,8	14	3	83,50	**080**	86,02	**080**
M10	1,50	200	7,0	5,5	8,5	16	3	84,15	**100**	94,42	**100**
M12	1,75	224	9,0	7,0	10,2	18	3	107,50	**120**	123,40	**120**
M14	2,00	224	11,0	9,0	12,0	20	3	158,30	**140**	179,00	**140**
M16	2,00	224	12,0	9,0	14,0	22	3	151,70	**160**	173,60	**160**
M18	2,50	250	14,0	11,0	15,5	25	3	243,40	**180**	263,10	**180**
M20	2,50	280	16,0	12,0	17,5	25	3	208,50	**200**	234,70	**200**

P	**12**	**12**
M	**7**	
K	**12**	**12**
N		**22**
S		
H		
O		

Foro cieco – Maschi a macchina destri

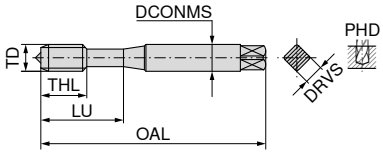
▲ EL = extralungo con lunghezza totale doppia

M | SL

ST
EL

E
1,5–2

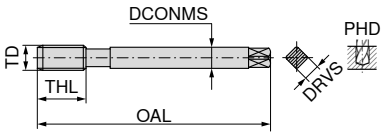
ISO 2
6H



DIN 371 con codolo rinforzato

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 078 ... EUR U0	
M3	0,50	100	3,5	2,7	2,5	11	18	2	51,85	**030**
M4	0,70	125	4,5	3,4	3,3	13	21	3	51,52	**040**
M5	0,80	140	6,0	4,9	4,2	15	25	3	58,40	**050**
M6	1,00	160	6,0	4,9	5,0	17	30	3	60,80	**060**
M8	1,25	180	8,0	6,2	6,8	20	35	3	73,36	**080**



DIN 376 con codolo rastremato

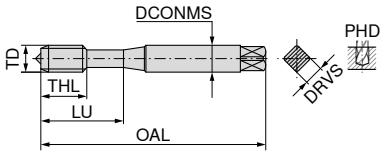
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 080 ... EUR U0	
M6	1,00	160	4,5	3,4	5,0	17	3	63,30	**060**
M8	1,25	180	6,0	4,9	6,8	20	3	75,31	**080**
M10	1,50	200	7,0	5,5	8,5	22	3	80,11	**100**
M12	1,75	224	9,0	7,0	10,2	24	3	102,20	**120**
M14	2,00	224	11,0	9,0	12,0	26	3	149,60	**140**
M16	2,00	224	12,0	9,0	14,0	27	3	147,40	**160**
M20	2,50	280	16,0	12,0	17,5	32	3	204,20	**200**

P	**12**
M	
K	**12**
N	**12**
S	
H	
O	

Foro cieco – Maschi a macchina destri

▲ NC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

M

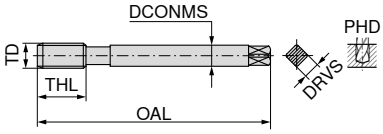


DIN 371 con codolo rinforzato

	UNI	UNI	UNI	UNI	UNI NC
	C 2–3	C 2–3	C 2–3	C 2–3	C 2–3
	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
	vap.	TiN	TiN	TiCN	TiN GS

	HSS-E	HSS-E	HSS-PM	HSS-E	HSS-E
	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 50° ≤ 1000 N/mm² ≤ 2,5xD	◁ 45° ≤ 1000 N/mm² ≤ 3xD	◁ 45° ≤ 1000 N/mm² ≤ 3xD
	23 118 ...	23 120 ...	23 026 ...	23 122 ...	23 124 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
M2	0,40	45	2,8	2,1	1,60	4	12	2	12,83	020	11,18	020						
M2,5	0,45	50	2,8	2,1	2,05	5	14	2	12,62	025	16,86	025						
M3	0,50	56	3,5	2,7	2,50	6	18	3	8,67	030	12,83	030	14,27	030	18,72	030	19,75	030
M4	0,70	63	4,5	3,4	3,30	7	21	3	8,67	040	13,75	040	14,27	040	19,75	040	20,89	040
M5	0,80	70	6,0	4,9	4,20	8	25	3	9,10	050	13,97	050	15,31	050	20,58	050	22,03	050
M6	1,00	80	6,0	4,9	5,00	10	30	3	9,41	060	17,38	060	17,79	060	26,58	060	29,79	060
M8	1,25	90	8,0	6,2	6,80	14	35	3	11,06	080	18,72	080	21,10	080	28,54	080	31,96	080
M10	1,50	100	10,0	8,0	8,50	16	39	3	12,72	100	23,99	100	26,58	100	36,09	100	40,65	100



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
								23 119 ...		23 121 ...		23 027 ...		23 123 ...		23 125 ...	
M3	0,50	56	2,2		2,5	6	3	10,34	030								
M4	0,70	63	2,8	2,1	3,3	7	3	9,32	040								
M5	0,80	70	3,5	2,7	4,2	8	3	9,18	050								
M6	1,00	80	4,5	3,4	5,0	10	3	9,03	060								
M8	1,25	90	6,0	4,9	6,8	14	3	9,46	080								
M10	1,50	100	7,0	5,5	8,5	16	3	12,83	100								
M12	1,75	110	9,0	7,0	10,2	18	3	14,48	120	28,75	120						
M12	1,75	110	9,0	7,0	10,2	18	4					31,34	120	42,82	120	47,17	120
M14	2,00	110	11,0	9,0	12,0	20	3			43,72	14000						
M14	2,00	110	11,0	9,0	12,0	20	4					45,20	140				
M16	2,00	110	12,0	9,0	14,0	22	3	21,30	160	40,03	160						
M16	2,00	110	12,0	9,0	14,0	22	4					45,20	160	57,09	160	62,89	160
M18	2,50	125	14,0	11,0	15,5	25	3			69,15	18000						
M20	2,50	140	16,0	12,0	17,5	25	3	32,06	200	59,27	200	51,71	200				
M20	2,50	140	16,0	12,0	17,5	25	4							103,40	200	114,80	200
M22	2,50	140	18,0	14,5	19,5	27	4			101,40	22000						
M24	3,00	160	18,0	14,5	21,0	34	4			83,58	240						
M27	3,00	160	20,0	16,0	24,0	30	4			126,80	27000						
M30	3,50	180	22,0	18,0	26,5	35	4			140,80	30000						
M33	3,50	180	25,0	20,0	29,5	35	4			203,00	33000						
M36	4,00	200	28,0	22,0	32,0	40	4			220,60	36000						

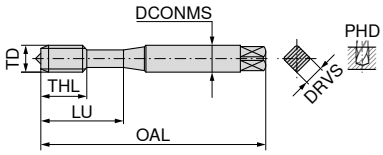
P	12	15	15	15	15
M	7	9	9	9	9
K	12	18	18	18	18
N		12	12	12	12
S					
H					
O					

Foro cieco – Maschi a macchina destri

▲ NCW = con attacco Weldon per la maschiatura rigida CNC senza mandrino a compensazione assiale

M

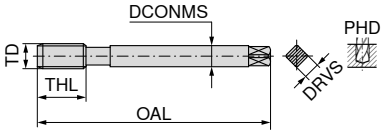
UNI NCW	FE	FE-HF	VA
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
TiCN		TiCN	



DIN 371 con codolo rinforzato

	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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 126 ... EUR T9		23 216 ... EUR T9		23 312 ... EUR T9		23 414 ... EUR T9	
M2	0,40	45	2,8	2,1	1,60	4	12	2			11,68	020			19,97	020
M2,5	0,45	50	2,8	2,1	2,05	5	14	2			21,41	025			23,69	025
M3	0,50	56	3,5	2,7	2,50	6	18	3			11,48	030	17,17	030	12,93	030
M3	0,50	70	6,0	4,9	2,50	6	18	3	21,20	030						
M4	0,70	63	4,5	3,4	3,30	7	21	3			11,48	040	18,72	040	12,93	040
M4	0,70	70	6,0	4,9	3,30	7	21	3	24,20	040						
M5	0,80	70	6,0	4,9	4,20	8	25	3	24,61	050	11,90	050	18,93	050	13,35	050
M6	1,00	80	6,0	4,9	5,00	10	30	3	24,61	060	11,90	060	26,17	060	13,35	060
M8	1,25	90	8,0	6,2	6,80	14	35	3	31,13	080	15,41	080	28,54	080	17,28	080
M10	1,50	100	10,0	8,0	8,50	16	39	3	37,54	100	18,41	100	35,58	100	21,00	100



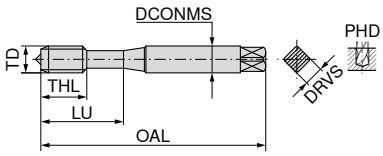
DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 127 ... EUR T9		23 217 ... EUR T9		23 313 ... EUR T9		23 415 ... EUR T9	
M12	1,75	110	10	8,0	10,2	18	3	46,95	120						
M12	1,75	110	9	7,0	10,2	18	3			24,83	120	41,17	120	27,82	120
M14	2,00	110	11	9,0	12,0	20	3			29,89	140				
M16	2,00	110	12	9,0	14,0	22	3	63,19	160	37,65	160	55,64	160	42,82	160
M20	2,50	140	16	12,0	17,5	25	3			59,37	200	99,70	200	65,47	200
M24	3,00	160	18	14,5	21,0	30	4							89,78	240

P	15	12	15	8
M	8			6
K	15	12	15	
N	22	22	24	22
S				
H				
O				

Foro cieco – Maschi a macchina destri

M

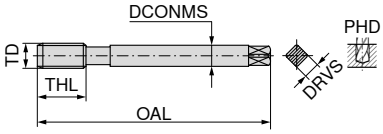


DIN 371 con codolo rinforzato

	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
	23 416 ...	**23 426 ...**	**23 456 ...**	**23 616 ...**	**23 614 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
M2	0,40	45	2,8	2,1	1,60	4	12	2	21,52	**020**								
M2,5	0,45	50	2,8	2,1	2,05	5	14	2	20,58	**025**								
M3	0,50	56	3,5	2,7	2,50	6	18	3	17,48	**030**	12,72	**030**	14,27	**030**	11,48	**030**	15,10	**030**
M4	0,70	63	4,5	3,4	3,30	7	21	3	18,31	**040**	12,93	**040**	15,52	**040**	11,48	**040**	15,10	**040**
M5	0,80	70	6,0	4,9	4,20	8	25	3	18,72	**050**	13,24	**050**	15,82	**050**	11,90	**050**	15,62	**050**
M6	1,00	80	6,0	4,9	5,00	10	30	3	23,48	**060**	13,45	**060**	20,37	**060**	11,90	**060**	15,62	**060**
M8	1,25	90	8,0	6,2	6,80	14	35	3	25,86	**080**	15,82	**080**	21,82	**080**	15,41	**080**	18,10	**080**
M10	1,50	100	10,0	8,0	8,50	16	39	3	32,68	**100**	19,03	**100**	30,09	**100**	18,41	**100**	22,14	**100**



DIN 376 con codolo rastremato

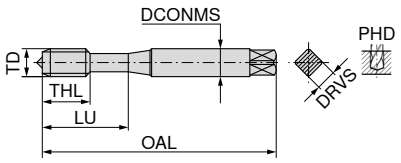
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9		EUR T9	
								23 417 ...		**23 427 ...**		**23 457 ...**		**23 617 ...**		**23 615 ...**	
M12	1,75	110	9	7,0	10,2	18	3			31,44	**120**	43,03	**120**	24,83	**120**	27,41	**120**
M12	1,75	110	9	7,0	10,2	18	4	38,68	**120**								
M14	2,00	110	11	9,0	12,0	20	4			41,37	**140**						
M16	2,00	110	12	9,0	14,0	22	3			44,99	**160**	54,20	**160**				
M16	2,00	110	12	9,0	14,0	22	4	52,75	**160**								
M20	2,50	140	16	12,0	17,5	25	3			67,02	**200**	107,60	**200**				
M20	2,50	140	16	12,0	17,5	25	4	90,91	**200**								
M24	3,00	160	18	14,5	21,0	30	4			84,81	**240**						

P	**10**	**8**	**10**		
M	**8**	**6**	**8**		
K					
N	**24**	**22**	**24**	**15**	**20**
S					
H					
O					

Foro passante / foro cieco – Maschi a macchina destri

M | TWIN

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



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-PM
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 800 N/mm² ≤ 2xD
	22 028 ...	**22 006 ...**	**22 030 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0		EUR U0	
M1,2	0,25	40	2,5	2,1	0,95	5	13	2	45,41	**012** [1]				
M1,4	0,30	40	2,5	2,1	1,10	6	13	2	36,68	**014** [1]				
M1,6	0,35	40	2,5	2,1	1,25	6	11	2	32,96	**016**				
M1,7	0,35	40	2,5	2,1	1,35	6	11	2	36,03	**017**				
M1,8	0,35	40	2,5	2,1	1,45	6	11	2	33,40	**018**				
M2	0,40	45	2,8	2,1	1,60	7	12	3	28,06	**020**				
M2,2	0,45	45	2,8	2,1	1,75	7	12	3	29,69	**022**				
M2,3	0,40	45	2,8	2,1	1,90	7	12	3	32,09	**023**				
M2,5	0,45	50	2,8	2,1	2,05	9	14	3	27,40	**025**				
M2,6	0,45	50	2,8	2,1	2,15	9	14	3	29,47	**026**				
M3	0,50	56	3,5	2,7	2,50	11	18	3	22,81	**030**	31,00	**030**	33,63	**030**
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	23,36	**035**				
M4	0,70	63	4,5	3,4	3,30	13	21	3	23,13	**040**	32,09	**040**	34,82	**040**
M5	0,80	70	6,0	4,9	4,20	15	25	3	23,36	**050**	33,40	**050**	34,82	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	23,47	**060**	33,63	**060**	34,82	**060**
M7	1,00	80	7,0	5,5	6,00	17	30	3	33,40	**070**				
M8	1,25	90	8,0	6,2	6,80	20	35	3	26,75	**080**	37,33	**080**	39,73	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	33,63	**100**	46,29	**100**	50,00	**100**

P	**12**	**6**	
M			
K	**12**	**16**	
N		**12**	**8**
S			
H			
O			

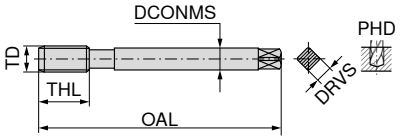
1) Tol. 4H/5H ≤ M1,4

Per versione DIN 376 vedere pagina successiva.

Foro passante / foro cieco – Maschi a macchina destri

M | TWIN

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



DIN 376 con codolo rastremato

	HSS-E	HSS-E	HSS-PM
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 800 N/mm² ≤ 2xD
	22 029 ...	**22 007 ...**	**22 031 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0	
M4	0,70	63	2,8	2,1	3,3	13	3	29,04	**040**				
M5	0,80	70	3,5	2,7	4,2	15	3	29,69	**050**				
M6	1,00	80	4,5	3,4	5,0	17	3	29,69	**060**				
M8	1,25	90	6,0	4,9	6,8	20	3	37,54	**080**				
M10	1,50	100	7,0	5,5	8,5	22	3	42,02	**100**				
M12	1,75	110	9,0	7,0	10,2	24	3	43,33	**120**	58,95	**120**		
M12	1,75	110	9,0	7,0	10,2	24	4					84,15	**120**
M14	2,00	110	11,0	9,0	12,0	26	3	59,71	**140**				
M16	2,00	110	12,0	9,0	14,0	27	3	63,64	**160**	83,50	**160**		
M16	2,00	110	12,0	9,0	14,0	27	4					126,60	**160**
M18	2,50	125	14,0	11,0	15,5	30	4	94,64	**180**				
M20	2,50	140	16,0	12,0	17,5	32	4	96,16	**200**			160,50	**200**
M22	2,50	140	18,0	14,5	19,5	32	4	136,50	**220**				
M24	3,00	160	18,0	14,5	21,0	34	4	130,00	**240**			196,40	**240**
M33	3,50	180	25,0	20,0	29,5	40	4	256,60	**330**				

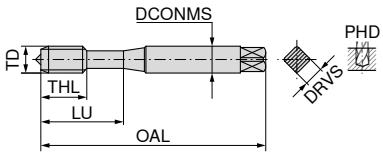
P	**12**	**6**	
M			
K	**12**	**16**	
N		**12**	**8**
S			
H			
O			

Foro passante / foro cieco – Maschi a macchina destri

M | TWIN

GG | C 2–3 | ISO 2X 6HX | nitr.

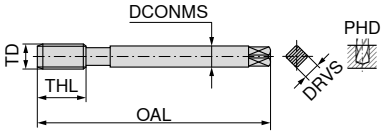
GG | C 2–3 | ISO 2X 6HX | nitr.



DIN 371 con codolo rinforzato

	HSS-E	HSS-E
	0°	0°
	≤ 1050 N/mm²	≤ 1050 N/mm²
	≤ 2xD	≤ 2xD
	22 032 ...	**22 036 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M2	0,40	45	2,8	2,1	1,60	7	12	3	29,69	**020**		
M2,5	0,45	50	2,8	2,1	2,05	9	14	3	29,69	**025**		
M3	0,50	56	3,5	2,7	2,50	11	18	3	25,00	**030**		
M3,5	0,60	56	4,0	3,0	2,90	12	20	3	27,40	**035**		
M4	0,70	63	4,5	3,4	3,30	13	21	3	25,66	**040**		
M5	0,80	70	6,0	4,9	4,20	15	25	3	27,30	**050**	39,95	**050**
M6	1,00	80	6,0	4,9	5,00	17	30	3	27,30	**060**	40,93	**060**
M8	1,25	90	8,0	6,2	6,80	20	35	3	31,98	**080**	45,07	**080**
M10	1,50	100	10,0	8,0	8,50	22	39	3	37,54	**100**	53,37	**100**



DIN 376 con codolo rastremato

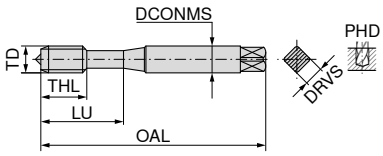
									22 033 ...		**22 037 ...**	
TD mm	**TP mm**	**OAL mm**	**DCONMS mm**	**DRVS mm**	**PHD mm**	**THL mm**		**Scanalature**	**EUR U0**		**EUR U0**	
M6	1,00	80	4,5	3,4	5,0	17		3	32,64	**060**		
M8	1,25	90	6,0	4,9	6,8	20		3	34,82	**080**		
M10	1,50	100	7,0	5,5	8,5	22		3	39,95	**100**		
M12	1,75	110	9,0	7,0	10,2	24		3	47,60	**120**	62,98	**120**
M14	2,00	110	11,0	9,0	12,0	26		3	62,98	**140**	86,56	**140**
M16	2,00	110	12,0	9,0	14,0	27		3	68,66	**160**	87,32	**160**
M18	2,50	125	14,0	11,0	15,5	30		4	101,60	**180**		
M20	2,50	140	16,0	12,0	17,5	32		4	101,60	**200**	130,00	**200**
M22	2,50	140	18,0	14,5	19,5	32		4	154,00	**220**		
M24	3,00	160	18,0	14,5	21,0	34		4	134,20	**240**		

P		
M		
K	**16**	**16**
N	**12**	**12**
S		
H		
O		

Foro passante / foro cieco – Maschi a macchina destri

M | TWIN

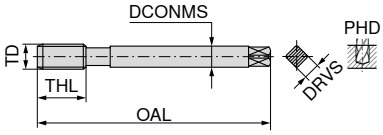
HT	HT
D 4–5	C 2–3
ISO 2X 6HX	ISO 2X 6HX
OSM	TiCN



DIN 371 con codolo rinforzato

	M.D.I.	HSS-PM
	0° ≤ 63 HRC ≤ 1,5xD	0° 44 - 52 HRC ≤ 1,5xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 806 ... EUR U0		22 227 ... EUR U0	
M3	0,50	63	4,5	3,4	2,55	6	18	4	203,70	030		
M4	0,70	63	4,5	3,4	3,40	8	20	4	203,70	040		
M5	0,80	70	6,0	4,9	4,30	10	26	4	230,30	050		
M6	1,00	80	6,0	4,9	5,00	10	30	4			133,20	060
M6	1,00	80	6,0	4,9	5,10	12	28	4	240,80	060		
M8	1,25	90	8,0	6,2	6,80	14	35	5			143,00	080
M8	1,25	90	8,0	6,2	6,90	15	35	5	268,50	080		
M10	1,50	100	10,0	8,0	8,50	18	38	5	332,20	100		
M10	1,50	100	10,0	8,0	8,50	16	39	5			179,00	100
M12	1,75	110	12,0	9,0	10,40	21	41	5	510,40	120		
M16	2,00	110	16,0	12,0	14,20	24	44	6	719,90	160		



DIN 376 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 228 ... EUR U0	
M12	1,75	110	9	7	10,4	18	5	223,80	120
M16	2,00	110	12	9	14,2	22	6	306,70	160

P		
M		
K		
N		22
S		
H	2	2
O		

Foro passante / foro cieco – Maschi a macchina destri

▲ EL = extralungo con lunghezza totale doppia

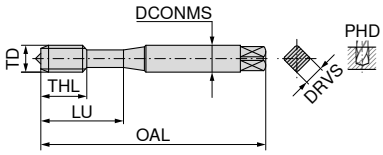
M | TWIN

HR EL

C 2–3

ISO 2X 6HX

nitr.

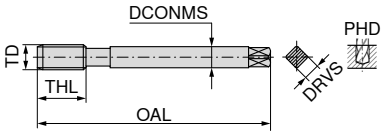


DIN 371 con codolo rinforzato

HSS-E
0°
≤ 1400 N/mm²
≤ 2xD

22 122 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
M3	0,50	100	3,5	2,7	2,5	11	18	3	56,98	**030**
M4	0,70	125	4,5	3,4	3,3	13	21	3	56,98	**040**
M5	0,80	140	6,0	4,9	4,2	15	25	3	60,26	**050**
M6	1,00	160	6,0	4,9	5,0	17	30	3	62,98	**060**
M8	1,25	180	8,0	6,2	6,8	20	35	3	74,77	**080**



DIN 376 con codolo rastremato

22 123 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
M10	1,50	200	7	5,5	8,5	22	3	83,50	**100**
M12	1,75	224	9	7,0	10,2	24	3	100,10	**120**
M16	2,00	224	12	9,0	14,0	27	3	157,20	**160**
M20	2,50	280	16	12,0	17,5	32	4	213,90	**200**

P	**6**
M	
K	**16**
N	**22**
S	
H	
O	

Foro passante / foro cieco – Maschi a macchina destri

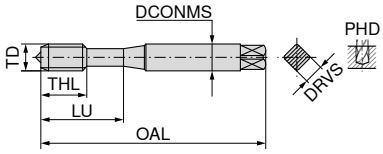
M

GG

C
2–3

ISO 2X
6HX

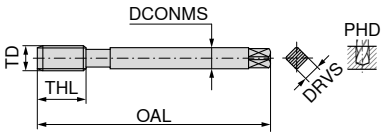
TiCN



DIN 371 con codolo rinforzato

HSS-E
0°
≤ 900 N/mm²
≤ 2xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 512 ... EUR T9	
M3	0,50	56	3,5	2,7	2,5	11	18	3	15,62	**030**
M4	0,70	63	4,5	3,4	3,3	13	21	3	16,96	**040**
M5	0,80	70	6,0	4,9	4,2	15	25	3	17,28	**050**
M6	1,00	80	6,0	4,9	5,0	17	30	3	23,89	**060**
M8	1,25	90	8,0	6,2	6,8	20	35	3	25,13	**080**
M10	1,50	100	10,0	8,0	8,5	22	39	3	31,96	**100**



DIN 376 con codolo rastremato

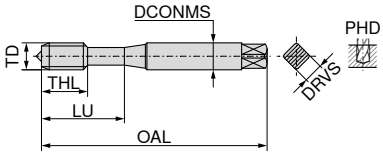
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 513 ... EUR T9	
M12	1,75	110	9	7	10,2	24	3	37,03	**120**

P	
M	
K	**20**
N	**24**
S	
H	
O	

Foro passante / foro cieco – Maschi a macchina destri

M | Spanlos

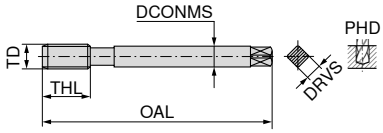
EC	EC
C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX
HCr	TiN



DIN 2174 con codolo rinforzato

	HSS-E ≤ 1100 N/mm² ≤ 1,5xD		HSS-E ≤ 1100 N/mm² ≤ 1,5xD	
	22 128 ...		**22 100 ...**	
TD mm / TP mm / OAL mm / DCONMS mm / DRVS mm / PHD mm / THL mm / LU mm	**EUR** U0		**EUR** U0	
M1 0,25 40 2,5 2,1 0,90 5 6,5			80,34	**010** 1)
M1,2 0,25 40 2,5 2,1 1,10 5 6,5			76,08	**012** 1)
M1,4 0,30 40 2,5 2,1 1,28 6 9,0			68,00	**014** 1)
M1,6 0,35 40 2,5 2,1 1,47 6 9,0			65,60	**016**
M1,7 0,35 40 2,5 2,1 1,57 6 9,0			72,04	**017**
M2 0,40 45 2,8 2,1 1,85 7 10,0	65,93	**020**	47,05	**020**
M2,5 0,45 50 2,8 2,1 2,33 9 14,0	56,76	**025**	45,62	**025**
M2,6 0,45 50 2,8 2,1 2,43 9 14,0			50,76	**026**
M3 0,50 56 3,5 2,7 2,80 11 18,0	40,82	**030**	43,66	**030**
M3,5 0,60 56 4,0 3,0 3,25 12 20,0			38,42	**035**
M4 0,70 63 4,5 3,4 3,70 13 21,0	42,47	**040**	44,65	**040**
M5 0,80 70 6,0 4,9 4,65 15 25,0	44,31	**050**	46,61	**050**
M6 1,00 80 6,0 4,9 5,60 17 30,0	44,31	**060**	53,27	**060**
M8 1,25 90 8,0 6,2 7,40 20 35,0			58,50	**080**
M8 1,25 90 8,0 6,2 7,45 20 35,0	50,43	**080**		
M10 1,50 100 10,0 8,0 9,35 22 39,0	65,93	**100**	74,22	**100**

1) Tol. ISO 1X 4HX ≤ M1,4



DIN 2174 con codolo rastremato

	22 101 ...
TD mm / TP mm / OAL mm / DCONMS mm / DRVS mm / PHD mm / THL mm	**EUR** U0
M12 1,75 110 9 7 11,25 24	81,53 **120**
M16 2,00 110 12 9 15,10 27	137,50 **160**

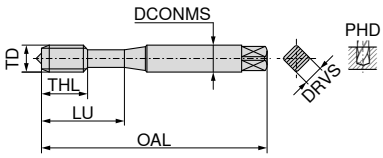
P	**18**	**18**
M	**10**	**10**
K	**10**	**10**
N	**18**	**22**
S		
H		
O		

Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

M | Spanlos

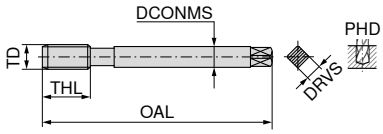
EC SN	EC SN	EC SN	EC SN	EC SN
C 2–3	C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 3X 6GX	ISO 2X 6HX	ISO 2X 6HX
nitr.	HCr	TiN	TiN GS	TiN



DIN 2174 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 104 ... EUR U0		22 107 ... EUR U0		22 108 ... EUR U0		22 154 ... EUR U0		22 105 ... EUR U0	
M2	0,40	45	2,8	2,1	1,85	7	10	3									54,03	**020**
M2,5	0,45	50	2,8	2,1	2,33	9	14	3									49,34	**025**
M3	0,50	56	3,5	2,7	2,80	11	18	3	33,63	**030**	46,61	**030**	45,30	**030**	62,44	**030**	47,60	**030**
M3,5	0,60	56	4,0	3,0	3,25	12	20	3									47,05	**035**
M4	0,70	63	4,5	3,4	3,70	13	21	4	34,82	**040**	47,60	**040**	47,05	**040**	64,19	**040**	49,34	**040**
M5	0,80	70	6,0	4,9	4,65	15	25	4	36,78	**050**	50,00	**050**	49,34	**050**	66,48	**050**		
M5	0,80	70	6,0	4,9	4,65	15	25	5									51,30	**050**
M6	1,00	80	6,0	4,9	5,60	17	30	4	37,33	**060**	50,00	**060**	57,63	**060**	73,46	**060**	58,17	**060**
M8	1,25	90	8,0	6,2	7,45	20	35	5	44,97	**080**	57,31	**080**	65,60	**080**	79,90	**080**	64,19	**080**
M10	1,50	100	10,0	8,0	9,35	22	39	6	57,63	**100**	75,53	**100**	83,07	**100**	97,15	**100**	80,34	**100**



DIN 2174 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 106 ... EUR U0	
M12	1,75	110	9	7	11,25	24	6	100,20	**120**
M14	2,00	110	11	9	13,10	26	5	193,20	**140**
M16	2,00	110	12	9	15,10	27	7	155,00	**160**

P	**12**	**18**	**18**	**18**	**18**
M		**10**	**10**	**10**	**10**
K	**8**	**10**	**10**	**10**	**10**
N	**12**	**18**	**22**	**22**	**22**
S					
H					
O					

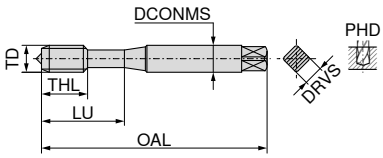
Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

M | Spanlos

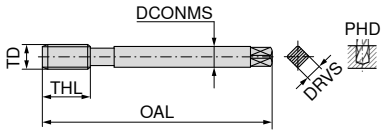
NEO SN | C 2–3 | ISO 2X 6HX | TiN

NEO SN | C 2–3 | ISO 2X 6HX | TiN



DIN 2174 con codolo rinforzato

									HSS-PM ≤ 1100 N/mm² ≤ 3xD		HSS-PM ≤ 1100 N/mm² ≤ 3xD	
									22 452 ...		22 453 ...	
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M3	0,50	56	3,5	2,7	2,80	11	18	4	62,44	030		
M4	0,70	63	4,5	3,4	3,70	13	21	4	64,19	040		
M5	0,80	70	6,0	4,9	4,65	15	25	4	68,33	050	85,37	050
M6	1,00	80	6,0	4,9	5,60	17	30	5	86,13	060	104,10	060
M8	1,25	90	8,0	6,2	7,45	20	35	5	96,49	080	117,90	080
M10	1,50	100	10,0	8,0	9,35	22	39	5	125,60	100	149,60	100



DIN 2174 con codolo rastremato

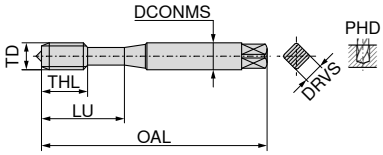
									22 452 ...		22 454 ...	
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature		EUR U0		EUR U0	
M12	1,75	110	9	7	11,25	24	6		145,10	120	174,60	120
M16	2,00	110	12	9	15,10	27	6		235,80	160	267,50	160
P										18		18
M										10		10
K										10		10
N										22		22
S												
H												
O												

Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

M

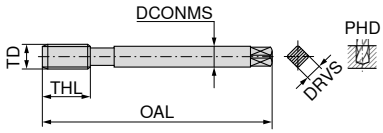
UNI	UNI	UNI SN	UNI SN
C 2–3	C 2–3	C 2–3	C 2–3
ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX	ISO 2X 6HX
TiN	CrN	TiN	CrN



DIN 2174 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 810 ... EUR T9		23 812 ... EUR T9		23 814 ... EUR T9		23 816 ... EUR T9	
M2	0,40	45	2,8	2,1	1,85	7	12		25,45	**020**	24,93	**020**				
M2	0,40	45	2,8	2,1	1,85	7	12	3					28,86	**020**	28,44	**020**
M2,5	0,45	50	2,8	2,1	2,33	9	14	3					26,17	**025**	24,93	**025**
M2,5	0,45	50	2,8	2,1	2,33	9	14		22,65	**025**	21,62	**025**				
M3	0,50	56	3,5	2,7	2,80	11	18	3					18,72	**030**	18,10	**030**
M3	0,50	56	3,5	2,7	2,80	11	18		16,44	**030**	15,62	**030**				
M4	0,70	63	4,5	3,4	3,70	13	21	4					19,45	**040**	18,10	**040**
M4	0,70	63	4,5	3,4	3,70	13	21		17,06	**040**	16,03	**040**				
M5	0,80	70	6,0	4,9	4,65	15	25	4					20,58	**050**	19,13	**050**
M5	0,80	70	6,0	4,9	4,65	15	25		18,10	**050**	16,76	**050**				
M6	1,00	80	6,0	4,9	5,60	17	30	4					23,79	**060**	19,13	**060**
M6	1,00	80	6,0	4,9	5,60	17	30		21,52	**060**	16,76	**060**				
M8	1,25	90	8,0	6,2	7,45	20	35	5					26,89	**080**	22,54	**080**
M8	1,25	90	8,0	6,2	7,45	20	35		23,99	**080**	19,35	**080**				
M10	1,50	100	10,0	8,0	9,35	22	39	5					34,86	**100**	28,86	**100**
M10	1,50	100	10,0	8,0	9,35	22	39		31,96	**100**	24,93	**100**				



DIN 2174 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 811 ... EUR T9		23 813 ... EUR T9		23 815 ... EUR T9		23 817 ... EUR T9	
M12	1,75	110	9	7,0	11,25	24		36,51	**120**	30,51	**120**				
M12	1,75	110	9	7,0	11,25	24	5					40,85	**120**	35,06	**120**
M16	2,00	110	12	9,0	15,10	27	6					76,43	**160**	70,13	**160**
M16	2,00	110	12	9,0	15,10	27		68,78	**160**	61,02	**160**				
M18	2,50	125	14	11,0	16,80	30	6					141,00	**18000**		
M20	2,50	140	16	12,0	18,80	32	6					131,10	**20000**		
M24	3,00	160	18	14,5	22,60	34	6					175,20	**24000**		

P	**18**	**18**	**18**	**18**
M	**10**	**10**	**10**	**10**
K	**10**		**10**	
N	**22**	**18**	**22**	**18**
S				
H				
O				

Foro passante – Maschi a macchina per filetti riportati destri

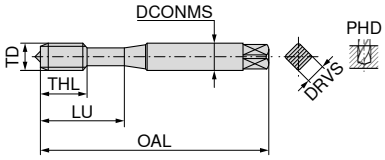
EG M | Stabil

UNI

B
4–5

6H mod

nitr. + vap.

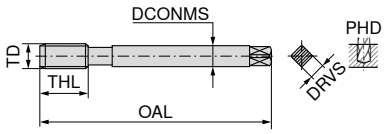


DIN 40435 con codolo rinforzato

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

22 662 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
EG-M2,5	0,45	56	3,5	2,7	2,65	11	18	3	50,20	**025**
EG-M3	0,50	63	4,5	3,4	3,15	10	21	3	41,70	**030**
EG-M4	0,70	70	6,0	4,9	4,20	12	25	3	43,33	**040**
EG-M5	0,80	80	6,0	4,9	5,25	13	30	3	42,02	**050**
EG-M6	1,00	90	8,0	6,2	6,30	17	35	3	42,47	**060**
EG-M8	1,25	100	10,0	8,0	8,40	18	39	3	50,65	**080**



DIN 40435 con codolo rastremato

22 663 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
EG-M10	1,50	100	9	7,0	10,50	22	3	68,11	**100**
EG-M12	1,75	110	11	9,0	12,50	26	3	77,94	**120**
EG-M16	2,00	125	14	11,0	16,50	27	3	113,50	**160**
EG-M20	2,50	160	18	14,5	20,75	34	3	159,40	**200**

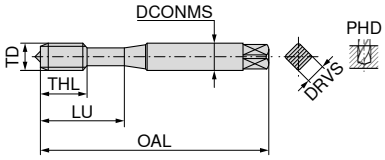
P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

6

Foro cieco – Maschi a macchina per filetti riportati destri

EG M | Salo-Rex

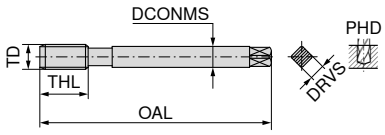
Soft	UNI
C 2–3	C 2–3
6H mod	6H mod
CH	vap.



DIN 40435 con codolo rinforzato

	HSS-E	HSS-E
	◁ 42° ≤ 500 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD
	22 280 ...	**22 664 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
EG-M2,5	0,45	56	3,5	2,7	2,65	5	18	2	60,70	**025**		
EG-M2,5	0,45	56	3,5	2,7	2,65	5	18	3			48,03	**025**
EG-M3	0,50	63	4,5	3,4	3,15	5	21	2	58,62	**030**		
EG-M3	0,50	63	4,5	3,4	3,15	5	21	3			43,76	**030**
EG-M4	0,70	70	6,0	4,9	4,20	8	25	2	58,62	**040**		
EG-M4	0,70	70	6,0	4,9	4,20	8	25	3			43,76	**040**
EG-M5	0,80	80	6,0	4,9	5,25	8	30	2	79,90	**050**		
EG-M5	0,80	80	6,0	4,9	5,25	8	30	3			40,39	**050**
EG-M6	1,00	90	8,0	6,2	6,30	10	35	2	81,33	**060**		
EG-M6	1,00	90	8,0	6,2	6,30	10	35	3			43,76	**060**
EG-M8	1,25	100	10,0	8,0	8,40	16	39	2	102,20	**080**		
EG-M8	1,25	100	10,0	8,0	8,40	16	39	3			49,01	**080**



DIN 40435 con codolo rastremato

	22 665 ...

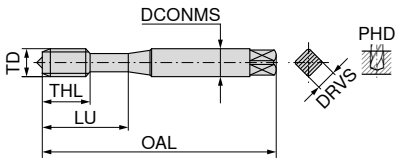
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
EG-M10	1,50	100	9	7,0	10,50	15	5	62,65	**100**
EG-M12	1,75	110	11	9,0	12,50	20	4	76,75	**120**
EG-M16	2,00	125	14	11,0	16,50	20	5	115,70	**160**
EG-M20	2,50	160	18	14,5	20,75	30	4	157,20	**200**

P		**12**
M		**7**
K		**12**
N	**22**	
S		
H		
O		

Foro passante – Maschi a macchina destri

MF | Stabil

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



DIN 371 con codolo rinforzato

	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 1100 N/mm² ≤ 4xD
	22 590 ...	**22 550 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,5	10	21	3	50,65	**040**	58,62	**040**
M5x0,5	0,50	70	6,0	4,9	4,5	11	25	3	50,65	**050**	58,62	**050**
M6x0,5	0,50	80	6,0	4,9	5,5	13	30	3	53,37	**060**	73,36	**060**
M6x0,75	0,75	80	6,0	4,9	5,2	13	30	3	53,37	**062**	73,36	**062**
M8x1	1,00	90	8,0	6,2	7,0	17	35	3	52,07	**084**	70,08	**080**
M10x1	1,00	90	10,0	8,0	9,0	18	35	4	53,37	**102**	79,58	**100**

P	**12**	**15**
M	**7**	**9**
K	**12**	**18**
N		**12**
S		
H		
O		

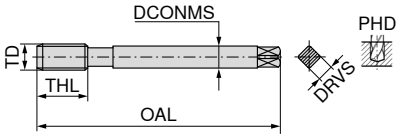
Per versione DIN 374 vedere pagina successiva.

Foro passante – Maschi a macchina destri

▲ TS = per lavorazione ad elevate velocità, fino a 100 m/min

▲ LH = per filetti sinistri

MF | Stabil



DIN 374 con codolo rastremato

	ST LH	ST TS	UNI	UNI	NEW NW
	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	DLC

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 750 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 880 N/mm² ≤ 4xD
	22 210 ...	22 193 ...	22 551 ...	22 552 ...	22 466 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0		EUR U0	
M6x0,5	0,50	80	4,5	3,4	5,5	13	3					93,99	060				
M6x0,75	0,75	80	4,5	3,4	5,2	13	3					45,41	062				
M8x0,75	0,75	80	6,0	4,9	7,2	14	3					49,66	082				
M8x1	1,00	90	6,0	4,9	7,0	10	4			79,58	080						
M8x1	1,00	90	6,0	4,9	7,0	17	3	66,25	084			45,41	084	70,08	080	55,91	08000
M10x0,75	0,75	90	7,0	5,5	9,2	18	4					66,59	100				
M10x1,25	1,25	100	7,0	5,5	8,8	22	3					99,33	104			73,18	10200
M10x1	1,00	90	7,0	5,5	9,0	10	4			85,37	100						
M10x1	1,00	90	7,0	5,5	9,0	18	4	68,77	102			46,29	102	76,75	100	58,08	10000
M12x1,5	1,50	100	9,0	7,0	10,5	22	3	94,64	124			51,30	124	79,58	120	64,79	12400
M12x1,25	1,25	100	9,0	7,0	10,8	22	3					75,31	122			75,25	12200
M12x1,5	1,50	100	9,0	7,0	10,5	15	4			81,98	120						
M12x1	1,00	100	9,0	7,0	11,0	18	4	88,86	120			54,14	120	89,95	121	66,98	12000
M14x1,5	1,50	100	11,0	9,0	12,5	22	3	121,10	144			68,77	144	104,10	140	85,75	14400
M14x1,25	1,25	100	11,0	9,0	12,8	22	3									85,75	14200
M14x1,5	1,50	100	11,0	9,0	12,5	15	4			103,40	140						
M14x1	1,00	100	11,0	9,0	13,0	18	4					139,70	140			90,38	14000
M16x1,5	1,50	100	12,0	9,0	14,5	22	3	121,10	162			81,98	162	107,50	160	95,71	16200
M16x1,5	1,50	100	12,0	9,0	14,5	15	4			137,50	160						
M16x1	1,00	100	12,0	9,0	15,0	18	4									98,29	16000
M18x1	1,00	110	14,0	11,0	17,0	20	5					228,20	180				
M18x2	2,00	125	14,0	11,0	16,0	26	3					187,80	184				
M18x1,5	1,50	110	14,0	11,0	16,5	17	4			170,40	180						
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	137,50	182			95,40	182				
M20x1	1,00	125	16,0	12,0	19,0	20	5					246,70	200				
M20x1,5	1,50	125	16,0	12,0	18,5	17	4			213,90	200						
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	159,40	202			107,50	202	169,20	200		
M25x1,5	1,50	140	18,0	14,5	23,5	28	4					397,30	250				
M26x1,5	1,50	140	18,0	14,5	24,5	28	4					164,90	260				
M24x1,5	1,50	140	18,0	14,5	22,5	27	4					133,20	242				
M24x2	2,00	140	18,0	14,5	22,0	27	4					241,20	244				
M22x1,5	1,50	125	18,0	14,5	20,5	25	4					117,90	222	205,30	220		
M27x2	2,00	140	20,0	16,0	25,0	28	4					419,20	272				
M28x1,5	1,50	140	20,0	16,0	26,5	28	5					193,20	280				
M30x1,5	1,50	150	22,0	18,0	28,5	28	5					207,30	302				

P	12	65	12	15	
M			7	9	
K	12	65	12	18	
N	22	22		12	15
S					
H					
O					

Foro passante – Maschi a macchina destri

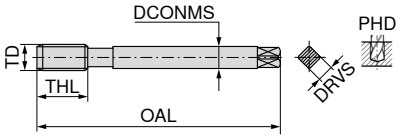
MF

UNI

B
4–5

ISO 2
6H

TiN



DIN 374 con codolo rastremato

HSS-PM
0°
≤ 1000 N/mm²
≤ 3xD

23 041 ...

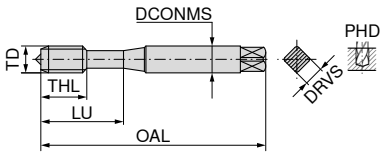
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9	
M8x1	1,00	90	6	4,9	7,0	17	3	22,24	**081**
M10x1	1,00	90	7	5,5	9,0	18	4	25,45	**102**
M10x1,25	1,25	100	7	5,5	8,8	22	3	27,30	**104**
M12x1	1,00	100	9	7,0	11,0	18	4	31,34	**120**
M12x1,25	1,25	100	9	7,0	10,8	22	3	32,78	**122**
M12x1,5	1,50	100	9	7,0	10,5	22	3	29,17	**121**
M14x1,5	1,50	100	11	9,0	12,5	22	3	35,99	**144**
M14x1,25	1,25	100	11	9,0	12,8	22	3	37,86	**142**
M16x1,5	1,50	100	12	9,0	14,5	22	3	40,75	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	4	53,89	**182**
M20x1,5	1,50	125	16	12,0	18,5	17	4	72,82	**202**
M24x1,5	1,50	140	18	14,5	22,5	27	4	78,60	**242**
M24x2	2,00	140	18	14,5	22,0	27	4	89,57	**244**
M22x1,5	1,50	125	18	14,5	20,5	25	4	68,47	**222**

P	**15**
M	**9**
K	**18**
N	**12**
S	
H	
O	

Foro passante – Maschi a macchina destri

MF

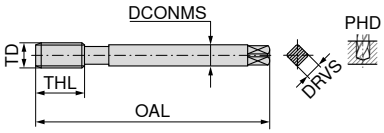
UNI	UNI	FE	VA
B 4–5	B 4–5	B 4–5	B 4–5
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H
nitr. + vap.	TiN		TiN



DIN 371 con codolo rinforzato

HSS-E	HSS-E	HSS-E	HSS-E
0°	0°	0°	0°
≤ 1000 N/mm²	≤ 1000 N/mm²	≤ 850 N/mm²	≤ 1200 N/mm²
≤ 3xD	≤ 3xD	≤ 3xD	≤ 4xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 140 ... EUR T9		23 142 ... EUR T9		23 240 ... EUR T9		23 440 ... EUR T9	
M4x0,5	0,50	63	4,5	3,4	3,5	10	21	3	15,72	**040**	21,20	**040**	18,93	**040**		
M5x0,5	0,50	70	6,0	4,9	4,5	11	25	3	15,72	**050**	21,41	**050**	19,13	**050**	26,07	**050**
M6x0,5	0,50	80	6,0	4,9	5,5	13	30	3	16,76	**060**	26,37	**060**	19,13	**060**		
M6x0,75	0,75	80	6,0	4,9	5,2	13	30	3	15,72	**062**	26,37	**062**	18,93	**062**	31,86	**062**



DIN 374 con codolo rastremato

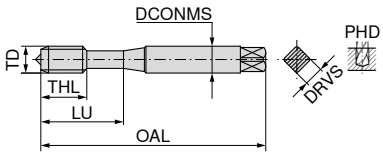
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 141 ... EUR T9		23 143 ... EUR T9		23 241 ... EUR T9		23 441 ... EUR T9	
M8x0,5	0,50	80	6	8,0	7,5	14	3					25,45	**080**		
M8x1	1,00	90	6	4,9	7,0	17	3	14,07	**084**			20,79	**084**	33,72	**084**
M8x1	1,00	90	6	4,9	7,0	17	4			25,96	**084**				
M8x0,75	0,75	80	6	4,9	7,2	14	3	18,00	**082**	27,62	**082**	22,03	**082**	35,89	**082**
M10x0,75	0,75	90	7	5,5	9,2	18	4	24,31	**100**	36,93	**100**	30,41	**100**		
M10x1,25	1,25	100	7	5,5	8,8	22	3	21,92	**104**	34,75	**104**	25,03	**104**		
M10x1	1,00	90	7	5,5	9,0	18	4	14,48	**102**	28,34	**102**	24,20	**102**	36,71	**102**
M12x1,5	1,50	100	9	7,0	10,5	22	3	16,44	**124**	30,09	**124**	26,89	**124**	39,30	**124**
M12x1,25	1,25	100	9	7,0	10,8	22	3	22,14	**122**	35,37	**122**	29,37	**122**		
M12x1	1,00	100	9	7,0	11,0	18	4	18,62	**120**	32,58	**120**	28,02	**120**	42,31	**120**
M14x1	1,00	100	11	9,0	13,0	18	4	26,37	**140**	39,10	**140**	34,54	**140**		
M14x1,5	1,50	100	11	9,0	12,5	22	3	23,48	**144**	40,03	**144**	33,20	**144**	51,92	**144**
M16x1	1,00	100	12	9,0	15,0	18	4	29,58	**160**	45,61	**160**	45,61	**160**		
M16x1,5	1,50	100	12	9,0	14,5	22	3	24,31	**162**	45,61	**162**	42,20	**162**	59,37	**162**
M18x1	1,00	110	14	11,0	17,0	20	5					60,30	**180**		
M18x1,5	1,50	110	14	11,0	16,5	25	4	33,52	**182**	56,37	**182**	54,82	**182**		
M20x1,5	1,50	125	16	12,0	18,5	25	4	37,34	**202**	71,47	**202**	60,82	**202**		
M20x1	1,00	125	16	12,0	19,0	20	5					65,16	**200**		
M22x1,5	1,50	125	18	14,5	20,5	25	4	42,20	**222**	74,26	**222**	70,02	**222**		
M24x1,5	1,50	140	18	14,5	22,5	27	4	48,61	**242**	77,78	**242**	81,61	**242**		
M26x1,5	1,50	140	18	14,5	24,5	28	4					104,40	**260**		
M28x1,5	1,50	140	20	16,0	26,5	28	5					120,00	**280**		
M30x1,5	1,50	150	22	18,0	28,5	28	5					133,50	**300**		

P	**12**	**15**	**12**	**10**
M	**7**	**9**		**8**
K	**12**	**18**	**12**	
N		**12**	**12**	**24**
S				
H				
O				

Foro cieco – Maschi a macchina destri

MF | Salo-Rex

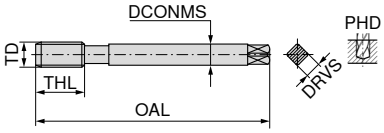
UNI	UNI	UNI	UNI
E 1,5–2	E 1,5–2	E 1,5–2	E 1,5–2
ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 3 6G
vap.	TiN	vap.	vap.



DIN 371 con codolo rinforzato

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 441 ... EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,50	5	21	3	54,68	**040**
M5x0,5	0,50	70	6,0	4,9	4,50	5	25	3	54,68	**050**
M6x0,75	0,75	80	6,0	4,9	5,25	8	30	3	54,68	**062**



DIN 374 con codolo rastremato

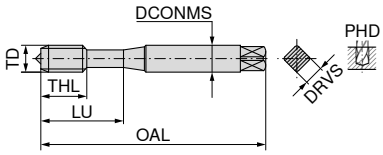
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 555 ... EUR U0		22 556 ... EUR U0		22 491 ... EUR U0		22 490 ... EUR U0	
M8x1	1,0	90	6	4,9	7,0	10	3	50,00	**080**	64,08	**080**			54,68	**080**
M10x1	1,0	90	7	5,5	9,0	10	4	53,92	**100**	81,98	**100**			60,26	**100**
M12x1,5	1,5	100	9	7,0	10,5	15	5	61,67	**120**	93,99	**120**	88,86	**120**	66,25	**120**
M14x1,5	1,5	100	11	9,0	12,5	15	5	79,58	**140**	120,10	**140**	117,90	**140**	87,32	**140**
M16x1,5	1,5	100	12	9,0	14,5	15	5	94,64	**160**	126,60	**160**	121,10	**160**	104,10	**160**
M18x1,5	1,5	110	14	11,0	16,5	17	5							120,10	**180**
M20x1,5	1,5	125	16	12,0	18,5	17	5					185,50	**200**	137,50	**200**

P	**12**	**15**	**12**	**12**
M	**7**	**9**	**7**	**7**
K	**12**	**18**	**12**	**12**
N		**12**		
S				
H				
O				

Foro cieco – Maschi a macchina destri

▲ CNC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

MF | Salo-Rex

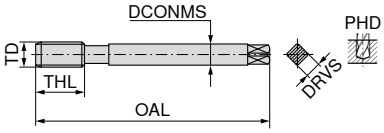


DIN 371 con codolo rinforzato

	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

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

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 202 ... EUR U0		22 548 ... EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	54,68	040		
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	50,00	050	63,30	050
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	54,68	062	63,30	062
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	54,68	060	63,30	060



DIN 374 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 553 ... EUR U0		22 554 ... EUR U0		22 563 ... EUR U0		22 549 ... EUR U0	
M6x0,75	0,75	80	4,5	3,4	5,2	8	3	54,68	062						
M8x0,75	0,75	80	6,0	4,9	7,2	8	3	51,30	080					66,59	082
M8x1	1,00	90	6,0	4,9	7,0	10	3	47,37	082	64,08	080	96,71	084	80,66	084
M10x0,75	0,75	90	7,0	5,5	9,2	10	4	94,64	101						
M10x1	1,00	90	7,0	5,5	9,0	10	3	50,65	100	81,98	100				
M10x1	1,00	90	7,0	5,5	9,0	10	4					104,10	102	92,12	102
M10x1,25	1,25	100	7,0	5,5	8,8	16	3	125,60	102						
M12x1	1,00	100	9,0	7,0	11,0	11	4	64,08	120	96,16	121			106,00	120
M12x1,25	1,25	100	9,0	7,0	10,8	15	4	100,10	122						
M12x1,5	1,50	100	9,0	7,0	10,5	15	4	61,67	124	93,99	120				
M12x1,5	1,50	100	9,0	7,0	10,5	15	5					117,90	124	102,20	124
M14x1,5	1,50	100	11,0	9,0	12,5	15	5					145,10	144	130,00	144
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	76,08	140	108,80	140				
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	92,90	160	126,60	160				
M16x1,5	1,50	100	12,0	9,0	14,5	15	5					164,90	162	151,70	162
M18x1,5	1,50	110	14,0	11,0	16,5	17	5							185,50	182
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	113,50	180	161,50	182				
M20x1,5	1,50	125	16,0	12,0	18,5	17	5					246,70	202	228,20	202
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	155,00	200	205,30	202				
M22x1,5	1,50	125	18,0	14,5	20,5	17	4	150,60	220						
M26x1,5	1,50	140	18,0	14,5	24,5	20	5	209,60	260						
M24x1,5	1,50	140	18,0	14,5	22,5	20	5	163,80	240						
M28x1,5	1,50	140	20,0	16,0	26,5	20	5	246,70	280						
M30x1,5	1,50	150	22,0	18,0	28,5	22	6	250,00	300						

P	12	15	15	15
M	7	9	9	9
K	12	18	18	18
N		12	12	12
S				
H				
O				

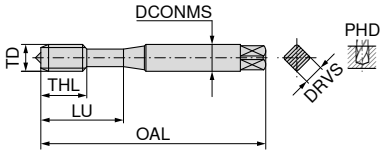
Foro passante / foro cieco – Maschi a macchina

▲ LH = per filetti sinistri

MF | Salo-Rex

ST LH | C 2–3 | ISO 2 6H

ST | C 2–3 | ISO 2 6H

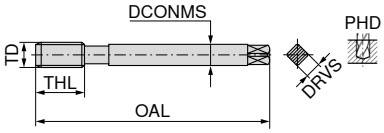


DIN 371 con codolo rinforzato

HSS-E
∢ 42°
≤ 750 N/mm²
≤ 3xD

HSS-E
∢ 42°
≤ 750 N/mm²
≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 238 ... EUR U0	
M2,5x0,35	0,35	50	2,8	2,1	2,15	5,0	15	2	87,32	**025**
M3x0,35	0,35	56	3,5	2,7	2,65	4,5	18	3	53,37	**030**
M3,5x0,35	0,35	56	4,0	3,0	3,15	5,0	20	3	73,36	**035**
M4x0,5	0,50	63	4,5	3,4	3,50	5,0	21	3	49,34	**040**
M5x0,5	0,50	70	6,0	4,9	4,50	5,0	25	3	49,34	**050**
M6x0,75	0,75	80	6,0	4,9	5,20	8,0	30	3	49,34	**060**
M8x0,75	0,75	80	8,0	6,2	7,20	8,0	30	3	54,68	**080**
M8x1	1,00	90	8,0	6,2	7,00	10,0	35	3	49,34	**082**



DIN 374 con codolo rastremato

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 601 ... EUR U0		22 186 ... EUR U0	
M6x0,75	0,75	80	4,5	3,4	5,2	8	3			48,79	**060**
M8x0,75	0,75	80	6,0	4,9	7,2	8	3			50,00	**080**
M8x1	1,00	90	6,0	4,9	7,0	10	3	79,58	**082**	45,41	**082**
M10x1	1,00	90	7,0	5,5	9,0	10	3	81,98	**100**	47,37	**100**
M12x1,5	1,50	100	9,0	7,0	10,5	15	4			56,43	**122**
M12x1	1,00	100	9,0	7,0	11,0	11	4	100,10	**120**	58,40	**120**
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	108,20	**140**	75,31	**140**
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	128,80	**160**	88,86	**160**
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	149,60	**180**	115,70	**180**
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	174,60	**200**	114,60	**200**
M22x1,5	1,50	125	18,0	14,5	20,5	17	4			128,80	**220**
M26x1,5	1,50	140	18,0	14,5	24,5	20	5			201,90	**260**
M24x1,5	1,50	140	18,0	14,5	22,5	20	5			138,60	**240**

P	**12**	**12**
M		
K	**12**	**12**
N	**12**	**22**
S		
H		
O		

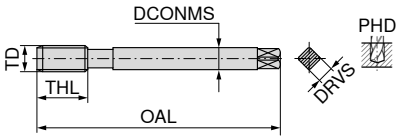
Foro cieco – Maschi a macchina destri

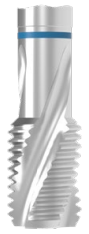
MF | SL

ST

C
2–3

ISO 2
6H





DIN 374 con codolo rastremato

HSS-E
15°
≤ 750 N/mm²
≤ 2xD

22 182 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
M6x0,75	0,75	80	4,5	3,4	5,2	13	3	50,20	**062**
M8x0,75	0,75	80	6,0	4,9	7,2	14	3	50,65	**082**
M8x1	1,00	90	6,0	4,9	7,0	17	3	46,29	**084**
M10x1	1,00	90	7,0	5,5	9,0	18	3	48,79	**102**
M10x0,75	0,75	90	7,0	5,5	9,2	18	3	80,66	**100**
M10x1,25	1,25	100	7,0	5,5	8,8	22	3	69,54	**104**
M9x1	1,00	90	7,0	5,5	8,0	17	3	68,77	**090**
M11x1	1,00	90	8,0	6,2	10,0	18	3	77,29	**110**
M12x1,25	1,25	100	9,0	7,0	10,8	22	3	77,29	**122**
M12x1,5	1,50	100	9,0	7,0	10,5	22	3	56,98	**124**
M12x1	1,00	100	9,0	7,0	11,0	18	3	59,71	**120**
M14x1	1,00	100	11,0	9,0	13,0	18	4	78,81	**140**
M14x1,5	1,50	100	11,0	9,0	12,5	22	3	76,75	**144**
M16x1	1,00	100	12,0	9,0	15,0	18	4	92,90	**160**
M16x1,5	1,50	100	12,0	9,0	14,5	22	3	90,60	**162**
M15x1	1,00	100	12,0	9,0	14,0	18	4	103,40	**150**
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	117,90	**182**
M18x2	2,00	125	14,0	11,0	16,0	26	3	186,70	**184**
M18x1	1,00	110	14,0	11,0	17,0	20	4	127,70	**180**
M20x1	1,00	125	16,0	12,0	19,0	20	4	130,00	**200**
M20x2	2,00	140	16,0	12,0	18,0	27	3	159,40	**204**
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	116,80	**202**
M22x2	2,00	140	18,0	14,5	20,0	27	4	162,60	**224**
M24x1,5	1,50	140	18,0	14,5	22,5	27	4	144,10	**242**
M24x1	1,00	140	18,0	14,5	23,0	20	5	177,90	**240**
M24x2	2,00	140	18,0	14,5	22,0	27	4	168,10	**244**
M22x1,5	1,50	125	18,0	14,5	20,5	25	4	132,10	**222**
M25x1,5	1,50	140	18,0	14,5	23,5	28	4	240,20	**252**
M22x1	1,00	125	18,0	14,5	21,0	20	4	170,40	**220**
M27x1,5	1,50	140	20,0	16,0	25,5	28	4	208,50	**270**
M28x2	2,00	140	20,0	16,0	26,0	28	4	275,10	**282**
M27x2	2,00	140	20,0	16,0	25,0	28	4	235,80	**272**
M30x1,5	1,50	150	22,0	18,0	28,5	28	5	239,10	**302**
M32x1,5	1,50	150	22,0	18,0	30,5	28	6	275,10	**320**
M30x2	2,00	150	22,0	18,0	28,0	28	4	253,30	**304**
M33x2	2,00	160	25,0	20,0	31,0	30	4	332,90	**332**
M36x2	2,00	170	28,0	22,0	34,0	30	5	423,50	**362**
M36x3	3,00	200	28,0	22,0	33,0	42	4	397,30	**364**
M34x1,5	1,50	170	28,0	22,0	32,5	30	6	336,30	**340**
M40x1,5	1,50	170	32,0	24,0	38,5	30	6	417,10	**400**
M42x3	3,00	200	32,0	24,0	39,0	45	4	533,80	**424**
M42x2	2,00	170	32,0	24,0	40,0	30	6	504,30	**422**
M45x1,5	1,50	180	36,0	29,0	43,5	32	6	493,40	**450**
M48x2	2,00	190	36,0	29,0	46,0	32	6	695,40	**482**
M48x3	3,00	225	36,0	29,0	45,0	50	5	706,30	**484**

P	**12**
M	
K	**12**
N	**22**
S	
H	
O	

Continua pagina seguente

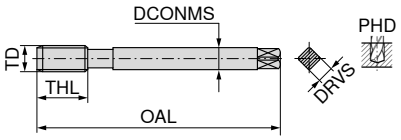
Foro cieco – Maschi a macchina destri

MF | SL

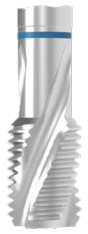
ST

C
2–3

ISO 2
6H



DIN 374 con codolo rastremato



HSS-E
15°
≤ 750 N/mm²
≤ 2xD

22 182 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
M45x3	3,00	200	36,0	29,0	42,0	45	5	681,10	**454**
M48x1,5	1,50	190	36,0	29,0	46,5	32	6	579,60	**480**
M52x2	2,00	190	40,0	32,0	50,0	32	6	825,20	**522**

P	**12**
M	
K	**12**
N	**22**
S	
H	
O	

6

Foro cieco – Maschi a macchina destri

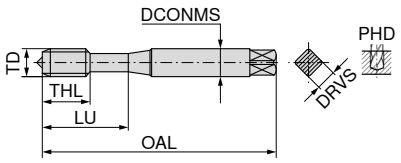
MF | Salo-Rex

VA

E
1,5–2

ISO 2
6H

TiN GS



DIN 371 con codolo rinforzato

HSS-E
45°
≤ 900 N/mm²
≤ 3xD

22 176 ...

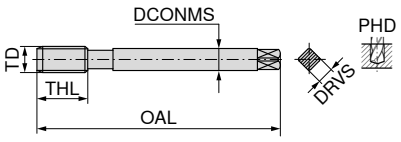
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	83,50	**040**
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	64,08	**050**
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	64,08	**060**
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	64,08	**062**

P	**10**
M	**8**
K	
N	**22**
S	
H	
O	

Per versione DIN 374 vedere pagina successiva.

Foro cieco – Maschi a macchina destri

MF | Salo-Rex



DIN 374 con codolo rastremato

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

	HSS-E	HSS-E	HSS-E	HSS-E
	∢ 42° ≤ 500 N/mm² ≤ 3xD	∢ 38° ≤ 880 N/mm² ≤ 3xD	∢ 42° ≤ 750 N/mm² ≤ 3xD	∢ 45° ≤ 900 N/mm² ≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 188 ... EUR U0		22 462 ... EUR U0		22 189 ... EUR U0		22 177 ... EUR U0	
M8x1	1,00	90	6	4,9	7,0	10	3	50,00	**081**	59,46	**08000**	50,00	**082**	81,43	**084**
M8x0,75	0,75	80	6	4,9	7,2	8	3							67,34	**082**
M10x1	1,00	90	7	5,5	9,0	10	3	52,07	**100**	64,21	**10000**				
M10x1,25	1,25	100	7	5,5	8,8	16	3			85,56	**10200**				
M10x1	1,00	90	7	5,5	9,0	10	4					58,07	**100**	92,90	**102**
M12x1,25	1,25	100	9	7,0	10,8	15	4			95,26	**12200**				
M12x1,5	1,50	100	9	7,0	10,5	15	4	57,31	**122**	76,03	**12400**				
M12x1,5	1,50	100	9	7,0	10,5	15	5					64,08	**120**	103,40	**124**
M12x1	1,00	100	9	7,0	11,0	11	4	63,64	**120**	77,05	**12000**	65,70	**121**	107,50	**120**
M14x1	1,00	100	11	9,0	13,0	11	4			98,50	**14000**				
M14x1,25	1,25	100	11	9,0	12,8	15	4			99,51	**14200**				
M14x1,5	1,50	100	11	9,0	12,5	15	4	81,98	**140**	97,39	**14400**				
M14x1,5	1,50	100	11	9,0	12,5	15	5					79,58	**140**	132,10	**144**
M16x1	1,00	100	12	9,0	15,0	12	4			113,50	**16000**				
M16x1,5	1,50	100	12	9,0	14,5	15	4	89,95	**160**	112,40	**16200**				
M16x1,5	1,50	100	12	9,0	14,5	15	5					96,16	**160**	154,00	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	5							187,80	**182**
M18x1,5	1,50	110	14	11,0	16,5	17	4	126,60	**180**						
M20x1,5	1,50	125	16	12,0	18,5	17	5					133,20	**200**	232,60	**202**
M20x1,5	1,50	125	16	12,0	18,5	17	4	117,90	**200**						
M26x1,5	1,50	140	18	14,5	24,5	20	6					258,70	**260**		
M28x1,5	1,50	140	20	16,0	26,5	20	6					302,40	**280**		
M30x1,5	1,50	150	22	18,0	28,5	22	6					299,10	**300**		

P	**15**		**8**	**10**
M			**6**	**8**
K				
N	**22**	**15**	**22**	**22**
S				
H				
O				

Foro cieco – Maschi a macchina destri

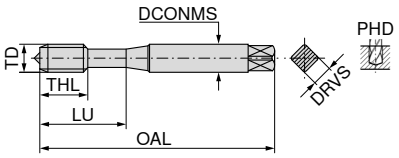
MF

UNI

C
2–3

ISO 2
6H

TiN



DIN 374 con codolo rinforzato

HSS-PM
40°
≤ 1000 N/mm²
≤ 2,5xD

23 047 ...

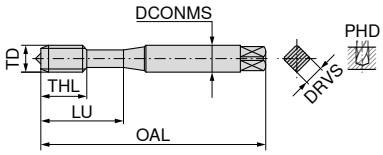
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9	
M8x1	1,00	90	6	4,9	7,0	10	35	3	21,82	**081**
M10x1	1,00	90	7	5,5	9,0	10	35	4	28,44	**102**
M10x1,25	1,25	100	7	5,5	8,8	16	39	4	27,72	**104**
M12x1	1,00	100	9	7,0	11,0	11	40	4	32,37	**120**
M12x1,25	1,25	100	9	7,0	10,8	15	40	5	35,27	**122**
M12x1,5	1,50	100	9	7,0	10,5	15	40	5	31,34	**121**
M14x1	1,00	100	11	9,0	12,8	11	40	4	37,86	**140**
M14x1,5	1,50	100	11	9,0	12,5	15	40	5	37,13	**144**
M16x1,5	1,50	100	12	9,0	14,5	15	44	5	48,09	**162**
M18x1,5	1,50	110	14	11,0	16,5	17	44	5	62,57	**182**
M20x1,5	1,50	125	16	12,0	18,5	17	44	5	71,36	**202**
M22x1,5	1,50	125	18	14,5	20,5	17	44	5	78,60	**222**
M24x1,5	1,50	140	18	14,5	22,5	20	48	5	80,05	**242**
M24x2	2,00	140	18	14,5	22,0	20	48	5	93,19	**244**

P	**15**
M	**9**
K	**18**
N	**12**
S	
H	
O	

Foro cieco – Maschi a macchina destri

▲ NC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

MF

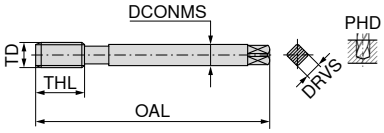


DIN 371 con codolo rinforzato

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

	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
	23 144 ...	23 146 ...	23 148 ...	23 242 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9	
M4x0,5	0,50	63	4,5	3,4	3,5	5	21	3	15,72	**040**	22,86	**040**			20,37	**040**
M5x0,5	0,50	70	6,0	4,9	4,5	5	25	3	15,72	**050**	22,86	**050**	30,31	**050**	20,79	**050**
M6x0,5	0,50	80	6,0	4,9	5,5	5	30	3	17,17	**060**	26,58	**060**	38,88	**060**	20,79	**060**
M6x0,75	0,75	80	6,0	4,9	5,2	8	30	3	16,76	**062**	26,58	**062**	38,88	**062**	20,37	**062**



DIN 374 con codolo rastremato

	23 145 ...	23 147 ...	23 149 ...	23 243 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9		EUR T9	
M4x0,5	0,50	63	2,8	2,1	3,5	5	3	15,31	**040**						
M5x0,5	0,50	70	3,5	2,7	4,5	5	3	15,31	**050**						
M6x0,75	0,75	80	4,5	3,4	5,2	8	3	16,34	**062**						
M8x1	1,00	90	6,0	4,9	7,0	10	3	13,55	**084**	26,58	**084**	38,88	**084**	22,14	**084**
M8x0,75	0,75	80	6,0	4,9	7,2	8	3	18,51	**082**	28,34	**082**	41,47	**082**	23,58	**082**
M8x0,5	0,50	80	6,0	8,0	7,5	6	3							45,30	**080**
M10x1,25	1,25	100	7,0	5,5	8,8	16	3	15,72	**104**	37,65	**104**			42,92	**104**
M10x1	1,00	90	7,0	5,5	9,0	10	3	14,17	**102**	29,79	**102**			25,96	**102**
M10x1	1,00	90	7,0	5,5	9,0	10	4					45,72	**102**		
M10x0,75	0,75	90	7,0	5,5	9,2	10	4	29,79	**100**	43,23	**100**			49,64	**100**
M12x1,25	1,25	100	9,0	7,0	10,8	15	4	22,44	**122**	42,41	**122**			48,20	**122**
M12x1,5	1,50	100	9,0	7,0	10,5	15	4	16,76	**124**	33,72	**124**			28,75	**124**
M12x1,5	1,50	100	9,0	7,0	10,5	15	5					49,34	**124**		
M12x1	1,00	100	9,0	7,0	11,0	11	4	19,03	**120**	34,96	**120**	52,03	**120**	29,89	**120**
M14x1,5	1,50	100	11,0	9,0	12,5	15	4	22,76	**144**	42,41	**144**			35,37	**144**
M14x1,5	1,50	100	11,0	9,0	12,5	15	5					63,40	**144**		
M14x1	1,00	100	11,0	9,0	13,0	11	4	25,03	**140**	45,61	**140**			48,20	**140**
M16x1,5	1,50	100	12,0	9,0	14,5	15	4	26,07	**162**	50,06	**162**			45,10	**162**
M16x1,5	1,50	100	12,0	9,0	14,5	15	5					70,64	**162**		
M16x1	1,00	100	12,0	9,0	15,0	12	4	26,89	**160**	50,06	**160**			56,68	**160**
M18x1,5	1,50	110	14,0	11,0	16,5	17	4	36,09	**182**	58,33	**182**			58,33	**182**
M18x1,5	1,50	110	14,0	11,0	16,5	17	5					89,57	**182**		
M20x1,5	1,50	125	16,0	12,0	18,5	17	5					116,90	**202**		
M20x1,5	1,50	125	16,0	12,0	18,5	17	4	33,20	**202**	74,26	**202**			65,16	**202**
M22x1,5	1,50	125	18,0	14,5	20,5	17	4	49,34	**222**	82,54	**222**			75,40	**222**
M24x1,5	1,50	140	18,0	14,5	22,5	20	5	53,78	**242**	88,12	**242**			87,92	**242**

P	**12**	**15**	**15**	**12**
M	**7**	**9**	**9**	
K	**12**	**18**	**18**	**12**
N		**12**	**12**	**22**
S				
H				
O				

Foro cieco – Maschi a macchina destri

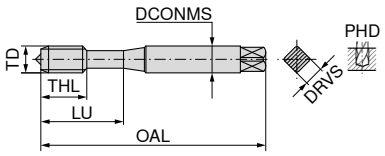
MF

VA

E
1,5–2

ISO 2
6H

TiN

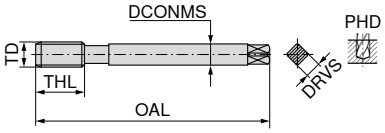


DIN 371 con codolo rinforzato

HSS-E
45°
≤ 1200 N/mm²
≤ 3xD

23 442 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9	
M5x0,5	0,50	70	6	4,9	4,5	5	25	3	27,62	**050**
M6x0,75	0,75	80	6	4,9	5,2	8	30	3	32,48	**062**



DIN 374 con codolo rastremato

23 443 ...

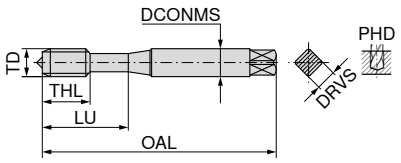
TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9	
M8x1	1,00	90	6	4,9	7,0	10	3	32,48	**084**
M8x0,75	0,75	80	6	4,9	7,2	8	3	34,65	**082**
M10x1	1,00	90	7	5,5	9,0	10	4	36,51	**102**
M12x1	1,00	100	9	7,0	11,0	11	4	42,82	**120**
M12x1,5	1,50	100	9	7,0	10,5	15	5	41,17	**124**
M14x1,5	1,50	100	11	9,0	12,5	15	5	52,23	**144**
M16x1,5	1,50	100	12	9,0	14,5	15	5	59,99	**162**

P	**10**
M	**8**
K	
N	**24**
S	
H	
O	

Foro passante / foro cieco – Maschi a macchina destri

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 con codolo rinforzato

	HSS-E	HSS-E	M.D.I.
	0° ≤ 750 N/mm² ≤ 2xD	0° ≤ 1400 N/mm² ≤ 2xD	0° ≤ 63 HRC ≤ 1,5xD
	22 144 ...	22 146 ...	22 817 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 144 ... EUR U0		22 146 ... EUR U0		22 817 ... EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,5	10	21	3	42,67	**040**	47,37	**040**		
M5x0,5	0,50	70	6,0	4,9	4,5	11	25	3	42,67	**050**	47,37	**050**		
M6x0,5	0,50	80	6,0	4,9	5,5	13	30	3	42,67	**060**	47,37	**060**		
M6x0,75	0,75	80	6,0	4,9	5,2	13	30	3	42,67	**062**	47,37	**062**		
M8x1	1,00	90	8,0	6,2	7,0	17	35	3	42,67	**084**				
M8x1	1,00	90	8,0	6,2	7,1	15	35	5					359,90	**080**
M10x1	1,00	100	10,0	8,0	9,1	18	38	5					459,40	**100**
M10x1	1,00	90	10,0	8,0	9,0	18	35	4	42,67	**104**				
M12x1,5	1,50	110	12,0	9,0	10,6	21	41	5					532,40	**120**
M14x1,5	1,50	110	14,0	11,0	12,6	24	44	6					625,00	**140**
M16x1,5	1,50	110	16,0	12,0	14,6	24	44	6					710,50	**160**

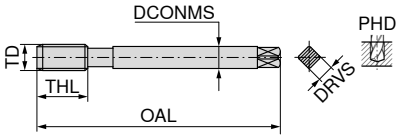
P	**12**	**6**	
M			
K	**12**	**16**	
N	**22**	**22**	
S			
H			**2**
O			

Per versione DIN 374 vedere pagina successiva.

Foro passante / foro cieco – Maschi a macchina destri

MF | TWIN

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



DIN 374 con codolo rastremato

	HSS-E	HSS-E	HSS-E
	0°	0°	0°
	≤ 750 N/mm²	≤ 1400 N/mm²	≤ 1050 N/mm²
	≤ 2xD	≤ 2xD	≤ 2xD
	22 171 ...	**22 209 ...**	**22 173 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0	
M4x0,5	0,50	63	2,8	2,1	3,5	10	3	38,86	042				
M5x0,5	0,50	70	3,5	2,7	4,5	11	3	46,61	050			43,33	050
M6x0,75	0,75	80	4,5	3,4	5,2	13	3	42,02	062			47,37	062
M6x0,5	0,50	80	4,5	3,4	5,5	13	3	43,33	060			53,59	060
M8x0,75	0,75	80	6,0	4,9	7,2	14	3	47,70	082			83,50	080
M8x1	1,00	90	6,0	4,9	7,0	17	3	38,32	084	47,37	082	83,50	082
M10x1	1,00	90	7,0	5,5	9,0	18	4	39,73	104	47,37	100	46,61	100
M10x1,25	1,25	100	7,0	5,5	8,8	22	3	47,37	106				
M10x0,75	0,75	90	7,0	5,5	9,2	18	4	61,67	102				
M11x1	1,00	90	8,0	6,2	10,0	18	4	70,08	110				
M12x1	1,00	100	9,0	7,0	11,0	18	4	46,29	122			53,59	120
M12x1,25	1,25	100	9,0	7,0	10,8	22	4	56,98	124				
M12x1,5	1,50	100	9,0	7,0	10,5	22	4	46,29	126	56,98	120	51,52	124
M14x1	1,00	100	11,0	9,0	13,0	18	4	70,08	140			79,58	140
M14x1,25	1,25	100	11,0	9,0	12,8	22	4	64,08	142				
M14x1,5	1,50	100	11,0	9,0	12,5	22	4	66,25	144	73,36	140	72,70	142
M16x1	1,00	100	12,0	9,0	15,0	18	5	72,70	160				
M16x1,5	1,50	100	12,0	9,0	14,5	22	4	65,16	162	79,58	160	75,31	160
M18x1	1,00	110	14,0	11,0	17,0	20	5	93,99	180				
M18x2	2,00	125	14,0	11,0	16,0	26	4	104,80	184				
M18x1,5	1,50	110	14,0	11,0	16,5	25	4	87,32	182	94,64	180	100,90	180
M20x1	1,00	125	16,0	12,0	19,0	20	5	104,80	200				
M20x2	2,00	140	16,0	12,0	18,0	27	4	131,00	204				
M20x1,5	1,50	125	16,0	12,0	18,5	25	4	95,40	202	120,10	200	105,50	200
M24x2	2,00	140	18,0	14,5	22,0	27	4	128,80	244				
M22x2	2,00	140	18,0	14,5	20,0	27	4	145,10	224				
M22x1	1,00	125	18,0	14,5	21,0	20	5	147,40	220				
M24x1	1,00	140	18,0	14,5	23,0	20	6	161,50	240				
M26x1,5	1,50	140	18,0	14,5	24,5	28	4	162,60	260			159,40	260
M24x1,5	1,50	140	18,0	14,5	22,5	27	4	114,60	242			128,80	240
M25x1,5	1,50	140	18,0	14,5	23,5	28	4	208,50	250				
M22x1,5	1,50	125	18,0	14,5	20,5	25	4	102,20	222			113,50	220
M28x1,5	1,50	140	20,0	16,0	26,5	28	5					188,90	280
M27x2	2,00	140	20,0	16,0	25,0	28	4	177,90	274				
M27x1,5	1,50	140	20,0	16,0	25,5	28	5	188,90	272				
M30x2	2,00	150	22,0	18,0	28,0	28	4	218,40	302				
M32x2	2,00	150	22,0	18,0	30,0	28	5	303,40	322				
M32x1,5	1,50	150	22,0	18,0	30,5	28	6	218,40	320				
M30x1,5	1,50	150	22,0	18,0	28,5	28	5	182,30	300			205,30	300
M33x2	2,00	160	25,0	20,0	31,0	30	5	246,70	332				
M36x2	2,00	170	28,0	22,0	34,0	30	5	306,70	362				
M36x1,5	1,50	170	28,0	22,0	34,5	30	6	273,00	360				
M35x1,5	1,50	170	28,0	22,0	33,5	30	6	336,30	350				
M42x1,5	1,50	170	32,0	24,0	40,5	30	6	401,70	420				
M42x3	3,00	200	32,0	24,0	39,0	45	5	486,90	424				
M40x2	2,00	170	32,0	24,0	38,0	30	6	354,80	402				
M50x1,5	1,50	190	36,0	29,0	48,5	32	8	513,00	500				
M52x1,5	1,50	190	40,0	32,0	50,5	32	8	586,20	520				

P	12	6	
M			
K	12	16	15
N	22	22	22
S			
H			
O			

Foro passante / foro cieco – Maschi a macchina

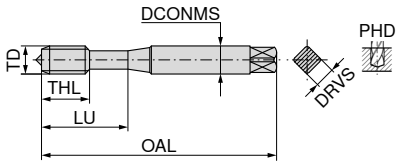
▲ ES = extracorto

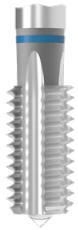
▲ LH = per filetto sinistro; ES = extracorto

MF | TWIN

ST ES — C 2–3 — ISO 2X 6HX

ST LH/ES — C 2–3 — ISO 2X 6HX





DIN 2181 con codolo rinforzato

HSS-E, 0°, ≤ 750 N/mm², ≤ 2xD — **22 179 ...**

HSS-E, 0°, ≤ 750 N/mm², ≤ 2xD — **22 200 ...**

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M2,5x0,35	0,35	40	2,8	2,1	2,15	9		3	62,98	**025**		
M3x0,35	0,35	40	3,5	2,7	2,65	8	18	3	40,93	**030**		
M4x0,35	0,35	45	4,5	3,4	3,65	9	22	3	58,62	**040**		
M4x0,5	0,50	45	4,5	3,4	3,50	9	22	3	40,93	**042**		
M4,5x0,5	0,50	50	6,0	4,9	4,00	10	24	3	68,11	**045**		
M5x0,5	0,50	50	6,0	4,9	4,50	11	25	3	40,93	**050**		
M6x0,5	0,50	56	6,0	4,9	5,50	12	27	3	43,01	**060**		
M6x0,75	0,75	56	6,0	4,9	5,20	12	27	3	40,93	**062**	56,98	**062**
M7x0,75	0,75	56	6,0	4,9	6,20	14		3	46,06	**070**		
M8x0,5	0,50	56	6,0	4,9	7,50	14		4	56,98	**080**		
M8x0,75	0,75	56	6,0	4,9	7,20	14		3	46,06	**082**		
M8x1	1,00	63	6,0	4,9	7,00	17		3	40,93	**084**	56,98	**084**
M9x1	1,00	63	7,0	5,5	8,00	17		4	56,98	**090**		
M10x0,75	0,75	63	7,0	5,5	9,20	18		4	60,26	**100**		
M10x1	1,00	63	7,0	5,5	9,00	18		4	43,01	**102**	58,62	**102**
M10x1,25	1,25	70	7,0	5,5	8,80	22		3	55,13	**104**		
M11x1	1,00	63	8,0	6,2	10,00	18		4	66,59	**110**		
M12x1	1,00	70	9,0	7,0	11,00	18		4	50,65	**120**	70,08	**120**
M12x1,25	1,25	70	9,0	7,0	10,80	20		4	56,98	**122**		
M12x1,5	1,50	70	9,0	7,0	10,50	20		4	49,34	**124**	68,11	**124**
M13x1	1,00	70	11,0	9,0	12,00	18		4	74,77	**130**		
M14x1	1,00	70	11,0	9,0	13,00	18		4	66,59	**140**		
M14x1,25	1,25	70	11,0	9,0	12,80	20		4	66,59	**142**		
M14x1,5	1,50	70	11,0	9,0	12,50	20		4	62,98	**144**	89,95	**144**
M15x1	1,00	70	12,0	9,0	14,00	18		5	80,66	**150**		
M16x1	1,00	70	12,0	9,0	15,00	18		5	76,08	**160**		
M16x1,5	1,50	70	12,0	9,0	14,50	20		4	70,08	**162**	98,79	**162**
M18x1	1,00	80	14,0	11,0	17,00	18		5	98,79	**180**		
M18x1,5	1,50	80	14,0	11,0	16,50	22		4	81,98	**182**	116,80	**182**
M18x2	2,00	80	14,0	11,0	16,00	22		4	98,79	**184**		
M20x1,5	1,50	80	16,0	12,0	18,50	22		4	96,16	**202**	133,20	**202**
M20x2	2,00	80	16,0	12,0	18,00	22		4	104,10	**204**		

P	**12**	**12**
M		
K	**12**	**12**
N	**22**	**22**
S		
H		
O		

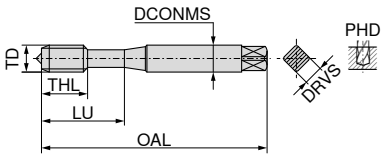
6

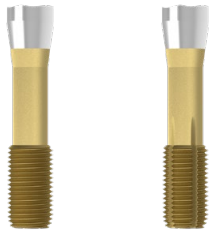
Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

MF | Spanlos

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

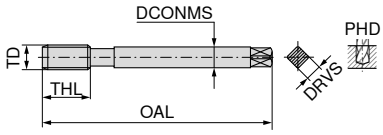




DIN 2174 con codolo rinforzato

	HSS-E ≤ 1100 N/mm² ≤ 1,5xD		HSS-E ≤ 1100 N/mm² ≤ 3xD	
	22 204 ...		**22 205 ...**	

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
M4x0,5	0,50	63	4,5	3,4	3,8	10	21		89,95	**040**		
M4x0,5	0,50	63	4,5	3,4	3,8	10	21	4			101,00	**040**
M5x0,5	0,50	70	6,0	4,9	4,8	11	25		76,75	**050**		
M5x0,5	0,50	70	6,0	4,9	4,8	11	25	4			89,95	**050**
M6x0,5	0,50	80	6,0	4,9	5,8	13	30		89,95	**060**		
M6x0,5	0,50	80	6,0	4,9	5,8	13	30	5			101,00	**060**
M6x0,75	0,75	80	6,0	4,9	5,7	13	30		71,28	**062**		
M6x0,75	0,75	80	6,0	4,9	5,7	13	30	4			80,34	**062**
M8x0,75	0,75	80	8,0	6,2	7,7	14	30		93,99	**080**		
M8x0,75	0,75	80	8,0	6,2	7,7	14	30	5			89,95	**080**
M8x1	1,00	90	8,0	6,2	7,6	17	35		87,11	**082**		
M8x1	1,00	90	8,0	6,2	7,6	17	35	5			95,40	**082**
M10x1	1,00	90	10,0	8,0	9,6	18	35		80,34	**100**		
M10x1	1,00	90	10,0	8,0	9,6	18	35	5			88,63	**100**



DIN 2174 con codolo rastremato

	22 196 ...		**22 197 ...**	

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0	
M12x1	1,0	100	9	7	11,60	18		92,67	**120**		
M12x1	1,0	100	9	7	11,60	18	6			102,90	**120**
M12x1,5	1,5	100	9	7	11,35	22		93,32	**124**		
M12x1,5	1,5	100	9	7	11,35	22	6			104,30	**124**
M14x1,5	1,5	100	11	9	13,35	22		127,70	**140**		
M14x1,5	1,5	100	11	9	13,35	22	6			133,20	**140**
M16x1,5	1,5	100	12	9	15,35	22		132,10	**160**		
M16x1,5	1,5	100	12	9	15,35	22	6			150,60	**160**
M20x1,5	1,5	125	16	12	19,35	25		191,00	**200**		
M20x1,5	1,5	125	16	12	19,35	25	6			210,70	**200**

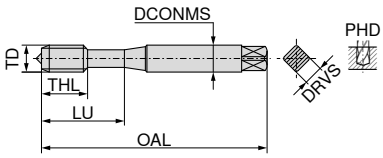
P	**18**	**18**
M	**10**	**10**
K	**10**	**10**
N	**22**	**22**
S		
H		
O		

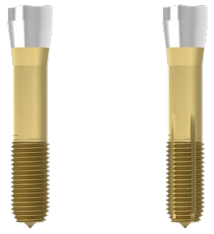
Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

MF

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

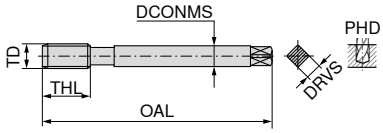




DIN 2174 con codolo rinforzato

	HSS-E ≤ 850 N/mm² ≤ 3xD		HSS-E ≤ 850 N/mm² ≤ 3xD	
	23 840 ...		**23 842 ...**	
	EUR T9		EUR T9	

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature				
M4x0,5	0,50	63	4,5	3,4	3,80	10	21		39,72	**040**		
M4x0,5	0,50	63	4,5	3,4	3,80	10	21	4			44,58	**040**
M5x0,5	0,50	70	6,0	4,9	4,80	11	25		34,34	**050**		
M5x0,5	0,50	70	6,0	4,9	4,80	11	25	4			40,13	**050**
M6x0,5	0,50	80	6,0	4,9	5,80	13	30		39,72	**060**		
M6x0,5	0,50	80	6,0	4,9	5,80	13	30	5			44,78	**060**
M8x1	1,00	90	8,0	6,2	7,60	17	35		38,27	**084**		
M8x1	1,00	90	8,0	6,2	7,60	17	35	5			42,61	**084**
M10x1	1,00	90	10,0	8,0	9,60	18	35		43,54	**102**		
M10x1	1,00	90	10,0	8,0	9,60	18	35	5			47,17	**102**
M10x1,25	1,25	100	10,0	8,0	9,45	18	39		51,82	**104**		
M10x1,25	1,25	100	10,0	8,0	9,45	18	39	5			57,61	**104**



DIN 2174 con codolo rastremato

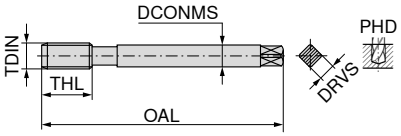
	23 841 ...		**23 843 ...**	
	EUR T9		EUR T9	

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature				
M12x1,25	1,25	100	9	7	11,45	22		55,64	**122**		
M12x1,25	1,25	100	9	7	11,45	22	6			62,89	**122**
M12x1,5	1,50	100	9	7	11,35	22		50,37	**124**		
M12x1,5	1,50	100	9	7	11,35	22	6			56,16	**124**
M14x1,5	1,50	100	11	9	13,35	22		62,47	**144**		
M14x1,5	1,50	100	11	9	13,35	22	6			69,71	**144**
M16x1,5	1,50	100	12	9	15,35	22		71,16	**162**		
M16x1,5	1,50	100	12	9	15,35	22	6			81,29	**162**

P	**18**	**18**
M	**10**	**10**
K	**10**	**10**
N	**22**	**22**
S		
H		
O		

Foro passante – Maschi a macchina destri

G | Stabil



DIN 5156 con codolo rastremato

	UNI	UNI	ST	NW (NEW)	VA
	B 4–5	B 4–5	B 4–5	B 4–5	B 4–5
	ISO 228	ISO 228	ISO 228	ISO 228	ISO 228
	nitr. + vap.	TiN		DLC	nitr.

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 1100 N/mm² ≤ 4xD	◁ 0° ≤ 750 N/mm² ≤ 4xD	◁ 0° ≤ 880 N/mm² ≤ 4xD	◁ 0° ≤ 900 N/mm² ≤ 4xD
	22 632 ...	22 630 ...	22 346 ...	22 467 ...	22 352 ...

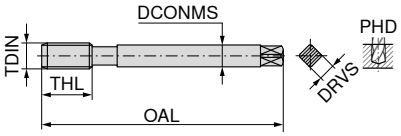
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 632 ... EUR U0		22 630 ... EUR U0		22 346 ... EUR U0		22 467 ... EUR U0		22 352 ... EUR U0	
1/8-28	0,907	90	7	5,5	8,80	18	3	60,80	**012**	81,98	**012**	46,06	**012**	60,62	**01200**	58,62	**012**
1/4-19	1,337	100	11	9,0	11,80	22	3	81,43	**025**	108,20	**025**	62,33	**025**	81,04	**02500**	76,75	**025**
3/8-19	1,337	100	12	9,0	15,25	22	3	101,50	**037**	126,60	**037**	74,77	**037**	104,00	**03700**	95,40	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	131,00	**050**	194,40	**050**	102,20	**050**	138,40	**05000**	126,60	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	208,50	**075**			163,80	**075**	219,30	**07500**	187,80	**075**
1-11	2,309	160	25	20,0	30,75	30	4	323,10	**100**			234,70	**100**	322,80	**10000**	287,10	**100**

P	**12**	**15**	**12**		**8**
M	**7**	**9**			**6**
K	**12**	**18**	**12**		
N		**12**	**22**	**15**	**22**
S					
H					
O					

Foro passante – Maschi a macchina destri

G

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



DIN 5156 con codolo rastremato

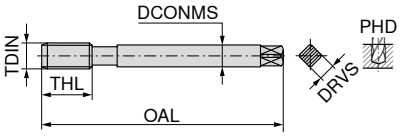
	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 3xD	0° ≤ 1100 N/mm² ≤ 3xD
	23 161 ...	**23 160 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9	
1/8-28	0,907	90	7	5,5	8,80	18	3	16,03	**012**	29,58	**012**
1/4-19	1,337	100	11	9,0	11,80	22	3	21,62	**025**	39,10	**025**
3/8-19	1,337	100	12	9,0	15,25	22	3	26,48	**037**	46,03	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	36,61	**050**	70,64	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	71,68	**075**	92,47	**075**
1-11	2,309	160	25	20,0	30,75	30	4	79,12	**100**	170,60	**100**

P	**12**	**15**
M	**7**	**9**
K	**12**	**18**
N		**12**
S		
H		
O		

Foro cieco – Maschi a macchina destri

G | Salo-Rex



DIN 5156 con codolo rastremato

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	HSS-E	HSS-E	HSS-E	HSS-E	
◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 1100 N/mm² ≤ 3xD	
22 633 ...	**22 634 ...**	**22 635 ...**	**22 636 ...**	**22 639 ...**	

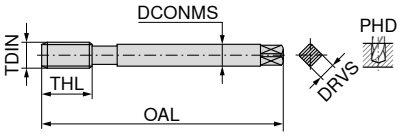
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0		EUR U0		EUR U0		EUR U0	
1/8-28	0,907	90	7	5,5	8,80	10	3	60,80	**012**	85,37	**012**						
1/8-28	0,907	90	7	5,5	8,80	10	4					62,33	**012**	85,37	**012**	81,98	**012**
1/4-19	1,337	100	11	9,0	11,80	15	4	85,37	**025**	106,90	**025**						
1/4-19	1,337	100	11	9,0	11,80	15	5					82,64	**025**	106,90	**025**	108,20	**025**
3/8-19	1,337	100	12	9,0	15,25	15	4	104,80	**037**	150,60	**037**						
3/8-19	1,337	100	12	9,0	15,25	15	5					102,20	**037**	150,60	**037**	134,20	**037**
1/2-14	1,814	125	16	12,0	19,00	17	4	138,60	**050**	216,20	**050**						
1/2-14	1,814	125	16	12,0	19,00	17	5					133,20	**050**	209,60	**050**	172,40	**050**
5/8-14	1,814	125	18	14,5	21,00	17	4	170,40	**062**								
3/4-14	1,814	140	20	16,0	24,50	20	4	213,90	**075**								
3/4-14	1,814	140	20	16,0	24,50	20	5									262,00	**075**
7/8-14	1,814	150	22	18,0	28,25	22	5	294,70	**087**								
1-11	2,309	160	25	20,0	30,75	24	5	325,40	**100**								
1-11	2,309	160	25	20,0	30,75	24	6									399,50	**100**
1 1/4-11	2,309	170	32	24,0	39,50	25	6	524,00	**125**								
1 1/2-11	2,309	190	36	29,0	45,25	27	6	747,70	**150**								

P	**12**	**15**	**12**	**15**	**12**
M	**7**	**9**	**7**	**9**	**7**
K	**12**	**18**	**12**	**18**	**12**
N		**12**		**12**	
S					
H					
O					

Foro cieco – Maschi a macchina destri

▲ CNC = per maschiatura rigida su macchine CNC con mandrino a minima compensazione assiale

G | Salo-Rex



DIN 5156 con codolo rastremato

	UNI CNC	ST	NW (NEW)	VA	VA
	E 1,5–2	C 2–3	C 2–3	E 1,5–2	E 1,5–2
	ISO 228	ISO 228	ISO 228	ISO 228	ISO 228
	TiN GS		DLC	vap.	TiN GS

	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	◁ 45° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 750 N/mm² ≤ 3xD	◁ 36° ≤ 880 N/mm² ≤ 3xD	◁ 42° ≤ 900 N/mm² ≤ 3xD	◁ 45° ≤ 900 N/mm² ≤ 3xD
	22 624 ...	**22 354 ...**	**22 463 ...**	**22 355 ...**	**22 358 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 624 ... EUR U0		22 354 ... EUR U0		22 463 ... EUR U0		22 355 ... EUR U0		22 358 ... EUR U0	
1/8-28	0,907	90	7	5,5	8,80	10	3			52,07	012	67,44	01200			99,33	012
1/8-28	0,907	90	7	5,5	8,80	10	4	97,58	012					62,33	012		
1/4-19	1,337	100	11	9,0	11,80	15	4			72,70	025	97,39	02500				
1/4-19	1,337	100	11	9,0	11,80	15	5	127,70	025					82,64	025	128,80	025
3/8-19	1,337	100	12	9,0	15,25	15	4			88,86	037	116,10	03700				
3/8-19	1,337	100	12	9,0	15,25	15	5	151,70	037					102,20	037	154,00	037
1/2-14	1,814	125	16	12,0	19,00	17	4			114,60	050	148,30	05000				
1/2-14	1,814	125	16	12,0	19,00	17	5	229,30	050					130,00	050	232,60	050
5/8-14	1,814	125	18	14,5	21,00	17	5							170,40	062		
3/4-14	1,814	140	20	16,0	24,50	20	4			182,30	075	236,40	07500				
3/4-14	1,814	140	20	16,0	24,50	20	5							218,40	075		
1-11	2,309	160	25	20,0	30,75	24	5			277,30	100	378,70	10000				
1-11	2,309	160	25	20,0	30,75	24	6							321,00	100		
P									15		12				8		10
M									9						6		8
K									18		12						
N									12		22		15		22		22
S																	
H																	
O																	

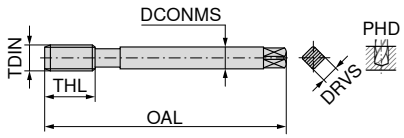
6

Foro cieco – Maschi a macchina destri

G

UNI C 2–3 ISO 228 vap.

UNI C 2–3 ISO 228 TiN



DIN 5156 con codolo rastremato

	HSS-E	HSS-E
	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD
	23 163 ...	**23 162 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9	
1/8-28	0,907	90	7	5,5	8,80	10	3	16,76	**012**	30,83	**012**
1/4-19	1,337	100	11	9,0	11,80	15	4	23,89	**025**	42,41	**025**
3/8-19	1,337	100	12	9,0	15,25	15	4	34,75	**037**	50,06	**037**
1/2-14	1,814	125	16	12,0	19,00	17	4	44,78	**050**	75,40	**050**
3/4-14	1,814	140	20	16,0	24,50	20	4	68,67	**075**	96,81	**075**
1-11	2,309	160	25	20,0	30,75	24	5	95,57	**100**	184,10	**100**

P	**12**	**15**
M	**7**	**9**
K	**12**	**18**
N		**12**
S		
H		
O		

Foro passante / foro cieco – Maschi a macchina destri

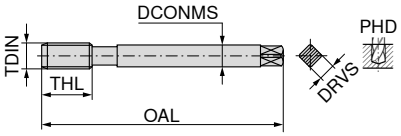
G | TWIN

ST | HR

C 2–3 | C 2–3

ISO 228 X | ISO 228 X

nitr.



DIN 5156 con codolo rastremato

HSS-E
0°
≤ 750 N/mm²
≤ 2xD

HSS-E
0°
≤ 1400 N/mm²
≤ 2xD

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 347 ... EUR U0		22 339 ... EUR U0	
1/16-28	0,907	90	6	4,9	6,80	17	3	53,92	**006**		
1/8-28	0,907	90	7	5,5	8,80	18	4	50,00	**012**	50,65	**012**
1/4-19	1,337	100	11	9,0	11,80	22	4	60,26	**025**	68,11	**025**
3/8-19	1,337	100	12	9,0	15,25	22	4	73,36	**037**	85,37	**037**
1/2-14	1,814	125	16	12,0	19,00	25	4	100,90	**050**	117,90	**050**
3/4-14	1,814	140	20	16,0	24,50	28	4	154,00	**075**	185,50	**075**
1-11	2,309	160	25	20,0	30,75	30	5	235,80	**100**	253,30	**100**
1 1/8-11	2,309	170	28	22,0	35,50	30	5	330,80	**112**	358,00	**112**
1 1/4-11	2,309	170	32	24,0	39,50	30	6	390,80	**125**	421,30	**125**
1 3/8-11	2,309	180	36	29,0	41,75	32	6	477,00	**137**	524,00	**137**
1 1/2-11	2,309	190	36	29,0	45,25	32	6	520,70	**150**	584,00	**150**
1 3/4-11	2,309	190	40	32,0	51,00	32	6			788,10	**175**

P	**12**	**6**
M		
K	**12**	**16**
N	**22**	**22**
S		
H		
O		

6

Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

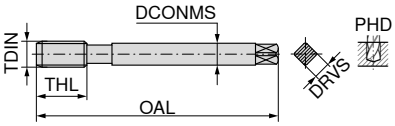
G | Spanlos

EC | EC SN

C 2–3 | C 2–3

ISO 228 | ISO 228

TiN | TiN



DIN 2189 con codolo rastremato

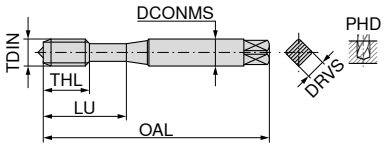
								HSS-E ≤ 1100 N/mm² ≤ 1,5xD		HSS-E ≤ 1100 N/mm² ≤ 3xD	
								22 360 ...		**22 359 ...**	
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0		EUR U0	
1/8-28	0,907	90	7	5,5	9,25	18		97,70	**012**		
1/8-28	0,907	90	7	5,5	9,25	18	5			110,20	**012**
1/4-19	1,337	100	11	9,0	12,55	22		125,60	**025**		
1/4-19	1,337	100	11	9,0	12,55	22	6			138,60	**025**
3/8-19	1,337	100	12	9,0	16,05	22		169,20	**037**		
3/8-19	1,337	100	12	9,0	16,05	22	6			189,90	**037**
1/2-14	1,814	125	16	12,0	20,10	25		225,90	**050**		
1/2-14	1,814	125	16	12,0	20,10	25	6			254,30	**050**

P	**18**	**18**
M	**10**	**10**
K	**10**	**10**
N	**22**	**22**
S		
H		
O		

Foro passante – Maschi a macchina destri

UNC | Stabil

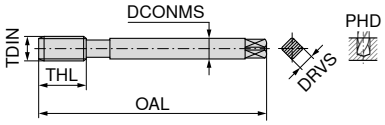
VA	Ti	UNI
B 4–5	B 4–5	B 4–5
2B	2BX	2B
nitr.	TiN	nitr. + vap.



DIN 371 con codolo rinforzato

	HSS-E	HSS-PM	HSS-E
	0° ≤ 900 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD	0° ≤ 1100 N/mm² ≤ 4xD
	22 250 ...	22 269 ...	22 572 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 250 ... EUR U0		22 269 ... EUR U0		22 572 ... EUR U0	
Nr. 2-56	0,454	45	2,8	2,1	1,85	7	12	2					79,58	**002**
Nr. 4-40	0,635	56	3,5	2,7	2,35	11	18	2					43,76	**004**
Nr. 4-40	0,635	56	3,5	2,7	2,35	11	18	3			70,08	**004**		
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	37,33	**006**	61,67	**006**	39,08	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	36,68	**008**	62,98	**008**	37,00	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	36,68	**010**	63,64	**010**	41,70	**010**
Nr. 12-24	1,058	80	6,0	4,9	4,50	16	30	3					50,00	**012**
1/4-20	1,270	80	7,0	5,5	5,10	17	30	3	46,61	**025**	67,34	**025**	45,07	**025**
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3	47,05	**031**	74,77	**031**	51,85	**031**
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3	47,70	**037**	87,32	**037**	57,63	**037**



DIN 376 con codolo rastremato

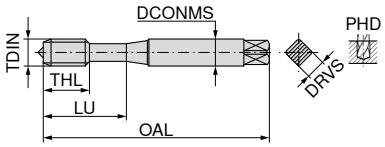
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 573 ... EUR U0	
1/2-13	1,954	110	9	7,0	10,80	25	3	68,77	**050**
5/8-11	2,309	110	12	9,0	13,50	27	3	96,16	**062**
3/4-10	2,540	125	14	11,0	16,50	30	3	119,00	**075**
7/8-9	2,822	140	18	14,5	19,50	32	3	151,70	**087**
1-8	3,175	160	18	14,5	22,25	36	3	193,20	**100**

P	**8**	**7**	**12**
M	**6**	**7**	**7**
K			**12**
N	**22**		
S		**5**	
H			
O			

Foro passante – Maschi a macchina destri

UNC

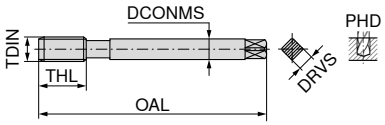
UNI	FE-HF	VA
B 4–5	B 4–5	B 4–5
2B	2B	2B
TiN	TiCN	nitr.



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-E
	0° ≤ 1000 N/mm² ≤ 3xD	0° ≤ 1100 N/mm² ≤ 3xD	0° ≤ 1000 N/mm² ≤ 3xD
	23 170 ...	23 370 ...	23 470 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2	19,35	**004**	27,41	**004**	16,03	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	18,62	**006**	26,58	**006**	14,89	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	18,62	**008**	26,58	**008**	14,48	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	19,35	**010**	27,62	**010**	16,03	**010**
1/4-20	1,270	80	7,0	5,5	5,20	17	30	3	25,45	**025**	38,37	**025**	17,17	**025**
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3	27,82	**031**	41,79	**031**	19,55	**031**
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3	33,10	**037**	49,34	**037**	22,14	**037**



DIN 376 con codolo rastremato

	23 171 ...	23 371 ...	23 471 ...

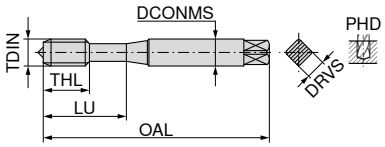
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9	
7/16-14	1,814	100	8	6,2	9,40	22	3	38,48	**043**	57,09	**043**	27,72	**043**
1/2-13	1,954	110	9	7,0	10,75	25	3	43,03	**050**	64,85	**050**	30,31	**050**
5/8-11	2,309	110	12	9,0	13,50	27	3	53,68	**062**	78,30	**062**	39,10	**062**
3/4-10	2,540	125	14	11,0	16,50	30	3	81,29	**075**	123,10	**075**	50,26	**075**

P	**15**	**15**	**8**
M	**9**		**6**
K	**18**	**15**	
N	**12**	**15**	**22**
S			
H			
O			

Foro cieco – Maschi a macchina destri

UNC | Salo-Rex

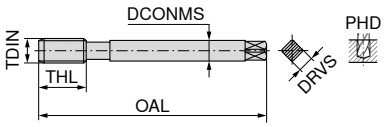
UNI	VA
C 2–3	C 2–3
2B	2B
vap.	vap.



DIN 371 con codolo rinforzato

	HSS-E	HSS-E
	◁ 42° ≤ 1100 N/mm² ≤ 3xD	◁ 42° ≤ 900 N/mm² ≤ 3xD
	22 582 ...	**22 266 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
Nr. 2-56	0,454	45	2,8	2,1	1,85	4,5	12	2	63,64	**002**		
Nr. 4-40	0,635	56	3,5	2,7	2,35	6,0	18	2	39,73	**004**		
Nr. 6-32	0,794	56	4,0	3,0	2,85	7,0	20	3	34,82	**006**	38,09	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	8,0	21	3	37,33	**008**	40,72	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	10,0	25	3	39,08	**010**	43,33	**010**
1/4-20	1,270	80	7,0	5,5	5,10	13,0	30	3	42,02	**025**	44,31	**025**
5/16-18	1,411	90	8,0	6,2	6,60	14,0	35	3	44,75	**031**	50,20	**031**
3/8-16	1,588	100	10,0	8,0	8,00	16,0	39	3	50,20	**037**	52,07	**037**



DIN 376 con codolo rastremato

									22 583 ...		**22 267 ...**	
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature		EUR U0		EUR U0	
7/16-14	1,814	100	8	6,2	9,40	18	3		68,77	**043**		
7/16-14	1,814	100	8	6,2	9,40	18	4				87,32	**043**
1/2-13	1,954	110	9	7,0	10,80	20	3		68,77	**050**		
1/2-13	1,954	110	9	7,0	10,80	20	4				76,75	**050**
9/16-12	2,117	110	11	9,0	12,25	20	3		97,58	**056**		
5/8-11	2,309	110	12	9,0	13,50	22	3		90,60	**062**		
5/8-11	2,309	110	12	9,0	13,50	22	4				98,79	**062**
3/4-10	2,540	125	14	11,0	16,50	25	3		116,80	**075**		
3/4-10	2,540	125	14	11,0	16,50	25	4				121,10	**075**
7/8-9	2,822	140	18	14,5	19,50	27	4		139,70	**087**		
1-8	3,175	160	18	14,5	22,25	30	4		189,90	**100**		
1-8	3,175	160	18	14,5	22,25	30	5				203,00	**100**

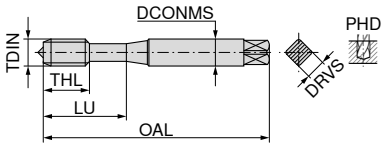
P	**12**	**8**
M	**7**	**6**
K	**12**	
N		**22**
S		
H		
O		

6

Foro cieco – Maschi a macchina destri

UNC

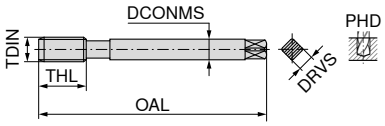
UNI	FE-HF	VA
C 2–3	C 2–3	C 2–3
2B	2B	2B
TiN	TiCN	



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-E
	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 1000 N/mm² ≤ 2,5xD
	23 172 ...	**23 372 ...**	**23 472 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	23 172 ... EUR T9		23 372 ... EUR T9		23 472 ... EUR T9	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2			21,92	004		
Nr. 4-40	0,635	56	3,5	2,7	2,30	6	18	2	20,89	004			26,48	004
Nr. 6-32	0,794	56	4,0	3,0	2,85	7	20	3	19,23	006			24,83	006
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3			20,79	006		
Nr. 8-32	0,794	63	4,5	3,4	3,50	8	21	3	20,69	008			25,75	008
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3			22,03	008		
Nr. 10-24	1,058	70	6,0	4,9	3,90	10	25	3	21,41	010			26,79	010
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3			22,76	010		
1/4-20	1,270	80	7,0	5,5	5,20	13	30	3	27,62	025			30,09	025
1/4-20	1,270	80	7,0	5,5	5,20	17	30	3			30,71	025		
5/16-18	1,411	90	8,0	6,2	6,60	14	35	3	27,62	031			31,75	031
5/16-18	1,411	90	8,0	6,2	6,60	20	35	3			31,96	031		
3/8-16	1,588	100	10,0	8,0	8,00	16	39	3	33,82	037			35,47	037
3/8-16	1,588	100	10,0	8,0	8,00	22	39	3			38,06	037		



DIN 376 con codolo rastremato

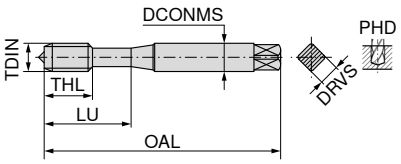
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	23 173 ... EUR T9		23 373 ... EUR T9		23 473 ... EUR T9	
7/16-14	1,814	100	8	6,2	9,40	22	3			47,47	043		
7/16-14	1,814	100	8	6,2	9,40	18	3	42,82	043			49,13	043
1/2-13	1,954	110	9	7,0	10,75	20	3	45,20	050			48,41	050
1/2-13	1,954	110	9	7,0	10,75	25	3			51,30	050		
5/8-11	2,309	110	12	9,0	13,50	22	3	55,64	062			67,95	062
5/8-11	2,309	110	12	9,0	13,50	27	3			61,44	062		
3/4-10	2,540	125	14	11,0	16,50	25	3	84,19	075			83,36	075
3/4-10	2,540	125	14	11,0	16,50	30	3			96,29	075		

P	15	15	8
M	9		6
K	18	15	
N	12	24	22
S			
H			
O			

Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

UNC | Spanlos



DIN 2174 con codolo rastremato

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

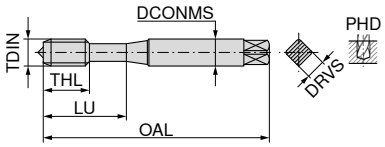
	HSS-E ≤ 1100 N/mm² ≤ 1,5xD		HSS-E ≤ 1100 N/mm² ≤ 3xD	
	22 270 ...		**22 271 ...**	
TDIN TP mm, OAL mm, DCONMS mm, DRVS mm, PHD mm, THL mm, LU mm, Scanalature	EUR U0		EUR U0	
Nr. 4-40 0,635 56 3,5 2,7 2,55 11 18	56,11	**004**		
Nr. 4-40 0,635 56 3,5 2,7 2,55 11 18 3			64,84	**004**
Nr. 6-32 0,794 56 4,0 3,0 3,15 12 20	52,28	**006**		
Nr. 6-32 0,794 56 4,0 3,0 3,15 12 20 3			60,26	**006**
Nr. 8-32 0,794 63 4,5 3,4 3,80 13 21	52,50	**008**		
Nr. 8-32 0,794 63 4,5 3,4 3,80 13 21 4			60,26	**008**
Nr. 10-24 1,058 70 6,0 4,9 4,35 15 25	58,50	**010**		
Nr. 10-24 1,058 70 6,0 4,9 4,35 15 25 4			66,25	**010**
1/4-20 1,270 80 7,0 5,5 5,75 17 30	68,00	**025**		
1/4-20 1,270 80 7,0 5,5 5,75 17 30 4			76,75	**025**
5/16-18 1,411 90 8,0 6,2 7,30 20 35	73,36	**031**		
5/16-18 1,411 90 8,0 6,2 7,30 20 35 5			83,07	**031**
3/8-16 1,588 100 10,0 8,0 8,80 22 39	87,98	**037**		
3/8-16 1,588 100 10,0 8,0 8,80 22 39 5			96,71	**037**
P		**18**		**18**
M		**10**		**10**
K		**10**		**10**
N		**22**		**22**
S				
H				
O				

6

Foro passante – Maschi a macchina per filetti riportati destri

EG UNC | Stabil

UNI | B 4–5 | 2B | nitr. + vap.

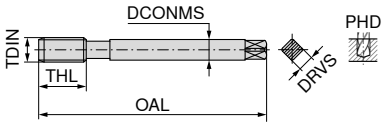


DIN 371 con codolo rinforzato

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

22 668 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
EG Nr. 4-40	0,635	63	4,5	3,4	3,1	13	21	3	57,63	**004**
EG Nr. 6-32	0,794	70	6,0	4,9	3,8	14	25	3	59,71	**006**
EG Nr. 8-32	0,794	80	6,0	4,9	4,4	16	30	3	57,31	**008**
EG Nr. 10-24	1,058	80	7,0	5,5	5,2	17	30	3	62,33	**010**
EG 1/4-20	1,270	90	8,0	6,2	6,7	20	35	3	64,40	**025**
EG 5/16-18	1,411	100	10,0	8,0	8,4	22	39	3	74,12	**031**



DIN 376 con codolo rastremato

22 670 ...

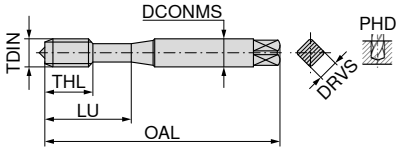
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
EG 3/8-16	1,588	100	9	7,0	10,00	22	3	85,37	**037**
EG 7/16-14	1,814	110	11	9,0	11,60	26	3	103,40	**043**
EG 1/2-13	1,954	110	12	9,0	13,30	27	3	110,20	**050**
EG 5/8-11	2,309	125	14	11,0	16,50	30	3	137,50	**062**
EG 3/4-10	2,540	140	18	14,5	19,75	32	3	179,00	**075**

P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

Foro cieco – Maschi a macchina per filetti riportati destri

EG UNC | Salo-Rex

UNI | E 1,5–2 | 2B | vap.



DIN 371 con codolo rinforzato

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

22 672 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
EG Nr. 4-40	0,635	63	4,5	3,4	3,1	7	21	3	58,40	**004**
EG Nr. 6-32	0,794	70	6,0	4,9	3,8	8	25	3	54,68	**006**
EG Nr. 8-32	0,794	80	6,0	4,9	4,4	8	30	3	58,07	**008**
EG Nr. 10-24	1,058	80	7,0	5,5	5,2	10	30	3	61,02	**010**
EG 1/4-20	1,270	90	8,0	6,2	6,7	14	35	3	67,34	**025**
EG 5/16-18	1,411	100	10,0	8,0	8,4	16	39	3	72,70	**031**

P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

6

Foro cieco – Maschi a macchina destri

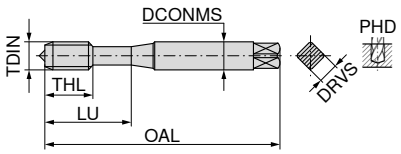
UNJC | SL

Ti

C
2–3

3BX

TiCN



DIN 371 con codolo rinforzato

HSS-E
15°
≤ 1200 N/mm²
≤ 2xD

22 166 ...

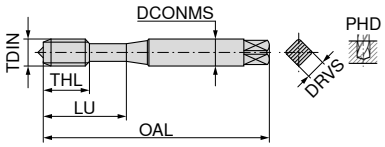
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
Nr. 4-40	0,635	56	3,5	2,7	2,30	11	18	2	76,75	**004**
Nr. 6-32	0,794	56	4,0	3,0	2,85	12	20	3	78,37	**006**
Nr. 8-32	0,794	63	4,5	3,4	3,50	13	21	3	77,29	**008**
Nr. 10-24	1,058	70	6,0	4,9	3,90	15	25	3	81,33	**010**
1/4-20	1,270	80	7,0	5,5	5,25	17	30	3	104,30	**025**
3/8-16	1,588	100	10,0	8,0	8,10	22	39	3	126,60	**037**

P	**7**
M	**7**
K	
N	**22**
S	**5**
H	
O	

Foro passante – Maschi a macchina destri

UNF | Stabil

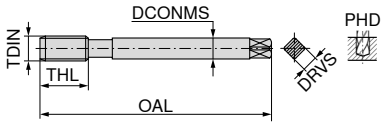
UNI	Ti
B 4–5	B 4–5
2B	2BX
nitr. + vap.	TiN



DIN 371 con codolo rinforzato

	HSS-E	HSS-PM
	0° ≤ 1100 N/mm² ≤ 4xD	0° ≤ 44 HRC ≤ 4xD
	22 602 ...	22 317 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
Nr. 4-48	0,529	56	3,5	2,7	2,40	11	18	2	53,37	**004**		
Nr. 4-48	0,529	56	3,5	2,7	2,40	11	18	3			75,31	**004**
Nr. 5-44	0,577	56	3,5	2,7	2,70	11	18	3			82,64	**005**
Nr. 6-40	0,635	56	4,0	3,0	2,95	12	20	3	47,37	**006**	65,70	**006**
Nr. 8-36	0,706	63	4,5	3,4	3,50	13	21	3	47,37	**008**	75,86	**008**
Nr. 10-32	0,794	70	6,0	4,9	4,10	15	25	3	48,79	**010**	68,77	**010**
1/4-28	0,907	80	7,0	5,5	5,50	17	30	3	53,59	**025**	77,29	**025**
5/16-24	1,058	90	8,0	6,2	6,90	17	35	3	60,47	**031**	88,31	**031**
3/8-24	1,058	90	10,0	8,0	8,50	18	35	3			93,44	**037**



DIN 374 con codolo rastremato

	22 603 ...		22 421 ...	
TDIN	**EUR U0**		**EUR U0**	
7/16-20	72,15	**043**		
1/2-20	68,77	**050**	113,50	**050**
9/16-18	106,00	**056**		
5/8-18	96,71	**062**		
3/4-16	122,30	**075**		
7/8-14	159,40	**087**		
1-12	206,30	**100**		
1 1/8-12	542,50	**112**		
1 1/4-12	594,90	**125**		
1 3/8-12	626,60	**137**		

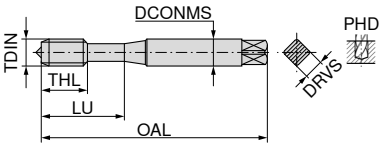
TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature
1,270	100	8	6,2	9,90	22	3
1,270	100	9	7,0	11,50	22	3
1,411	100	11	9,0	12,90	22	3
1,411	100	12	9,0	14,50	22	3
1,588	110	14	11,0	17,50	25	4
1,814	125	18	14,5	20,50	25	4
2,117	140	18	14,5	23,25	28	4
2,117	150	22	18,0	26,50	28	4
2,117	150	22	18,0	29,75	28	4
2,117	170	28	22,0	33,00	30	5

P	**12**	**7**
M	**7**	**7**
K	**12**	
N		**22**
S		**5**
H		
O		

Foro passante – Maschi a macchina destri

UNF

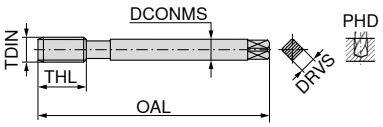
UNI	FE	VA
B 4–5	B 4–5	B 4–5
2B	2B	2B
TiN		nitr.



DIN 371 con codolo rinforzato

	HSS-E	HSS-E	HSS-E
	0° ≤ 1100 N/mm² ≤ 3xD	0° ≤ 850 N/mm² ≤ 3xD	0° ≤ 1100 N/mm² ≤ 3xD
	23 180 ...	23 280 ...	23 480 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR T9		EUR T9		EUR T9	
Nr. 10-32	0,794	70	6	4,9	4,1	15	25	3	22,34	**010**	27,10	**010**	18,41	**010**
1/4-28	0,907	80	7	5,5	5,5	17	30	3	28,54	**025**	29,17	**025**	20,79	**025**
5/16-24	1,058	90	8	6,2	6,9	17	35	3	31,75	**031**	32,27	**031**	22,96	**031**
3/8-24	1,058	90	10	8,0	8,5	18	35	4	34,65	**037**	33,62	**037**	23,99	**037**



DIN 374 con codolo rastremato

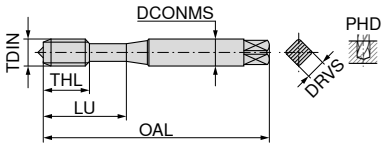
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR T9		EUR T9		EUR T9	
								23 181 ...		23 281 ...		23 481 ...	
7/16-20	1,270	100	8	6,2	9,9	22	3	41,69	**043**	43,23	**043**	30,71	**043**
1/2-20	1,270	100	9	7,0	11,5	22	3	43,03	**050**	43,23	**050**	30,71	**050**
9/16-18	1,411	100	11	9,0	12,9	22	3	58,55	**056**	53,68	**056**	38,06	**056**
5/8-18	1,411	100	12	9,0	14,5	22	3	54,20	**062**	48,41	**062**	34,44	**062**
3/4-16	1,588	110	14	11,0	17,5	25	4	82,23	**075**	63,09	**075**	44,88	**075**

P	**15**	**12**	**8**
M	**9**		**6**
K	**18**	**12**	
N	**12**	**22**	**22**
S			
H			
O			

Foro cieco – Maschi a macchina destri

UNF | Salo-Rex

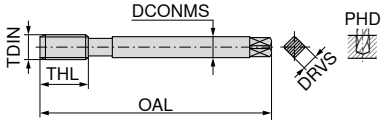
VA	UNI	UNI
E 1,5–2	C 2–3	E 1,5–2
2B	2B	2B +0,05
vap.	vap.	vap.



DIN 371 con codolo rinforzato

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

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 308 ... EUR U0		22 606 ... EUR U0		22 307 ... EUR U0	
Nr. 2-64	0,397	45	2,8	2,1	1,85	4,5	12	2	65,50	002				
Nr. 4-48	0,529	56	3,5	2,7	2,40	6,0	18	2	49,34	004	47,37	004		
Nr. 6-40	0,635	56	4,0	3,0	2,95	7,0	20	3	47,37	006	42,02	006		
Nr. 6-40	0,635	56	4,0	3,0	3,00	7,0	20	3					66,25	006
Nr. 8-36	0,706	63	4,5	3,4	3,50	8,0	21	3	47,37	008	42,02	008		
Nr. 10-32	0,794	70	6,0	4,9	4,10	10,0	25	3	50,65	010	44,31	010		
Nr. 10-32	0,794	70	6,0	4,9	4,15	10,0	25	3					70,08	010
1/4-28	0,907	80	7,0	5,5	5,50	10,0	30	3	52,07	025	48,46	025		
1/4-28	0,907	80	7,0	5,5	5,55	10,0	30	3					73,36	025
5/16-24	1,058	90	8,0	6,2	6,90	10,0	35	3	58,07	031	54,68	031		
5/16-24	1,058	90	8,0	6,2	6,95	10,0	35	3					83,50	031
3/8-24	1,058	90	10,0	8,0	8,50	10,0	35	3	60,80	037				
3/8-24	1,058	90	10,0	8,0	8,55	10,0	35	3					83,50	037



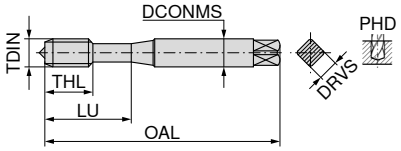
DIN 374 con codolo rastremato

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	22 607 ... EUR U0		22 409 ... EUR U0	
7/16-20	1,270	100	8	6,2	9,90	13	3	68,77	043		
7/16-20	1,270	100	8	6,2	9,95	13	4			105,50	043
1/2-20	1,270	100	9	7,0	11,50	13	4	68,77	050		
1/2-20	1,270	100	9	7,0	11,55	13	5			101,50	050
9/16-18	1,411	100	11	9,0	12,90	15	4	103,40	056		
9/16-18	1,411	100	11	9,0	12,95	15	5			144,10	056
5/8-18	1,411	100	12	9,0	14,50	15	4	90,60	062		
5/8-18	1,411	100	12	9,0	14,55	15	5			131,00	062
3/4-16	1,588	110	14	11,0	17,50	17	4	124,50	075		
3/4-16	1,588	110	14	11,0	17,55	17	5			176,90	075
7/8-14	1,814	125	18	14,5	20,50	17	4	150,60	087		
1-12	2,117	140	18	14,5	23,25	20	4	213,90	100		
1-12	2,117	140	18	14,5	23,30	20	5			277,30	100
1 1/8-12	2,117	150	22	18,0	26,50	22	4	291,50	112		
1 1/4-12	2,117	150	22	18,0	29,75	22	5	332,90	125		
1 3/8-12	2,117	170	28	22,0	33,00	24	5	405,00	137		

P	8	12	12
M	6	7	7
K		12	12
N	22		22
S			
H			
O			

Foro cieco – Maschi a macchina destri

UNF | SL



DIN 371 con codolo rinforzato

Ti	Ti	
C 2–3	C 2–3	
2BX	3BX	
vap.	vap.	

HSS-PM
◁ 30°
≤ 1400 N/mm²
≤ 1,5xD

HSS-PM
◁ 30°
≤ 1400 N/mm²
≤ 1,5xD

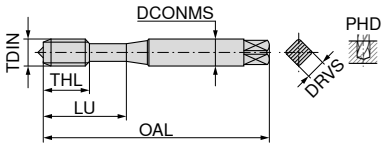
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	22 302 ... EUR U0		22 303 ... EUR U0	
Nr. 10-32	0,794	70	6	4,9	4,1	10	25	3	92,12	**010**	92,12	**010**
1/4-28	0,907	80	7	5,5	5,5	10	30	3	100,10	**025**	100,10	**025**
5/16-24	1,058	90	8	6,2	6,9	10	35	3	119,00	**031**	108,20	**031**
3/8-24	1,058	90	10	8,0	8,5	10	35	3	117,90	**037**	117,90	**037**

P	**5**	**5**
M	**5**	**5**
K		
N	**22**	**22**
S	**3**	**3**
H		
O		

Foro cieco – Maschi a macchina destri

UNF

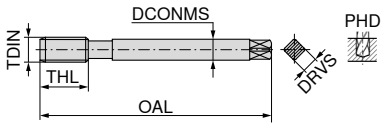
UNI	VA
C 2–3	C 2–3
2B	2B
TiN	



DIN 371 con codolo rinforzato

	HSS-E	HSS-E
	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD	◁ 35° ≤ 1100 N/mm² ≤ 2,5xD
	23 182 ...	**23 482 ...**

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanala-ture	EUR T9		EUR T9	
Nr. 10-32	0,794	70	6	4,9	4,1	10	25	3	23,58	**010**	31,44	**010**
1/4-28	0,907	80	7	5,5	5,5	10	30	3	30,20	**025**	34,34	**025**
5/16-24	1,058	90	8	6,2	6,9	10	35	3	31,96	**031**	36,41	**031**
3/8-24	1,058	90	10	8,0	8,5	10	35	3	35,58	**037**	39,51	**037**



DIN 374 con codolo rastremato

									23 183 ...		**23 483 ...**	
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanala-ture		EUR T9		EUR T9	
7/16-20	1,270	100	8	6,2	9,9	13	3		42,82	**043**	49,13	**043**
1/2-20	1,270	100	9	7,0	11,5	13	4		45,20	**050**	49,54	**050**
9/16-18	1,411	100	11	9,0	12,9	15	4		61,02	**056**	69,51	**056**
5/8-18	1,411	100	12	9,0	14,5	15	4		55,23	**062**	61,02	**062**
3/4-16	1,588	110	14	11,0	17,5	17	4		87,60	**075**	82,54	**075**
P										**15**		**8**
M										**9**		**6**
K										**18**		
N										**12**		**22**
S												
H												
O												

Foro passante / foro cieco – Maschi a macchina destri

▲ SN = maschi a rullare con scanalature di lubrificazione

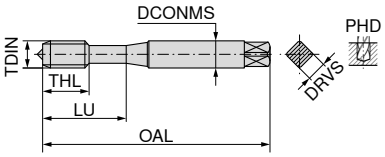
UNF | Spanlos

EC
SN

C
2–3

2BX

TiN

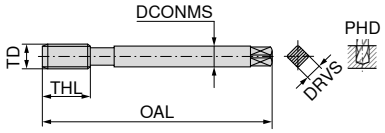


DIN 2174 con codolo rastremato

HSS-E
≤ 1100 N/mm²
≤ 3xD

22 312 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
Nr. 4-48	0,529	56	3,5	2,7	2,62	11	18	3	72,04	**004**
Nr. 6-40	0,635	56	4,0	3,0	3,22	12	20	3	66,91	**006**
Nr. 8-36	0,706	63	4,5	3,4	3,85	13	21	4	68,66	**008**
Nr. 10-32	0,794	70	6,0	4,9	4,45	15	25	4	74,22	**010**
1/4-28	0,907	80	7,0	5,5	5,95	17	30	4	87,11	**025**



DIN 2174 con codolo rastremato

22 313 ...

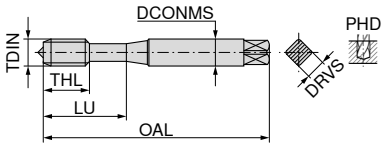
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
7/16-20	1,27	100	8	6,2	10,55	22	6	130,00	**043**
1/2-20	1,27	100	9	7,0	12,15	22	6	133,20	**050**

P	**18**
M	**10**
K	**10**
N	**22**
S	
H	
O	

Foro passante – Maschi a macchina per filetti riportati destri

EG UNF | Stabil

UNI | B 4–5 | 2B | nitr. + vap.

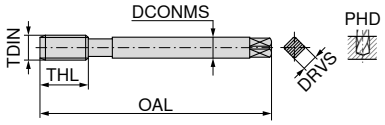


DIN 371 con codolo rinforzato

HSS-E
0°
≤ 1100 N/mm²
≤ 4xD

22 676 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanala-ture	EUR U0	
EG Nr. 4-48	0,529	56	4	3,0	3,0	9	20	3	74,77	**004**
EG Nr. 6-40	0,635	70	6	4,9	3,7	11	25	3	72,15	**006**
EG Nr. 8-36	0,706	80	6	4,9	4,4	13	30	3	72,15	**008**
EG Nr. 10-32	0,794	80	6	4,9	5,1	13	30	3	76,75	**010**
EG 1/4-28	0,907	90	8	6,2	6,6	17	35	3	81,98	**025**



DIN 374 con codolo rastremato

22 677 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanala-ture	EUR U0	
EG 3/8-24	1,058	90	8	6,2	9,80	18	4	100,10	**037**
EG 7/16-20	1,270	100	9	7,0	11,50	22	3	125,60	**043**
EG 1/2-20	1,270	100	11	9,0	13,10	22	3	117,90	**050**
EG 5/8-18	1,411	110	14	11,0	16,25	25	4	180,00	**062**
EG 3/4-16	1,588	125	16	12,0	19,50	25	4	230,30	**075**

P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

Foro cieco – Maschi a macchina per filetti riportati destri

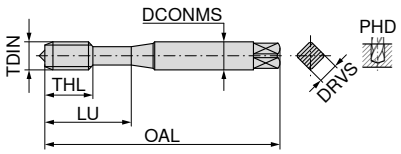
EG UNF | Salo-Rex

UNI

E 1,5–2

2B

vap.



DIN 371 con codolo rinforzato

HSS-E
42°
≤ 1100 N/mm²
≤ 3xD

22 680 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Scanalature	EUR U0	
EG Nr. 4-48	0,529	56	4	3,0	3,0	7	20	3	70,08	**004**
EG Nr. 6-40	0,635	70	6	4,9	3,7	8	25	3	69,54	**006**
EG Nr. 8-36	0,706	80	6	4,9	4,4	8	30	3	72,70	**008**
EG Nr. 10-32	0,794	80	6	4,9	5,1	8	30	3	76,75	**010**
EG 1/4-28	0,907	90	8	6,2	6,6	10	35	3	84,15	**025**

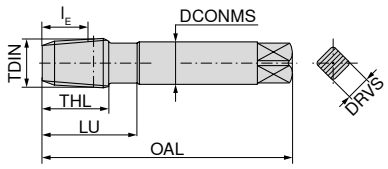
P	**12**
M	**7**
K	**12**
N	
S	
H	
O	

Foro cieco – Maschi a macchina destri

NPT | Salo-Rex

VA | C 2–3 | vap.

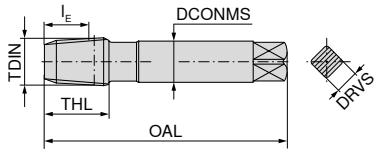
VA | C 2–3 | TiN



DIN 371 con codolo rinforzato

6

									HSS-E ◁ 35° ≤ 900 N/mm²		HSS-E ◁ 42° ≤ 1100 N/mm²	
									22 364 ...		**22 365 ...**	
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	LU mm	Scanalature	EUR U0		EUR U0	
1/16-27	0,941	90	8	6,2	9,24	13,0	26,0	3	95,40	**006**		
1/8-27	0,941	90	10	8,0	9,28	13,0	26,0	3	110,20	**012**		
1/8-27	0,941	90	10	8,0	9,28	12,0	26,0	4			144,10	**012**
1/4-18	1,411	100	14	11,0	13,55	19,5	34,5	3	128,80	**025**		
1/4-18	1,411	100	14	11,0	13,55	18,0	34,5	4			147,40	**025**



DIN 374 con codolo rastremato

									22 371 ...		**22 372 ...**	
TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Scanalature		EUR U0		EUR U0	
3/8-18	1,411	110	14	11	13,86	19,5	3		158,30	**037**		
3/8-18	1,411	110	14	11	13,86	18,0	5				239,10	**037**
1/2-14	1,814	140	16	12	18,11	25,0	5		230,30	**050**		
1/2-14	1,814	140	16	12	18,11	23,0	5				338,40	**050**
3/4-14	1,814	150	20	16	18,59	26,0	5		310,00	**075**		
1-11,5	2,209	170	25	20	22,31	32,0	5		454,10	**100**		

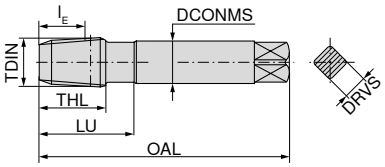
P	**4**	**5**
M	**3**	**4**
K		
N	**22**	**22**
S		
H		
O		

Foro passante / foro cieco – Maschi a macchina destri

NPT | TWIN

VG

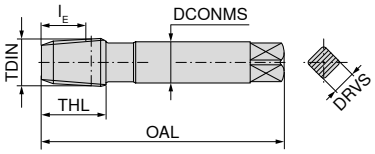
C
2–3



DIN 371 con codolo rinforzato

HSS-E
0°
≤ 1100 N/mm²

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	LU mm	Scanalature	22 374 ... EUR U0	
1/16-27	0,941	90	8	6,2	9,24	13,0	26,0	3	68,77	**006**
1/8-27	0,941	90	10	8,0	9,28	13,0	26,0	3	89,40	**012**
1/4-18	1,411	100	14	11,0	13,55	19,5	34,5	3	94,64	**025**



DIN 374 con codolo rastremato

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Scanalature	22 375 ... EUR U0	
3/8-18	1,411	110	14	11	13,86	19,5	3	117,90	**037**
1/2-14	1,814	140	16	12	18,11	25,0	5	158,30	**050**
3/4-14	1,814	150	20	16	18,59	26,0	5	204,20	**075**
1-11,5	2,209	170	25	20	22,31	30,0	5	279,40	**100**

P	**4**
M	
K	**6**
N	**22**
S	
H	
O	

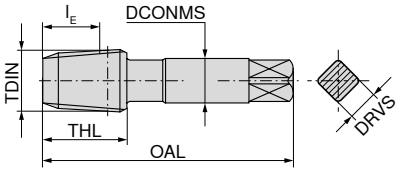
Foro passante / foro cieco – Maschi a macchina destri

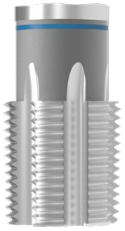
▲ ES = extracorto

NPT | TWIN

ST
ES

C
2–3





DIN 2181 con codolo rastremato

HSS-E
0°
≤ 750 N/mm²

6

22 361 ...

TDIN	TP mm	OAL mm	DCONMS mm	DRVS mm	l_E mm	THL mm	Scanalature	EUR U0	
1/16-27	0,941	63	6	4,9	9,24	13,0	4	58,62	**006**
1/8-27	0,941	63	7	5,5	9,28	13,0	5	61,67	**012**
1/4-18	1,411	63	11	9,0	13,55	19,5	5	73,36	**025**
3/8-18	1,411	70	12	9,0	13,86	19,5	5	92,12	**037**
1/2-14	1,814	80	16	12,0	18,11	23,0	5	123,40	**050**
3/4-14	1,814	100	20	16,0	18,59	26,0	6	155,00	**075**
1-11,5	2,209	110	25	20,0	22,31	32,0	6	231,30	**100**

P	**6**
M	
K	**6**
N	**22**
S	
H	
O	

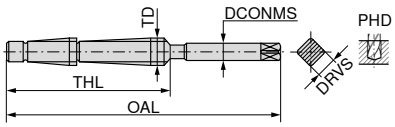
Foro passante – Maschi a macchina destri

- Maschi trapezoidali unici (2 gradini)
- Non eseguire il movimento di ritorno del maschio

Tr

ST

7H



Norma di fabbrica

HSS-E
5°
≤ 900 N/mm²
≤ 2xD

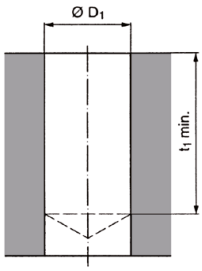
22 402 ...

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Scanalature	EUR U0	
Tr 8	1,5	105	6	4,9	6,60	55	3	513,00	**080**
Tr 9	2,0	130	7	5,5	7,20	70	3	513,00	**090**
Tr 10	2,0	130	7	5,5	8,20	70	3	513,00	**102**
Tr 10	3,0	155	7	5,5	7,25	95	3	472,70	**103**
Tr 12	3,0	160	9	7,0	9,25	95	3	566,60	**123**
Tr 14	3,0	170	10	8,0	11,25	100	3	657,00	**143**
Tr 14	4,0	195	10	8,0	10,25	125	3	555,70	**144**
Tr 16	4,0	225	12	9,0	12,25	130	3	555,70	**164**
Tr 18	4,0	225	14	11,0	14,25	116	3	573,10	**184**
Tr 20	4,0	225	16	12,0	16,25	130	3	663,70	**204**
Tr 22	5,0	260	16	12,0	17,25	160	3	772,90	**225**
Tr 24	5,0	285	18	14,5	19,25	165	3	894,00	**245**

P	●
M	
K	●
N	●
S	
H	
O	

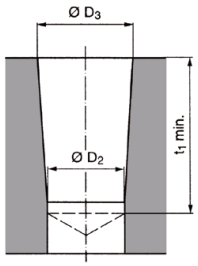
Diametri preforo per filetti conici, conicità 1:16

Preforo cilindrico senza l'impiego di un alesatore



		NPT		NPTF				Rc	
Ø d_1 poll.	Passo Fil./poll.	Ø D_1 mm	t_1 min. mm	Ø D_1 mm	t_1 min. mm	Ø d_1 poll.	Passo Fil./poll.	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				

Preforo cilindrico e alesatura conica con alesatore

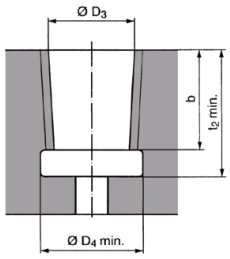


Conicità 1:16

		NPT			NPTF		
Ø d_1 poll.	Passo Fil./poll.	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 poll.	Passo Fil./poll.	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

Raccomandazioni per il preforo su fori ciechi



Conicità 1:16

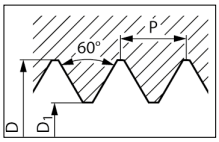
		NPT				NPTF			
Ø d_1 poll.	Passo Fil./poll.	Ø D_3 mm	b mm	t_2 min. mm	Ø D_4 mm	Ø D_3 mm	b mm	t_2 min. mm	Ø D_4 min. mm
1/16	27	6,39	7	10	7,6	6,41	8	11	7,4
1/8	27	8,74	7	10	10	8,76	8	11	9,8
1/4	18	11,36	10,2	14,5	13,1	11,4	11,6	15,5	12,9
3/8	18	14,8	10,6	15	16,5	14,84	12	16	16,3
1/2	14	18,32	13,8	19	20,5	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 poll.	Passo Fil./poll.	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

Maschiatura – diametro di preforatura

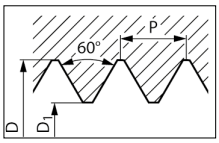
M Filetto ISO metrico fine 6H secondo DIN 13 e DIN ISO 965-1 (M1–M1,4 = 5H)

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



MF Filetto ISO metrico fine 6H secondo DIN 13 e DIN ISO 965-1

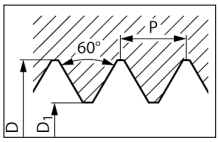
Ø nominale filetto			Ø D_1		Ø Preforo	Ø nominale filetto			Ø D_1		Ø Preforo
D	x	P	min.	max.		D	x	P	min.	max.	
M2	x	0,25	1,729	1,774	1,75	M20	x	1,0	18,917	19,153	19
M2,2	x	0,25	1,929	1,974	1,95	M20	x	1,5	18,376	18,676	18,5
M2,5	x	0,35	2,121	2,221	2,15	M20	x	2,0	17,835	18,210	18
M3	x	0,35	2,621	2,721	2,65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



Dimensioni in mm; P = passo

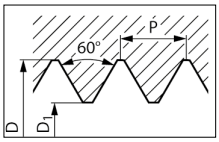
Rullatura – diametro di preforatura

M Filetto ISO metrico fine 6H secondo DIN 13 e DIN ISO 965-1 (M1–M1,4 = 5H)



Ø nominale filetto		Ø D_1		Ø Preforo	Ø nominale filetto		Ø D_1		Ø Preforo
D	P	min.	max.		D	P	min.	max.	
M1	0,25	0,89		0,9	M6	1	5,51	5,59	5,55
M1,2	0,25	1,09		1,1	M7	1	6,51	6,59	6,55
M1,4	0,3	1,26		1,26	M8	1,25	7,39	7,48	7,4
M1,6	0,35	1,45		1,45	M9	1,25	8,39	8,48	8,4
M1,8	0,35	1,65		1,65	M10	1,5	9,25	9,35	9,3
M2	0,4	1,83	1,86	1,85	M11	1,5	10,25	10,35	10,3
M2,2	0,45	2,00	2,04	2,0	M12	1,75	11,12	11,25	11,2
M2,5	0,45	2,30	2,34	2,3	M14	2	13,00	13,15	13,0
M3	0,5	2,77	2,82	2,8	M16	2	15,00	15,15	15,0
M3,5	0,6	3,23	3,28	3,25	M18	2,5	16,72	16,90	16,8
M4	0,7	3,68	3,73	3,7	M20	2,5	18,72	18,90	18,8
M4,5	0,75	4,15	4,21	4,15	M22	2,5	20,72	20,9	20,8
M5	0,8	4,63	4,68	4,65	M24	3	22,46	22,7	22,5

MF Filetto ISO metrico fine 6H secondo DIN 13 e DIN ISO 965-1



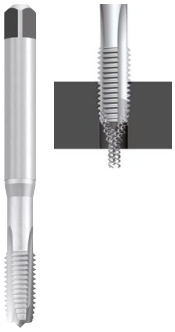
Ø nominale filetto			Ø D_1		Ø Preforo	Ø nominale filetto			Ø D_1		Ø Preforo
D	x	P	min.	max.		D	x	P	min.	max.	
M2	x	0,25	1,89		1,9	M12	x	1,0	11,52	11,6	11,5
M2,2	x	0,25	2,09		2,1	M12	x	1,25	11,4	11,49	11,4
M2,5	x	0,25	2,39		2,4	M12	x	1,5	11,26	11,36	11,3
M2,5	x	0,35	2,35		2,35	M13	x	0,75	12,66	12,72	12,7
M3	x	0,25	2,89		2,9	M13	x	1,0	12,52	12,6	12,5
M3	x	0,35	2,85		2,85	M13	x	1,5	12,26	12,36	12,3
M3,5	x	0,35	3,35		3,35	M14	x	0,75	13,66	13,72	13,7
M3,5	x	0,5	3,27	3,32	3,3	M14	x	1,0	13,52	13,6	13,5
M4	x	0,35	3,85		3,85	M14	x	1,25	13,4	13,49	13,4
M4	x	0,5	3,77	3,82	3,8	M14	x	1,5	13,26	13,36	13,3
M4,5	x	0,5	4,27	4,32	4,3	M15	x	0,75	14,66	14,72	14,7
M5	x	0,5	4,77	4,82	4,8	M15	x	1,0	14,52	14,6	14,5
M5	x	0,75	4,65	4,71	4,65	M15	x	1,5	14,26	14,36	14,3
M5,5	x	0,5	5,27	5,32	5,3	M16	x	0,75	15,66	15,72	15,7
M6	x	0,5	5,78	5,83	5,8	M16	x	1,0	15,52	15,6	15,5
M6	x	0,75	5,65	5,71	5,65	M16	x	1,5	15,26	15,36	15,3
M7	x	0,5	6,78	6,83	6,8	M18	x	1,0	17,52	17,6	17,5
M7	x	0,75	6,65	6,71	6,65	M18	x	1,5	17,26	17,36	17,3
M8	x	0,5	7,78	7,83	7,8	M18	x	2,0	17	17,15	17
M8	x	0,75	7,65	7,71	7,65	M20	x	1,0	19,52	19,6	19,5
M8	x	1,0	7,51	7,59	7,55	M20	x	1,5	19,26	19,36	19,3
M9	x	0,5	8,78	8,83	8,8	M20	x	2,0	19	19,15	19
M9	x	0,75	8,65	8,71	8,65	M22	x	1,5	21,26	21,36	21,3
M9	x	1,0	8,51	8,59	8,55	M22	x	2,0	21	21,15	21
M10	x	0,5	9,78	9,83	9,8	M24	x	1,5	23,26	23,38	23,3
M10	x	0,75	9,65	9,71	9,65	M24	x	2,0	23,01	23,16	23
M10	x	1,0	9,51	9,59	9,55	M25	x	1,5	24,26	24,38	24,3
M10	x	1,25	9,39	9,48	9,4	M26	x	1,5	25,26	25,38	25,3
M11	x	0,75	10,65	10,71	10,7	M27	x	2,0	26,01	26,16	26
M11	x	1,0	10,51	10,59	10,5	M28	x	1,5	27,26	27,38	27,25
M12	x	0,75	11,66	11,72	11,7	M30	x	1,5	29,26	29,38	29,25
						M30	x	2,0	29,01	29,16	29

Dimensioni in mm; P = passo

Tipi di maschi - dettagli e caratteristiche

Stabil

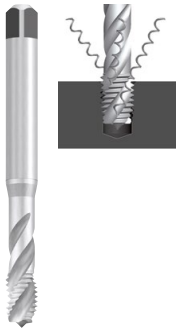
Maschi per fori passanti tipo Stabil



- Per filetti passanti fino a 4xD
- Forma d'imbocco B: imbocco 3,5–5 filetti, senza imbocco corretto
- Scanalature diritte
- Idoneo anche per maschiatura rigida, con attacco Weldon, esecuzione extralunga e refrigerazione interna
- Grazie alla geometria particolare delle scanalature il truciolo viene evacuato in direzione del taglio.

Salo-Rex

Maschi per fori ciechi tipo Salo-Rex



- Per filetti ciechi fino a 3xD
- Forma d'imbocco C: imbocco 2–3 filetti, senza imbocco corretto
- Forma d'imbocco E: imbocco 1,5–2 filetti, senza imbocco corretto
- (35°, 42°, 45°, 50°) con scanalature destre, ad elica forte torsione
- Idoneo anche per maschiatura rigida, con attacco Weldon, esecuzione extralunga e refrigerazione interna
- Grazie alla torsione estremamente accentuata delle eliche i trucioli vengono evacuati in sicurezza nella direzione opposta a quella di taglio.

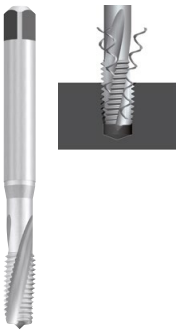
TWIN

Maschi per fori passanti e fori ciechi tipo TWIN

- Per filetti ciechi e passanti fino a 2xD
- Forma d'imbocco C: imbocco 2–3 filetti, senza imbocco corretto
- Forma d'imbocco D: imbocco 3,5–5 filetti, senza imbocco corretto
- Forma d'imbocco E: imbocco 1,5–2 filetti, senza imbocco corretto
- Scanalature diritte
- Per acciaio, materiali a truciolo corto e temprati fino a 55 (62) HRC
- Con esecuzione extralunga e refrigerazione interna

SL

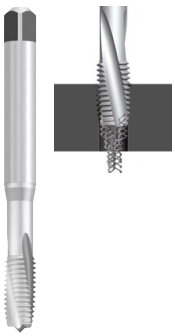
Maschi per fori ciechi tipo SL



- Per filetti ciechi fino a 2xD
- Forma d'imbocco C: imbocco 2–3 filetti, senza imbocco corretto
- Forma d'imbocco E: imbocco 1,5–2 filetti, senza imbocco corretto
- (15°, 25°, 30°) con scanalature destre, ad elica leggera
- Idoneo per acciaio, titanio, leghe di titanio e Inconel 718
- Idoneo anche per maschiatura rigida, con esecuzione extralunga e refrigerazione interna
- Adatto anche per condizioni d'impiego difficili come fori trasversali

DL

Maschi per fori passanti tipo DL



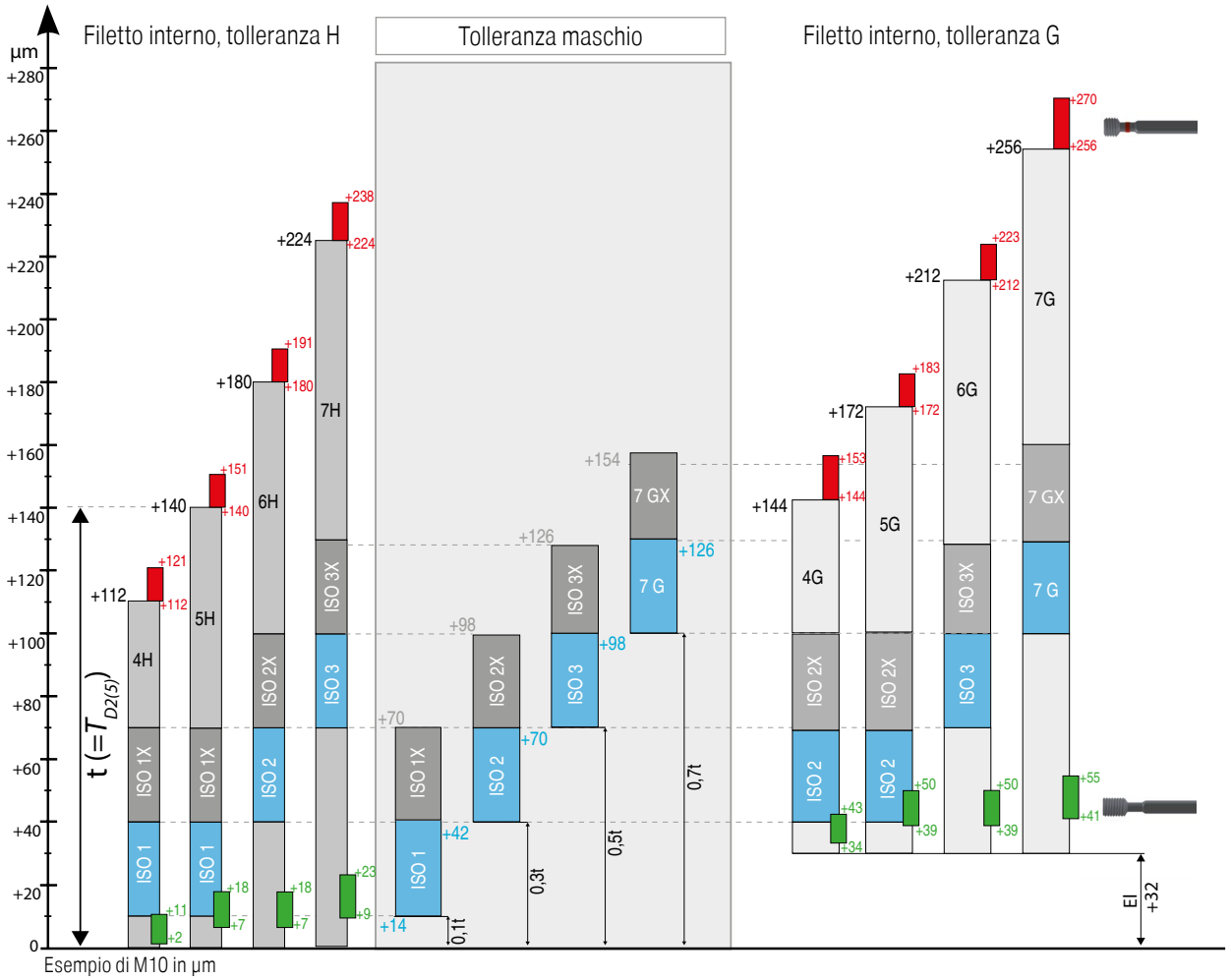
- Per filetti passanti fino a 4xD
- Forma d'imbocco D: imbocco 3,5–5 filetti, senza imbocco corretto
- Con elica sinistra di 15°
- Idoneo per acciaio, titanio e leghe di titanio e Inconel 718
- I trucioli vengono evacuati nella direzione di taglio.

Spanlos

Maschi a rullare tipo Spanlos

- Per filetti ciechi e passanti fino a 3xD
- Forma d'imbocco C: imbocco 2–3 filetti, senza imbocco corretto
- Per materiali adatti alla deformazione a freddo fino a 1400 N/mm^2
- Idoneo anche per maschiatura rigida, con scanalature di lubrificazione e refrigerazione interna

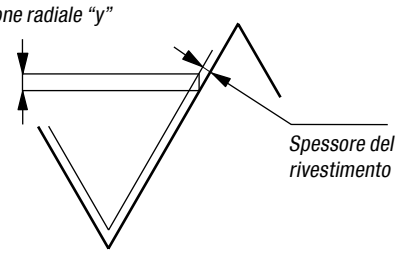
Tabella delle tolleranze di costruzione



I filetti che devono essere rivestiti richiedono un maschio maggiorato. La maggiorazione dipende dallo spessore del rivestimento e dall'angolo del fianco.

Con	60° Angolo del fianco	maggiorazione ≙ 4 x spessore del rivestimento
	55° Angolo del fianco	maggiorazione ≙ 4,331 x spessore del rivestimento
	30° Angolo del fianco	maggiorazione ≙ 7,727 x spessore del rivestimento

Maggiorazione radiale "y"

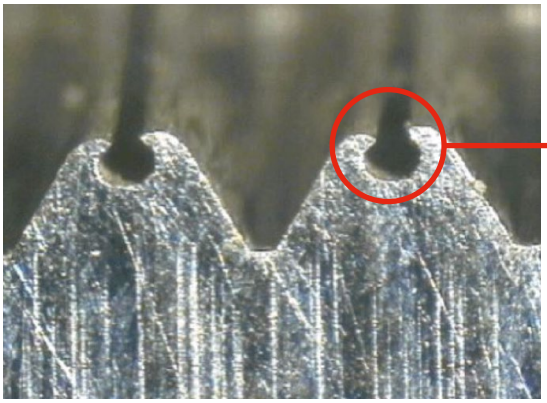


Classe d'impiego per maschi – denominazione secondo		Classe di tolleranza del filetto interno da tagliare				
DIN	ISO					
4H	ISO1	4H	5H	–	–	–
6H	ISO2	4G	5G	6H	–	–
6G	ISO3	–	(4E)	6G	7H	8H
7G	–	–	–	(6E)	7G	8G

Per particolari impieghi, ad esempio su ghisa abrasiva o materie plastiche, occorre scegliere altre dimensioni che vengono definite in base all'esperienza. In tal caso viene aggiunta una X alla denominazione della classe di tolleranza, ad es. ISO 2X, anche se la tolleranza del filetto interno può essere limitata (6HX per il campo di tolleranza 6H e 5G). Inoltre va tenuto conto del fatto che le dimensioni del filetto interno tagliato non dipendono solamente dalle dimensioni del maschio ma anche dal materiale da lavorare e dalle condizioni di produzione in generale. Per maschi sgrossatori e semifinitori non sono definite tolleranze dimensionali.

Maschi a rullare

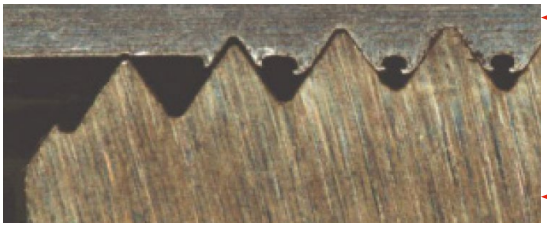
Maschi a rullare Spanlos per materiali adatti alla deformazione a freddo fino a 1400 N/mm² oppure min. 5 % di resistenza alla trazione. Il filetto viene prodotto mediante deformazione plastica. Grazie a questo il filetto prodotto raggiunge una resistenza molto elevata.



Prima di rullare un filetto, assicuratevi che il cliente sia d'accordo con questo metodo di produzione: in determinati settori la rullatura di filetti **non** è ammessa. Possono rimanere sporcizia o batteri nella parte superiore del filetto.

Importante

Deformazione a step mediante pressione



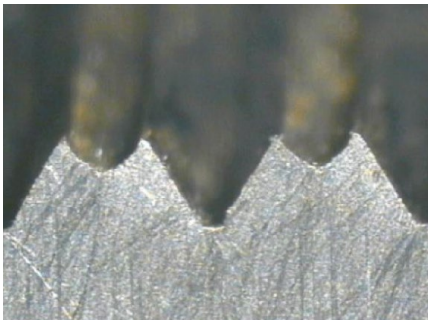
Pezzo

Maschi a rullare

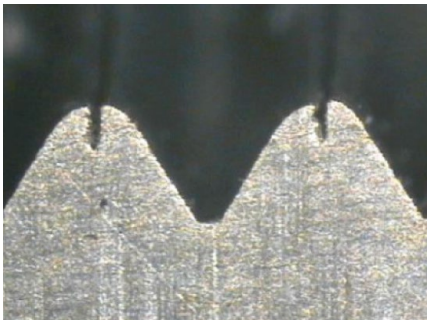
Il profilo del filetto viene premuto nel materiale in varie fasi per via dell'imbocco del filetto.

Caratteristiche

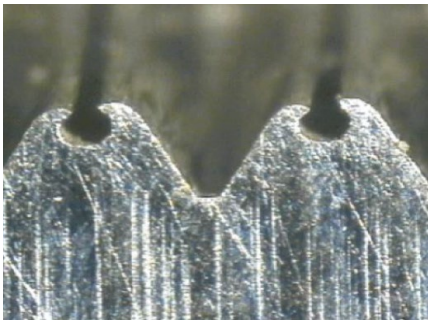
- Tipo applicabile con vari materiali
- Per filetti passanti e ciechi
- Qualità della superficie molto buona
- Elevata resistenza statica e dinamica del filetto
- Lavorazione sicura di filetti profondi e posizionati in bassp
- Tempi brevi di lavorazione
- Non vi sono problemi di evacuazione truciolo
- Nessun filetto disassato
- Elevata sicurezza dei processi
- Materiali HSS-E e HSS-PM fino a ca. 33 HRC con una resistenza alla trazione del materiale di min. 5 %



forma non abbastanza definita – preforo troppo grande



forma troppo espressa (sovrapposta) – preforo troppo piccolo



forma perfetta – preforo corretto

Risoluzione dei problemi

Bassa durata utile

Cause

- Rotture a fatica dei taglienti nella parte dell'imbocco
- Durezza o materiale di base dell'utensile non idoneo per la lavorazione
- Preforo troppo piccolo o indurito
- Lubrificazione insufficiente o parametri d'impiego scorretti

Misure

- Imbocco più lungo o numero maggiore di scanalature con lunghezza d'imbocco identica, pertanto un numero maggiore di taglienti attivi
- In utensili riaffilati è possible che cali la durezza di base, applicare i parametri corretti per la riaffilatura
- Cambio più frequente o riaffilatura dell'utensile a forare
- Parametri di applicazione corretti per l'utensile di foratura
- Scegliere il lubrificante corretto e assicurare la fornitura di una quantità sufficiente

Filetti eseguiti non in asse

Cause

- La geometria da taglio non è adatta
- Il numero di giri del mandrino non è compatibile con l'avanzamento
- I maschi per fori ciechi vengono applicati con eccessiva pressione di taglio iniziale
- I maschi per fori passanti vengono applicati con pressione di taglio iniziale insufficiente

Misure

- Rivedere programmazione e cartuccia principale e altri strumenti per la sincronizzazione
- Utilizzare un mandrino portamaschio con compensazione assiale
- Ridurre la pressione iniziale di taglio
- Aumentare la pressione di taglio iniziale

Filetto troppo grande

Cause

- Le tolleranze dell'utensile e del calibro per filetti sono compatibili
- Taglienti degli utensili con bave dopo l'affilatura
- Bave causate da deformazione a freddo

Misure

- Applicare tolleranze corrette e calibro per filettature
- Realizzare una sbavatura precisa
- Utilizzare una geometria (positiva) adatta
- Ridurre la velocità di taglio
- Effettuare un altro trattamento superficiale o un altro rivestimento
- Usare un mandrino portamaschio con compensazione assiale
- Utilizzare un lubrificante

Rottura utensile

Cause

- L'utensile è spuntato
- l'utensile tocca il fondo del foro
- Croste di fusione
- Preforo troppo piccolo
- Tucioli acumulati
- Velocità di taglio scorretta
- Intasamento nella scanalatura
- Refrigerazione o lubrificazione insufficiente

Misure

- Utilizzare un maschio del set
- Utilizzare un utensile con un'elica con meno torsione
- Utilizzare un utensille con un imbocco più corto/lungo
- Controllo della profondità del preforo e della profondità del filetto
- Effettuare un preforo con maggiore profondità
- Correggere la velocità di taglio
- Cambiare rivestimento o trattamento della superficie
- Utilizzare un mandrino con compensazione assiale
- Usare un lubrificante adatto
- Utilizzare il diametro con preforo corretto
- Cambiare geometria e/o forma di scanalatura
- Tenere conto della forma e della formazione del truciolo

Rivestimenti

vap.
- Vaporizzato
- La vaporizzazione evita la formazione di materiale di riporto sull'utensile e aumenta la durezza della superficie e di conseguenza anche la resistenza all'usura

nitr.
- Nitrurato
- La nitrurazione aumenta la resistenza all'usura e offre buone caratteristiche antifrizione

vap. + nitr.
- Vaporizzatto e nitrurato
- Una combinazione di una maggiore durezza della superficie e conduttore di lubrificante

TiN
- Rivestimento TiN
- Massima temperatura d'impiego: 450 °C

TiN GS
- Substrato antifrizione di nitruro di titanio
- Elevata resistenza all'usura con buone caratteristiche antifrizione
- Massima temperatura d'impiego: 450 °C

TiCN
- Rivestimento multistrato TiCN
- Massima temperatura d'impiego: 450 °C

DLC
- Rivestimento DLC ("Diamond-Like Carbon")
- Particolarmente adatto per la lavorazione di metalli non ferrosi
- Temperatura d'impiego max.: 400 °C

Ti200
- Rivestimento TiN
- Buona idoneità per elevate velocità nella rullatura
- Massima temperatura d'impiego: 450 °C

OSM
- Substrato duro e antifrizione
- per l'applicazione su acciai altamente resistenti

CH
- Rivestimento di carbonio amorfo
- Per la lavorazione di metalli non ferrosi
- Riduce l'adesione del materiale

HCr
- Cromato duro
- Per l'uso con metalli non ferrosi
- Bassa rugosità della superficie

CrN
- Rivestimento di cromo e azoto
- Rivestimento con elevata resistenza all'usura
- Particolarmente per la lavorazione di alluminio, idoneo anche per materiali P, M e S

ALTiNHD
- Rivestimento nanostrato con base AlTiN
- Temperatura d'impiego max. 500 °C

Panoramica degli anelli colorati

WNT \ Performance

Per acciaio fino a 750 N/mm²

Tipo ST maschio non rivestito per acciaio fino a 750 N/mm² di resistenza alla trazione

Per acciai fino a 1100 N/mm²

Tipo ST e VG maschi rivestiti per acciaio fino a 1100 N/mm² di resistenza alla trazione

Per acciaio ad alta resistenza fino a 1400 N/mm²

Tipo HR per acciaio fino a 1400 N/mm² di resistenza alla trazione

Per acciai inossidabili e acciai resistenti agli acidi

Tipo VA per acciai inossidabili

Per ghisa

Tipo GG per ghise

Per alluminio e metalli non ferrosi

Tipo NW, Soft e Ms per alluminio, ottone a truciolo corto e leghe non ferrose

Per leghe resistenti al calore

Tipo Ti, Ni e AMPCO per leghe resistenti al calore, Titanio e Inconel

Per acciai temprati

Tipo HT per la lavorazione di materiali duri

Per impiego universale fino a 1100 N/mm²

Tipo UNI per applicazioni universali