PROFITHREAD

Catalogue 2016

Threading's Profitools Line

Utensili per Filettare della Linea

PROFITOOLS

PROFITOOLS

Profitools Line includes:

- PROFITHREAD
- PROFITURN
- PROFIMILL
- PROFIDRILL
- PROFIMACHINE
- PROFIKEY
- PROFIBORE
- PROFIMEASURE
- PROFIREAMER

Profitools Line is exclusively powered by

BST di Bassotti Stefano
Rapprensentanze
Distribuzioni Industriali

bst@bassottis.com - www.bassottis.com
Tel. 039 28 73 805 - Fax. 039 33 05 117

Elevate Prestazioni

High Performance

Maschi HP - IK - IKR *Maschi dalle elevate prestazioni, idonei per un'ampia gamma di materiali, rivestiti TiN e ZHL con foro di lubrificazione, assiale e radiale*

HP - IK - IKR Taps *High Performance Taps, suitable for a wide range of materials, coated with TiN and ZHL with internal coolant, radial and axial*

Maschi TI - NI - T/N *Maschi specifici per lavorazioni di Ti, Ni e tutte le loro leghe.*

TI - NI - T/N Taps *Specific Taps for machining of Ti, Ni and their alloys.*

Tabella Applicazioni / Application Table

Legenda / *Legend*

TD • Tagli diritti imbocco C,D / *Straight fluted*
IC • Tagli diritti imbocco corretto fori passanti / *Spiral point*
FCE • Elicoidali 15° fori ciechi / *Spiral fluted 15°*
ER • Elicoidali 35° fori ciechi / *Spiral fluted 35°*
ERE • Elicoidali 35° fori ciechi Imbocco E / *Spiral fluted 35° form "E"*
ESP • Elicoidali 10°-15° fori passanti / *Spiral Fluted 10°-15°*
Form • Maschio a rullare / *Form Taps*
LH • Filettatura sinistra / *Left thread*
AZ • Alternatura del filetto / *Interrupted thread*
OT • Per Ottone / *For Brass*
GG • Per ghisa / *For Cast Iron*
ALU • Per alluminio / *For Alluminium*
VA • Per Inox / *For Inox*
TI • Per Titanio / *For Titanium*
NI • Per Nichel e leghe / *For Nickel and Alloys*
EG • Per helicoil / *For wire thread inserts*
Punta • Maschi fora filetti / *Drill taps*
SL • Serie lunga / *Extralonge shank*

New • Maschi / *Taps* High Performance

IK • Foro assiale HSSCo-PM / *Internal coolant*
IKR • Foro radiale HSSCo-PM / *Radial coolant*
HP • High performance HSSCo-PM
TI • Leghe Ti, HP HSSCo-PM / *Ti Alloys*
Ni • Leghe Ni, HP HSSCo-PM / *Ni alloys*
T/N • Leghe Ti/Ni,HP HSSCo-PM / *Titanium/Nickel alloys*

Lubrificazione / *Lubrification*

E • Emulsione / *Emulsion*
O • Olio / *Oil*
MQL • Lubrificazione minimale / *Minimal Lubrification*
S • A secco / *Dry*

● Raccomandato / *Raccommended use*

○ Idoneo / *Suitable*

Cod.	
Rivestimenti / *Treatment*	
Materiale / *Material*	
Imbocco / *Chamfer*	
M	4H
	6H/6HX
	6G/6GX
	7G/7GX
	6H + 0.1
MF	6H/6HX
	6G/6GX
MJ	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
NPSM/NPSF	
NPT/NPTF	
Tr	
EG	

	Descrizione / *Description*	N/mm2	HB	Truciolo / *Chip*	Lubrificazione / *Lubrification*
1.1	Acciaio dolce, costruzione, cementazione, avp / *Soft constr. free-cutting steel*	< 700	< 200	Long/Medium	E, O, MQL
1.2	Acciaio al carbonio / *Plain carbon steel*	< 700	175	Long/Medium	E, O, MQL
1.3	Acciaio legato / *Alloyed stell*	< 800	200	Long/Medium	E, O, MQL
1.4	Acciaio legato bonificato - alta resistenza / *Alloyed steel - tempered steel*	< 1300	> 250	Long/Medium	O, MQL
2.1	Acciaio Inox automatico / *Free cutting inox*	< 800	< 250	Medium	O, MQL
2.2	Acciaio Inox austenitico / *Inox austenitic*	< 900	< 250	Long	O, MQL
2.3	Acciaio Inox ferritico + austenitico - martensitico / *Inox (ferr. martens)*	> 900	< 300	Medium/Long	O, MQL
2.4	Leghe Ni Cr ad alta resistenza / *Ni alloys*	<1300	360	Medium/Short	O, MQL
3.1	Ghisa grigia / *Cast Iron*	< 900	< 250	Short	O, MQL
3.2	Ghisa malleabile e sferoidale / *Sferoidal and malleable Cast iron*	< 900	< 250	Medium/Short	E, O, MQL
4.1	Titanio puro / *Ti Unalloyed*	< 900	< 250	Long	E, O, MQL
4.2	Leghe di Titanio / *Ti Alloys*	> 900	> 250	Medium/Short	O, MQL
5.1	Nichel puro / *Ni Unalloyed*	< 900	< 250	Long	E, O, MQL
5.2	Leghe di Nichel / *Ni Alloys*	> 900	> 250	Long	O, MQL
6.1	Rame puro, rame elettrolitico / *Cu Unalloyed*	< 400	< 120	Long	E, O, MQL
6.2	Ottone a truciolo corto - bronzo / *Short-chipping Brass*	< 700	< 120	Short	E, O, MQL
6.3	Ottone a truciolo lungo / *Long-chipping Brass*	< 700	< 120	Long	E, O, MQL
7.1	Magnesio e sue leghe / *Magnesium and alloys*	< 400	< 120	Short	E, O, MQL
8.1	Alluminio puro e leghe di Al con Si < 0,5% / *Al -Si alloys (Si < 5%) and alloys*	< 500	< 120	Long	E, O, MQL
8.2	Leghe di Al con Si < 10% / *Al-Si alloys (Si <10%)*	< 500	< 120	Medium/Short	E, O, MQL
8.3	Leghe di Al con Si > 10% / *Al-Si alloys (Si >10%)*	< 500	< 120	Short	E, O, MQL

Tabella Applicazioni / Application Table

S3P	SH	S2P	TD	TDOT	TDGG	TDGG-T	IC	IC-Y
						TiCN		TiN
HSS	HSS-E	HSS	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	C	C	C	C	C	C	B	B
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Tabella Applicazioni — Application Table

NEW	NEW									
IKR IC-Z	T/NIC	FPL	ER	ER-Y	ER-T	ERE	ERVA	ERVA-Y	ERALU	ERALU-T
ZHL				TiN	TiCN		VAP	TiN		TiCN
HSSCo-PM	HSSCo-PM	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
B	B	B	C	C	C	E	C	C	C	C
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	○									

Tabella Applicazioni

Application Table

							NEW	NEW	NEW
IC-T	IC VA	IC VA-Y	ICALU	ICALU T	ICAZ	ICAZ-T	HP IC-Y	HP IC-Z	IKR IC
TiCN		TiN		TiCN		TiCN	TiN	ZHL	TiN
HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSSCo-PM	HSSCo-PM	HSSCo-PM
B	B	B	B	B	B	B	B	B	B
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Tabella Applicazioni — Application Table

NEW	NEW	NEW	NEW	NEW	NEW					
45°	45°	45°	45°	25°	15°					
HP ER-Y	**IK ER-Y**	**IK ER-Z**	**HP ER-Z**	**NIER**	**TIFCE**	**FCE**	**FCE-Y**	**FORM**	**FORM-Y**	**FORM-T**
TiN	**TiN**	**ZHL**	**ZHL**				**TiN**		**TiN**	**TiCN**
HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
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						○	○		●	●
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						○	○			
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				○	○					

Tabella Applicazioni — Application Table

NEW	NEW	NEW							
HP FORM-Y	IK FORM-Y	IKR FORM-Y	EL	SL TD	SL IC	SL ER	PUNTA	Tr TD	Tr ESP
TiN	TiN	TiN							
HSSCo-PM	HSSCo-PM	HSSCo-PM	HSS / HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	C	C		C	B	C	C		
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								●	
			●	●	○	○	●		●
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								●	
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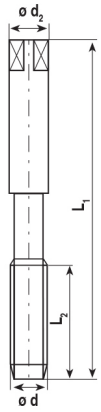
Filettatura Metrica ISO a Passo Grosso
Maschi a Mano Serie 3 PZ

ISO Metric Coarse Thread
Hand Taps Set of 3

DIN 352



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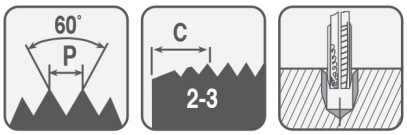


Tol	6H
Mat	HSS
Imbocco	C

L1	L2	d2	⌀	Preforo	d x p
32	5.5	2.5	2.1	0.75	**M 1 x 0.25**
32	5.5	2.5	2.1	0.95	**M 1.2 x 0.25**
32	7	2.5	2.1	1.1	**M 1.4 x 0.3**
32	8	2.5	2.1	1.25	**M 1.6 x 0.35**
32	8	2.5	2.1	1.3	**M 1.7 x 0.35**
32	8	2.5	2.1	1.45	**M 1.8 x 0.35**
36	8	2.8	2.1	1.6	**M 2 x 0.4**
40	9	2.8	2.1	2.05	**M 2,5 x 0.45**
40	11	3.5	2.7	2.5	**M 3 x 0.5**
45	13	4	3	2.8	**M 3.5 x 0.6**
45	13	4.5	3.4	3.3	**M 4 x 0.7**
50	16	6	4.9	3.55	**M 4.5 x 0.75**
50	16	6	4.9	4.2	**M 5 x 0.8**
50	19	6	4.9	5	**M 6 x 1**
50	19	6	4.9	6	**M 7 x 1**
56	22	6	4.9	6.75	**M 8 x 1.25**
63	22	7	5.5	7.75	**M 9 x 1.25**
70	24	7	5.5	8.5	**M 10 x 1.5**
70	24	8	6.2	9.5	**M 11 x 1.5**
75	29	9	7	10.25	**M 12 x 1.75**
80	30	11	9	12	**M 14 x 2**
80	32	12	9	14	**M 16 x 2**
95	40	14	11	15.5	**M 18 x 2.5**
95	40	16	12	17.5	**M 20 x 2.5**
100	40	18	14.5	19.5	**M 22 x 2.5**
110	50	18	14.5	21	**M 24 x 3**
110	50	20	16	24	**M 27 x 3**
125	56	22	18	26.5	**M 30 x 3.5**
125	56	25	20	29.5	**M 33 x 3.5**
150	63	28	22	32	**M 36 x 4**
150	63	32	24	35	**M 39 x 4**
150	63	32	24	37.5	**M 42 x 4.5**
160	70	36	29	40.5	**M 45 x 4.5**
180	75	36	29	43	**M 48 x 5**
180	75	40	32		**M 52 x 5**

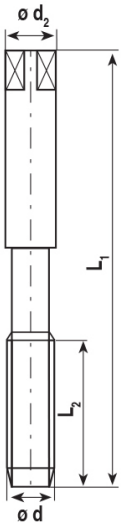
Filettatura Metrica ISO a Passo Grosso
Maschi a Mano Serie 3 PZ

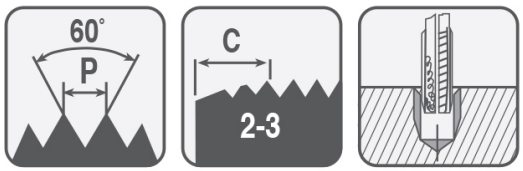
ISO Metric Coarse Thread
Hand Taps Set of 3

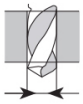
DIN 352

Codice Articolo

S H	3^ fin







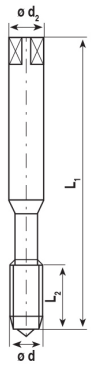
	H
Tol	6HX
Mat	HSS-E
Imbocco	

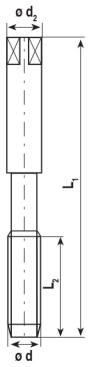
L1	L2	d2	⌀	Preforo	d x p
45	6	2.5	2.1	0.75	**M 1 x 0.25**
45	6	2.5	2.1	0.95	**M 1.2 x 0.25**
45	8	2.5	2.1	1.1	**M 1.4 x 0.3**
45	8	2.5	2.1	1.25	**M 1.6 x 0.35**
45	8	2.5	2.1	1.3	**M 1.7 x 0.35**
45	10	2.5	2.1	1.45	**M 1.8 x 0.35**
45	10	2.8	2.1	1.6	**M 2 x 0.4**
45	10	2.8	2.1	2.05	**M 2.5 x 0.45**
40	11	3.5	2.7	2.5	**M 3 x 0.5**
45	13	4.5	3.4	3.3	**M 4 x 0.7**
50	18	6	4.9	4.2	**M 5 x 0.8**
50	18	6	4.9	5	**M 6 x 1**
56	22	6	4.9	6.75	**M 8 x 1.25**
70	25	7	5.5	8.5	**M 10 x 1.5**
75	30	9	7	10.25	**M 12 x 1.75**
80	30	11	9	12	**M 14 x 2**
80	32	12	9	14	**M 16 x 2**
95	40	14	11	15.5	**M 18 x 2.5**
95	40	16	12	17.5	**M 20 x 2.5**

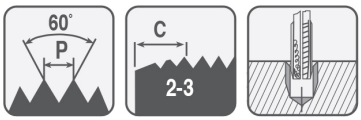
Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti

ISO Metric Coarse Thread
Straight Fluted

	DIN 371	DIN 376







Codice Articolo

	TDGP	TD	TD	TD

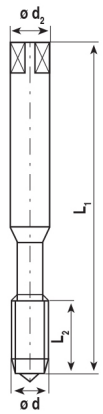
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	**6H**	**6H**	**6G**	**+0.10**
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	**C**	**C**	**C**	**C**

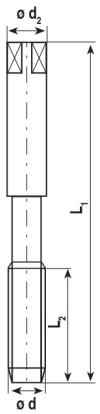
		DIN 371		DIN 376			
L1	L2	d2	∅	d2	∅	Preforo	d x p
45	5.5	2.5	2.1			0.75	**M 1 x 0.25**
45	5.5	2.5	2.1			0.95	**M 1.2 x 0.25**
45	7	2.5	2.1			1.1	**M 1.4 x 0.3**
45	8	2.5	2.1			1.25	**M 1.6 x 0.35**
45	8	2.5	2.1			1.35	**M 1.7 x 0.35**
45	8	2.5	2.1			1.45	**M 1.8 x 0.35**
45	8	2.8	2.1			1.6	**M 2 x 0.4**
45	8	2.8	2.1			1.75	**M 2.2 x 0.45**
45	8	2.8	2.1			1.9	**M 2.3 x 0.4**
50	9	2.8	2.1			2.05	**M 2.5 x 0.45**
50	9	2.8	2.1			2.15	**M 2.6 x 0.45**
56	10	3.5	2.7	2.2	1.8	2.5	**M 3 x 0.5**
56	10	4	3			2.9	**M 3.5 x 0.6**
63	12	4.5	3.4	2.8	2.1	3.3	**M 4 x 0.7**
70	12	6	4.9			3.75	**M 4.5 x 0.75**
70	12	6	4.9	3.5	2.7	4.2	**M 5 x 0.8**
80	14	6	4.9			4.6	**M 5.5 x 0.9**
80	14	6	4.9	4.5	3.4	5	**M 6 x 1**
80	16	7	5.5			6	**M 7 x 1**
90	18	8	6.2	6	4.9	6.75	**M 8 x 1.25**
100	18	9	7			7.75	**M 9 x 1.25**
100	20	10	8	7	5.5	8.5	**M 10 x 1.5**
100	20			8	6.2	9.5	**M 11 x 1.5**
110	22			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**
140	32			18	14.5	19.5	**M 22 x 2.5**
160	36			18	14.5	21	**M 24 x 3**
160	36			20	16	24	**M 27 x 3**
180	40			22	18	26.5	**M 30 x 3.5**
180	40			25	20	29.5	**M 33 x 3.5**
200	45			28	22	32	**M 36 x 4**
200	45			32	24	35	**M 39 x 4**
220	50			32	24	37.5	**M 42 x 4.5**
220	50			36	29	40.5	**M 45 x 4.5**
250	56			36	29	43	**M 48 x 5**
250	56			40	32	47	**M 52 x 5**
280	64			45	35	50.5	**M 56 x 5.5**
280	64			45	35	50.5	**M 60 x 5.5**

Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti

ISO Metric Coarse Thread
Straight Fluted

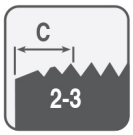
DIN 371	DIN 376





Codice Articolo

TDOT	TDGG	TDGG-T



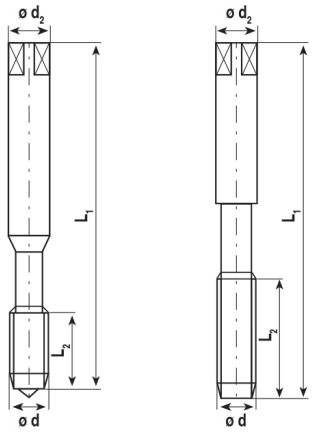
	NEUTRO	NEUTRO	TiCN
Tol	6H	6HX	6HX
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

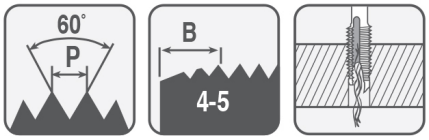
L1	L2			d2	⌀	Preforo	d x p
45	8	DIN 371		2.8	2.1	1.6	**M 2 x 0.4**
45	8			2.8	2.1	1.75	**M 2.2 x 0.45**
45	8			2.8	2.1	1.9	**M 2.3 x 0.4**
50	9			2.8	2.1	2.05	**M 2.5 x 0.45**
50	9			2.8	2.1	2.15	**M 2.6 x 0.45**
56	10			3.5	2.7	2.5	**M 3 x 0.5**
56	10			4	3	2.9	**M 3.5 x 0.6**
63	12			4.5	3.4	3.3	**M 4 x 0.7**
70	12			6	4.9	3.75	**M 4.5 x 0.75**
70	12			6	4.9	4.2	**M 5 x 0.8**
80	14			6	4.9	4.6	**M 5.5 x 0.9**
80	14			6	4.9	5	**M 6 x 1**
80	16			7	5.5	6	**M 7 x 1**
90	18			8	6.2	6.75	**M 8 x 1.25**
100	18			9	7	7.75	**M 9 x 1.25**
100	20			10	8	8.5	**M 10 x 1.5**
100	20		DIN 376	8	6.2	9.5	**M 11 x 1.5**
110	22			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**

Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti Imbocco Corretto

ISO Metric Coarse Thread
Spiral Point

DIN 371	DIN 376





Codice Articolo

ICGP	IC	IC-Y	IC-T	IC	IC

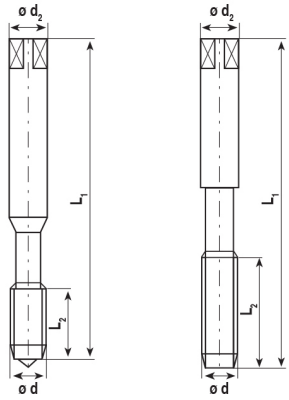
	NEUTRO	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	**6H**	**6H**	**6H**	**6H**	**6G**	**4H**
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	**B**	**B**	**B**	**B**	**B**	**B**

		DIN 371		DIN 376			
L1	L2	d2	⌀	d2	⌀	Preforo	d x p
45	8	2.8	2.1			1.6	**M 2 x 0.4**
45	8	2.8	2.1			1.75	**M 2.2 x 0.45**
50	9	2.8	2,1			2.05	**M 2.5 x 0.45**
56	10	3.5	2.7	2.2	1.8	2.5	**M 3 x 0.5**
56	10	4	3			2.9	**M 3.5 x 0.6**
63	12	4.5	3.4	2.8	2.1	3.3	**M 4 x 0.7**
70	12	6	4.9	3.5	2.7	4.2	**M 5 x 0.8**
80	14	6	4.9			4.6	**M 5.5 x 0.9**
80	14	6	4.9	4.5	3.4	5	**M 6 x 1**
80	16	7	5.5			6	**M 7 x 1**
90	18	8	6.2	6	4.9	6.75	**M 8 x 1.25**
100	18	9	7			7.75	**M 9 x 1.25**
100	20	10	8	7	5.5	8.5	**M 10 x 1.5**
100	20			8	6.2	9.5	**M 11 x 1.5**
110	22			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**
140	32			18	14.5	19.5	**M 22 x 2.5**
160	36			18	14.5	21	**M 24 x 3**
160	36			20	16	24	**M 27 x 3**
180	40			22	18	26.5	**M 30 x 3.5**
180	40			25	20	29.5	**M 33 x 3.5**
200	45			28	22	32	**M 36 x 4**
200	45			32	24	35	**M 39 x 4**
220	50			32	24	37.5	**M 42 x 4.5**
220	50			36	29	40.5	**M 45 x 4.5**
250	56			36	29	43	**M 48 x 5**

Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti Imbocco Corretto

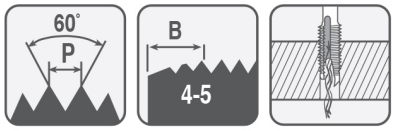
ISO Metric Coarse Thread
Spiral Point

DIN 371	DIN 376



Codice Articolo

IC	IC	ICVA	ICVA-Y



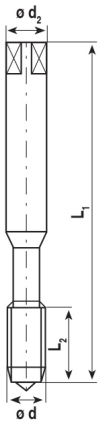
	NEUTRO	NEUTRO	VAP	TiN
Tol	7G	+0.10	6H	6H
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B

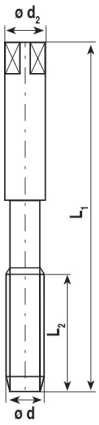
L1	L2			d2	⌀	Preforo	d x p
45	8	DIN 371		2.8	2.1	1.6	**M 2 x 0.4**
45	8			2.8	2.1	1.75	**M 2.2 x 0.45**
45	8			2.8	2,1	1.9	**M 2.3 x 0.4**
50	9			2.8	2,1	2.05	**M 2.5 x 0.45**
50	9			2.8	2,1	2.15	**M 2.6 x 0.45**
56	10			3.5	2.7	2.5	**M 3 x 0.5**
63	12			4.5	3.4	3.3	**M 4 x 0.7**
70	12			6	4.9	4.2	**M 5 x 0.8**
80	14			6	4.9	5	**M 6 x 1**
90	18			8	6.2	6.75	**M 8 x 1.25**
100	18			9	7	7.75	**M 9 x 1.25**
100	20			10	8	8.5	**M 10 x 1.5**
110	22		DIN 376	9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**

Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti Imbocco Diretto

ISO Metric Coarse Thread
Spiral Point

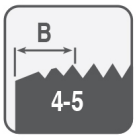
DIN 371	DIN 376





Codice Articolo

ICALU	ICALU-T	ICAZ	ICAZ-T



	NEUTRO	TiCN	NEUTRO	TiCN
Tol	**6H**	**6H**	**6H**	**6H**
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	**B**	**B**	**B**	**B**

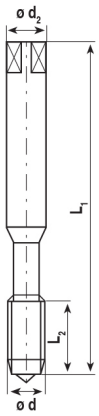
L1	L2			d2	⌀	Preforo	d x p
56	10	DIN 371		3.5	2.7	2.5	**M 3 x 0.5**
63	12			4.5	3.4	3.3	**M 4 x 0.7**
70	12			6	4.9	4.2	**M 5 x 0.8**
80	14			6	4.9	5	**M 6 x 1**
80	16			7	5.5	6	**M 7 x 1**
90	18			8	6.2	6.75	**M 8 x 1.25**
100	20			10	8	8.5	**M 10 x 1.5**
110	22		DIN 376	9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**

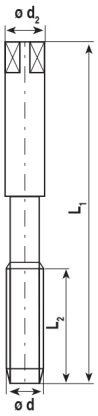
Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti Imbocco Corretto

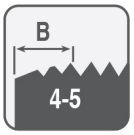
ISO Metric Coarse Thread
Spiral Point

HIGH PERFORMANCE

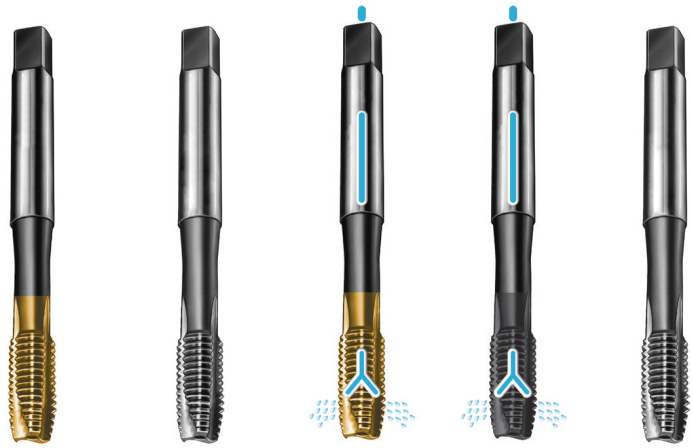
DIN 371	DIN 376







Codice Articolo



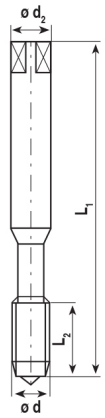
	HP IC-Y	HP IC-Z	IKR IC-Y	IKR IC-Z	T/N IC
	TiN	ZHL	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX	6HX	6HX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	B	B	B	B	B

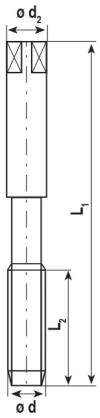
L1	L2			d2	⌀	Preforo	d x p
56	10	DIN 371		3,5		2,7	**M 3 x 0.5**
63	10			4,5		3,4	**M 4 x 0.7**
70	12			6		4,9	**M 5 x 0.8**
80	14			6		4,9	**M 6 x 1**
90	18			8		6,2	**M 8 x 1.25**
100	22			10		5,5	**M 10 x 1.5**
100	22		DIN 376	9		7	**M 12 x 1.75**
110	25			11		9	**M 14 x 2**
110	25			12		9	**M 16 x 2**
125	32			14		11	**M 18 x 2.5**
140	32			16		12	**M 20 x 2.5**
160	36			18		14,5	**M 24 x 3**
160	36			20		16	**M 27 x 3**
180	40			22		18	**M 30 x 3.5**
180	40			25		20	**M 33 x 3.5**
200	45			28		22	**M 36 x 4**

Filettatura Metrica ISO a Passo Grosso
Elica 35°

ISO Metric Coarse Thread
Spiral Fluted 35°

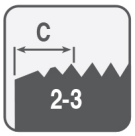
DIN 371	DIN 376





Codice Articolo

ERGP	ER	ER-Y	ER-T	ER E	ER



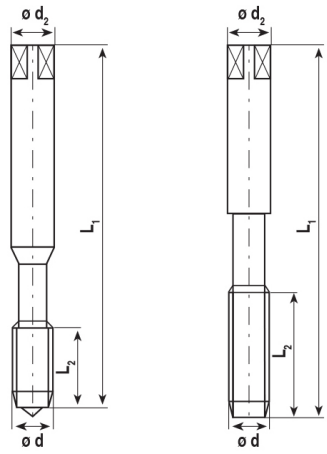
	NEUTRO	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6H	6H	6G
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	E	C

		DIN 371		DIN 376			
L1	L2	d2	⌀	d2	⌀	Preforo	d x p
45	8	2.8	2.1			1.6	**M 2 x 0.4**
45	8	2.8	2.1			1.75	**M 2.2 x 0.45**
45	4	2.8	2,1			1.9	**M 2.3 x 0.4**
50	9	2.8	2,1			2.05	**M 2.5 x 0.45**
50	4	2.8	2,1			2.15	**M 2.6 x 0.45**
56	5	3.5	2.7	2.2	1.8	2.5	**M 3 x 0.5**
56	6	4	3			2.9	**M 3.5 x 0.6**
63	7	4.5	3.4	2.8	2.1	3.3	**M 4 x 0.7**
70	8	6	4.9			3.75	**M 4.5 x 0.75**
70	8	6	4.9	3.5	2.7	4.2	**M 5 x 0.8**
80	10	6	4.9			4.6	**M 5.5 x 0.9**
80	10	6	4.9	4.5	3.4	5	**M 6 x 1**
80	12	7	5.5			6	**M 7 x 1**
90	12	8	6.2	6	4.9	6.75	**M 8 x 1.25**
100	14	9	7			7.75	**M 9 x 1.25**
100	14	10	8	7	5.5	8.5	**M 10 x 1.5**
100	20			8	6.2	9.5	**M 11 x 1.5**
110	16			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
110	25			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**
140	32			18	14.5	19.5	**M 22 x 2.5**
160	36			18	14.5	21	**M 24 x 3**
160	36			20	16	24	**M 27 x 3**
180	40			22	18	26.5	**M 30 x 3.5**
180	40			25	20	29.5	**M 33 x 3.5**
200	45			28	22	32	**M 36 x 4**
200	45			32	24	35	**M 39 x 4**
220	50			32	24	37.5	**M 42 x 4.5**
220	50			36	29	40.5	**M 45 x 4.5**
250	56			36	29	43	**M 48 x 5**

Filettatura Metrica ISO a Passo Grosso
Elica 35°

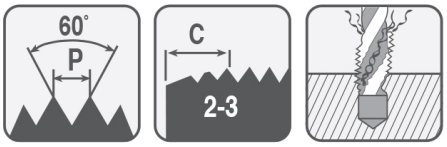
ISO Metric Coarse Thread
Spiral Fluted 35°

DIN 371	DIN 376



Codice Articolo

ER	ER	ER	ER VA	ERVA-Y



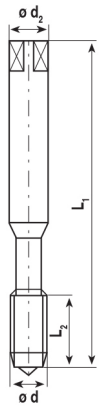
	NEUTRO	NEUTRO	NEUTRO	VAP	TiN
Tol	4H	+ 0.10	7G	6H	6H
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

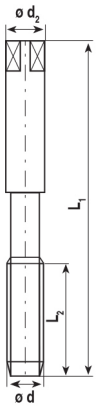
L1	L2			d2	⌀	Preforo	d x p
56	5	DIN 371		3.5	2.7	2.5	**M 3 x 0.5**
63	7			4.5	3.4	3.3	**M 4 x 0.7**
70	8			6	4.9	4.2	**M 5 x 0.8**
80	10			6	4.9	5	**M 6 x 1**
90	12			8	6.2	6.75	**M 8 x 1.25**
100	14			9	7	7.75	**M 9 x 1.25**
100	14			10	8	8.5	**M 10 x 1.5**
100	20		DIN 376	8	6.2	9.5	**M 11 x 1.5**
110	16			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**

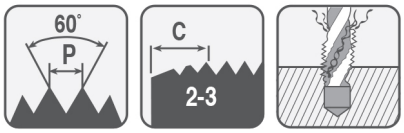
Filettatura Metrica ISO a Passo Grosso
Elica 25° - 35°

ISO Metric Coarse Thread
Spiral Fluted 25° - 35°

DIN 371	DIN 376



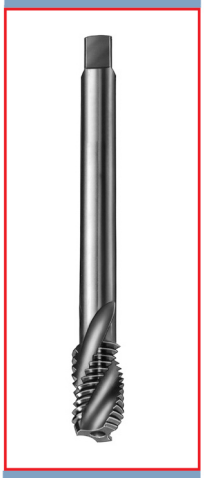




Codice Articolo

	ERALU 35°	ERALU-T 35°	NI ER 25°
	NEUTRO	TiCN	NEUTRO
Tol	6H	6H	6HX
Mat	HSS-E	HSS-E	HSSCo-PM
Imbocco	C	C	C

HIGH PERFORMANCE



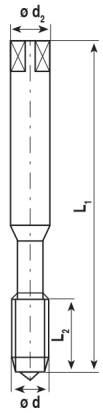
L1	L2		d2	⌀	Preforo	d x p
56	5	DIN 371	3.5	2.7	2.5	**M 3 x 0.5**
63	7		4.5	3.4	3.3	**M 4 x 0.7**
70	8		6	4.9	4.2	**M 5 x 0.8**
80	10		6	4.9	5	**M 6 x 1**
90	12		8	6.2	6.75	**M 8 x 1.25**
100	15		10	8	8.5	**M 10 x 1.5**
100	16	DIN 376	9	7	10.25	**M 12 x 1.75**
110	25		11	9	12	**M 14 x 2**
110	20		12	9	14	**M 16 x 2**
125	25		14	11	15.5	**M 18 x 2.5**
140	25		16	12	17.5	**M 20 x 2.5**
160	32		18	14.5	21	**M 24 x 3**
160	32		20	16	24	**M 27 x 3**
180	40		22	18	26.5	**M 30 x 3.5**
180	40		25	20	29.5	**M 33 x 3.5**
200	45		28	22	32	**M 36 x 4**

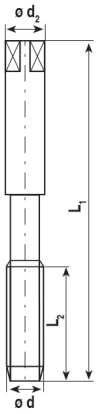
Filettatura Metrica ISO a Passo Grosso
Elica 45°

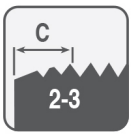
ISO Metric Coarse Thread
Spiral Fluted 45°

HIGH PERFORMANCE

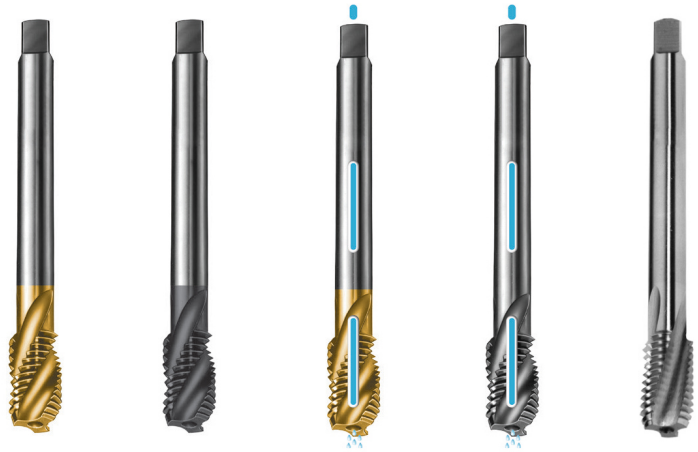
DIN 371	DIN 376







Codice Articolo



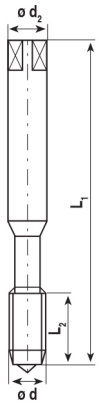
	HP ER-Y	HP ER-Z	IK ER-Y	IK ER-Z	FCE TI 15°
	TiN	ZHL	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX	6HX	6HX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	C	C	C	C	C

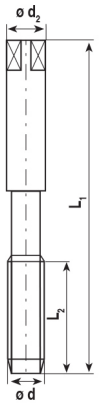
L1	L2		d2	⌀	Preforo	d x p
56	5	DIN 371	3.5	2.7	2.5	**M 3 x 0.5**
63	7		4.5	3.4	3.3	**M 4 x 0.7**
70	8		6	4.9	4.2	**M 5 x 0.8**
80	10		6	4.9	5	**M 6 x 1**
90	12		8	6.2	6.75	**M 8 x 1.25**
100	15		10	8	8.5	**M 10 x 1.5**
100	16	DIN 376	9	7	10.25	**M 12 x 1.75**
110	25		11	9	12	**M 14 x 2**
110	20		12	9	14	**M 16 x 2**
125	25		14	11	15.5	**M 18 x 2.5**
140	25		16	12	17.5	**M 20 x 2.5**
160	32		18	14.5	21	**M 24 x 3**
160	32		20	16	24	**M 27 x 3**
180	40		22	18	26.5	**M 30 x 3.5**
180	40		25	20	29.5	**M 33 x 3.5**
200	45		28	22	32	**M 36 x 4**

Filettatura Metrica ISO a Passo Grosso
Elica 15°

ISO Metric Coarse Thread
Spiral Fluted 15°

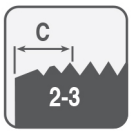
DIN 371	DIN 376





Codice Articolo

FCEGP	FCE	FCE	FCE	FCE



	NEUTRO	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6H	6G	7G	+ 0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

		DIN 371		DIN 376			
L1	L2	d2	⌀	d2	⌀	Preforo	d x p
45	8	2.8	2.1			1.6	**M 2 x 0.4**
45	8	2.8	2.1			1.75	**M 2.2 x 0.45**
45	4	2.8	2,1			1.9	**M 2.3 x 0.4**
50	9	2.8	2,1			2.05	**M 2.5 x 0.45**
50	4	2.8	2,1			2.15	**M 2.6 x 0.45**
56	5	3.5	2.7	2.2	1.8	2.5	**M 3 x 0.5**
56	6	4	3			2.9	**M 3.5 x 0.6**
63	12	4.5	3.4	2.8	2.1	3.3	**M 4 x 0.7**
70	12	6	4.9			3.75	**M 4.5 x 0.75**
70	12	6	4.9	3.5	2.7	4.2	**M 5 x 0.8**
80	14	6	4.9	4.5	3.4	5	**M 6 x 1**
80	16	7	5.5			6	**M 7 x 1**
90	18	8	6.2	6	4.9	6.75	**M 8 x 1.25**
100	20	10	8	7	5.5	8.5	**M 10 x 1.5**
100	20			8	6.2	9.5	**M 11 x 1.5**
110	16			9	7	10.25	**M 12 x 1.75**
110	25			11	9	12	**M 14 x 2**
110	25			12	9	14	**M 16 x 2**
125	32			14	11	15.5	**M 18 x 2.5**
140	32			16	12	17.5	**M 20 x 2.5**
140	32			18	14.5	19.5	**M 22 x 2.5**
160	36			18	14.5	21	**M 24 x 3**
160	36			20	16	24	**M 27 x 3**
180	40			22	18	26.5	**M 30 x 3.5**
180	40			25	20	29.5	**M 33 x 3.5**
200	45			28	22	32	**M 36 x 4**
200	45			32	24	35	**M 39 x 4**
220	50			32	24	37.5	**M 42 x 4.5**
220	50			36	29	40.5	**M 45 x 4.5**
250	56			36	29	43	**M 48 x 5**
250	56			40	32	47	**M 52 x 5**

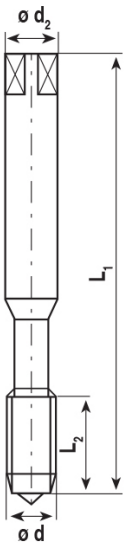
Filettatura Metrica ISO a Passo Grosso
Elica 35° - Imbocco Corretto

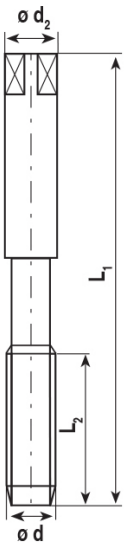
ISO Metric Coarse Thread
Spiral Fluted 35° - Spiral Point

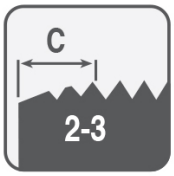
Codice Articolo

DIN 371	DIN 376

ER	IC







	NEUTRO	NEUTRO
Tol	4H	4H
Mat	HSS-E	HSS-E
Imbocco	C	B

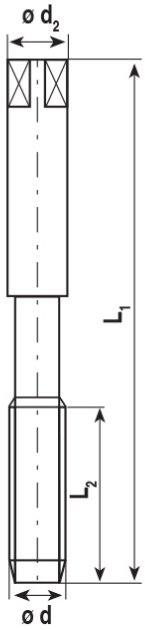
L1	L2			d2	⌀	Preforo	d x p
56	5			3.5	2.7	2.5	**MJ 3X0.5**
63	7			4.5	3.4	3.3	**MJ 4X0.7**
70	8			6	4.9	4.2	**MJ 5X0.8**
80	10			6	4.9	5	**MJ 6X1**
90	12			8	6.2	6.75	**MJ 8X1**
90	18			6	4.9	8.3	**MJ 8X1.25**
100	12			7	5.5	10.3	**MJ 10X1**
100	12			7	5.5	10.3	**MJ 10X1.25**
100	14			10	8	8.5	**MJ 10X1.5**
100	12			9	7	12.3	**MJ 12X1.25**
100	16			9	7	12.3	**MJ 12X1.5**
110	16			9	7	10.25	**MJ 12X1.75**
100	18			11	9	13	**MJ 14X1**
100	18			11	9	12.5	**MJ 14X1.5**

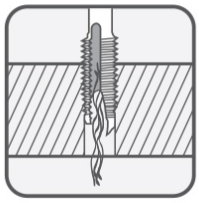
Filettatura Metrica ISO a Passo Grosso
Maschi per dadi

ISO Metric Coarse Thread
Nut Taps

Codice Articolo

NORM	EL





	NEUTRO
Tol	6H
Mat	HSS / HSS-E
Imbocco	

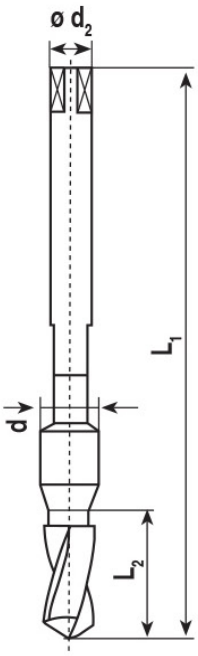
L1	L2	d2	⌀	Preforo	d x p
100	10	1.4		1.6	**2 x 0.4**
100	11	1.6		1.75	**2.2 x 0.45**
110	11	1.9		2.05	**2.5 x 0.45**
190	12	2.2		2.5	**3 x 0.5**
190	17	3		3.3	**4 x 0.7**
190	19	3.8		4.2	**5 x 0.8**
190	24	4.5		5	**6 x 1**
265	30	6		6.75	**8 x 1.25**
265	36	8		8.5	**10 x 1.5**
265	42	9.5	8	10.25	**12 x 1.75**
200	48	11.2	9	12	**14 x 2**
200	48	13.1	10	14	**16 x 2**
220	60	14.5	11	15.5	**18 x 2.5**
250	60	16.5	13	17.5	**20 x 2.5**

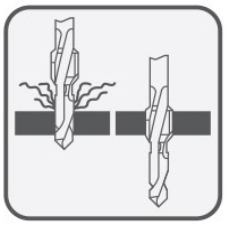
Filettatura Metrica ISO a Passo Grosso
Maschi Punta a Forare

ISO Metric Coarse Thread
Machine Drill Taps

Codice Articolo

NORM	PUNTA





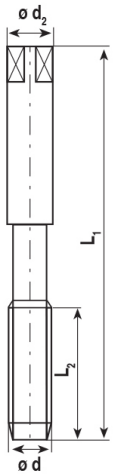
	NEUTRO
Tol	6H
Mat	HSS-E
Imbocco	D

L1	L2	d2	⌀	Preforo	d x p
62	9	3.5	2.7	2.5	**M 3 x 0.5**
66	10	4.5	3.4	3.3	**M 4 x 0.7**
75	12.5	6	4.9	4.2	**M 5 x 0.8**
81	14	6	4.9	5	**M 6 x 1**
93	20	6	4.9	6.75	**M 8 x 1.25**
99	22	7	5.5	8.5	**M 10 x 1.5**
120	25	9	7	10.25	**M 12 x 1.75**
120	28	11	9	12	**M 14 x 2**
125	32	12	9	14	**M 16 x 2**

Filettatura Metrica ISO a Passo Grosso
Maschi Serie Lunga

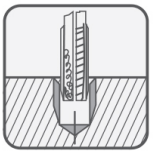
ISO Metric Coarse Thread
Extra Long Shank

NORM



Codice Articolo

SL IC	SL ER	SL TD



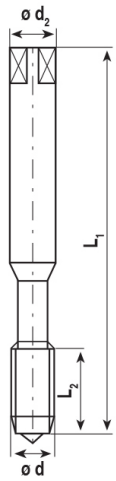
	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6H	6H
Mat	HSS-E	HSS-E	HSS-E
Imbocco	B	C	C

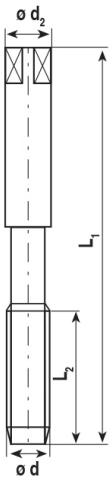
L1	L2	d2	⌀	Preforo	d x p
100	10	3.5	2.7	2.5	**M 3 x 0.5**
125	10	4.5	3.4	3.3	**M 4 x 0.7**
140	12	6	4.9	4.2	**M 5 x 0.8**
160	14	6	4.9	5	**M 6 x 1**
180	18	6	4.9	6.75	**M 8 x 1.25**
200	22	7	5.5	8.5	**M 10 x 1.5**
220	22	9	7	10.25	**M 12 x 1.75**
220	25	11	9	12	**M 14 x 2**
220	25	12	9	14	**M 16 X 2**
220	25	16	12	17.5	**M 20 X 2.5**

Filettatura Metrica ISO a Passo Grosso
Maschi a Rullare

ISO Metric Coarse Thread
Flutless Taps

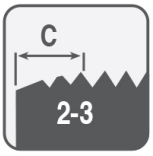
DIN 371 - DIN 2174	DIN 376 - DIN 2174





Codice Articolo

FORM	FORM-Y	FORM-T



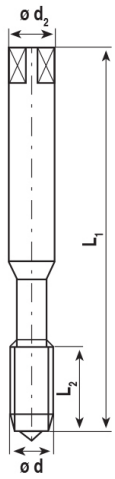
	NEUTRO	TiN	TiCN
Tol	6HX/6GX	6HX/6GX	6HX/6GX
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

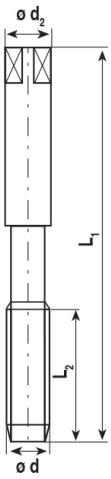
L1	L2			d2	⌀	Preforo	d x p
45	6	DIN 371		2.8	1.6	1.8	**M 2 x 0.4**
56	10			3.5	2.7	2.8	**M 3 x 0.5**
56	10			4	3	3.25	**M 3.5 x 06**
63	10			4.5	3.4	3.7	**M 4 x 0.7**
70	12			6	4.9	4.65	**M 5 x 0.8**
80	14			6	4.9	5.55	**M 6 x 1**
90	18			8	6.2	7.43	**M 8 x 1.25**
100	22			10	8	9.35	**M 10 x 1.5**
110	22		DIN 376	9	7	11.20	**M 12 x 1.75**
110	25			11	9	13.10	**M 14 x 2**
110	25			12	9	15.10	**M 16 x 2**
125	32			14	11	16.9	**M 18 x 2.5**
140	32			16	12	18.9	**M 20 x 2.5**

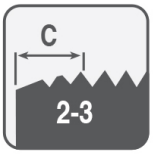
Filettatura Metrica ISO a Passo Grosso
Maschi a Rullare

ISO Metric Coarse Thread
Flutless Taps

DIN 371 - DIN 2174	DIN 376 - DIN 2174







Codice Articolo

HIGH PERFORMANCE

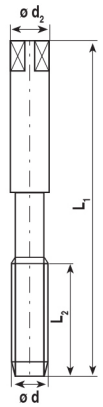
	HP FORM-Y	IK FORM-Y	IKR FORM-Y
	TiN	TiN	TiN
Tol	6HX	6HX	6HX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	C	C	C

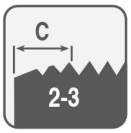
L1	L2			d2	⌀	Preforo	d x p
56	10	DIN 371		3.5	2.7	2.8	**M 3 x 0.5**
63	10			4.5	3.4	3.7	**M 4 x 0.7**
70	12			6	4.9	4.65	**M 5 x 0.8**
80	14			6	4.9	5.55	**M 6 x 1**
90	18			8	6.2	7.45	**M 8 x 1.25**
100	22			10	8	9.35	**M 10 x 1.5**
110	22		DIN 376	9	7	11.20	**M 12 x 1.75**
110	25			12	9	15.10	**M 16 x 2**
125	32			14	11	16.9	**M 18 x 2.5**
140	32			16	12	18.9	**M 20 x 2.5**

Filettatura Metrica ISO a Passo Fine
Maschi a Mano Serie 2 PZ

ISO Metric Fine Thread
Hand Taps Set of 2

DIN 2181	Codice Articolo S2P	Codice Articolo 3^





	NEUTRO	NEUTRO
Tol	**6H**	**6H**
Mat	HSS	HSS
Imbocco	**C**	**C**

L1	L2	d2	⌀	Preforo	d x p
40	9	3,5	2,7	2.65	**M 3 x 0.35**
45	10	4,5	3,4		**M 4 x 0.5**
50	12	6	4,9		**M 5 x 0.5**
50	14	6	4,9	5.25	**M 6x 0.75**
50	19	6	4,9	7.25	**M 8 x 0.75**
56	22	6	4,9	7	**M 8 x 1**
63	20	7	5,5	9.25	**M 10 x 0.75**
63	20	7	5,5	9	**M 10 x 1**
70	24	7	5,5	8.75	**M 10 x 1.25**
70	22	9	7	11	**M 12 x 1**
70	22	9	7	10.75	**M 12 x 1.25**
70	22	9	7	10.75	**M 12 x 1.5**
70	22	11	9	13	**M 14 x 1**
70	22	11	9	12.75	**M 14 x 1.25**
70	22	11	9	12.5	**M 14 x 1.5**
70	22	12	9	15	**M 16 x 1**
70	22	12	9	14.5	**M 16 x 1.5**
80	22	14	11	17	**M 18 x 1**
80	22	14	11	16.5	**M 18 x 1.5**
80	22	16	12	19	**M 20 x 1**
80	22	16	12	18.5	**M 20 x 1.5**
80	22	16	12	18	**M 20 x 2**
80	22	18	14,5	21	**M 22 x 1**
80	22	18	14,5	20.5	**M 22 x 1.5**
90	22	18	14,5	23	**M 24 x 1**
90	22	18	14,5	22.5	**M 24 x 1.5**
90	22	18	14,5	22	**M 24 x 2**
90	22	20	16	25.5	**M 27 x 1.5**
90	22	20	16	25	**M 27 x 2**
90	22	20	16	16.5	**M 28 x 1.5**
90	22	22	18	28.5	**M 30 x 1.5**
90	22	22	18	28	**M 30 x 2**
90	22	22	18	31.5	**M 33 x 1.5**
100	25	25	20	31	**M 33 x 2**

Filettatura Metrica ISO a Passo Fine
Taglienti Diritti

ISO Metric Fine Thread
Straight Fluted

Codice Articolo

DIN 374

	TD	TD	TD	TD
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	∅	Preforo	d x p
45	8	1.4	-	1.75	**M 2 x 0.25**
45	8	1.6	-	1.95	**M 2.2 x 0.25**
45	9	1.8	-	2.15	**M 2.5 x 0.35**
56	10	2.2	-	2.65	**M 3 x 0.35**
56	10	2.5	2.1	3.15	**M 3.5 x 0.35**
63	10	2.8	2.1	3.5	**M 4 x 0.5**
70	10	3.5	2.7	4.5	**M 5 x 0.5**
80	10	4.5	3.4	5.5	**M 6 x 0.5**
80	10	4.5	3.4	5.25	**M 6 x 0.75**
80	10	5.5	4.3	6.25	**M 7 x 0.75**
90	12	6	4.9	7.25	**M 8 x 0.75**
90	18	6	4.9	7	**M 8 x 1**
100	18	7	5.5	8	**M 9 x 1**
100	12	7	5.5	9.25	**M 10 x 0.75**
100	16	7	5.5	9	**M 10 x 1**
100	16	7	5.5	8.75	**M 10 x 1.25**
100	12	8	6.2	10.25	**M 11 x 0.75**
100	20	8	6.2	10	**M 11 x 1**
100	20	8	6.2	9.75	**M 11 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	16	9	7	11	**M 12 x 1**
100	16	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.5	**M 12 x 1.5**
100	12	11	9	12.5	**M 13 x 0.5**
100	12	11	9	12.25	**M 13 x 0.75**
100	18	11	9	12	**M 13 x 1**
100	12	11	9	13.5	**M 14 x 0.5**
100	12	11	9	13.25	**M 14 x 0.75**
100	18	11	9	13	**M 14 x 1**
100	18	11	9	12.75	**M 14 x 1.25**
110	25	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14	**M 15 x 1**
100	18	12	9	13.5	**M 15 x 1.5**
100	18	12	9	15	**M 16 x 1**
100	18	12	9	14.75	**M 16 x 1.25**
100	18	12	9	14.5	**M 16 x 1.5**
100	18	12	9	16	**M 17 x 1**
110	22	12	9	15.5	**M 17 x 1.5**
110	18	14	11	17	**M 18 x 1**
110	25	14	11	16.5	**M 18 x 1.5**
125	25	14	11	16	**M 18 x 2**

Codice Articolo

	TD	TD	TD	TD
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	∅	Preforo	d x p
125	18	16	12	19	**M 20 x 1**
125	25	16	12	18.5	**M 20 x 1.5**
125	25	16	12	18	**M 20 x 2**
125	18	18	14.5	21	**M 22 x 1**
125	25	18	14.5	20.5	**M 22 x 1.5**
125	25	18	14.5	20	**M 22 x 2**
140	18	18	14.5	23	**M 24 x 1**
140	25	18	14.5	22.5	**M 24 x 1.5**
140	25	18	14.5	22	**M 24 x 2**
140	18	18	14.5	24	**M 25 x 1**
140	25	18	14.5	23.5	**M 25 x 1.5**
140	25	18	14.5	23	**M 25 x 2**
140	18	20	16	25	**M 26 x 1**
140	25	20	16	24.5	**M 26 x 1.5**
140	25	20	16	24	**M 26 x 2**
140	25	20	16	26	**M 27 x 1**
140	25	20	16	25.5	**M 27 x 1.5**
140	25	20	16	25	**M 27 x 2**
150	18	20	16	27	**M 28 x 1**
150	25	20	16	26.5	**M 28 x 1.5**
150	25	20	16	26	**M 28 x 2**
150	18	22	18	29	**M 30 x 1**
150	25	22	18	28.5	**M 30 x 1.5**
150	25	22	18	28	**M 30 x 2**
150	18	22	18	31	**M 32 x 1**
150	18	22	18	30.5	**M 32 x 1.5**
150	28	22	18	30	**M 32 x 2**
160	22	25	20	31.5	**M 33 x 1.5**
160	32	25	20	31	**M 33 x 2**
160	25	28	22	32.5	**M 34 x 1.5**
160	25	28	22	33.5	**M 35 x 1.5**
180	22	28	22	34.5	**M 36 x 1.5**
180	32	28	22	34	**M 36 x 2**
180	32	28	22	33	**M 36 x 3**
180	28	32	24	36.5	**M 38 x 1.5**
180	28	32	24	37	**M 39 x 2**
190	36	32	24	36	**M 39 x 3**
180	28	32	24	38.5	**M 40 x 1.5**
180	28	32	24	38	**M 40 x 2**
180	28	32	24	37	**M 40 x 3**
180	32	32	24	40.5	**M 42 x 1.5**
180	32	32	24	40	**M 42 x 2**
200	36	32	24	39	**M 42 x 3**
190	28	36	29	43.5	**M 45 x 1.5**
190	36	36	29	43	**M 45 x 2**
190	36	36	29	42	**M 45 x 3**
190	28	36	29	46.5	**M 48 x 1.5**
190	28	36	29	46	**M 48 x 2**
200	36	36	29	45	**M 48 x 3**
200	32	36	29	48.5	**M 50 x 1.5**
200	32	36	29	48	**M 50 x 2**
200	32	36	29	47	**M 50 x 3**
200	36	40	32	50.5	**M 52 x 1.5**
200	36	40	32	50	**M 52 x 2**
200	36	40	32	49	**M 52 x 3**

Filettatura Metrica ISO a Passo Fine
Imbocco Corretto

ISO Metric Fine Thread
Spiral Point

DIN 374

Codice Articolo	IC	IC-Y	IC-T	IC	IC
	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B	B

L1	L2	d2	⌀	Preforo	d x p
45	8	2.8	2.1	1.75	**M 2 x 0.25**
45	8	2.8	2.1	1.95	**M 2.2 x 0.25**
45	9	2.8	2.1	2.15	**M 2.5 x 0.35**
56	10	2.2	2.1	2.65	**M 3 x 0.35**
56	10	2.5	2.1	3.15	**M 3.5 x 0.35**
63	10	2.8	2.1	3.5	**M 4 x 0.5**
70	10	3.5	2.7	4.5	**M 5 x 0.5**
80	10	4.5	3.4	5.5	**M 6 x 0.5**
80	10	4.5	3.4	5.25	**M 6 x 0.75**
80	10	5.5	4.3	6.25	**M 7 x 0.75**
90	12	6	4.9	7.25	**M 8 x 0.75**
90	18	6	4.9	7	**M 8 x 1**
100	18	7	5.5	8	**M 9 x 1**
100	12	7	5.5	9.25	**M 10 x 0.75**
100	16	7	5.5	9	**M 10 x 1**
100	16	7	5.5	8.75	**M 10 x 1.25**
100	12	8	6.2	10.25	**M 11 x 0.75**
100	20	8	6.2	10	**M 11 x 1**
100	20	8	6.2	9.75	**M 11 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	16	9	7	11	**M 12 x 1**
100	16	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.75	**M 12 x 1.5**
100	12	11	9	12.5	**M 13 x 0.5**
100	12	11	9	12.25	**M 13 x 0.75**
100	18	11	9	12	**M 13 x 1**
100	12	11	9	13.5	**M 14 x 0.5**
100	12	11	9	13.25	**M 14 x 0.75**
100	18	11	9	13	**M 14 x 1**
100	18	11	9	12.75	**M 14 x 1.25**
110	25	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14	**M 15 x 1**
100	18	12	9	13.5	**M 15 x 1.5**
100	18	12	9	15	**M 16 x 1**
100	18	12	9	14.75	**M 16 x 1.25**
100	18	12	9	14.5	**M 16 x 1.5**
100	18	12	9	16	**M 17 x 1**
110	22	12	9	15.5	**M 17 x 1.5**
110	18	14	11	17	**M 18 x 1**
110	25	14	11	16.5	**M 18 x 1.5**
125	25	14	11	16	**M 18 x 2**

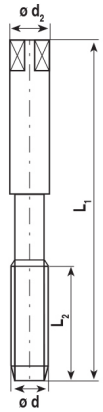
Codice Articolo	IC	IC-Y	IC-T	IC	IC
	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B	B

L1	L2	d2	⌀	Preforo	d x p
125	18	16	12	19	**M 20 x 1**
125	25	16	12	18.5	**M 20 x 1.5**
125	25	16	12	18	**M 20 x 2**
125	18	18	14.5	21	**M 22 x 1**
125	25	18	14.5	20.5	**M 22 x 1.5**
125	25	18	14.5	20	**M 22 x 2**
140	18	18	14.5	23	**M 24 x 1**
140	25	18	14.5	22.5	**M 24 x 1.5**
140	25	18	14.5	22	**M 24 x 2**
140	18	18	14.5	24	**M 25 x 1**
140	25	18	14.5	23.5	**M 25 x 1.5**
140	25	18	14.5	23	**M 25 x 2**
140	18	20	16	25	**M 26 x 1**
140	25	20	16	24.5	**M 26 x 1.5**
140	25	20	16	24	**M 26 x 2**
140	25	20	16	26	**M 27 x 1**
140	25	20	16	25.5	**M 27 x 1.5**
140	25	20	16	25	**M 27 x 2**
150	18	20	16	27	**M 28 x 1**
150	25	20	16	26.5	**M 28 x 1.5**
150	25	20	16	26	**M 28 x 2**
150	18	22	18	29	**M 30 x 1**
150	25	22	18	28.5	**M 30 x 1.5**
150	25	22	18	28	**M 30 x 2**
150	18	22	18	31	**M 32 x 1**
150	18	22	18	30.5	**M 32 x 1.5**
150	28	22	18	30	**M 32 x 2**
160	22	25	20	31.5	**M 33 x 1.5**
160	32	25	20	31	**M 33 x 2**
160	25	28	22	32.5	**M 34 x 1.5**
160	25	28	22	33.5	**M 35 x 1.5**
180	22	28	22	34.5	**M 36 x 1.5**
180	32	28	22	34	**M 36 x 2**
180	32	28	22	33	**M 36 x 3**
180	28	32	24	36.5	**M 38 x 1.5**
180	28	32	24	37	**M 39 x 2**
190	36	32	24	36	**M 39 x 3**
180	28	32	24	38.5	**M 40 x 1.5**
180	28	32	24	38	**M 40 x 2**
180	28	32	24	37	**M 40 x 3**
180	32	32	24	40.5	**M 42 x 1.5**
180	32	32	24	40	**M 42 x 2**
200	36	32	24	39	**M 42 x 3**
190	28	36	29	43.5	**M 45 x 1.5**
190	36	36	29	43	**M 45 x 2**
190	36	36	29	42	**M 45 x 3**
190	28	36	29	46.5	**M 48 x 1.5**
190	28	36	29	46	**M 48 x 2**
200	36	36	29	45	**M 48 x 3**
200	32	36	29	48.5	**M 50 x 1.5**
200	32	36	29	48	**M 50 x 2**
200	32	36	29	47	**M 50 x 3**
200	36	40	32	50.5	**M 52 x 1.5**
200	36	40	32	50	**M 52 x 2**
200	36	40	32	49	**M 52 x 3**

Filettatura Metrica ISO a Passo Fine
Imbocco Corretto

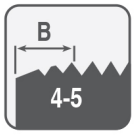
ISO Metric Fine Thread
Spiral Point

DIN 374



Codice Articolo

ICVA	ICVA-Y



	VAP	TiN
Tol	6H	6H
Mat	HSS-E	HSS-E
Imbocco	B	B

L1	L2	d2	⌀	Preforo	d x p
80	10	4.5	3.4	5.25	**M 6 x 0.75**
90	18	6	4.9	7	**M 8 x 1**
100	16	7	5.5	9	**M 10 x 1**
100	16	7	5.5	8.75	**M 10 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	16	9	7	11	**M 12 x 1**
100	16	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.5	**M 12 x 1.5**
100	18	11	9	13	**M 14 x 1**
100	11	11	9	12.75	**M 14 x 1.25**
110	25	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14.5	**M 16 x 1.5**
110	25	14	11	16.5	**M 18 x 1.5**
125	25	16	12	18.5	**M 20 x 1.5**

Filettatura Metrica ISO a Passo Fine
Imbocco Corretto

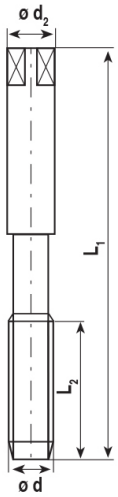
ISO Metric Fine Thread
Spiral Point

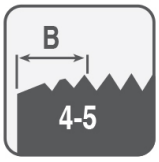
DIN 374

Codice Articolo

HIGH PERFORMANCE

HP IC-Y	HP IC-Z	T/N IC





	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	B	B	B

L1	L2	d2	⌀	Preforo	d x p
90	18	6	4.9	7	**M 8 x 1**
100	16	7	5.5	9	**M 10 x 1**
100	16	7	5.5	8.75	**M 10 x 1.25**
100	16	9	7	11	**M 12 x 1**
100	16	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.5	**M 12 x 1.5**
110	25	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14.5	**M 16 x 1.5**
110	25	14	11	16.5	**M 18 x 1.5**
125	25	16	12	18.5	**M 20 x 1.5**

Filettatura Metrica ISO a Passo Fine
Elica 35°

ISO Metric Fine Thread
Spiral Fluted 35°

DIN 374

Codice Articolo	ER	ER-Y	ER-T	ER	ER
	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

L1	L2	d2	⌀	Preforo	d x p
45	8	1.4	-	1.75	**M 2 x 0.25**
45	8	1.6	-	1.95	**M 2.2 x 0.25**
45	9	1.8	-	2.15	**M 2.5 x 0.35**
56	5	2.2	-	2.65	**M 3 x 0.35**
56	6	2.5	2.1	3.15	**M 3.5 x 0.35**
63	7	2.8	2.1	3.5	**M 4 x 0.5**
70	8	3.5	2.7	4.5	**M 5 x 0.5**
80	10	4.5	3.4	5.5	**M 6 x 0.5**
80	10	4.5	3.4	5.25	**M 6 x 0.75**
80	10	5.5	4.3	6.25	**M 7 x 0.75**
90	12	6	4.9	7.25	**M 8 x 0.75**
90	12	6	4.9	7	**M 8 x 1**
100	18	7	5.5	8	**M 9 x 1**
100	12	7	5.5	9.25	**M 10 x 0.75**
100	12	7	5.5	9	**M 10 x 1**
100	12	7	5.5	8.75	**M 10 x 1.25**
100	12	8	6.2	10.25	**M 11 x 0.75**
100	12	8	6.2	10	**M 11 x 1**
100	12	8	6.2	9.75	**M 11 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	12	9	7	11	**M 12 x 1**
100	12	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.5	**M 12 x 1.5**
100	12	11	9	12.5	**M 13 x 0.5**
100	12	11	9	12.25	**M 13 x 0.75**
100	18	11	9	12	**M 13 x 1**
100	12	11	9	13.5	**M 14 x 0.5**
100	12	11	9	13.25	**M 14 x 0.75**
100	12	11	9	13	**M 14 x 1**
100	12	11	9	12.75	**M 14 x 1.25**
110	18	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14	**M 15 x 1**
100	18	12	9	13.5	**M 15 x 1.5**
100	12	12	9	15	**M 16 x 1**
100	12	12	9	14.75	**M 16 x 1.25**
100	18	12	9	14.5	**M 16 x 1.5**
100	18	12	9	16	**M 17 x 1**
100	18	12	9	15.5	**M 17 x 1.5**
110	18	14	11	17	**M 18 x 1**
110	25	14	11	16.5	**M 18 x 1.5**
110	18	14	11	16	**M 18 x 2**

Codice Articolo	ER	ER-Y	ER-T	ER	ER
	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

L1	L2	d2	⌀	Preforo	d x p
125	18	16	12	19	**M 20 x 1**
125	18	16	12	18.5	**M 20 x 1.5**
125	18	16	12	18	**M 20 x 2**
125	18	18	14.5	21	**M 22 x 1**
125	18	18	14.5	20.5	**M 22 x 1.5**
125	18	18	14.5	20	**M 22 x 2**
140	18	18	14.5	23	**M 24 x 1**
140	18	18	14.5	22.5	**M 24 x 1.5**
140	18	18	14.5	22	**M 24 x 2**
140	18	18	14.5	24	**M 25 x 1**
140	18	18	14.5	23.5	**M 25 x 1.5**
140	18	18	14.5	23	**M 25 x 2**
140	18	20	16	25	**M 26 x 1**
140	18	20	16	24.5	**M 26 x 1.5**
140	18	20	16	24	**M 26 x 2**
140	25	20	16	26	**M 27 x 1**
140	25	20	16	25.5	**M 27 x 1.5**
140	25	20	16	25	**M 27 x 2**
150	18	20	16	27	**M 28 x 1**
150	18	20	16	26.5	**M 28 x 1.5**
150	18	20	16	26	**M 28 x 2**
150	18	22	18	29	**M 30 x 1**
150	18	22	18	28.5	**M 30 x 1.5**
150	25	22	18	28	**M 30 x 2**
150	18	22	18	31	**M 32 x 1**
150	18	22	18	30.5	**M 32 x 1.5**
150	18	22	18	30	**M 32 x 2**
160	22	25	20	31.5	**M 33 x 1.5**
160	22	25	20	31	**M 33 x 2**
160	25	28	22	32.5	**M 34 x 1.5**
180	22	28	22	34.5	**M 36 x 1.5**
180	32	28	22	34	**M 36 x 2**
180	32	28	22	33	**M 36 x 3**
180	28	32	24	36.5	**M 38 x 1.5**
180	28	32	24	37	**M 39 x 2**
190	36	32	24	36	**M 39 x 3**
180	28	32	24	38.5	**M 40 x 1.5**
180	28	32	24	38	**M 40 x 2**
180	28	32	24	37	**M 40 x 3**
180	32	32	24	40.5	**M 42 x 1.5**
180	32	32	24	40	**M 42 x 2**
200	36	32	24	39	**M 42 x 3**
190	28	36	29	43.5	**M 45 x 1.5**
190	36	36	29	43	**M 45 x 2**
190	36	36	29	42	**M 45 x 3**
190	28	36	29	46.5	**M 48 x 1.5**
190	28	36	29	46	**M 48 x 2**
200	36	36	29	45	**M 48 x 3**
200	32	36	29	48.5	**M 50 x 1.5**
200	32	36	29	48	**M 50 x 2**
200	32	36	29	47	**M 50 x 3**
200	36	40	32	50.5	**M 52 x 1.5**
200	36	40	32	50	**M 52 x 2**
200	36	40	32	49	**M 52 x 3**

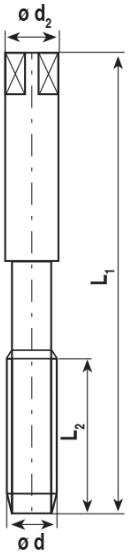
Filettatura Metrica ISO a Passo Fine
Elica 35°

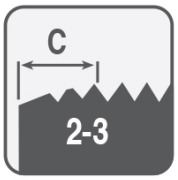
ISO Metric Fine Thread
Spiral Fluted 35°

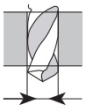
DIN 374

Codice Articolo

ERVA 35°	ERVA-Y 35°







	VAP	TiN
Tol	6H	6H
Mat	HSS-E	HSS-E
Imbocco	C	C

L1	L2	d2	⌀	Preforo	d x p
80	10	4.5	3.4	5.25	**M 6 x 0.75**
90	12	6	4.9	7	**M 8 x 1**
100	12	7	5.5	9	**M 10 x 1**
100	12	7	5.5	8.75	**M 10 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	12	9	7	11	**M 12 x 1**
100	12	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.75	**M 12 x 1.5**
100	12	11	9	13	**M 14 x 1**
100	12	11	9	12.75	**M 14 x 1.25**
110	18	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14.5	**M 16 x 1.5**
110	25	14	11	16.5	**M 18 x 1.5**
125	18	16	12	18.5	**M 20 x 1.5**

Filettatura Metrica ISO a Passo Fine
Elica 25° - 45°

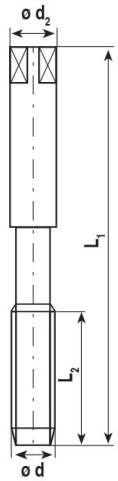
ISO Metric Fine Thread
Spiral Fluted 25° - 45°

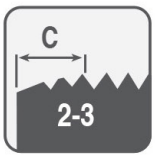
HIGH PERFORMANCE

DIN 374

Codice Articolo

HP ER-Y 45°	HP ER-Z 45°	NI ER 25°





	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	C	C	C

L1	L2	d2	⌀	Preforo	d x p
90	12	6	4.9	7	**M 8 x 1**
100	12	7	5.5	9	**M 10 x 1**
100	12	7	5.5	8.75	**M 10 x 1.25**
100	13	9	7	11	**M 12 x 1**
100	13	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.75	**M 12 x 1.5**
110	16	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14.5	**M 16 x 1.5**
110	15	14	11	16.5	**M 18 x 1.5**
125	18	16	12	18.5	**M 20 x 1.5**

Filettatura Metrica ISO a Passo Fine
Elica 15°

ISO Metric Fine Thread
Spiral Fluted 15°

DIN 374

Codice Articolo	FCE	FCE	FCE	FCE
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	⌀	Preforo	d x p
45	8	1.4	-	1.75	**M 2 x 0.25**
45	8	1.6	-	1.95	**M 2.2 x 0.25**
45	9	1.8	-	2.15	**M 2.5 x 0.35**
56	10	2.2	-	2.65	**M 3 x 0.35**
56	10	2.5	2.1	3.15	**M 3.5 x 0.35**
63	10	2.8	2.1	3.5	**M 4 x 0.5**
70	10	3.5	2.7	4.5	**M 5 x 0.5**
80	10	4.5	3.4	5.5	**M 6 x 0.5**
80	10	4.5	3.4	5.25	**M 6 x 0.75**
80	10	5.5	4.3	6.5	**M 7 x 0.5**
80	10	5.5	4.3	6.25	**M 7 x 0.75**
90	12	6	4.9	7.25	**M 8 x 0.75**
90	18	6	4.9	7	**M 8 x 1**
100	12	7	5.5	8.5	**M 9 x 0.5**
100	18	7	5.5	8	**M 9 x 1**
100	12	7	5.5	9.25	**M 10 x 0.75**
100	16	7	5.5	9	**M 10 x 1**
100	16	7	5.5	8.75	**M 10 x 1.25**
100	12	8	6.2	10.25	**M 11 x 0.75**
100	20	8	6.2	10	**M 11 x 1**
100	20	8	6.2	9.75	**M 11 x 1.25**
100	12	9	7	11.25	**M 12 x 0.75**
100	16	9	7	11	**M 12 x 1**
100	16	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.5	**M 12 x 1.5**
100	12	11	9	12.5	**M 13 x 0.5**
100	12	11	9	12.25	**M 13 x 0.75**
100	18	11	9	12	**M 13 x 1**
100	12	11	9	13.5	**M 14 x 0.5**
100	12	11	9	13.25	**M 14 x 0.75**
100	18	11	9	13	**M 14 x 1**
100	18	11	9	12.75	**M 14 x 1.25**
110	25	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14	**M 15 x 1**
100	18	12	9	13.5	**M 15 x 1.5**
100	18	12	9	15	**M 16 x 1**
100	18	12	9	16	**M 17 x 1**
110	22	12	9	15.5	**M 17 x 1.5**
110	18	14	11	17	**M 18 x 1**
110	25	14	11	16.5	**M 18 x 1.5**
125	25	14	11	16	**M 18 x 2**

Codice Articolo	FCE	FCE	FCE	FCE
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	⌀	Preforo	d x p
125	18	16	12	19	**M 20 x 1**
125	25	16	12	18.5	**M 20 x 1.5**
125	25	16	12	18	**M 20 x 2**
125	18	18	14.5	21	**M 22 x 1**
125	25	18	14.5	20.5	**M 22 x 1.5**
125	25	18	14.5	20	**M 22 x 2**
140	18	18	14.5	23	**M 24 x 1**
140	25	18	14.5	22.5	**M 24 x 1.5**
140	25	18	14.5	22	**M 24 x 2**
140	18	18	14.5	24	**M 25 x 1**
140	25	18	14.5	23.5	**M 25 x 1.5**
140	25	18	14.5	23	**M 25 x 2**
140	18	20	16	25	**M 26 x 1**
140	25	20	16	24.5	**M 26 x 1.5**
140	25	20	16	24	**M 26 x 2**
140	25	20	16	26	**M 27 x 1**
140	25	20	16	25.5	**M 27 x 1.5**
140	25	20	16	25	**M 27 x 2**
150	18	20	16	27	**M 28 x 1**
150	25	20	16	26.5	**M 28 x 1.5**
150	25	20	16	26	**M 28 x 2**
150	18	22	18	29	**M 30 x 1**
150	25	22	18	28.5	**M 30 x 1.5**
150	25	22	18	28	**M 30 x 2**
150	18	22	18	31	**M 32 x 1**
150	18	22	18	30.5	**M 32 x 1.5**
150	28	22	18	30	**M 32 x 2**
160	22	25	20	31.5	**M 33 x 1.5**
160	32	25	20	31	**M 33 x 2**
160	25	28	22	32.5	**M 34 x 1.5**
160	25	28	22	33.5	**M 35 x 1.5**
180	22	28	22	34.5	**M 36 x 1.5**
180	32	28	22	34	**M 36 x 2**
180	32	28	22	33	**M 36 x 3**
180	28	32	24	36.5	**M 38 x 1.5**
180	28	32	24	37	**M 39 x 2**
190	36	32	24	36	**M 39 x 3**
180	28	32	24	38.5	**M 40 x 1.5**
180	28	32	24	38	**M 40 x 2**
180	28	32	24	37	**M 40 x 3**
180	32	32	24	40.5	**M 42 x 1.5**
180	32	32	24	40	**M 42 x 2**
200	36	32	24	39	**M 42 x 3**
190	28	36	29	43.5	**M 45 x 1.5**
190	36	36	29	43	**M 45 x 2**
190	36	36	29	42	**M 45 x 3**
190	28	36	29	46.5	**M 48 x 1.5**
190	28	36	29	46	**M 48 x 2**
200	36	36	29	45	**M 48 x 3**
200	32	36	29	48.5	**M 50 x 1.5**
200	32	36	29	48	**M 50 x 2**
200	32	36	29	47	**M 50 x 3**
200	36	40	32	50.5	**M 52 x 1.5**
200	36	40	32	50	**M 52 x 2**
200	36	40	32	49	**M 52 x 3**

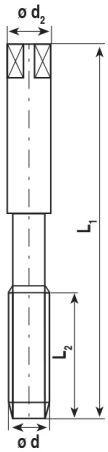
Filettatura Metrica ISO a Passo Fine
Elica 15°

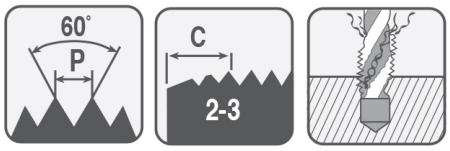
ISO Metric Fine Thread
Spiral Fluted 15°

Codice Articolo **HIGH PERFORMANCE**

DIN 374

TI FCE





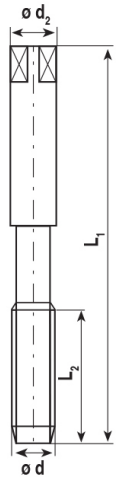
	NEUTRO
Tol	6HX
Mat	HSSCo-PM
Imbocco	C

L1	L2	d2	⌀	Preforo	d x p
90	12	8	6.2	7	**M 8 x 1**
100	12	10	8	9	**M 10 x 1**
100	12	10	8	8.75	**M 10 x 1.25**
100	12	9	7	11	**M 12 x 1**
100	12	9	7	10.75	**M 12 x 1.25**
100	16	9	7	10.75	**M 12 x 1.5**
100	15	11	9	12.5	**M 14 x 1.5**
100	18	12	9	14.5	**M 16 x 1.5**

Filettatura Metrica ISO a Passo Fine
Maschi a Rullare

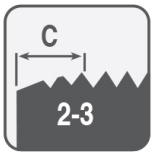
ISO Metric Fine Thread
Fluteless Taps

DIN 374



Codice Articolo

FORM	FORM-Y	FORM-T



	NEUTRO	TiN	TiCN
Tol	6HX/6GX	6HX/6GX	6HX/6GX
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

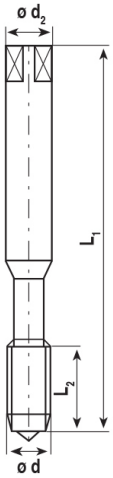
L1	L2	d2	⌀	Preforo	d x p
63	7	2.8	2.1	3.8	**M 4 x 0.5**
70	8	3.5	2.7	4.8	**M 5 x 0.5**
80	10	4.5	3.4	5.8	**M 6 x 05**
80	10	4.5	3.4	5.65	**M 6 x 0.75**
90	12	6	4.9	7.65	**M 8 x 0.75**
90	18	6	4.9	7.55	**M 8 x 1**
100	16	8	5.5	9.55	**M 10x 1**
100	16	7	5.5		**M 10 x 1.25**
100	16	9	7	11.55	**M 12 x 1**
100	16	9	7		**M 12 x 1.25**
110	22	9	7	11.35	**M 12 x 1.5**
100	18	11	9		**M 14 x 1**
110	25	11	9	13.35	**M 14 x 1.5**
100	18	12	9	15.55	**M 16 x 1**
100	18	12	9	15.35	**M 16 x 1.5**
110	25	14	11	17.35	**M 18 x 1.5**
125	18	16	12	19.55	**M 20 x 1**
125	25	16	12	19.35	**M 20 x 1.5**

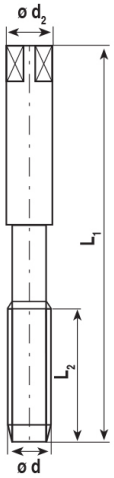
Filettatura Metrica ISO a Passo Fine
Maschi a Rullare

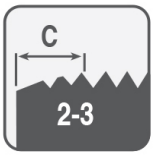
ISO Metric Fine Thread
Fluteless Taps

Codice Articolo **HIGH PERFORMANCE**

DIN 371	DIN 374	HP FORM-Y







	TiN
Tol	6HX
Mat	HSSCo-PM
Imbocco	C

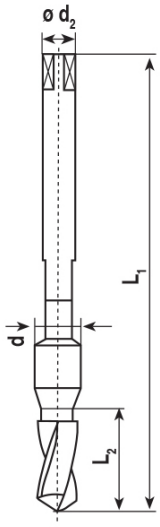
L1	L2	d2	∅	Preforo	d x p
90	18	8	6.2	7.55	**M 8 x 1**
100	22	10	8	9.55	**M 10x 1**
100	22	10	8		**M 10 x 1.25**
110	22	9	7	11.55	**M 12 x 1**
110	22	9	7		**M 12 x 1.25**
110	22	9	7	11.35	**M 12 x 1.5**
110	25	11	9	13.35	**M 14 x 1.5**
100	18	12	9	15.35	**M 16 x 1.5**

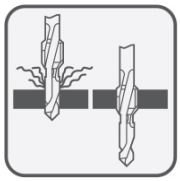
Filettatura Metrica ISO a Passo Fine
Punta a Forare

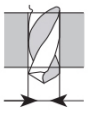
ISO Metric Fine Thread
Drill Taps

Codice Articolo

NORM	PUNTA







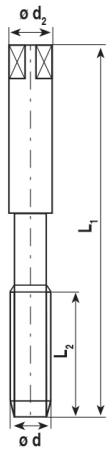
	NEUTRO
Tol	6H
Mat	HSS-E
Imbocco	D

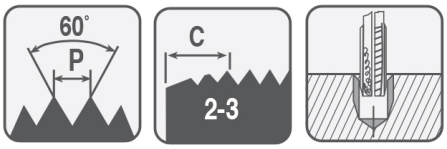
L1	L2	d2	⌀	Preforo	d x p
93	20	6	4.9	7.05	**M 8 x 1**
99	22	7	5.5	9.05	**M 10 x 1**

Filettatura Metrica ISO a Passo Fine
Serie Lunga

ISO Metric Fine Thread
with Extralong Shank

NORM





Codice Articolo

	SL TD	EL
	NEUTRO	NEUTRO
Tol	6H	6H
Mat	HSS-E	HSS-E
Imbocco	C	

L1	L2	d2	⌀	Preforo	d x p
180	12	6	4.9	7	**M 8 x 1**
200	16	7	5.5	9	**M 10 x 1**
220	25	11	9	12.5	**M 14 x 1.5**
200	18	12	9	14.5	**M 16 x 1.5**
220	25	14	11	16.5	**M 18 x 1.5**
220	32	16	12	18.5	**M 20 x 1.5**
250	32	18	14	20.5	**M 22 x 1.5**
250	36	18	14	22	**M 24 x 2**
250	32	20	16	25	**M 27 x 2**

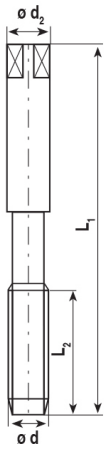
MASCHI PER DADI / *NUT TAPS*

L1	L2	d2	⌀	Preforo	d x p
190	12	3.8	-	4.5	**M 5 x 0.5**
190	18	4.5	-	5.25	**M 6 x 0.75**
265	24	6	-	7	**M 8 x 1**
265	18	8	-	9.25	**M 10 x 0.75**
265	24	8	-	9	**M 10 x 1**
265	30	8		8.75	**M 10 x 1.25**
265	24	9.5		11	**M 12 x 1**
265	36	9		10.5	**M 12 x 1.5**

Filettatura Whitworth BSW
Maschi a Mano Serie 3 PZ

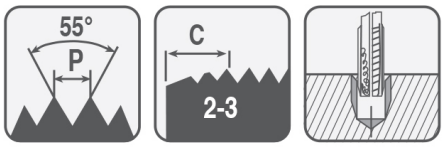
British Standard Whitworth Thread BSW
Hand Taps Set of 3

DIN 2184-2



Codice Articolo

S3P	3^



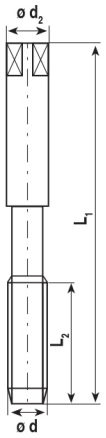
	NEUTRO	NEUTRO
Tol	medium	medium
Mat	HSS	HSS
Imbocco	C	C

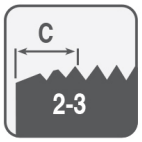
L1	L2	d2	∅	Preforo	mm	d x p
36	10	2.5	2.1	1.15	1.59	**W 1/16 - 60**
36	10	2.8	2.1	1.8	2.38	**W 3/32 - 48**
40	12	3.5	2.7	2.5	3.17	**W 1/8 - 40**
45	14	4.5	3.4	3.1	3.97	**W 5/32-32**
50	18	6	4.9	3.6	4.76	**W 3/16 - 24**
50	18	6	4.9	4.4	5.56	**W 7/32 - 24**
50	19	6	4.9	5	6.35	**W 1/4 - 20**
56	22	6	4.9	6.5	7.94	**W 5/16 - 18**
70	24	70	5.5	7.9	9.53	**W 3/8 - 16**
70	24	8	6.2	9.2	11.11	**W 7/16 - 14**
75	29	9	7	10.4	12.70	**W 1/2 - 12**
80	30	11	9	12	14.29	**W 9/16 - 12**
80	32	12	9	13.4	15.88	**W 5/8 - 11**
95	40	14	11	16.25	19.05	**W 3/4 - 10**
100	40	18	14.5	19.25	22.23	**W 7/8 - 9**
110	50	18	14.5	22	25.4	**W 1' - 8**
132	56	22	18	24.5	28.58	**W 1' 1/8 - 7**
132	56	22	18	27.75	31.75	**W 1' 1/4 - 7**
150	63	28	22	30.25	34.93	**W 1' 3/8 - 6**
150	63	32	24	33.5	38.10	**W 1' 1/2 - 6**

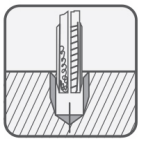
Filettatura Whitworth BSW
BS 84

British Standard Whitworth Thread BSW
BS 84

DIN 2184-1







Codice Articolo

	TD	IC
	TAGLIENTI DRITTI / *STRAIGHT FLUTED*	IMBOCCO CORRETTO / *SPIRAL POINT*
	NEUTRO	NEUTRO
Tol	medium	medium
Mat	HSS-E	HSS-E
Imbocco	C	B

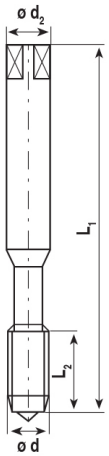
L1	L2	d2	⌀	Preforo	mm	d x p
45	8	2.5	2.1	1.15	1.59	**W 1/16 - 60**
50	9	2.8	2.1	1.8	2.38	**W 3/32 - 48**
56	10	3.5	2.7	2.5	3.17	**W 1/8 - 40**
63	10	4.5	3.4	3.1	3.97	**W 5/32 - 32**
70	12	6	4.9	3.6	4.76	**W 3/16 - 24**
80	12	6	4.9	4.4	5.56	**W 7/32 - 24**
80	16	7	5.5	5	6.35	**W 1/4 - 20**
90	18	8	6.2	6.5	7.94	**W 5/16 - 18**
100	22	10	7	7.9	9.53	**W 3/8 - 16**
100	20	8	6.2	9.2	11.11	**W 7/16 - 14**
110	25	9	7	10.4	12.70	**W 1/2 - 12**
110	25	11	9	12	14.29	**W 9/16 - 12**
110	25	12	9	13.4	15.88	**W 5/8 - 11**
125	32	14	11	16.25	19.05	**W 3/4 - 10**
140	32	18	14.5	19.25	22.23	**W 7/8 - 9**
160	36	20	16	22	25.4	**W 1' - 8**
180	40	22	18	24.5	28.58	**W 1' 1/8 - 7**
180	40	25	20	27.75	31.75	**W 1' 1/4 - 7**
200	45	28	22	30.25	34.93	**W 1' 3/8 - 6**
200	45	32	24	33.5	38.10	**W 1' 1/2 - 6**

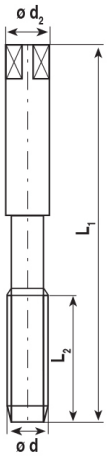
Filettatura Whitworth BSW
Elica 15° - 35°

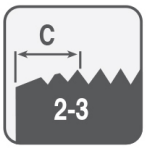
British Standard Whitworth Thread BSW
Spiral Fluted 15° - 35°

Codice Articolo

DIN 2184-1	FCE 15°	ER 35°







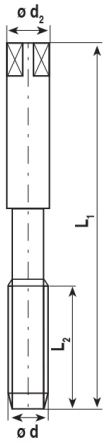
	NEUTRO	NEUTRO
Tol	medium	medium
Mat	HSS-E	HSS-E
Imbocco	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
45	8	2.5	2.1	1.15	1.59	**W 1/16 - 60**
50	9	2.8	2.1	1.8	2.38	**W 3/32 - 48**
56	10	3.5	2.7	2.5	3.17	**W 1/8 - 40**
63	10	4.5	3.4	3.1	3.97	**W 5/32-32**
70	12	6	4.9	3.6	4.76	**W 3/16 - 24**
80	12	6	4.9	4.4	5.56	**W 7/32 - 24**
80	16	7	5.5	5	6.35	**W 1/4 - 20**
90	18	8	6.2	6.5	7.94	**W 5/16 - 18**
100	22	10	7	7.9	9.53	**W 3/8 - 16**
100	20	8	6.2	9.2	11.11	**W 7/16 - 14**
110	25	9	7	10.4	12.70	**W 1/2 - 12**
110	25	11	9	12	14.29	**W 9/16 - 12**
110	25	12	9	13.4	15.88	**W 5/8 - 11**
125	32	14	11	16.25	19.05	**W 3/4 - 10**
140	32	18	14.5	19.25	22.23	**W 7/8 - 9**
160	36	20	16	22	25.4	**W 1' - 8**
180	40	22	18	24.5	28.58	**W 1' 1/8 - 7**
180	40	25	20	27.75	31.75	**W 1' 1/4 - 7**
200	45	28	22	30.25	34.93	**W 1' 3/8 - 6**
200	45	32	24	33.5	38.10	**W 1' 1/2 - 6**

Filettatura Gas Cilidrica G
Maschi a Mano Serie 2 PZ

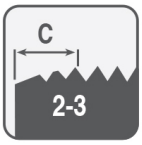
Whitworth Pipe Thread G
Hand Taps Set of 2

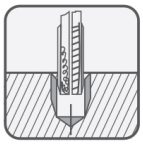
DIN 5157



Codice Articolo

S2P	3^





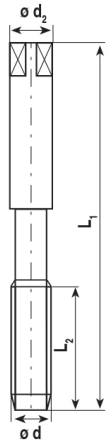
	NEUTRO	NEUTRO
Tol	ISO228	ISO228
Mat	HSS	HSS
Imbocco	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
63	20	7	5.5	8.7	9.73	**G 1/8 - 28**
70	22	11	9	11.16	13.16	**G 1/4 - 19**
70	22	12	9	15	16.66	**G 3/8 - 19**
80	22	16	12	19	20.95	**G 1/2 - 14**
80	22	18	14.5	20.75	22.91	**G 5/8 - 14**
90	22	20	16	24.5	26.44	**G 3/4 - 14**
90	22	22	18	28	30.20	**G 7/8 - 14**
100	25	25	20	30.5	33.25	**G 1' - 11**
125	40	28	22	35	37.90	**G 1' 1/8 - 11**
125	40	32	24	39.5	41.91	**G 1' 1/4 - 11**
140	40	36	29	41.5	44.32	**G 1' 3/8 - 11**
140	40	36	29	45	47.80	**G 1' 1/2 - 11**
140	40	40	32	51	53.75	**G 1' 3/4 - 11**
160	40	45	35	57	59.61	**G 2' - 11**
160	40	50	39	63.3	65.71	**G 2' 1/4 - 11**
160	40	50	39	72.8	75.18	**G 2' 1/2 - 11**
180	45	56	44	85.5	87.88	**G 3' - 11**

Filettatura Gas Cilindrica G
Taglienti Diritti

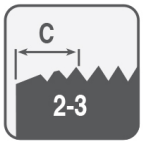
Whitworth Pipe Thread G
Straight Fluted

DIN 5156



Codice Articolo

TD	TD	TD	TD



	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	ISO 228	+ 0.05	+ 0.10	+ 0.20
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

l.tot	l.fil	gambo	⌀	Preforo	mm	d x p
90	18	6	4.9	6.56	7.72	**G 1/16 - 28**
100	16	7	5.5	8.75	9.73	**G 1/8 - 28**
100	18	11	9	11.75	13.16	**G 1/4 - 19**
110	22	12	9	15.25	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
125	25	18	14.5	20.75	22.91	**G 5/8 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
150	25	22	18	28	30.2	**G 7/8 - 14**
160	32	25	20	30.5	33.25	**G 1' - 11**
180	28	32	24	35	37.9	**G 1' 1/8 - 11**
180	32	32	24	39.5	41.91	**G 1' 1/4 - 11**
190	36	36	29	41.5	44.32	**G 1' 3/8 - 11**
200	36	36	29	45	47.8	**G 1' 1/2 - 11**
200	36	40	29	51	53.75	**G 1' 3/4 - 11**
220	36	45	35	57	59.61	**G 2' - 11**
250	50	45	35	63.3	65.71	**G 2' 1/4 - 11**
270	55	56	44	72.8	75.18	**G 2' 1/2 - 11**
270	55	56	44	85.5	87.88	**G 3' - 11**

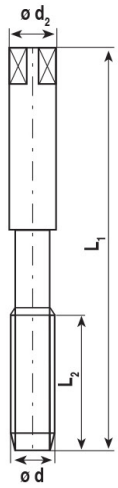
Filettatura Gas Cilindrica G
Taglienti Diritti

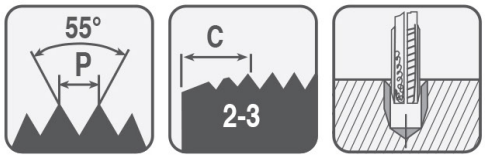
Whitworth Pipe Thread G
Straight Fluted

DIN 5156

Codice Articolo

TDOT	TDGG	TDGG-T





	NEUTRO	NIT	TiCN
Tol	ISO 228	ISO 228	ISO 228
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

l.tot	l.fil	gambo	⌀	Preforo	mm	d x p
90	18	6	4.9	6.56	7.72	**G 1/16 - 28**
100	16	7	5.5	8.75	9.73	**G 1/8 - 28**
100	18	11	9	11.75	13.16	**G 1/4 - 19**
110	22	12	9	15.25	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
125	25	18	14.5	20.75	22.91	**G 5/8 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
150	25	22	18	28	30.2	**G 7/8 - 14**
160	32	25	20	30.5	33.25	**G 1' - 11**

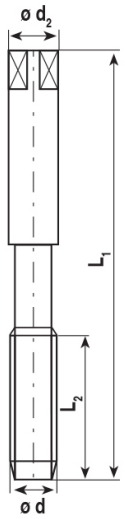
Filettatura Gas Cilindrica G
Imbocco Corretto

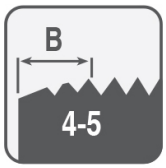
Whitworth Pipe Thread G
Spiral Point

DIN 5156

Codice Articolo

IC	ICVA	ICVA-Y





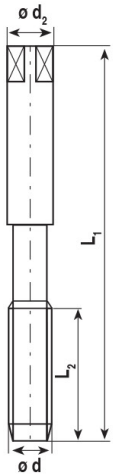
	NEUTRO	VAP	TiN
Tol	ISO 228	ISO 228	ISO 228
Mat	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B

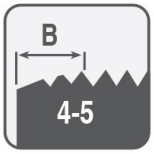
L1	L2	d2	⌀	Preforo	mm	d x p
100	16	7	5.5	8.75	9.73	**G 1/8 - 28**
100	18	11	9	11.75	13.16	**G 1/4 - 19**
110	22	12	9	15.25	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
125	25	18	14.5	20.75	22.91	**G 5/8 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
150	25	22	18	28	30.20	**G 7/8 - 14**
160	32	25	20	30.5	33.25	**G 1' - 11**
180	28	32	24	35	37.90	**G 1' 1/8 - 11**
180	32	32	24	39.5	41.91	**G 1' 1/4 - 11**
190	36	36	29	41.5	44.32	**G 1' 3/8 - 11**
200	36	36	29	45	47.80	**G 1' 1/2 - 11**
225	36	40	32	51	53.75	**G 1' 3/4 - 11**
220	36	45	35	57	59.61	**G 2' - 11**
230	45	45	35	72.8	75.18	**G 2' 1/2 - 11**
270	55	56	44	85.5	87.88	**G 3' - 11**

Filettatura Gas Cilindrica G
Imbocco Corretto

Whitworth Pipe Thread G
Spiral Point

DIN 5156





Codice Articolo **HIGH PERFORMANCE**

HP IC-Y	HP IC-Z

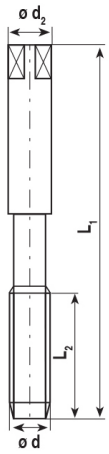
	TiN	ZHL
Tol	ISO228	ISO228
Mat	HSSCo-PM	HSSCo-PM
Imbocco	B	B

L1	L2	d2	⌀	Preforo	mm	d x p
100	16	7	5.5	8.75	9.73	**G 1/8 - 28**
100	18	11	9	11.75	13.16	**G 1/4 - 19**
110	22	12	9	15.25	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
160	32	25	20	30.5	33.25	**G 1' - 11**

Filettatura Gas Cilindrica G
Elica 15°

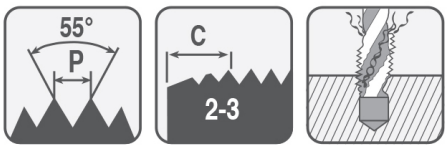
Whitworth Pipe Thread G
Spiral Fluted 15°

DIN 5156



Codice Articolo

FCE	FCE	FCE	FCE



	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	ISO 228	+ 0.05	+ 0.10	+ 0.20
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
90	18	6	4.9	6.8	7.72	**G 1/16 - 28**
100	16	7	5.5	8.75	9.73	**G 1/8 - 28**
100	18	11	9	11.75	13.16	**G 1/4 - 19**
110	22	12	9	15.25	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
125	25	18	14.5	20.75	22.91	**G 5/8 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
150	25	22	18	28	30.20	**G 7/8 - 14**
160	32	25	20	30.5	33.25	**G 1' - 11**
180	28	32	24	35	37.90	**G 1' 1/8 - 11**
180	32	32	24	39.5	41.91	**G 1' 1/4 - 11**
190	36	36	29	41.5	44.32	**G 1' 3/8 - 11**
200	36	36	29	45	47.80	**G 1' 1/2 - 11**
200	36	40	32	51	53.75	**G 1' 3/4 - 11**
220	36	45	35	57	59.61	**G 2' - 11**
250	50	45	35	63.3	65.71	**G 2' 1/4 - 11**
270	55	56	44	72.8	75.18	**G 2' 1/2 - 11**
270	55	56	44	85.5	87.88	**G 3' - 11**

BSP/G - EN ISO 228

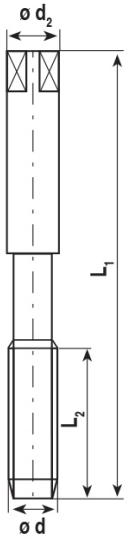
Filettatura Gas Cilindrica G
Elica 35°

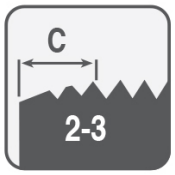
Whitworth Pipe Thread G
Spiral Fluted 35°

DIN 5156

Codice Articolo

ER	ERVA	ERVA-Y





	NEUTRO	VAP	TiN
Tol	ISO 228	ISO 228	ISO 228
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
90	12	6	4.9	6.8	7.72	**G 1/16 - 28**
100	12	7	5.5	8.7	9.73	**G 1/8 - 28**
100	18	11	9	11.16	13.16	**G 1/4 - 19**
100	18	12	9	15	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
125	25	18	14.5	20.75	22.91	**G 5/8 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
150	25	22	18	28	30.20	**G 7/8 - 14**
160	32	22	20	30.5	33.25	**G 1' - 11**
180	28	32	24	35	37.90	**G 1' 1/8 - 11**
180	32	32	24	39.5	41.91	**G 1' 1/4 - 11**
190	36	36	29	41.5	44.32	**G 1' 3/8 - 11**
225	36	36	29	45	47.80	**G 1' 1/2 - 11**
200	36	40	32	51	53.75	**G 1' 3/4 - 11**
220	36	45	35	57	59.61	**G 2' - 11**
250	50	45	35	63.3	65.71	**G 2' 1/4 - 11**
270	55	56	44	72.8	75.18	**G 2' 1/2 - 11**
270	55	56	44	85.5	87.88	**G 3' - 11**

Filettatura Gas Cilindrica G
Elica 45°

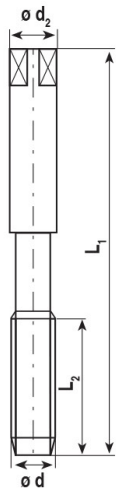
Whitworth Pipe Thread G
Spiral Fluted 45°

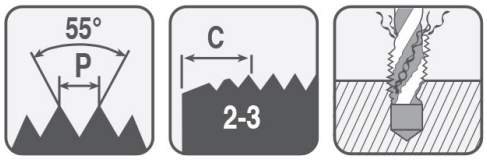
HIGH PERFORMANCE

DIN 5156

Codice Articolo

HP ER-Y	HP ER-Z





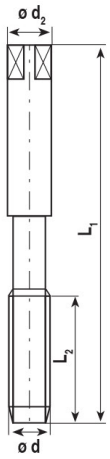
	TiN	ZHL
Tol	ISO 228X	ISO 228X
Mat	HSSCo-PM	HSSCo-PM
Imbocco	C	C

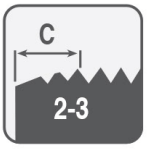
L1	L2	d2	⌀	Preforo	mm	d x p
100	12	7	5.5	8.7	9.73	**G 1/8 - 28**
100	16	11	9	11.16	13.16	**G 1/4 - 19**
110	13	12	9	15	16.66	**G 3/8 - 19**
125	18	16	12	19	20.95	**G 1/2 - 14**
140	18	20	16	24.5	26.44	**G 3/4 - 14**
160	23	25	20	30.5	33.25	**G 1' - 11**

Filettatura Gas Cilindrica G
Maschi a Rullare

Whitworth Pipe Thread G
Fluteless Taps

DIN 2189





Codice Articolo

	FORM	FORM-Y	HP FORM-Y
			HIGH PERFORMANCE
	NEUTRO	TiN	TiN
Tol	ISO 228X	ISO 228X	ISO 228X
Mat	HSS-E	HSS-E	HSSCo-PM
Imbocco	C	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
100	16	7	5.5	8.7	9.73	**G 1/8 - 28**
100	18	11	9	11.16	13.16	**G 1/4 - 19**
110	22	12	9	15	16.66	**G 3/8 - 19**
125	25	16	12	19	20.95	**G 1/2 - 14**
140	25	20	16	24.5	26.44	**G 3/4 - 14**
160	32	25	20	32	33.25	**G 1' - 11**

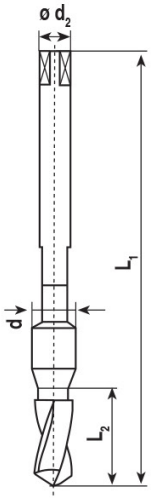
Filettatura Gas Cilindrica G
Maschi Punta a Forare

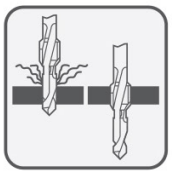
Whitworth Pipe Thread G
Machine Drill Taps

Codice Articolo

NORM

PUNTA





	NEUTRO
Tol	B
Mat	HSS-E
Imbocco	D

L1	L2	d2	⌀	Preforo	mm	Ø
93	20	7	5.5	8.75	9.73	1/8 - 28
106	25	11	9	11.75	13.16	1/4 - 14
123	32	12	9	15.25	16.66	3/8 - 14
132	36	16	12	19	20.95	1/2 - 14
155	45	20	16	24.5	26.44	3/4 - 14
180	50	25	20	30.5	33.25	1 - 11

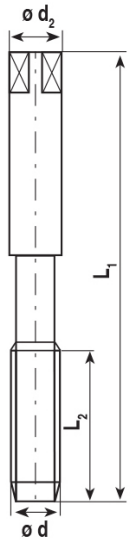
Filettatura Gas Cilindrica G
Maschi Punta a Forare

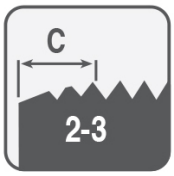
Whitworth Pipe Thread G
Machine Drill Taps

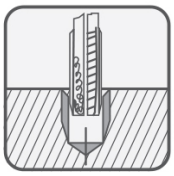
NORM

Codice Articolo

SL IC	SL ER	SL TD







	NEUTRO	NEUTRO	NEUTRO
Tol	ISO 228	ISO 228	ISO 228
Mat	HSS-E	HSS-E	HSS-E
Imbocco	B	C	C

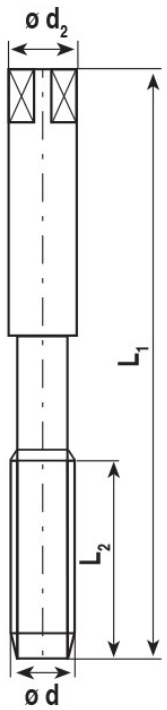
L1	L2	d2	⌀	Preforo	mm	Ø
200	16	7	5.5	8.75	9.73	1/8 - 28
200	18	11	9	11.16	13.16	1/4 - 14
180	22	12	9	15	16.66	3/8 - 14
250	32	16	12	19	20.95	1/2 - 14
250	32	20	16	24.5	26.44	3/4 - 14
250	22	25	20	30.5	33.25	1 - 11

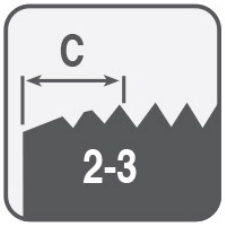
Filettatura Gas Cilindrica Interna RP
Taglienti Diritti

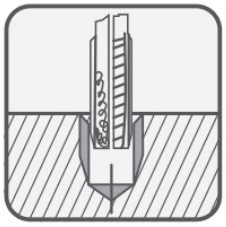
Cylindrical Whitworth Internal Pipe Thread RP
Straight Fluted

Codice Articolo

DIN 374 | **TD**







	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

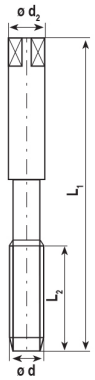
L1	L2	d2	⌀	Preforo	mm	d x p
100	16	7	5.5	8.6	9.73	**Rp 1/8 - 28**
100	18	11	9	11.5	13.16	**Rp 1/4 - 19**
110	22	12	9	15	16.66	**Rp 3/8 - 19**
125	25	16	12	18.6	20.95	**Rp 1/2 - 14**
140	25	20	16	24	26.44	**Rp 3/4 - 14**
160	32	25	20	30.25	33.25	**Rp 1' - 11**
180	32	32	24	39	41.91	**Rp 1' 1/4 - 11**
200	36	36	29	44.9	47.80	**Rp 1' 1/2 - 11**
220	36	45	35	56.6	59.61	**Rp 2' - 11**

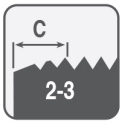
Filettatura Gas Conica RC (BSPT) CON.1:16
3^ Finitore - Taglienti Diritti

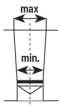
Tapered Pipe Thread RC (BSPT) TAPER 1:16
Hand Taps - Straight Fluted

NORM

Codice Articolo: **S 3^**





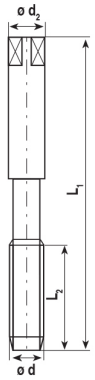


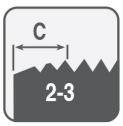
	NEUTRO	
Tol		
Mat	HSS	
Imbocco	C	

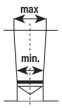
L1	L2	d2	⌀	L.MIS.	Preforo	Preforo min	Preforo max	mm	d x p
119	36	31.5	25	28.3	38.52	37.5	38.95	41.91	**Rc 1' ¼ - 11**
125	37	35.5	28	28.3	44.5	43.5	44.85	47.8	**Rc 1' ½ - 11**
160	41	45	31.5	32.7	56.5	55	56.66	59.61	**Rc 2' - 11**
						62.75	63.4	65.71	**Rc 2' ¼ - 11**
						72.22	72.86	75.18	**Rc 2' ½ - 11**
164	48	50	39	40.2	84.15	84.92	85.56	87.88	**Rc 3' - 11**
180	60	70	55		29.75	110	110.7	113.03	**Rc 4' - 11**

DIN 374

Codice Articolo: **TD**







	NEUTRO	
Tol		
Mat	HSS-E	
Imbocco	C	

L1	L2	d2	⌀	L.MIS.	Preforo	Preforo min	Preforo max	mm	d x p
90	18	6	4.9	10.1	6.3	6.1	6.56	7.72	**Rc 1/16 - 28**
100	20	8	6.2	10.1	8.3	8.1	8.57	9.73	**Rc 1/8 - 28**
110	25	11	9	15	11.5	10.75	11.45	13.16	**Rc 1/4 - 19**
110	25	14	11	15.4	14.75	14.25	14.95	16.66	**Rc 3/8 - 19**
140	32	18	14.5	20.5	18.25	17.75	18.63	20.95	**Rc 1/2 - 14**
160	36	20	16	21.8	23.5	23	24.12	26.44	**Rc 3/4 - 14**
180	36	28	22	26	29.75	29	30.29	33.25	**Rc 1' - 11 ½**

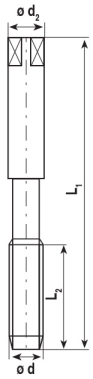
Filettatura Gas Conica Americana CON. 1:16
3^ Finitore - Taglienti Diritti

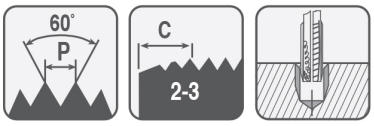
American Tapered Pipe Thread Taper 1:16
Hand Taps - Straight Fluted

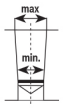
NORM

Codice Articolo

S 3^	







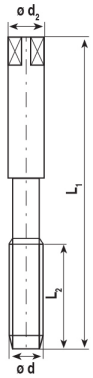
	NEUTRO	
Tol		
Mat	HSS	
Imbocco	C	

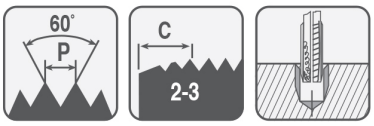
L1	L2	d2	⌀	L.MIS.	Preforo	Preforo min	Preforo max	mm	d x p
125	34	32	24	27	38	38.48	38.56	42.16	**NPT 1' ¼ - 11 ½**
140	34	36	29	27	44	44.55	44.63	48.26	**NPT 1' ½ - 11 ½**
160	36	36	29	28	56	56.59	56.67	60.32	**NPT 2' - 11 ½**
160	55	45	35.5	41	67			73.02	**NPT 2' ½ - 8**
160	58	50	39	43	83			88.9	**NPT 3' - 8**
180	60	70	55	46				114.3	**NPT 4' - 8**

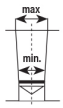
DIN 374

Codice Articolo

TD NPT	TD AZ NPT	TD NPTF







	NEUTRO	NEUTRO	NEUTRO
Tol			
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

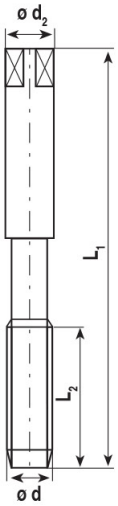
L1	L2	d2	⌀	L.MIS.	Preforo	Preforo min	Preforo max	mm	d x p
90	18	6	4.9	11	6.3	6.41	6.5	7.93	**NPT 1/16 - 27**
100	20	8	6.2	11	8.5	8.76	8.85	10.28	**NPT 1/8 - 27**
110	25	11	9	17	11.2	11.39	11.48	13.71	**NPT 1/4 - 18**
110	25	14	11	17	14.5	14.83	14.92	17.14	**NPT 3/8 - 18**
140	32	18	14.5	21	18	18.33	18.41	21.33	**NPT 1/2 - 14**
160	36	20	16	22	23	23.67	23.76	26.67	**NPT 3/4 - 14**
180	36	28	22	26	29	29.72	29.81	33.4	**NPT 1' - 11 ½**

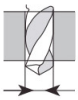
Filettatura Americana Cilindrica per Tubi NPSM-NPSF
Taglienti Diritti

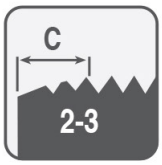
American National Pipe Straight NPSM-NPSF
Straight Fluted

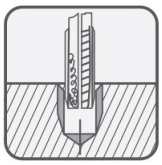
Codice Articolo

DIN 374	TD









	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

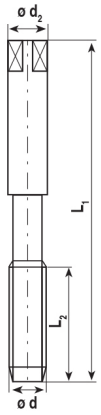
	L1	L2	d2	⌀	Preforo	mm	d x p
NPSM	90	18	6	4.9	6.9	7.753	NPSM 1/16 - 27
	100	16	7	5.5	9.1	10.10	NPSM 1/8 - 27
	100	18	11	9	12	13.40	NPSM 1/4 - 18
	110	22	12	9	15.5	16.84	NPSM 3/8 - 18
	125	25	16	12	19	20.95	NPSM 1/2 - 14
	140	25	20	16	24.5	26.29	NPSM 3/4 - 14
	160	32	25	20	30.5	32.89	NPSM 1' - 11½
	180	32	32	24	38	41.65	NPSM 1' 1/4 - 11½
	190	28	36	29	44	47.72	NPSM 1' 1/2 - 11½
	220	36	45	35	56	59.76	NPSM 2' - 11½

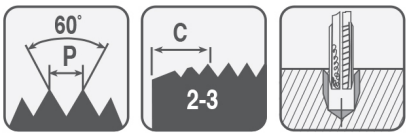
	L1	L2	d2	⌀	Preforo	mm	d x p
NPSF	90	18	6	4.9	6.9	7.64	NPSF 1/16 - 27
	100	16	7	5.5	8.75	9.98	NPSF 1/8 - 27
	100	18	11	9	11.2	13.23	NPSF 1/4 - 18
	110	22	12	9	14.5	16.67	NPSF 3/8 - 18
	125	25	16	12	18	20.73	NPSF 1/2 - 14
	140	25	20	16	23.5	26.08	NPSF 3/4 - 14
	160	32	25	20	29.5	32.63	NPSF 1' - 11½

Filettatura Americana UNC
Maschi a Mano Serie 3 PZ

Unified Coarse Thread UNC
Hand Taps Set of 3

DIN 2184-2





Codice Articolo

	S3P	3^
Tol	NEUTRO	NEUTRO
Mat	HSS	HSS
Imbocco	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
40	12	3.5	2.7	2.6	3.175	**Nr 5 - 40**
45	14	4	3	2.7	3.505	**Nr 6 - 32**
45	14	4.5	3.4	3.4	4.166	**Nr 8 - 32**
50	16	6	4.9	3.8	4.826	**Nr 10 - 24**
50	18	6	4.9	4.5	5.486	**Nr 12 - 24**
50	19	6	4.9	5.1	6.35	**NC 1/4 - 20**
56	22	6	4.9	6.5	7.94	**NC 5/16 - 18**
70	24	7	5.5	7.9	9.53	**NC 3/8 - 16**
70	24	8	6.2	9.3	11.11	**NC 7/16 - 14**
75	29	9	7	10.7	12.70	**NC 1/2 - 13**
80	30	11	9	12.3	14.29	**NC 9/16 - 12**
80	32	12	9	13.5	15.88	**NC 5/8 - 11**
95	40	14	11	16.5	19.05	**NC 3/4 - 10**
100	40	18	14.5	19.3	22.23	**NC 7/8 - 9**
110	50	18	14.5	22.25	25.40	**NC 1' - 8**
132	56	22	18	25	28.58	**NC 1' 1/8 - 7**
132	56	22	18	28.25	31.75	**NC 1' 1/4 - 7**
150	63	28	22	30.75	34.93	**NC 1' 3/8 - 6**
150	63	32	24	34	38.10	**NC 1' 1/2 - 6**
160	70	36	29	39.5	44.45	**NC 1' 3/4 - 5**
190	80	40	32	45.25	50.80	**NC 2' - 4½**

Filettatura Americana UNC
ASME B 1.1

Unified Coarse Thread UNC
ASME B 1.1

Codice Articolo

	TD	IC
	TAGLIENTI DRITTI / *STRAIGHT FLUTED*	IMBOCCO CORRETTO / *SPIRAL POINT*
	NEUTRO	NEUTRO
Tol	**2B**	**2B**
Mat	HSS-E	HSS-E
Imbocco	**C**	**B**

L1	L2	d2	⌀	Preforo	mm	d x p
45	8	2.8	2.1	1.8	2.184	**Nr 2 - 56**
50	9	2.8	2.1	2	2.515	**Nr 3 - 48**
56	10	3.5	2.7	2.3	2.845	**Nr 4 - 40**
56	10	3.5	2.7	2.6	3.175	**Nr 5 - 40**
56	10	4	3.4	2.7	3.505	**Nr 6 - 32**
63	10	4.5	3.4	3.4	4.166	**Nr 8 - 32**
70	12	6	4.9	3.8	4.826	**Nr 10 - 24**
80	12	6	4.9	4.5	5.486	**Nr 12 - 24**
80	16	7	5.5	5.1	6.35	**NC 1/4 - 20**
90	18	8	6.2	6.5	7.94	**NC 5/16 - 18**
100	20	10	8	7.9	9.53	**NC 3/8 - 16**
100	20	8	6.2	9.3	11.11	**NC 7/16 - 14**
110	25	9	7	10.7	12.70	**NC 1/2 - 13**
110	25	11	9	12.3	14.29	**NC 9/16 - 12**
110	25	12	9	13.5	15.88	**NC 5/8 - 11**
125	32	14	11	16.5	19.05	**NC 3/4 - 10**
140	32	18	14.5	19.3	22.23	**NC 7/8 - 9**
160	36	20	16	22.25	25.40	**NC 1' - 8**
180	40	22	18	25	28.58	**NC 1' 1/8 - 7**
180	40	25	20	28.25	31.75	**NC 1' 1/4 - 7**
200	45	28	22	30.75	34.93	**NC 1' 3/8 - 6**
200	45	32	24	34	38.10	**NC 1' 1/2 - 6**
220	50	36	29	39.5	44.45	**NC 1' 3/4 - 5**
250	56	40	32	45.25	50.80	**NC 2' - 4½**

Filettatura Americana UNC
Elica 15° - 35° / Maschi a Rullare

Unified Coarse Thread UNC
Spiral Fluted 15° - 35° / Fluteless Taps

Codice Articolo

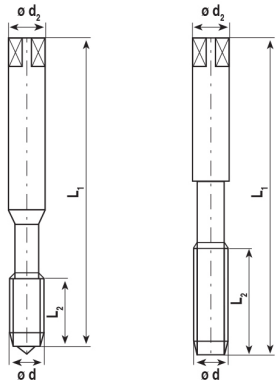
	FCE 15°	ER 35°	FORM	FORM-Y
	ELICOIDALI / *SPIRAL FLUTED*		A RULLARE / *FLUTELESS TAPS*	
	NEUTRO	NEUTRO	NEUTRO	TiN
Tol	**2B**	**2B**	**2BX**	**2BX**
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	**C**	**C**	**C**	**C**

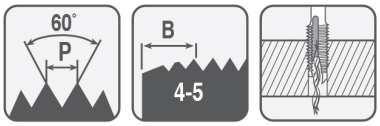
L1	L2	d2	⌀	Preforo	mm	d x p
45	8	2.8	2.1	1.8	2.184	**Nr 2 - 56**
50	9	2.8	2.1	2	2.515	**Nr 3 - 48**
56	10	3.5	2.7	2.3	2.845	**Nr 4 - 40**
56	10	3.5	2.7	2.6	3.175	**Nr 5 - 40**
56	10	4	3.4	2.7	3.505	**Nr 6 - 32**
63	10	4.5	3.4	3.4	4.166	**Nr 8 - 32**
70	12	6	4.9	3.8	4.826	**Nr 10 - 24**
80	12	6	4.9	4.5	5.486	**Nr 12 - 24**
80	16	7	5.5	5.1	6.35	**NC 1/4 - 20**
90	18	8	6.2	6.5	7.94	**NC 5/16 - 18**
100	22	10	8	7.9	9.53	**NC 3/8 - 16**
100	20	8	6.2	9.3	11.11	**NC 7/16 - 14**
110	25	9	7	10.7	12.70	**NC 1/2 - 13**
110	25	11	9	12.3	14.29	**NC 9/16 - 12**
110	25	12	9	13.5	15.88	**NC 5/8 - 11**
125	32	14	11	16.5	19.05	**NC 3/4 - 10**
140	32	18	14.5	19.3	22.23	**NC 7/8 - 9**
160	36	20	16	22.25	25.40	**NC 1' - 8**
180	40	22	18	25	28.58	**NC 1' 1/8 - 7**
180	40	25	20	28.25	31.75	**NC 1' 1/4 - 7**
200	45	28	22	30.75	34.93	**NC 1' 3/8 - 6**
200	45	32	24	34	38.10	**NC 1' 1/2 - 6**
220	50	36	29	39.5	44.45	**NC 1' 3/4 - 5**
250	56	40	32	45.25	50.80	**NC 2' - 4½**

Filettatura Americana UNC
Imbocco Corretto / Elicoidali

Unified Coarse Thread UNC
Spiral Point / Spiral Fluted

DIN 371	DIN 376





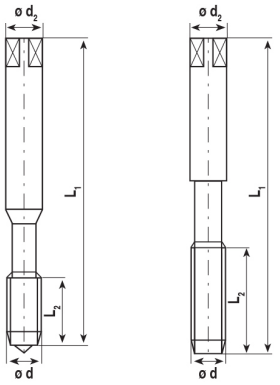
Codice Articolo

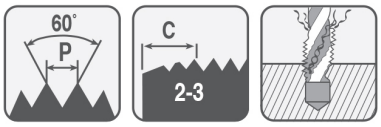
HIGH PERFORMANCE

	HP IC-Y	HP IC-Z	T/N IC	HP FORM-Y
	IMBOCCO CORRETTO / SPIRAL POINT			A RULLARE / FLUTELESS TAPS
	TiN	ZHL	NEUTRO	TiN
Tol	2BX	2BX	2BX	2BX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	B	B	B	C

L1	L2	d2	⌀	Preforo	mm	d x p
80	16	7	5.5	5.1	6.35	**NC 1/4 - 20**
90	18	8	6.2	6.5	7.94	**NC 5/16 - 18**
100	22	10	7	7.9	9.53	**NC 3/8 - 16**
110	25	9	7	10.7	12.70	**NC 1/2 - 13**
110	20	11	9	12.3	14.29	**NC 9/16 - 12**
110	25	12	9	13.5	15.88	**NC 5/8 - 11**

DIN 371	DIN 376





Codice Articolo

HIGH PERFORMANCE

	HP ER-Y 45°	HP ER-Z 45°	TI FCE 15°	NI ER 25°
	TiN	ZHL	NEUTRO	NEUTRO
Tol	2BX	2BX	2BX	2BX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	C	C	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
80	11	7	5.5	5.1	6.35	**NC 1/4 - 20**
90	12	8	6.2	6.5	7.94	**NC 5/16 - 18**
100	15	10	7	7.9	9.53	**NC 3/8 - 16**
110	18	9	7	10.7	12.70	**NC 1/2 - 13**
110	25	12	9	13.5	15.88	**NC 5/8 - 11**

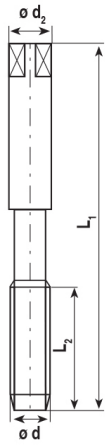
Filettatura Americana UNF
Maschi a Mano Serie 3 PZ

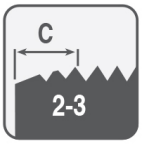
Unified Fine Thread UNF
Hand Taps Set of 3

DIN 2184-2

Codice Articolo

S2P	3^





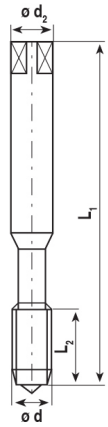
	NEUTRO	NEUTRO
Tol	2B	2B
Mat	HSS	HSS
Imbocco	C	C

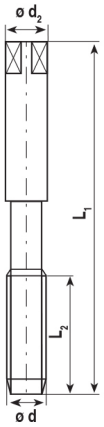
L1	L2	d2	⌀	Preforo	mm	d x p
32	10	2.8	2.1	1.8	2.184	**Nr 2 - 64**
32	10	2.8	2.1	2.1	2.515	**Nr 3 - 56**
36	11	3.5	2.7	2.4	2.845	**Nr 4 - 48**
36	11	3.5	2.7	2.6	3.175	**Nr 5 - 44**
40	12	4.5	3.4	2.9	3.505	**Nr 6 - 40**
40	12	4.5	3.4	3.5	4.166	**Nr 8 - 36**
45	14	8	4.9	4	4.826	**Nr 10 - 32**
50	14	6	4.9	4.6	5.486	**Nr 12 - 28**
50	18	6	4.9	5.4	6.35	**UNF 1/4-28**
56	22	6	4.9	6.9	7.94	**UNF 5/16-24**
63	22	7	5.5	8.4	9.53	**UNF 3/8-24**
63	22	8	6.2	9.9	11.11	**UNF 7/16-20**
75	24	9	7	11.5	12.70	**UNF 1/2-20**
80	28	11	9	13	14.29	**UNF 9/16-18**
80	28	12	9	14.5	15.88	**UNF 5/8-18**
95	32	14	11	17.4	19.05	**UNF 3/4-16**
100	36	18	14.5	20.4	22.23	**UNF 7/8-14**
110	40	18	14.5	23.25	25.40	**UNF 1' - 12**
110	50	22	18	26.5	28.58	**UNF 1' 1/8 - 12**
132	56	22	18	29.5	31.75	**UNF 1' 1/4 - 12**
132	56	28	22	32.7	34.93	**UNF 1' 3/8 - 12**
150	63	32	24	36	38.10	**UNF 1' 1/2 - 12**

Filettatura Americana UNF
ASME B 1.1

Unified Fine Thread UNF
ASME B 1.1

DIN 371	DIN 376





Codice Articolo

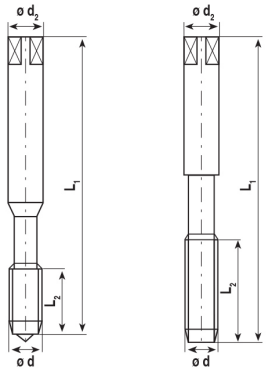
	TD	IC	FCE	ER
	TAGLIO DIRITTO / *STRIGHT FLUTED*	IMBOCCO CORRETTO / *SPIRAL POINT*	ELICOIDALI / *SPIRAL FLUTED*	
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	2B	2B	2B	2B
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	B	C	C

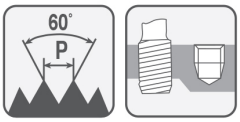
L1	L2	d2	⌀	Preforo	mm	d x p
45	8	2.8	2.1	1.8	2.184	**Nr 2 - 64**
50	9	2.8	2.1	2.1	2.515	**Nr 3 - 56**
56	10	3.5	2.7	2.4	2.845	**Nr 4 - 48**
56	10	3.5	2.7	2.6	3.175	**Nr 5 - 44**
56	10	4	3	2.9	3.505	**Nr 6 - 40**
63	10	4.5	3.4	3.5	4.166	**Nr 8 - 36**
70	12	6	4.9	4	4.826	**Nr 10 - 32**
80	14	6	4.9	4.6	5.486	**Nr 12 - 28**
80	16	7	5.5	5.4	6.35	**NF 1/4 - 28**
90	18	8	6.2	6.9	7.94	**NF 5/16 - 24**
100	16	7	5.5	8.4	9.53	**NF 3/8 - 24**
100	20	8	6.2	9.9	11.11	**NF 7/16 - 20**
100	18	9	7	11.5	12.70	**NF 1/2 - 20**
100	18	11	9	13	14.29	**NF 9/16 - 18**
100	18	12	9	14.5	15.88	**NF 5/8 - 18**
125	25	14	11	17.4	19.05	**NF 3/4 - 16**
125	25	18	14.5	20.4	22.23	**NF 7/8 - 14**
140	25	20	16	23.25	25.40	**NF 1' - 12**
150	32	22	18	26.52	28.58	**NF 1' 1/8 - 12**
150	28	22	18	29.5	31.75	**NF 1' 1/4 - 12**
160	25	28	22	32.7	34.93	**NF 1' 3/8 - 12**
180	28	32	24	36	38.10	**NF 1' 1/2 - 12**

Filettatura Americana UNF
Maschi a Rullare / Imbocco Corretto

Unified Fine Thread UNF
Fluteless Taps / Spiral Point

DIN 371	DIN 376





Codice Articolo

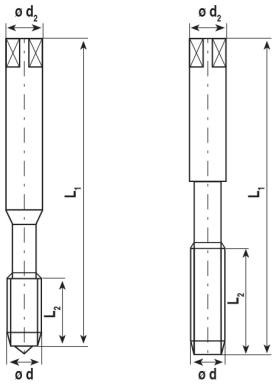
FORM	FORM-Y

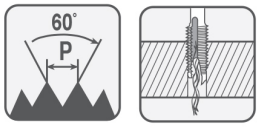
	NEUTRO	TiN
Tol	2BX	2BX
Mat	HSS-E	HSS-E
Imbocco	C	C

L1	L2	d2	⌀	Preforo	mm	d x p
70	12	6	4.9	4.5	4.82	**Nr 10 - 32**
80	16	7	5.5	6	6.35	**Nr 1/4 - 28**
90	18	8	6.2	7.5	7.94	**Nr 5/16 - 24**
100	16	7	5.5	9.1	9.53	**Nr 3/8 - 24**

HIGH PERFORMANCE

DIN 371	DIN 376





Codice Articolo

HP IC-Y	HP IC-Z	T/N IC	HP FORM-Y

IMBOCCO CORRETTO / SPIRAL POINT

A RULLARE / FLUTELESS TAPS

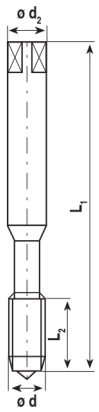
	TiN	ZHL	NEUTRO	TiN
Tol	2BX	2BX	2BX	2BX
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	B	B	C	C

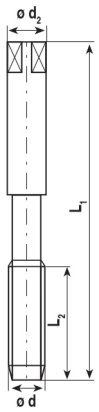
L1	L2	d2	⌀	Preforo	mm	d x p
80	16	7	5.5	5.4	6.35	**NF 1/4 - 28**
90	18	6	6.2	6.9	7.94	**NF 5/16 - 24**
100	22	7	5.5	8.4	9.53	**NF 3/8 - 24**
100	20	8	6.2	9.9	11.11	**NF 7/16 - 20**
100	18	9	7	11.5	12.70	**NF 1/2 - 20**
100	18	11	9	13	14.29	**NF 9/16 - 18**
100	18	12	9	14.5	15.88	**NF 5/8 - 18**

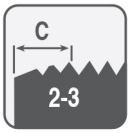
Filettatura Americana UNF
Elicoidali

Unified Fine Thread UNF
Spiral Fluted

DIN 371	DIN 376







Codice Articolo

HIGH PERFORMANCE

HP ER-Y 45°	HP ER-Z° 45°	TI FCE 15°	NI ER 25°

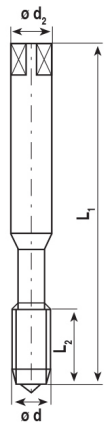
	TiN	ZHL	NEUTRO	NEUTRO
Tol	**2BX**	**2BX**	**2BX**	**2BX**
Mat	HSSCo-PM	HSSCo-PM	HSSCo-PM	HSSCo-PM
Imbocco	**C**	**C**	**C**	**C**

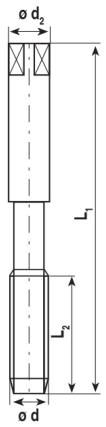
L1	L2	d2	⌀	Preforo	mm	d x p
80	11	7	5.5	5.4	6.35	**NF 1/4 - 28**
90	12	8	6.2	6.9	7.94	**NF 5/16 - 24**
100	12	10	7	8.4	9.53	**NF 3/8 - 24**
100	13	8	6.2	9.9	11.11	**NF 7/16 - 20**
100	15	9	7	11.5	12.70	**NF 1/2 - 20**
100	15	11	9	13	14.29	**NF 9/16 - 18**
100	18	12	9	14.5	15.88	**NF 5/8 - 18**

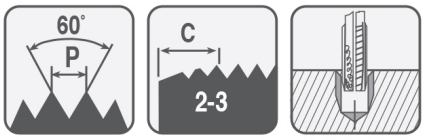
Filettatura Americana 8UN/UNEF
8UN / UNEF

American Unified Thread 8UN/UNEF
8UN / UNEF

DIN 371	DIN 376







Codice Articolo

	TD	IC	FCE 15°	ER 35°
	TAGLIO DIRITTO / STRIGHT FLUTED	IMBOCCO CORRETTO / SPIRAL POINT	ELICOIDALI / SPIRAL FLUTED	
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	2B	2B	2B	2B
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	B	C	C

	L1	L2	d2	∅	Preforo	mm	d x p
UNEF	80	12	6	4.9	4.7	5.486	Nr 12 - 32
	80	16	4.5	3.4	5.6	6.35	NEF 1/4 - 32
	90	12	6	4.9	7.2	7.94	NEF 5/16 - 32
	100	12	7	5.5	8.8	9.53	NEF 3/8 - 32
	100	20	8	6.2	10.2	11.11	NEF 7/16 - 28
	100	18	9	7	11.8	12.70	NEF 1/2 - 28
	100	18	11	9	13.2	14.29	NEF 9/16 - 24
	100	18	12	9	14.75	15.88	NEF 5/8 - 24
	125	25	14	11	17.75	19.05	NEF 3/4 - 20
	125	25	18	14.5	21	22.23	NEF 7/8 - 20
	140	25	20	16	24.25	25.40	NEF 1' - 20

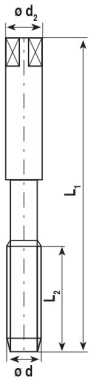
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	2B	2B	2B	2B
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	B	C	C

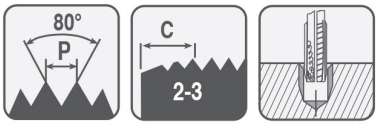
	L1	L2	d2	∅	Preforo	mm	d x p
8 UN	150	32	22	18	25.40	28.57	UN 1' 1/8 - 8
	180	40	25	20	28.60	31.75	UN 1' 1/4 - 8
	180	36	28	22	31.80	34.92	UN 1' 3/8 - 8
	180	36	32	24	34.95	38.10	UN 1' 1/2 - 8
	180	36	32	24	38.10	41.27	UN 1' 5/8 - 8
	200	36	36	29	41.30	44.45	UN 1' 3/4 - 8
	200	36	36	29	44.50	47.62	UN 1' 7/8 - 8
	210	36	40	32	47.37	50.80	UN 2' - 8
	240	50	40	32	53.90	57.15	UN 2' 1/4 - 8
	250	50	45	35	60.50	63.50	UN 2' 1/2 - 8
	270	50	50	39	66.50	69.85	UN 2' 3/4 - 8
	270	55	56	44	73	76.20	UN 3' - 8

Filettatura PG per Tubi Corazzati
Taglienti Diritti

PG Steel Conduit Thread
Straight Fluted

DIN 374



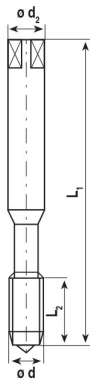


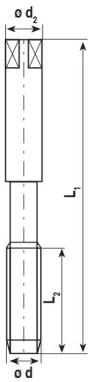
Codice Articolo

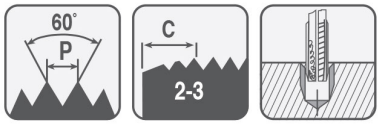
	TD
PG	
	PG NEUTRO
Tol	2B
Mat	HSS-E
Imbocco	C

L1	L2	d2	⌀	Preforo	mm	p	d
100	18	9	7	11.4	12.50	**20**	**PG 7**
100	18	12	9	14	15.20	**18**	**PG 9**
125	25	14	11	17.35	18.60	**18**	**PG 11**
125	25	16	12	19	20.40	**18**	**PG 13.5**
125	25	18	14.5	21.25	22.50	**18**	**PG 16**
150	25	20	16	26.75	28.30	**16**	**PG 21**
180	28	32	24	35.5	37	**16**	**PG 29**
190	28	36	29	45.5	47	**16**	**PG 36**
200	36	40	32	52.5	54	**16**	**PG 42**
220	36	45	35	57.8	59.30	**16**	**PG 48**

DIN 371 | DIN 376







Codice Articolo

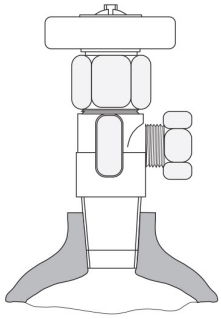
	TD	TD	TD
	ETRTO	DIN 7756	ISO 4570
	NEUTRO	NEUTRO	NEUTRO
Tol			
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

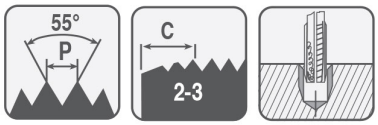
L1	L2	d2	⌀	Preforo	mm
80	14	6	4.9		
90	18	6	4.9		
100	16	7	5.5		

Filettatura per Bombole Gas
Taglienti Diritti

Thread for Gas Cylinders
Straight Fluted

NORM





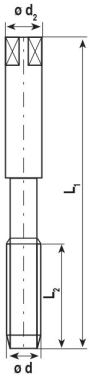
Codice Articolo

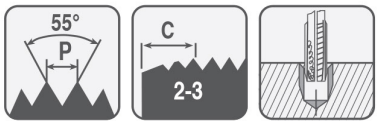
	TD			

	NEUTRO			
Tol				
Mat	HSS-E			
Imbocco	C			

FILETTATURA CONICA (CON.3:25) / *TAPERED THREAD (TAPER CON. 3:25)*					
L1	L2	d2	⌀	Preforo	d x p
100	30	18	14.5		W 19.8 - 14
110	40	22	18		W 28.8 - 14
STANDARD FRANCESE CON/TAP/KEG 1:10 (60°)					
L1	L2	d2	⌀	Preforo	d x p
160	36	18	14.5		M 24.2 x 2
STANDARD ITALIANO CON/TAP/KEG 1:10 (60°)					
L1	L2	d2	⌀	Preforo	d x p
160	36	20	16		M 26 x 2

DIN 374





Codice Articolo

	TD	TD		

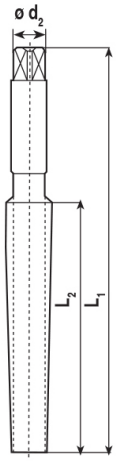
	NEUTRO	NEUTRO		
Tol				
Mat	HSS-E	HSS-E		
Imbocco	C	C		

L1	L2	d2	⌀	Preforo	d x p
125	25	18	14.5	19.7	W 21.7- 14
125	25	18	14.5	19.8	W 21.8 - 14
140	25	18	14.5	22.3	W 24.32 - 14
STANDARD ITALIANO					
125	25	16	12		W 20 - 14

Filettatura Trapezoidale
Taglienti Diritti / Elicoidale

Trapezoidal Coarse Thread
Straight Fluted / Spiral Fluted

NORM



Codice Articolo

	TD	TD	ESP	ESP
	TAGLIENTI DIRITTI / *STRAIGHT FLUTED*		ELICOIDALI ELICA 10° / *SPIRAL FLUTED 10°*	
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	**7H**	**7H**	**7H**	**7H**
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	**C**	**C**	**C**	**C**

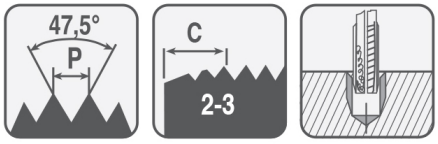
L1	L2	d2	⌀	Preforo min	Preforo max	d x p
130	60	6	4.9	6	6.23	**Tr 8 x 2**
140	60	7	5.5	8	8.23	**Tr 10 x 2**
176	90	8	6.2	9	9.31	**Tr 12 x 3**
210	120	9	7	10	10.37	**Tr 14 x 4**
220	120	11	9	12	12.37	**Tr 16 x 4**
250	150	13	10	14	14.37	**Tr 18 x 4**
260	150	14	11	16	16.37	**Tr 20 x 4**
260	150	14	11	15	15.45	**Tr 20 x 5**
300	180	16	12	17	17.45	**Tr 22 x 5**
260	150	18	14.5	19	19.45	**Tr 24 x 5**
310	180	20	16	20	20.45	**Tr 25 x 5**
310	180	20	16	21	21.44	**Tr 26 x 5**
310	180	22	18	23	23.45	**Tr 28 x 5**
320	180	22	18	24	24.50	**Tr 30 x 6**
360	200	28	22	30	30.50	**Tr 36 x 6**

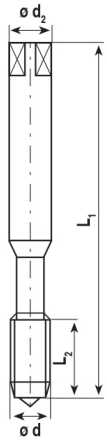
Filettatura Inglese
Taglienti Diritti

British Thread
Straight Fluted

Codice Articolo

TD



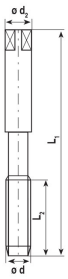


	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

L1	L2	d2	⌀	Preforo	P	d
66	19	6.3	5	5	1	**0 BA**
62	17	5.6	5	4.4	0.9	**1 BA**
58	16	5	4	4.7	0.81	**2 BA**
53	13	4.5	3.55	4.1	0.73	**3 BA**
50	13	3.55	2.8	3.6	0.66	**4 BA**
48	11	2.5	2.5	3.2	0.59	**5 BA**
44.5	15.5	2.24	2.24	2.8	0.53	**6 BA**

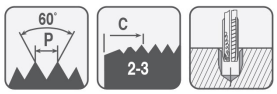
Filettatura Inglese
EG/M - EG/MF Elica 15°

British Thread
EG/M - EG/MF Spiral Fluted 15°



Codice Articolo

FCE



	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

	L1	L2	d2	⌀	Preforo	Ø	d x p
	63	10	4.5	3.4	3.15	3.65	**M 3 X 0.5**
	70	12	6	4.9	4.20	4.91	**M 4 X 0.7**
	80	14	6	4.9	5.25	6.04	**M 5 X 0.8**
	90	18	8	6.2	6.30	7.30	**M 6 X 1**
	100	22	10	8	8.40	9.62	**M 8 X 1.25**
	110	22	9	7	10.4	11.95	**M 10 X 1.5**
	110	25	11	9	12.5	14.27	**M 12 X 1.75**
	110	22	12	9	14.5	16.58	**M 14 X 2**

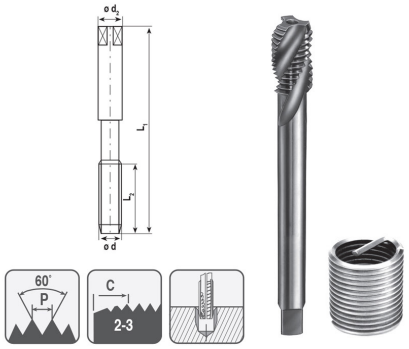
EG - UNC/UNF - NASM 33537

Filettatura Americana EG-UNC/UNF per Inserti Filettati
Elica 15°

EG-UNC/UNF Unified National Thread for Thread Inserts
Spiral Fluted 15°

Codice Articolo

FCE



	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

EG-UNF

L1	L2	d2	⌀	Preforo	Ø	d x p
70	12	6	4.9	3.7	4.33	**Nr 6 x 40**
80	12	6	4.9	4.4	5.08	**Nr 8 x 36**
80	12	6	4.9	5.1	5.8	**Nr 10 x 32**
90	18	8	6.2	6.6	7.5	**NF 1/4 x 28**
100	20	8	6.2	9.8	10.89	**NF 3/8 x 24**
100	18	12	9	13.1	14.35	**NF 1/2 x 20**

Codice Articolo

FCE

	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

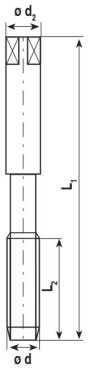
EG-UNC

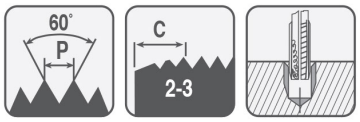
L1	L2	d2	⌀	Preforo	Ø	d x p
63	10	4.5	3.4	3.1	3.67	**Nr 4 - 40**
70	12	6	4.9	3.8	4.53	**Nr 6 - 32**
80	12	6	4.9	4.5	5.19	**Nr 8 - 32**
80	16	7	5.5	5.3	6.20	**Nr 10 - 24**
90	18	8	6.2	6.8	8	**NC 1/4 - 20**
100	22	10	8	8.4	9.77	**NC 5/16 - 18**
110	22	9	7	10	11.58	**NC 3/8 - 16**
110	25	12	9	13.3	15.23	**NC 1/2 - 13**

Filettatura Metrica ISO a Passo Grosso
Maschi a Mano

ISO Metric Coarse Thread
Hand Taps

DIN 352





Codice Articolo

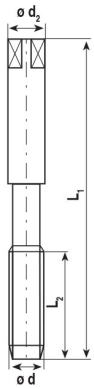
	BE 3P	BE 3^
Tol	NEUTRO medium	NEUTRO medium
Mat	HSS	HSS
Imbocco	C	C

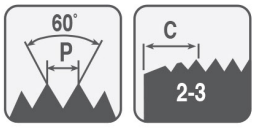
d x p
M 3 x 0.5
M 3.5 x 0.6
M 4 x 0.7
M 5 x 0.8
M 6 x 1
M 7 x 1
M 8 x 1.25
M 9 x 1.25
M 10 x 1.5
M 12 x 1.75

Filettatura Metrica ISO a Passo Grosso
Taglienti Diritti / Elicoidali

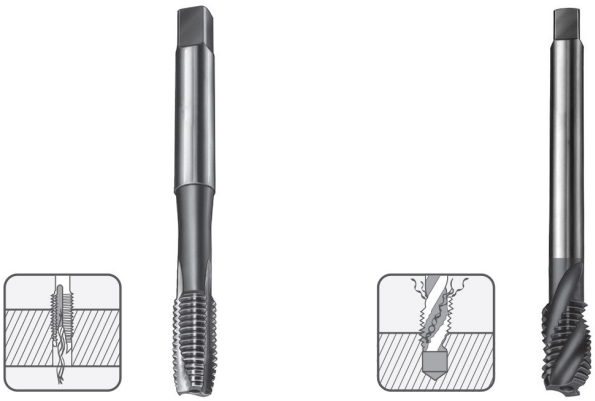
ISO Metric Coarse Thread
Straight Fluted / Spiral Fluted

DIN 371





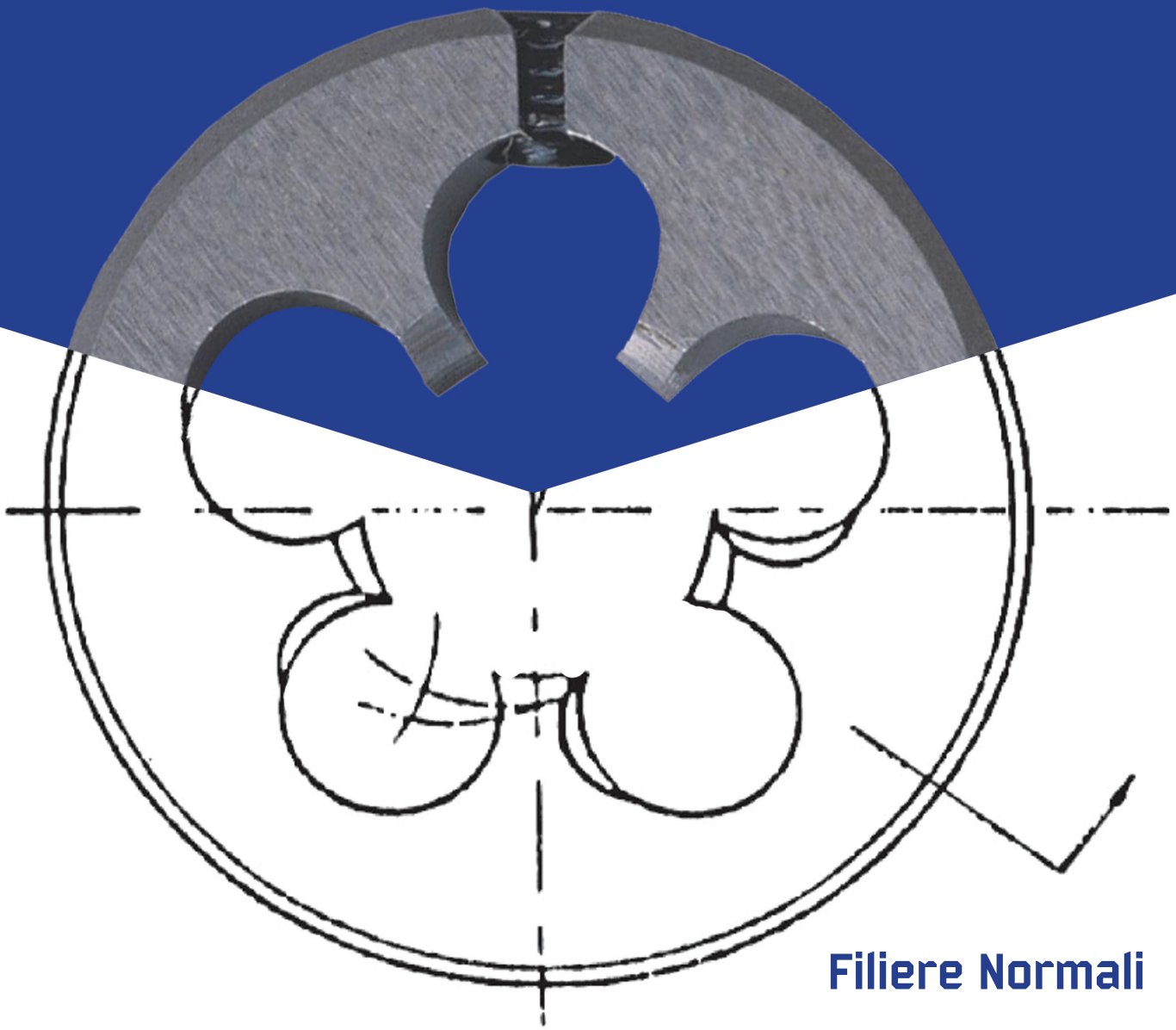
Codice Articolo



	IC	ER
Tol		
Mat	HSS-E	HSS-E
Imbocco	C	C

d x p
M 3 x 0.5
M 3.5 x 0.6
M 4 x 0.7
M 5 x 0.8
M 6 x 1
M 7 x 1
M 8 x 1.25
M 9 x 1.25
M 10 x 1.5
M 12 x 1.75

PROFITHREAD



Filiere Normali

Normal Round Dies

Filiere a Camapana

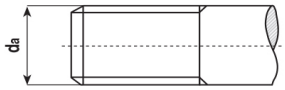
Bell Form Dies

Filettatura Metrica ISO a Passo Grosso
Filiere Normali / Fieliere Campana

ISO Metric Coarse Thread
Normal Round Dies / Bell Form

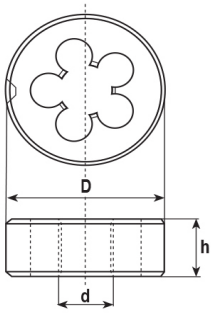
Codice Articolo

FN	FK



Codice Articolo

FCAM	FKCAM



	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCo-PM

			h	
da	d x p	D	N	CAM
0.97	**M 1 x 0.25**	16	5	
1.17	**M 1.2 x 0.25**	16	5	
1.36	**M 1.4 x 0.3**	16	5	
1.54	**M 1.6 x 0.35**	16	5	
	M 1.7 x 0.35	16	5	
1.74	**M 1.8 x 0.35**	16	5	
1.94	**M 2 x 0.4**	16	5	
		20	5	
2.13	**M 2.2 x 0.45**	16	5	
		20	5	
2.24	**M 2.3 x 0.4**	16	5	
		20	5	
2.43	**M 2.5 x 0.45**	16	5	
2.53	**M 2.6 x 0.45**	16	5	
		20	5	
2.92	**M 3 x 0.5**	16	5	9
		20	5	11
		25	5	
3.41	**M 3.5 x 0.6**	20	5	
3.90	**M 4 x 0.7**	16	5	9
		20	5	11
		25	7	
4.40	**M 4.5 x 0.75**	20	7	
4.90	**M 5 x 0.8**	16		9
		20	7	11
		25	7	
5.40	**M 5.5 x 0.9**	20	7	
5.88	**M 6 x 1**	20	7	11
		25	9	
6.88	**M 7 x 1**	20	7	
		25	9	
7.97	**M 8 x 1.25**	25	9	14.5
		30	11	
		38	10	

	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCo-PM

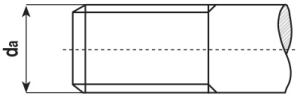
			h	
da	d x p	D	N	CAM
0.97	**M 1 x 0.25**	16		
1.17	**M 1.2 x 0.25**	16		
1.36	**M 1.4 x 0.3**	16		
1.54	**M 1.6 x 0.35**	16		
	M 1.7 x 0.35	16		
1.74	**M 1.8 x 0.35**	16		
1.94	**M 2 x 0.4**	16		
		20		
2.13	**M 2.2 x 0.45**	16		
		20		
2.24	**M 2.3 x 0.4**	16		
		20		
2.43	**M 2.5 x 0.45**	16		
2.53	**M 2.6 x 0.45**	16		
		20		
2.92	**M 3 x 0.5**	16		9
		20		11
		25		
3.41	**M 3.5 x 0.6**	20		
3.90	**M 4 x 0.7**	16		9
		20		11
		25		
4.40	**M 4.5 x 0.75**	20		
4.90	**M 5 x 0.8**	16		9
		20		11
		25		
5.40	**M 5.5 x 0.9**	20		
5.88	**M 6 x 1**	20		11
		25		
6.88	**M 7 x 1**	20		
		25		
7.97	**M 8 x 1.25**	25		14.5
		30		
		38		

Filettatura Metrica ISO a Passo Grosso
Filiere Normali / Filiere Campana

ISO Metric Coarse Thread
Normal Round Dies / Bell Form

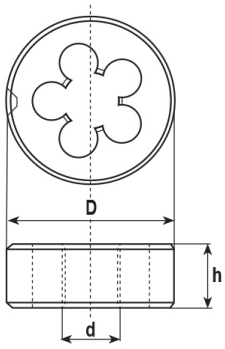
Codice Articolo

FN	FK



Codice Articolo

FCAM	FKCAM



	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCo-PM

	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCo-PM

			h	
da	d x p	D	N	CAM
8.86	**M 9 x 1.25**	25	9	
9.85	**M 10 x 1.5**	25	9	14.5
		30	11	
		38	10	
10.85	**M 11 x 1.5**	30	11	
		38	10	
11.83	**M 12 x 1.75**	38	14	
13.82	**M 14 x 2**	38	14	
15.82	**M 16 x 2**	38	14	
		45	18	
17.79	**M 18 x 2.5**	38	14	
		45	18	
19.79	**M 20 x 2.5**	38	14	
		45	18	
		50	18	
21.79	**M 22 x 2.5**	55	22	
23.76	**M 24 x 3**	55	22	
26.76	**M 27 x 3**	65	25	
29.73	**M 30 x 3.5**	65	25	
32.73	**M 33 x 3.5**	65	25	
35.70	**M 36 x 4**	65	25	
38.70	**M 39 x 4**	75	30	
41.68	**M 42 x 4.5**	75	30	
44.93	**M 45 x 4.5**	90	36	
47.92	**M 48 x 5**	90	36	
51.29	**M 52 x 5**	90	36	

			h	
da	d x p	D	N	CAM
8.86	**M 9 x 1.25**	25		
9.85	**M 10 x 1.5**	25		14.5
		30		
		38		
10.85	**M 11 x 1.5**	30		
		38		
11.83	**M 12 x 1.75**	38		
13.82	**M 14 x 2**	38		
15.82	**M 16 x 2**	38		
		45		
17.79	**M 18 x 2.5**	38		
		45		
19.79	**M 20 x 2.5**	38		
		45		
		50		
21.79	**M 22 x 2.5**	55		
23.76	**M 24 x 3**	55		
26.76	**M 27 x 3**	65		
29.73	**M 30 x 3.5**	65		
32.73	**M 33 x 3.5**	65		
35.70	**M 36 x 4**	65		
38.70	**M 39 x 4**	75		
41.68	**M 42 x 4.5**	75		
44.93	**M 45 x 4.5**	90		
47.92	**M 48 x 5**	90		
51.29	**M 52 x 5**	60		

Filettatura Metrica ISO a Passo Fine
Filiere Normali / Filiere Campana

ISO Metric Fine Thread
Normal Round Dies / Bell Form

Codice Articolo

FN	FCAM		FN	FCAM

	NEUTRO	NEUTRO		NEUTRO	NEUTRO
Tol	6G	6G		6G	6G
Mat	HSS	HSS		HSS	HSS

da	d x p	D	h N	h CAM
1.98	**M 2 x 0.25**	16	5	
2.15	**M 2.2 x 0.25**	16	5	
2.44	**M 2.5 x 0.35**	16	5	
2.54	**M 2.6x 0.35**	16	5	
2.94	**M 3 x 0.35**	20	5	
3.44	**M 3.5 x 0.35**	20	5	
3.93	**M 4 x 0.5**	20	5	
4.43	**M 4.5 x 0.5**	20	7	
4.90	**M 5 x 0.5**	20	7	
5.43	**M 5.5 x 0.5**	20	7	
5.92	**M 6 x 0.5**	20	7	
5.90	**M 6 x 0.75**	20	7	
		25	9	
6.93	**M 7 x 0.5**	25	9	
6.90	**M 7 x 0.75**	25	9	
7.93	**M 8 x 0.5**	25	9	
7.90	**M 8 x 0.75**	25	9	
7.88	**M 8 x 1**	25	9	
8.93	**M 9 x 0.5**	25	9	
8.90	**M 9 x 0.75**	25	9	
8.88	**M 9 x 1**	25	9	
9.93	**M 10 x 0.5**	30	11	
9.90	**M 10 x 0.75**	30	11	
		38	10	
9.88	**M 10 x 1**	25	9	
		30	11	
		38	10	
9.86	**M 10 x 1.25**	25	9	
		30	11	
		38	10	
10.93	**M 11 x 0.5**	30	11	
10.90	**M 11 x 0.75**	30	11	
10.88	**M 11 x 1**	30	11	
		38	10	
11.86	**M 11 x 1.25**	30	11	
		38	10	
11.93	**M 12 x 0.5**	38	10	
11.90	**M 12 x 0.75**	38	10	
11.88	**M 12 x 1**	38	10	
11.86	**M 12 x 1.25**	38	10	
11.85	**M 12 x 1.5**	38	10	
12.90	**M 13 x 0.5**	38	10	
12.95	**M 13 x 0.75**	38	10	

da	d x p	D	h N	h CAM
12.88	**M 13 x 1**	38	10	
12.90	**M 13 x 1.25**	38	10	
12.85	**M 13 x 1.5**	38	10	
12.93	**M 14 x 0.5**	38	10	
13.90	**M 14 x 0.75**	38	10	
13.88	**M 14 x 1**	38	10	
13.86	**M 14 x 1.25**	38	14	
13.85	**M 14 x 1.5**	38	14	
14.95	**M 15 x 0.5**	38	10	
14.97	**M 15 x 0.75**	38	10	
14.88	**M 15 x 1**	38	10	
14.86	**M 15 x 1.25**	38	14	
14.85	**M 15 x 1.5**	38	14	
15.95	**M 16 x 0.5**	38	10	
15.97	**M 16 x 0.75**	38	10	
15.88	**M 16 x 1**	38	10	
		45	14	
15.86	**M 16 x 1.25**	38	14	
15.85	**M 16 x 1.5**	38	14	
		45	14	
16.97	**M 17 x 0.75**	38	10	
16.88	**M 17 x 1**	38	10	
16.86	**M 17 x 1.25**	38	14	
16.85	**M 17 x 1.5**	38	14	
17.97	**M 18 x 0.75**	38	10	
17.88	**M 18 x 1**	38	10	
		45	14	
17.80	**M 18 x 1.25**	38	14	
17.85	**M 18 x 1.5**	38	14	
		45	14	
17.80	**M 18 x 2**	38	14	
18.88	**M 19x 1**	38	14	
18.85	**M 19 x 1.5**	38	14	
19.97	**M 20 x 0.75**	45	10	
19.88	**M 20 x 1**	38	10	
		45	10	
19.86	**M 20 x 1.25**	38	14	
19.85	**M 20 x 1.5**	38	14	
		45	14	
		50	14	
19.80	**M 20 x 2**	45	18	
		50	18	

Filettatura Metrica ISO a Passo Fine
Filiere Normali

ISO Metric Fine Thread
Normal Round Dies

Codice Articolo

FN	FCAM		FN	FCAM

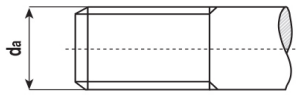
	NEUTRO	NEUTRO		NEUTRO	NEUTRO
Tol	6G	6G		6G	6G
Mat	HSS	HSS		HSS	HSS

da	d x p	D	h N
20.88	**M 21 x 1**	50	14
21.97	**M 22 x 0.75**	50	14
21.88	**M 22 x 1**	45	14
		50	14
		55	16
21.86	**M 22 x 1.25**	50	14
21.85	**M 22 x 1.5**	45	14
		50	14
		55	16
21.80	**M 22 x 2**	45	18
		50	18
22.85	**M 23 x 1.5**	50	14
23.88	**M 24 x 1**	50	14
23.86	**M 24 x 1.25**	50	14
23.85	**M 24 x 1.5**	50	14
		55	18
23.80	**M 24 x 2**	50	18
		55	16
24.88	**M 25 x 1**	50	14
24.86	**M 25 x 1.25**	50	14
24.85	**M 25 x 1.5**	50	14
		55	14
24.80	**M 25 x 2**	55	18
25.88	**M 26 x 1**	55	14
25.86	**M 26 x 1.25**	55	14
25.85	**M 26 x 1.5**	50	14
		55	14
25.80	**M 26 x 2**	55	18
26.88	**M 27 x 1**	65	16
26.85	**M 27 x 1.5**	50	14
		65	18
26.80	**M 27 x 2**	50	18
		65	18
27.88	**M 28 x 1**	65	14
27.85	**M 28 x 1.5**	50	14
		65	18
27.80	**M 28 x 2**	50	18
		65	18
28.85	**M 29 x 1.5**	65	18
29.85	**M 30 x 1**	65	16
29.85	**M 30 x 1.5**	65	18
29.80	**M 30 x 2**	65	18
29.80	**M 30 x 3**	65	18

da	d x p	D	h N
31.88	**M 32 x 1**	65	16
31.65	**M 32 x 1.5**	65	18
31.82	**M 32 x 2**	65	18
32.88	**M 33 x 1**	65	16
32.85	**M 33 x 1.5**	65	18
32.82	**M 33 x 2**	65	18
34.88	**M 35 x 1**	65	16
34.85	**M 35 x 1.5**	65	18
34.82	**M 35 x 2**	65	18
35.88	**M 36 x 1**	65	16
35.85	**M 36 x 1.5**	65	18
35.82	**M 36 x 2**	65	18
35.90	**M 36 x 3**	65	25
37.88	**M 38 x 1**	75	20
37.85	**M 38 x 1.5**	75	20
37.82	**M 38 x 2**	75	20
38.82	**M 39 x 2**	75	20
38.76	**M 39x 3**	75	30
39.88	**M 40 x 1**	75	20
39.85	**M 40 x 1.5**	75	20
41.85	**M 42 x 1.5**	75	20
41.82	**M 42 x 2**	75	20
41.76	**M 42 x 3**	75	30
44.88	**M 45 x 1**	75	20
44.85	**M 45 x 1.5**	75	20
44.82	**M 45 x 2**	90	22
44.76	**M 45 x 3**	90	36
47.88	**M 48 x 1**	90	22
47.85	**M 48 x 1.5**	90	22
47.82	**M 48 x 2**	90	22
47.76	**M 48 x 3**	90	36
49.88	**M 50 x 1**	90	22
49.85	**M 50 x 1.5**	90	22
49.82	**M 50 x 2**	90	22
51.85	**M 52 x 1.5**	90	22
51.82	**M 52 x 2**	90	22
51.76	**M 52 x 3**	90	36
55.60	**M 56 x 4**	90	36

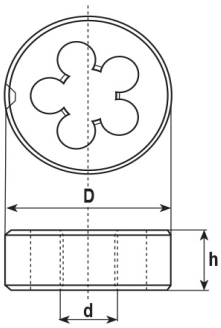
Filettatura Whitworth BSW
Filiere Normali

British Standard Whitworth Thread BSW
Normal Round Dies



Codice Articolo

FN



	NEUTRO
Tol	medium
Mat	HSS

da	mm	d x p	D	h N
1.54	1.59	**W 1/16 - 60**	16	5
2.33	2.38	**W 3/32 - 48**	20	5
3.12	3.17	**W 1/8 - 40**	16	5
			20	5
3.82	3.97	**W 5/32 - 32**	20	5
			25	7
4.61	4.76	**W 3/16 - 24**	20	5
			25	7
5.41	5.56	**W 7/32 - 24**	20	7
6.20	6.35	**W 1/4 - 20**	20	7
			25	9
6.99	7.14	**W 9/32 - 20**	25	9
7.79	7.94	**W 5/16 - 18**	25	9
9.38	9.53	**W 3/8 - 16**	30	11
			38	10
10.89	11.11	**W 7/16 - 14**	30	11
			38	14
12.52	12.70	**W 1/2 - 12**	38	14
14.11	14.29	**W 9/16 - 12**	38	14
15.7	15.88	**W 5/8 - 11**	38	14
			45	18
16.98	17.46	**W 11/16 - 11**	45	18
18.87	19.05	**W 3/4 - 10**	45	18
20.18	20.36	**W 13/16 - 10**	45	18
22	22.23	**W 7/8 - 9**	50	18
		W 15/16 - 9	50	18
25.2	25.4	**W 1' - 8**	55	18
28.38	28.58	**W 1' 1/8 - 7**	65	25
31.15	31.75	**W 1' 1/4 - 7**	65	25
34.28	34.93	**W 1' 3/8 - 6**	65	25
37.47	38.10	**W 1' 1/2 - 6**	75	30
44.11	44.45	**W 1' 3/4 - 5**	90	36
50.43	50.80	**W 2' - 4.5**	90	36

Filettatura Gas Cilindrica G
Filiere Normali

Whitworth Pipe thread G
Normal Round Dies

Codice Articolo

FN	FN	FNOT	FCAM	FCOT

	NEUTRO	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	A	-0.1 / -0.2	A	A	A
Mat	HSS	HSS	HSS	HSS	HSS

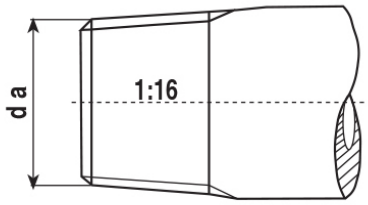
da	mm	d x p	D	N	Cam
9.58	9.73	**G 1/8 - 28**	25	9	
			30	11	
			38	10	24
13.01	13.16	**G 1/4 - 19**	25	9	
			30	11	18
			38	10	24
16.51	16.66	**G 3/8 - 19**	30	11	18
			38	14	24
			45	14	
20.8	20.95	**G 1/2 - 14**	38	14	24
			45	14	28.5
			50	14	32
22.77	22.91	**G 5/8 - 14**	50	14	
			55	16	
26.26	26.44	**G 3/4 - 14**	45	14	
			50	14	32
			55	16	
30.02	30.20	**G 7/8 - 14**	65	18	
33.07	33.25	**G 1' - 11**	50	18	32
			65	18	
37.72	37.90	**G 1' 1/8 - 11**	65	18	
			75	20	
41.73	41.91	**G 1' 1/4 - 11**	65	18	
			75	20	
44.14	44.32	**G 1' 3/8 - 11**	90	22	
47.62	47.80	**G 1' 1/2 - 11**	75	20	
			90	22	
53.57	53.75	**G 1' 3/4 - 11**	90	22	
59.43	59.61	**G 2' - 11**	90	22	
			105	22	
65.53	65.71	**G 2' 1/4 - 11**	105	22	
75	75.18	**G 2' 1/2 - 11**	105	22	
87.7	87.88	**G 3' - 11**	140	25	

Filettatura Gas Conica RC (BSPT) CON. 1:16

Filiere Normali

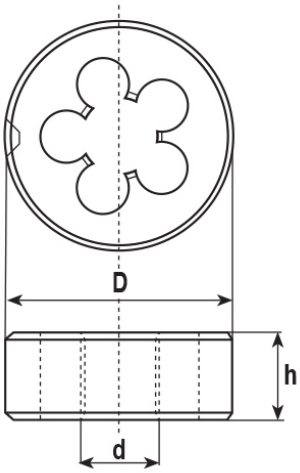
Tapered Pipe Thread RC (BSPT) Taper 1:16

Normal Round Dies



Codice Articolo

FN

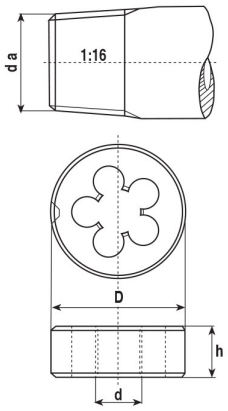


	NEUTRO
Tol	
Mat	HSS

da	mm	d x p	D	h N
9.48	9.73	**R 1/8 - 28**	25	10
			30	10
			38	10
12.78	13.16	**R 1/4 - 19**	38	14
16.26	16.66	**R 3/8 - 19**	38	15
			45	15
20.44	20.95	**R 1/2 - 14**	38	20
			45	20
25.85	26.44	**R 3/4 - 14**	65	20
32.60	33.25	**R 1' - 11**	65	25
	41.91	**R 1' 1/4 - 11**	75	27
	47.80	**R 1' 1/2 - 11**	90	27
	59.61	**R 2' - 11**	105	31
	75.18	**R 2' 1/2 - 11**	105	

Filettatura Gas Conica Americana CON. 1:16 NPT/NPTF
Filiere Normali

American Tapered Pipe Thread Taper 1:16 NPT/NPTF
Normal Round Dies



Codice Articolo

FN

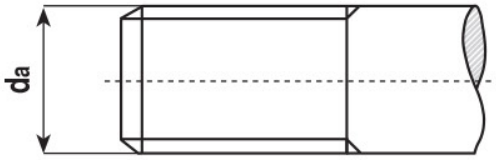
	NEUTRO
Tol	
Mat	HSS

	da	mm	d x p	D	h N
NPT	7.58	7.93	**NPT 1/16 - 27**	25	10
				30	10
				38	10
	9.93	10.28	**NPT 1/8 - 27**	30	10
				38	10
	13.18	13.71	**NPT 1/4 - 18**	38	15
	16.59	17.14	**NPT 3/8 - 18**	38	15.3
				45	15.3
	20.63	21.33	**NPT 1/2 - 14**	45	20
				50	20
	25.95	26.67	**NPT 3/4 - 14**	65	20.2
	32.50	33.40	**NPT 1' - 11½**	65	25
	41.23	42.16	**NPT 1' 1/4 - 11½**	75	25.6
	47.30	48.26	**NPT 1' 1/2 - 11½**	90	26
	59.33	60.32	**NPT 2' - 11½**	105	26.9

	da	mm	d x p	D	h N
NPTF	7.57	7.93	**NPTF 1/16 - 27**	25	10
				30	10
				38	10
	9.91	10.28	**NPTF 1/8 - 27**	30	10
				38	10
	13.17	13.71	**NPTF 1/4 - 18**	38	15
	16.59	17.14	**NPTF 3/8 - 18**	38	15.3
				45	15.3
	20.66	21.33	**NPTF 1/2 - 14**	45	20
				50	20
	25.97	26.67	**NPTF 3/4 - 14**	65	20.2
	32.52	33.40	**NPTF 1' - 11½**	65	25
	41.25	42.16	**NPTF 1' 1/4 - 11½**	75	25.6
	47.32	48.26	**NPTF 1' 1/2 - 11½**	90	26
	59.33	60.32	**NPTF 2' - 11½**	105	26.9

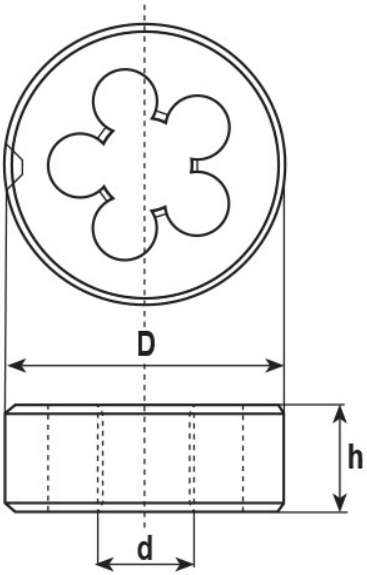
Filettatura Americana Cilindrica per Tubi
Filiere Normali

American National Pipe Straight
Normal Round Dies



Codice Articolo

FN



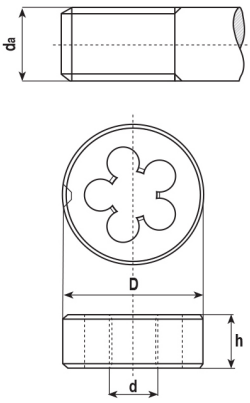
	NEUTRO
Tol	2A
Mat	HSS

da	mm	d x p	D	h N
9.95	10.10	**1/8 - 27**	38	10
13.2	13.40	**1/4 - 18**	38	14
16.6	16.84	**3/8 - 18**	38	14
20.75	20.95	**1/2 - 14**	45	14
26.10	24.5	**3/4 - 14**	55	16
32.65	32.89	**1' - 11.5**	65	18

Filettatura Americana UNC / UNF
Filiere Normali

Unified Coarse Thread UNC / Fine Thread UNF
Normal Round Dies

Filiera UNC / Coarse Thread UNC



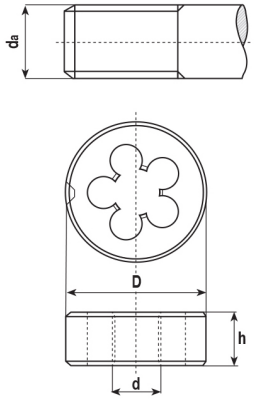
Codice Articolo

FN

	NEUTRO
Tol	2A
Mat	HSS

da	mm	d x p	D	h N
1.79	1.854	**Nr 1 - 64**	16	5
2.12	2.184	**Nr 2 - 56**	16	5
2.44	2.515	**Nr 3 - 48**	16	5
2.76	2.845	**Nr 4 - 40**	16	5
			20	5
3.09	3.175	**Nr 5 - 40**	20	5
3.41	3.505	**Nr 6 - 32**	20	5
4.07	4.166	**Nr 8 - 32**	20	5
4.71	4.826	**Nr 10 - 24**	20	7
5.37	5.486	**Nr 12 - 24**	20	7
6.22	6.35	**NC 1/4 - 20**	20	7
			25	9
7.80	7.94	**NC 5/16 - 18**	25	9
9.37	9.53	**NC 3/8 - 16**	30	11
10.95	11.11	**NC 7/16 - 14**	30	11
12.52	12.70	**NC 1/2 - 13**	38	14
14.10	14.29	**NC 9/16 - 12**	38	14
15.68	15.88	**NC 5/8 - 11**	45	18
18.84	19.05	**NC 3/4 - 10**	45	18
22	22.23	**NC 7/8 - 9**	50	18
			55	22
25.16	25.40	**NC 1' - 8**	55	22
28.31	28.58	**NC 1' 1/8 - 7**	65	25
31.49	31.75	**NC 1' 1/4 - 7**	65	25
34.63	34.93	**NC 1' 3/8 - 6**	65	25
37.80	38.10	**NC 1' 1/2 - 6**	75	30
44.12	44.45	**NC 1' 3/4 - 5**	90	36
50.45	50.80	**NC 2' - 4 1/2**	90	36

Filiera UNF / Fine Thread UNF



Codice Articolo

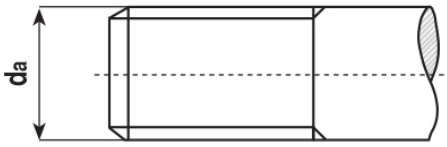
FN

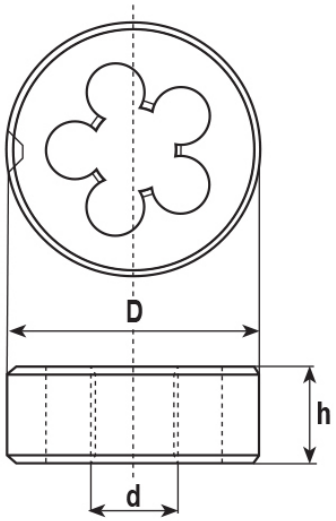
	NEUTRO
Tol	2A
Mat	HSS

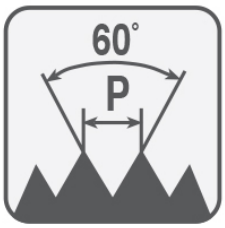
da	mm	d x p	D	h N
2.12	2.184	**Nr 2 - 64**	16	5
2.44	2.515	**Nr 3 - 56**	16	5
2.77	2.845	**Nr 4 - 48**	16	5
3.10	3.175	**Nr 5 - 44**	20	5
3.42	3.505	**Nr 6 - 40**	20	5
4.08	4.166	**Nr 8 - 36**	20	5
4.73	4.826	**Nr 10 - 32**	20	7
5.38	5.486	**Nr 12 - 28**	20	7
6.25	6.35	**NF 1/4 - 28**	20	7
			25	9
7.82	7.94	**NF 5/16 - 24**	25	9
9.41	9.53	**NF 3/8 - 24**	30	11
			38	10
10.98	11.11	**NF 7/16 - 20**	30	11
			38	10
12.56	12.70	**NF 1/2 - 20**	38	10
14.14	14.29	**NF 9/16 - 18**	38	14
15.73	15.88	**NF 5/8 - 18**	38	14
			45	14
18.89	19.05	**NF 3/4 - 16**	45	14
22.05	22.23	**NF 7/8 - 14**	50	14
			55	16
25.21	25.40	**NF 1' - 12**	55	16
28.38	28.58	**NF 1' 1/8 - 12**	65	18
31.55	31.75	**NF 1' 1/4 - 12**	65	18
34.73	34.93	**NF 1' 3/8 - 12**	65	18
37.90	38.10	**NF 1' 1/2 - 12**	75	20

Filettatura Americana UNEF
Filiere Normali

American Unified Thread UNEF
Normal Round Dies







Codice Articolo

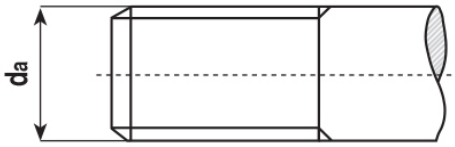
FN

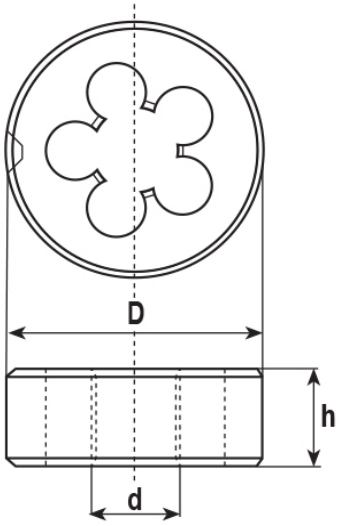
	NEUTRO
Tol	2A
Mat	HSS

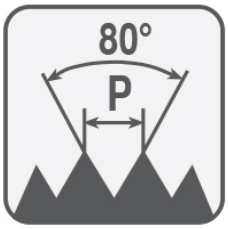
da	mm	d x p	D	h N
6.30	6.35	**NEF 1/4 - 32**	25	9
7.83	7.94	**NEF 5/16 - 32**	25	9
9.42	9.53	**NEF 3/8 - 32**	30	11
11	11.11	**NEF 7/16 - 28**	30	11
12.59	12.70	**NEF 1/2 - 28**	38	10
14.16	14.29	**NEF 9/16 - 24**	38	10
15.75	15.88	**NEF 5/8 - 24**	38	10
18.91	19.05	**NEF 3/4 - 20**	45	14
22.09	22.23	**NEF 7/8 - 20**	50	14
25.26	25.40	**NEF 1' - 20**	55	14

Filettatura PG per Tubi Corazzati
Filiere Normali

PG Steel Conduit Thread
Normal Round Dies







Codice Articolo

FN

	NEUTRO
Tol	
Mat	HSS

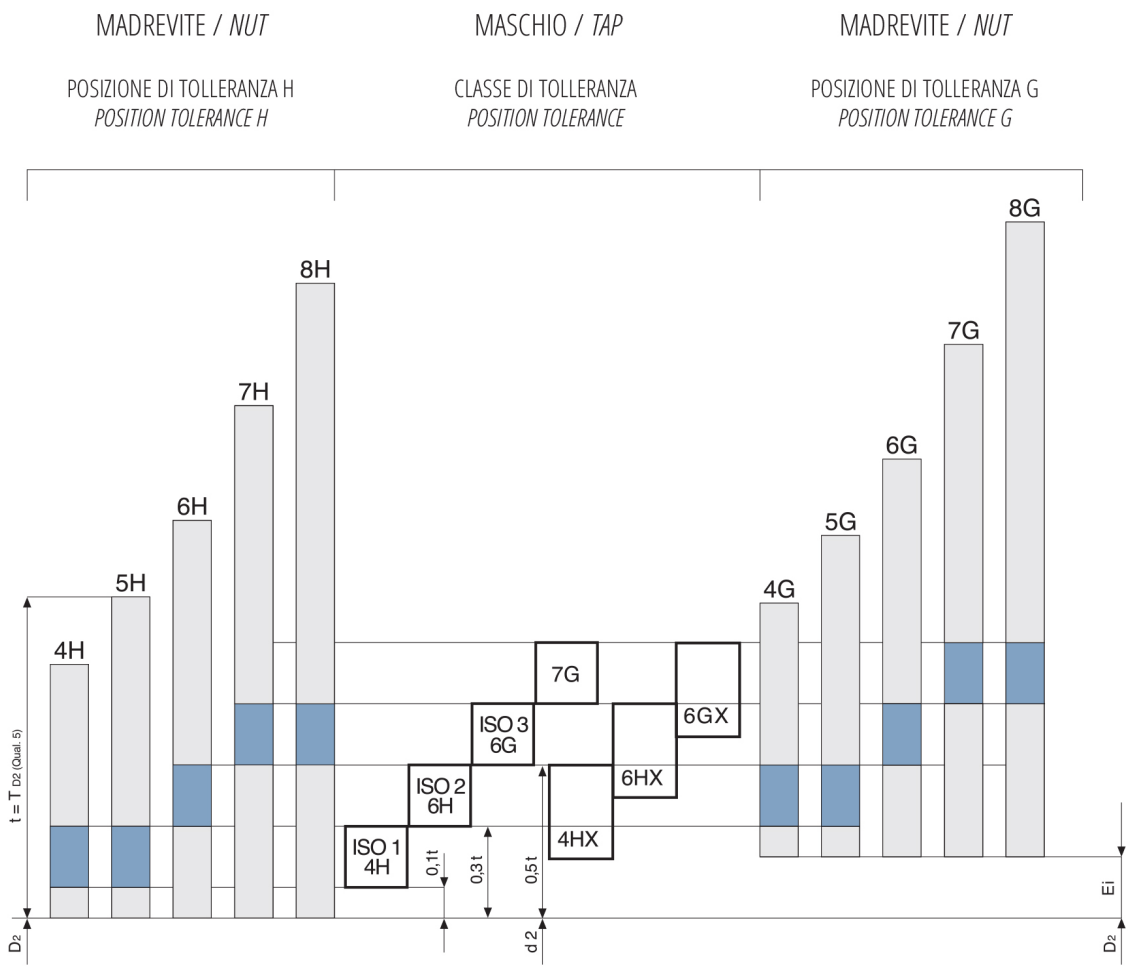
da	mm	P	d x p	D	h N	
12.4	12.50	**20**	**PG 7**	38	10	66,91
15.1	15.20	**18**	**PG 9**	38	10	66,91
18.1	18.60	**18**	**PG 11**	45	14	83,34
20.3	20.40	**18**	**PG 13.5**	45	14	83,34
22.4	22.50	**18**	**PG 16**	55	16	112,23
28.2	28.30	**16**	**PG 21**	65	18	160,45
36.9	37	**16**	**PG 29**	75	18	
46.9	47	**16**	**PG 36**	90	22	340,43
53.9	54	**16**	**PG 42**	90	22	387,37
59.20	59.30	**16**	**PG 48**	105	22	446,07

PROFITHREAD

Catalogue 2016

Parametri e Informazioni Tecniche

Parameters and Technical Information



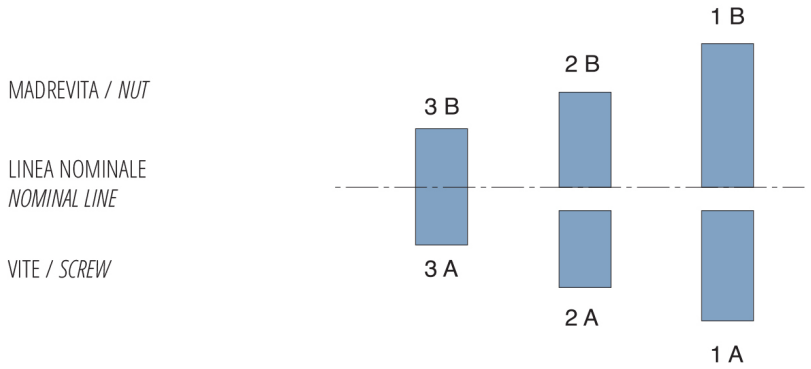
Uso generale dei maschi classe 1 a 3 / *General use of taps class 1 to 3:*

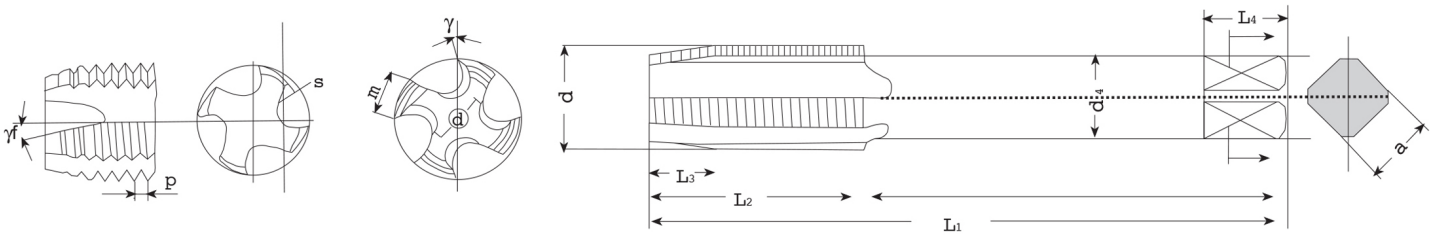
- **ISO - classe/class 1:** madreviti 4H e 5H / *nuts 4H and 5H*
- **ISO - classe/class 2:** madreviti 6H, 4G and 5G / *nuts 6H, 4G and 5G*
- **ISO - classe/class 3:** madreviti 7H, 8H e 6G / *nuts 7H, 8H and 6G*

Questa corrispondenza ha solo valore indicativo, poiché la precisione della maschiatura dipende da diversi altri fattori. È pertanto raccomandata la scelta conforme all'esecuzione della madrevite desiderata.

This correspondence is an approximation since the accuracy of tapping depends on several other factors. Therefore it is recommended a choice conforms to the execution of the nut desired.

SCHEMA QUALITATIVO DI AMPIEZZA E POSIZIONE RELATIVO ALLE FILETTATURE AMERICANE
QUALITATIVE DIAGRAM OF SIZE AND POSITION ABOUT THE AMERICAN STANDARD





L1) Lunghezza totale
Overail lenght

L2) Lunghezza filetto
Thread length

L3) Lunghezza imbocco
Chamfer length

L4) Lunghezza quadro
Lenght of square

d) Diametro nominale
Thread diameter

d4) Diametro del gambo
Shank diameter

d6) Diametro del nocciolo
Core diameter

a) Quadro
Square

yf) Angolo dell'imbocco corretto
Spiral point angle

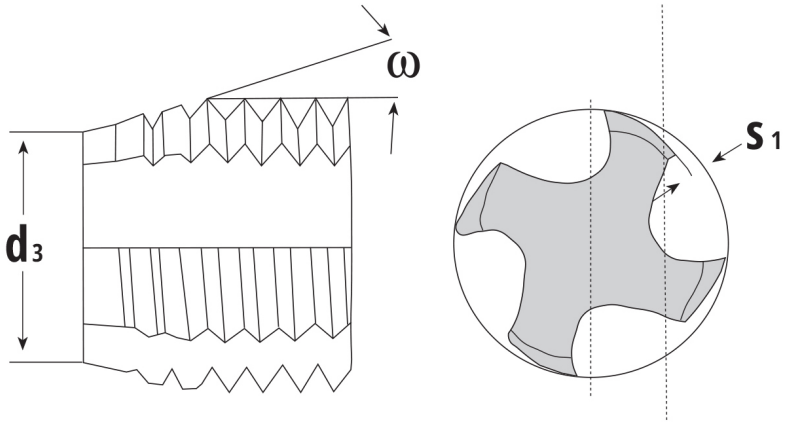
S) Spoglia radiale sul filetto
Thread radial relief

m) Larghezza del tagliente
Width of land

y) Angolo di taglio
Rake angle

p) Passo
Pitch

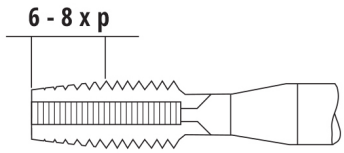
IMBOCCO / *CHAMFER*



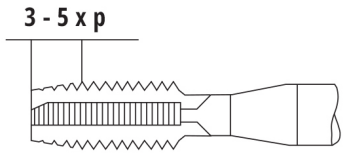
d3) Diametro imbocco
Chamfer diameter

ω) Angolo d'imbocco
Chamfer angle

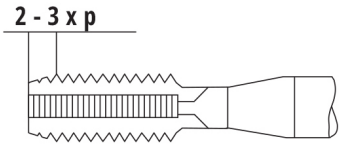
S1) Spoglia radiale sull'imbocco
Chamfer radial relief



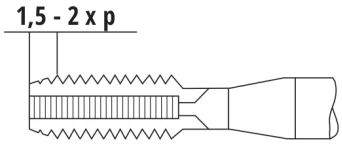
form "A"
ω=5°- 6°



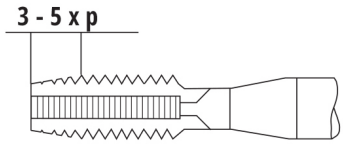
form "B"
ω=8°- 9°



form "C"
ω=19°



form "E"
ω=23°



form "D"
ω=8°- 9°

Formula per calcolo della potenza di macchina necessaria *Formula for calculating the working power required*	*esempio* *M22, passo 2.5, materiale GG-22, V=15 m/min, rendimento macchina = 0.6, N=220 giri/min⁻¹*
$P_i = \frac{P_e}{\eta} = \frac{1}{9550} \cdot \frac{a \cdot K_s \cdot r \cdot \eta}{1000 \cdot \eta}$ [KW]	$P_i \approx \frac{1{,}5625 \cdot 1600 \cdot 11 \cdot 220}{9\,550\,000 \cdot 0{,}6} \approx 1{,}05$ KW

Terminologia / *Terminology*

P_i	Potenza assorbita / *Absorbed Power*
P_e	Potenza effettiva / *Effective power*
F_u	$a \cdot K_s$ sforzo di taglio in N
r	$\frac{\text{Ø esterno / } external}{2}$ [mm]
n	giri/min⁻¹ / *revolutions/min⁻¹*
η	Rendimento della macchina / *Machine efficiency*
K_s	Sforzo specifico di taglio / *Specific Shearing Stress* (N/mm²)
a	Sezione del trucciolo / *Section of chip* (mm²)
	Per filettature cilindriche con angolo sui fianchi di 55° e 60° con portanza del 75 %: **a≈0.25 P² (P = passo)** *For cylindrical thread with 55° and 60° angle and 75% lift:* **a≈0.25 P2 (P = pitch)**
	Per filettature trapezie ACME, tonde piatte ecc, la sezione "a" deve venire calcolata di volta in volta considerando solo la superficie tagliata contemporaneamente. Per filettature a più principi la sezione determinata va moltiplicata per il numero dei principi. **Con la perdita dell'affilatura** dell'utensile lo sforzo di taglio può giungere a raddoppiare. È pertanto consigliabile moltiplicare per 2 i valori calcolati. *For trapezoidal thread ACME, round, flat, etc., "a" section must be calculated each time considering only the cut surface simultaneously. For multi-start screw thread the determined section must be multiplied by the number of the starts. With loss of sharpening of the tool, the Shearing*

Per i maschi in serie P_i deve venire moltiplicato per uno dei seguenti fattori
For Taps Set Pi it must be multiplied by one of these coefficients

serie di 2 pezzi / *2 pz set*	fattore 0.7	Consiglio: per filettature con passo superiore a 4 mm consigliabile usare maschi in serie. *Advice: for threads with pitch higher than 4 mm it is recommended to use Taps Set*
serie di 3 pezzi / *3 pz set*	fattore 0.5	
serie di 4 pezzi / *4 pz set*	fattore 0.4	

Sforzo specifico di taglio / *Specific Shearing Stress*

	K_s		K_s
Acciaio / *Steel* 1000...1300 N/mm²	3600 N/mm²	**Ghisa dura / *Hard cast iron***	1250 N/mm²
Acciaio / *Steel* 850... 1000 N/mm²	2600 N/mm²	**Rame / *Copper***	1100 N/mm²
Acciaio / *Steel* 700 N/mm²	2500 N/mm²	**Ghisa bianca / *White cast iron***	900 N/mm²
Acciaio / *Steel* 600 N/mm²	2400 N/mm²	**Ottone / *Brass***	720 N/mm²
Bronzo fuso / *Cast bronze*	1900 N/mm²	**Leghe Al-Si / *Alloys Al-Si***	680 N/mm²
GG-22 (HB 170)	1600 N/mm²	**Leghe di Zinco / *Zinc Alloys***	440 N/mm²

FILETTATURA ESTERNA SCOSTAMENTO A_0 / *EXTERNAL THREAD DEVIATION A_0*

PASSO / *PITCH* mm	SCOSTAMENTO A_0 DELLA POSIZIONE DELLA TOLLERANZA / *DEVIATION A_0 OF POSITION TOLERANCE*					
	c	d	e	f	g	h
0.2			-45	-32	-17	0
0.25			-45	-33	-18	0
0.3			-46	-33	-18	0
0.35			-46	-34	-19	0
0.4	(-120)	(-72)	-48	-34	-19	0
0.45	(-120)	(-73)	-48	-35	-20	0
0.5	(-122)	(-74)	-50	-36	-20	0
0.6	(-124)	(-76)	-53	-36	-21	0
0.7	(-125)	(-78)	-56	-38	-22	0
0.75	(-126)	(-79)	-56	-38	-22	0
0.81	(-127)	(-80)	-60	-38	-24	0
1	-130	-85	-60	-40	-26	0
1.25	-135	-90	-63	-42	-28	0
1.5	-140	-95	-67	-45	-32	0
1.75	-145	-100	-71	-48	-34	0
2	-150	-105	-71	-52	-38	0
2.5	-160	-110	-80	-58	-42	0
3	-170	-115	-85	-63	-48	0
3.5	-180	-125	-90	-70	-53	0
4	-190	-130	-95	-75	-60	0
4.5	-200	-135	-100	-80	-63	0
5	-212	-140	-106	-85	-71	0
5.5	-224	-150	-112	-90	-75	0
6	-235	-155	-118	-95	-80	0
8	-265	-180	-140	-118	-100	0

UNC

d	p	
1	64	1,5
2	56	1,8
3	48	2
4	40	2,3
5	40	2,6
6	32	2,7
8	32	3,4
10	24	3,8
12	24	4,5
1/4	20	5,1
5/16	18	6,5
3/8	16	7,9
7/16	14	9,3
1/2	13	10,7
9/16	12	12,3
5/8	11	13,5
3/4	10	16,5
7/8	9	19,3
1'	8	22,25
1'1/8	7	25
1'1/4	7	28
1'3/8	6	30,75
1'1/2	6	33,5
1'3/4	5	39
2'	4 1/2	45

UNF

d	p	
0	80	1,2
1	72	1,5
2	64	1,8
3	56	2,1
4	48	2,4
5	44	2,6
6	40	2,9
8	36	3,5
10	32	4
12	28	4,6
1/4	28	5,4
5/16	24	6,9
3/8	24	8,4
7/16	20	9,9
1/2	20	11,5
9/16	18	13
5/8	18	14,5
3/4	16	17,4
7/8	14	20,4
1'	12	23,25
1'1/8	12	26,5
1'1/4	12	29,75
1'3/8	12	33
1'1/2	12	36

UNEF

d	p	
12	32	4,7
1/4	32	5,6
5/16	32	7,2
3/8	32	8,8
7/16	28	10,2
1/2	28	11,8
9/16	24	13,2
5/8	24	14,75
3/4	20	17,75
7/8	20	21
1'	20	24,25
1'1/8	18	27,25
1'1/4	18	30,5
1'3/8	18	33,5

BSW

d	p	
3/32	48	1,8
1/8	40	2,5
5/32	32	3,10
3/16	24	3,6
7/32	24	4,40
1/4	20	5,10
5/16	18	6,50
3/8	16	7,9
7/16	14	9,30
1/2	12	10,5
9/16	12	12
5/8	11	13,5
3/4	10	16,5
7/8	9	19,25
1'	8	22
1'1/8	7	24,75
1'1/4	7	27,75
1'3/8	6	30,50
1'1/2	6	33,5
1'5/8	5	35,5
1'3/4	5	39
1'7/8	4 1/2	41,5
2	4 1/2	44,5

BSW

d	p	
1/8	28	8,7
1/4	19	11,6
3/8	19	15
1/2	14	19
5/8	14	20,75
3/4	14	24,5
7/8	14	28
1'	11	30,5
1'1/8	11	35
1'1/4	11	39,5
1'3/8	11	41,5
1'1/2	11	45
1'3/4	11	51
2'	11	57
2'1/4	11	63
2'1/2	11	72,5
2'3/4	11	79
3'	11	85,5

Tr

d	p	max	min
10	2	8,2	8
10	3	7,3	7
12	2	10,2	10
12	3	9,3	9
14	2	12,2	12
14	3	11,3	11
14	4	10,35	10
16	2	14,2	14
16	4	12,35	12
18	2	16,20	16
18	4	14,35	14
20	2	18,2	18
20	4	16,35	16
22	5	17,45	17
24	3	21,3	21
24	5	19,45	19
26	3	23,3	23
26	5	21,45	21
28	5	23,45	23
30	6	24,5	24
32	6	26,5	26
34	6	28,5	28
36	6	30,5	30
40	7	33,5	33
42	7	35,5	35
44	7	37,5	37
46	8	38,6	38
48	8	40,6	40
50	8	42,6	42
52	8	44,6	44

UN

d	p	
1'1/16	12	24,75
1'1/8	8	25,25
1'3/16	12	28
1'1/4	8	28,5
1'5/16	12	31,25
1'3/8	8	31,75
1'1/2	8	35
1'5/8	8	38
1'5/8	12	39
1'3/4	8	41,25
1'3/4	12	42,25
1'7/8	8	44,5
1'7/8	12	45,5
2'	8	47,5
2'	12	48,5
2'1/8	12	51,8
2'1/4	8	53,9
2'3/8	12	58,2
2'1/2	8	60,3
2'1/2	12	61,3
2'3/4	8	66,6
3'	8	73
3'	12	74

BA

d	p	
14	0,23	0,75
13	0,25	0,95
12	0,28	1
11	0,31	1,2
10	0,35	1,35
9	0,39	1,5
8	0,43	1,8
7	0,48	2
6	0,53	2,3
5	0,59	2,6
4	0,66	2,95
3	0,73	3,4
2	0,81	3,9
1	0,90	4,4
0	1	5

BSF

d	p	
3/16	32	3,9
7/32	28	4,5
1/4	26	5,25
9/32	26	6
5/16	22	6,7
3/8	20	8,2
7/16	18	9,6
1/2	16	11
9/16	16	12,5
5/8	14	13,9
11/16	14	15,5
3/4	12	16,75
7/8	11	19,75
1'	10	22,6
1'1/8	9	25,5
1'1/4	9	28,75

RP

d	p	
1/8	28	8,6
1/4	19	11,5
3/8	19	15
1/2	14	18,6
3/4	14	24
1'	11	30,25
1'1/4	11	39
1'3/8	11	41,5
1'1/2	11	44,9
2'	11	56,6

PG

d	p	
7	20	11,4
9	18	14
11	18	17,25
13,5	18	19
16	18	21,25
21	16	26,75
29	16	35,5
36	16	45,5
42	16	52,5
48	16	57,8

NPSM

d	p	
1/8	27	9,10
1/4	18	12
3/8	18	15,5
1/2	14	19
3/4	14	24,5
1'	11 1/2	30,5

NPSC

d	p	
1/8	27	8,9
1/4	18	11,50
3/8	18	15,00
1/2	14	18,50
3/4	14	23,80
1'	11 1/2	29,90

NPSF

d	p	
1/8	27	8,7
1/4	18	11,30
3/8	18	14,75
1/2	14	18,25
3/4	14	23,50
1'	11 1/2	29,50

EG-M		
d	p	
M 2	0,4	2,1
M 2,5	0,45	2,6
M 3	0,5	3,2
M 3,5	0,6	3,7
M 4	0,7	4,2
M 5	0,8	5,2
M 6	1	6,3
M 8	1,25	8,4
M 10	1,5	10,4
M 12	1,75	12,5
M 14	2	14,5
M 16	2	16,5
M 18	2,5	18,75
M 20	2,5	20,75
M 22	2,5	22,75
M 24	3	24,75
M 30	3,5	31

EG-MF		
d	p	
M 8	1	8,3
M 10	1	10,3
M 10	1,25	10,3
M 12	1,25	12,3
M 12	1,5	12,5
M 14	1,25	14,3
M 14	1,5	14,5
M 16	1,5	16,5
M 18	1,5	18,5
M 20	1,5	20,5
M 22	1,5	22,5
M 24	1,5	24,5

EG-UNC		
d	p	
1	64	2,0
2	56	2,4
3	48	2,8
4	40	3,1
5	40	3,4
6	32	3,8
8	32	4,5
10	24	5,3
12	24	5,9
1/4	20	6,8
5/16	18	8,4
3/8	16	10,0
7/16	14	11,7
1/2	13	13,3
9/16	12	15,0
5/8	11	16,5
3/4	10	19,7
7/8	9	23,0
1'	8	26,5

EG-UNF		
d	p	
1	72	2,0
2	64	2,3
3	56	2,7
4	48	3,1
5	44	3,4
6	40	3,8
7	4	0,0
8	32	4,4
10	32	5,1
12	28	0,0
1/4	28	6,6
5/16	24	8,2
3/8	20	9,8
7/16	20	11,4
1/2	18	13,0
9/16	18	14,7
5/8	16	16,3
3/4	16	19,5
7/8	14	22,7
1'	12	26,0

BSW		
d	p	
1/8	28	8,7
1/4	19	11,6
3/8	19	15
1/2	14	19
5/8	14	20,75
3/4	14	24,5
7/8	14	28
1'	11	30,5
1' 1/8	11	35
1' 1/4	11	39,5
1' 3/8	11	41,5
1' 1/2	11	45
1' 3/4	11	51
2'	11	57
2' 1/4	11	63
2' 1/2	11	72,5
2' 3/4	11	79
3'	11	85,5

NPT				
d	p		min	max
1/16	27	6,3	6,41	6,50
1/8	27	8,5	8,76	8,85
1/4	18	11,20	11,39	11,48
3/8	18	14,5	14,83	14,92
1/2	14	18	18,33	18,41
3/4	14	23	23,67	23,76
1'	11 1/2	29	29,72	29,81
1'1/4	11 1/2	38	38,48	38,56
1'1/2	11 1/2	44	44,55	44,63
2'	11 1/2	56	56,59	56,67

NPTF				
d	p		min	max
1/16	27	6,3	6	6,41
1/8	27	8,6	8,25	8,76
1/4	18	11,20	10,7	11,40
3/8	18	14,75	14,1	14,84
1/2	14	18	17,4	18,33
3/4	14	23,5	22,6	23,68
1'	11 1/2	29,5	28,5	29,72
1'1/4	11 1/2	38,5	37	38,48
1'1/2	11 1/2	44	43,5	44,56
2'	11 1/2	56,5	55	56,59

RC				
d	p		min	max
1/16	28	6,3	6,10	6,56
1/8	28	8,3	8,10	8,57
1/4	19	11,5	10,75	11,45
3/8	19	14,75	14,25	14,95
1/2	14	18,25	17,75	18,63
3/4	14	23,5	23	24,12
1'	11	29,75	29	30,29
1'1/4	11	38,5	37,5	38,95
1'1/2	11	44,5	43,5	44,85
2'	11	56,5	55	56,66

DIAMETRI DI PREFORATURA PER MASCHI A RULLARE
DIAMETERS OF PREDRILLING FOR FORMING TAPS

M		
d	p	
2	0,4	1,8
2,2	0,45	2
2,3	0,4	2,1
2,5	0,45	2,3
2,6	0,45	2,4
3	0,5	2,8
3,5	0,6	3,25
4	0,7	3,7
5	0,8	4,65
6	1	5,55
8	1,25	7,45
10	1,5	9,35
12	1,75	11,2
14	2	13,1
16	2	15,1
18	2,5	16,9
20	2,5	18,9

MF		
d	p	
4	0,5	3,8
5	0,5	4,8
6	0,5	5,8
6	0,75	5,65
8	0,75	7,65
8	1	7,55
10	1	9,55
12	1	11,55
12	1,5	11,35
14	1,5	13,35
16	1	15,55
16	1,5	15,35
18	1	17,55
18	1,5	17,35
20	1	19,55
20	1,5	19,35
22	1,5	21,35
24	1,5	23,35
26	1,5	25,35
28	1,5	27,35
30	1,5	29,35

UNC		
d	p	
1	64	1,7
2	56	2,0
3	48	2,3
4	40	2,6
5	40	2,9
6	32	3,2
8	32	3,8
10	24	4,4
12	24	5
1/4	20	5,8
5/16	18	7,3
3/8	16	8,8
7/16	14	10,3
1/2	13	11,9

UNF		
d	p	
1	72	1,7
2	64	2
3	56	2,3
4	48	2,6
5	44	2,9
6	40	3,2
8	36	3,9
10	32	4,5
12	28	5,1
1/4	28	6
5/16	24	7,5
3/8	24	9,1
7/16	20	10,6
1/2	20	12,1
5/8	18	15,25
3/4	16	18,35
7/8	14	21,40
1'	12	24,45

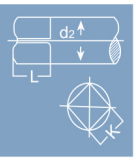
G		
d	p	
1/8	28	9,35
1/4	19	12,55
3/8	19	16,05
1/2	14	20,15
3/4	14	25,65
1'	11	32,25

TABELLA DI CONVERSIONE POLLICI/MILLIMETRI
CONVERSION TABLE INS/MM

ø pollici / *ins*	Decimali ins *Decimal ins*	Equivalente in mm *Conversion table ins/mm*
1/64	015625	0.3968
1/32	03125	0.7937
3/64	046875	1.1906
1/16	0625	1.5874
5/64	078125	1.9843
3/32	09375	2.3812
7/64	109375	2.7780
1/8	125	3.1749
9/64	140625	3.5718
5/32	15625	3.9686
11/64	171875	4.3655
3/16	1875	4.7624
13/64	203125	5.1592
7/32	21875	5.5561
15/64	234375	5.9530
1/4	25	6.3498
17/64	265625	6.7467
9/32	28125	7.1436
19/64	296875	7.5404
5/16	3125	7.9373
21/64	328125	8.3342
11/32	34375	8.7310
23/64	359375	9.1279
3/8	375	9.5248
25/64	390625	9.9216
13/32	40625	10.3185
27/64	421875	10.7154
7/16	4375	11.1122
29/64	453125	11.5091
15/32	46875	11.9060
31/64	484375	12.3029
1/2	5	12.6997

ø pollici / *ins*	Decimali ins *Decimal ins*	Equivalente in mm *Conversion table ins/mm*
33/64	515625	13.0966
17/32	53125	13.4934
35/64	546875	13.8903
9/16	5625	14.2872
37/64	578125	14.6841
19/32	59375	15.0809
39/64	609375	15.4778
5/8	625	15.8747
41/64	640625	16.2715
21/32	65625	16.6684
43/64	671875	17.0653
11/16	6875	17.4621
45/64	703125	17.8590
23/32	71875	18.2559
47/64	734375	18.6527
3/4	75	19.0496
49/64	765625	19.4465
25/32	78125	19.8433
51/64	796875	20.2402
13/16	8125	20.6371
53/64	828125	21.0339
27/32	84375	21.4308
55/64	859375	21.8277
7/8	875	22.2245
57/64	890625	22.6214
29/32	90625	23.0183
59/64	921875	23.4151
15/16	9375	23.8120
61/64	953125	24.2089
31/64	96875	24.6057
63/64	984375	25.0026
1	1	25.3995

QUADRI PER UTENSILI SEC. DIN 10
BOARDS FOR TOOLS IN DIN 10
DIMENSIONI - TOLLERANZE - QUOTE IN MM
DIMENSIONS - ALLOWANCES



ø gambo d2 / *ø shank d2*		Quadro k *Board*	Quadro esterno K h12 *External board*		L
da / *from*	a / *to*	valore *measure*	max	min	
2,47	2,83	2,1	2,100	2,010	5
2,83	3,20	2,4	2,400	2,310	5
3,20	3,60	2,7	2,700	2,910	6
3,60	4,01	3,0	3,000	3,280	6
4,01	4,53	3,4	3,400	4,180	6
4,53	5,08	3,8	3,800	4,780	7
5,08	5,79	4,3	4,300	5,380	7
5,79	6,53	4,9	4,900	6,050	8
6,53	7,33	5,5	5,500	6,850	8
7,33	8,27	6,2	6,200	7,850	9
8,27	9,46	7	7,000	8,850	10
9,46	10,67	8	8,00	9,850	11
10,67	12,00	9	9,000	10,820	12
12,00	13,33	10	10,000	11,820	13
13,33	14,67	11	11,000	12,820	14
14,67	16,00	12	12,000	14,320	15
16,00	17,33	13	13,000	15,820	16
17,33	19,33	14,5	14,500	17,820	17
19,33	21,33	16	16,000	19,790	19
21,33	24,00	18	18,000	21,790	21
24,00	26,67	20	20,000	23,790	23
26,67	29,33	22	22,000	25,790	25
29,33	32,00	24	24,000	28,790	27
32,00	34,67	26	26,000	31,750	29
34,67	38,67	29	29,000	34,750	32
38,67	42,67	32	32,000	38,750	35
42,67	46,67	35	35,000	43,750	38
46,67	52,06	39	39,000	48,750	42
52,06	58,67	44	44,000	54,700	47
58,67	65,33	49	49,000	60,700	52
65,33	73,33	55	55,000	67,700	58
73,33	81,33	61	61,000	75,500	64
81,33	90,66	68	68,000	68,000	71
90,66	101,33	76	76,000	76,000	79

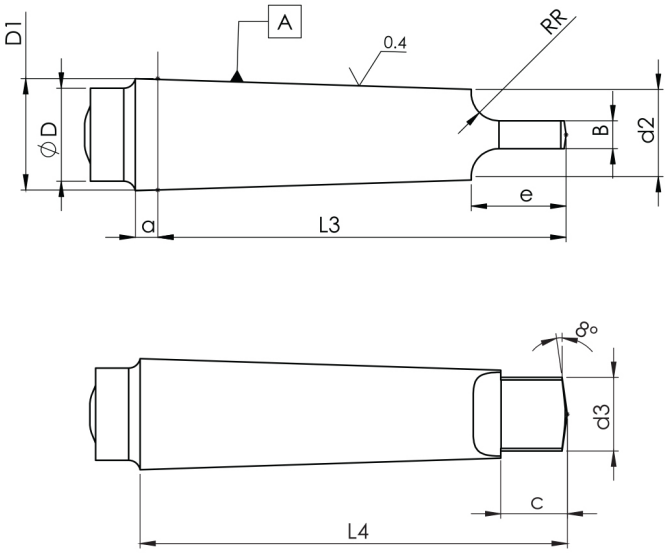
ALCUNE ALTRE FILETTATURE UNIFICATE
OTHER THREADS' STANDARDS

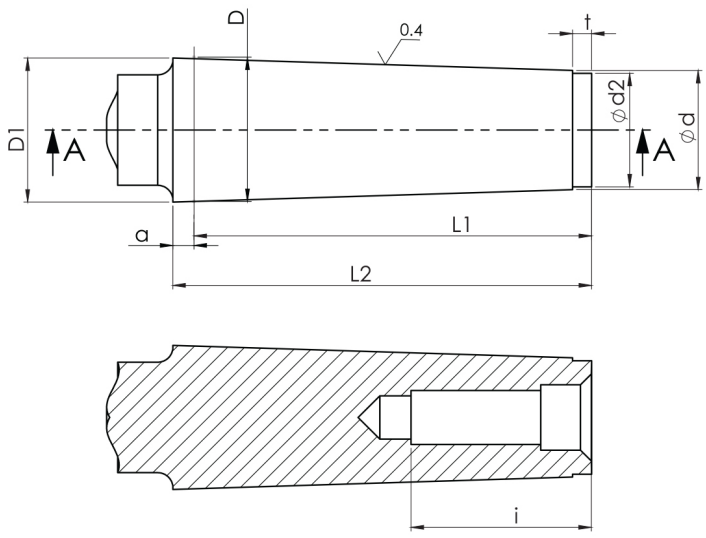
NGO	Filettatura americana cilindrica per rubinetti bombole gas / *American National gas outlet thread*
NPSC	Filettatura americana cilindrica per l'accoppiamento di tubi con l'aggiunta di impermeabilizzanti / *American Standard straight pipe thread in couplings*
NPSH	Filettatura americana cilindrica per tubi, giunti e nippli / *American Standard straight pipe thread for hose couplings and nipples*
NPSI	Filettatura americana interna cilindrica, per tenuta stagna senza sigillanti / *American Standard intermediate internal straight pipe thread, dryseal*
NPSL	Filettatura americana cilindrica per controdadi e tubi per controdadi / *American Standard straight pipe thread for locknuts and locknut-pipe thread*
NGT	Filettatura americana conica per tubi / *National Gas taper threads*
NPTR	Filettatura americana conica per tubi per equipaggiamenti ferroviari / *American Standard taper pipe thread for railing fittings*
PTF-SAE Short	Filettatura americana conica per tubi per tenuta stagna senza sigillanti / *Dryseal SAE Short taper pipe thread*
API-LP	Filettatura americana conica per tubi, settore petrolifero / *American Petroleum Institute Line Pipe*

ACME-G	Filettatura trapezoidale americana per usi generici / *ACME thread for general purposes*
ACME-C	Filettatura trapezoidale americana autocentrante / *Centralizing ACME thread*
STUB-ACME	Filettatura trapezoidale americana, profilo ribassato / *STUB-ACME threads, short*
N BUTT	Filettatura americana a dente di sega / National Buttress screw thread

Rd	Filettatura a profilo tondo / *Rundgewinde*
E	Filettatura Edison, settore elettrico / *Electrical thread*
S	Filettatura a dente di sega
FG	Filettatura tedesca per cicli / *Gewinde für Fahrräder und Mopeds*
BSC	Filettatura inglese per cicli / *British Standard Cycle thread*

CODOLO / *TANG*				conicità C	P%	a	D1**	d**	d1	d2**	d3 max	l1 max	l2 max	l3 max	l4 max	b h13	C	e max	l max	R max	t max
Tipo	Cono	n°	D																		
- B	metrico	4	4	1:20	5	$2^{+0.5/0}$	4,1	2,9	-	-	-	23	25	-	-	-	-	-	-	-	2
- B	metrico	6	6			$3^{+0.5/0}$	6,2	4,4	-	-	-	32	35	-	-	-	-	-	-	-	3
A B	Morse	0	9,045	1:19,212	5,205	$3^{+1/0}$	9,2	6,4	-	6,1	6	50	53	56,5	59,5	3,9	6.5	10,5	-	4	4
A B	Morse	1	12,065	1:20,047	4,988	$3.5^{+1/0}$	12,2	9,4	M 6	9	8,7	53,5	57	62	65,5	5,2	8,5	13,5	16	5	5
A B	Morse	2	17,780	1:20,020	4,995	$5^{+1/0}$	18	14,6	M 10	14	13,5	64	69	75	80	6,3	10	16	24	6	5
A B	Morse	3	23,825	1:19,922	5,020	$5^{+1/0}$	24,1	19,8	M 12	19,1	18,5	81	86	94	99	7,9	13	20	28	7	7
A B	Morse	4	31,267	1:19,254	5,194	$6.5^{+1.5/0}$	31,6	25,9	M 16	25,2	24,5	102,5	109	117,5	124	11,9	16	24	32	8	9
A B	Morse	5	44,399	1:19,002	5,263	$6.5^{+1.5/0}$	44,7	37,6	M 20	36,5	35,7	129,5	136	149,5	156	15,9	19	29	40	10	10
A B	Morse	6	63,348	1:19,180	5,214	$8^{+2/0}$	63,8	53,9	M 24	52,4	51	182	190	210	218	19	27	40	50	13	16
A B	metrico	80	80	120	5	$8^{+2/0}$	80,4	70,2	M 30	69	67	196	204	220	228	26	24	48	65	24	24
A B	metrico	100	100			$10^{+2/0}$	100,5	88,4	M 36	87	85	232	242	260	270	32	28	58	80	30	30
A B	metrico	120	120			$12^{+2/0}$	120,6	106,6	M 36	105	102	268	280	300	312	38	32	68	80	36	36
A B	metrico	160	160			$16^{+3/0}$	160,8	143	M 48	141	138	340	356	380	396	50	40	88	100	48	48
A B	metrico	200	200			$20^{+3/0}$	201	179,4	M 48	177	174	412	432	460	480	62	48	108	100	60	60





* La differenza dei valori limite di a dei codoli, relativa alla zona nella quale deve essere compreso il piano di misura del diametro D, rappresenta in spostamento assiale la tolleranza della parte conica.
The difference of the limit values of "a" of the tangs on the area in which it must be understood the plane of measurement of the diameter D, is in axial tolerance of the conical part.

** I valori dimensioni D1,d e d2 sono approssimativi e dati a titolo indicativo (valori esatti si possono calcolare in base alla dimensione D ed alla conicità, tenendo presenti i valori effettivi delle dimensioni a, l1 e l3 rispettivamente).
The difference of the limit values of "a" of the tangs on the area in which it must be understood the plane of measurement of the diameter D, is in axial tolerance of the conical part.

VAP	Trattamento di vaporizzazione - Riduce l'attrito tra l'utensile e il pezzo in lavorazione, migliora lo scorrimento del maschio ed evita le incollature dei trucioli. *Vaporization treatment - It reduces the friction between the tool and the workpiece, improves the sliding of the tap and avoids the gluing of chips.*	**NERO** ***BLACK***
NIT	Nitrurazione - I maschi nitrurati hanno una maggiore durezza superficiale e sono consigliati per materiali abrasivi come la ghisa grigia, leghe d'alluminio con percentuale di Si medio alta. *Nitriding - The nitrided taps have a higher surface hardness and are recommended for abrasive materials such as cast iron, aluminum alloys with high average percentage of Si.*	**NERO** ***BLACK***
TiN	Rivestimento con nitruri di titanio - Questo trattamento è consigliato per la lavorazione di materiale abrasivo, di materiali che creano saldature fredde. Permette di aumentare la velocità di filettatura e la durata del maschio. *Surface with titanium nitrides - This treatment is recommended for the processing of abrasive material, of materials that create cold welding. It allows to increase the speed of threading and durability of the tap.*	**GIALLO** ***YELLOW***
TiCN	Rivestimento con carbonitruri di titanio. Questo trattamento ha una durezza superiore al TIN, consente velocità di filettatura superiori. *Surface with titanium carbonitrides. This treatment has a hardness higher than the TIN and allows higher speed of threading.*	**VIOLA - GRIGIO** ***VIOLET - GRAY***
TiAlN	Rivestimento con nitruri di titanio e alluminio - Utilizzato per le lavorazioni di materiali abrasivi, come Ghisa grigia, leghe d'allumino con Silicio, materie plastiche a fibre rinforzate o lavorazioni ad alte temperature con raffreddamento insufficiente. *Surface with nitrides of titanium and aluminum - It is used for machining of abrasive materials such as cast iron, aluminum alloys with silicon, plastics with reinforced fibers or for workings at high temperatures with insufficient cooling.*	**VIOLA - NERO** ***VIOLET - BLACK***
CrN	Rivestimenti con nitruri di cromo - Utilizzato in sostituzione della cromatura, da applicarsi nelle lavorazioni del rame e le sue leghe, titanio, leghe d'alluminio senza Silicio a truciolo lungo. *Surface with chromium nitride - It is used to replace the chromium plating, to be applied in the processing of copper and its alloys, titanium, aluminum alloys without silicon long chips.*	**GRIGIO METALLICO** ***METALLIC***
ZHL	Elevata durezza e resistenza a temperatura - Combinata con ottime proprietà di scorrimento. *High hardness and temperature resistance - Combined with excellent sliding properties.*	**GRIGIO SCURO** ***DARK GRAY***

	Y - TiN	T - TiCN	CrN	TiAlN	Z -ZHL
	Monostrato *Monolayer*	Monostrato *Monolayer*	Monostrato *Monolayer*	Nano struttura *Nano structure*	Pluristrato *Plurilayer*
Durezza / *Hardness* H V (0.05)	2300	3000	1750	3300	300
Coefficiente di attrito su acciaio a secco *Coefficient of friction on dry steel*	0.4	0.4	0.5	0.4	0.2
Spessore / *Thickness* (um)	1+5	1+5	1+4/10	1+4	2+6
Temperatura massima di esercizio (°C) 600°C *Maximum operating temperature (° C) 600° C*	600°C= 1100°F	400°C= 750°F	700°C= 300°F	900°C= 1470°F	800°C=
Colore / *Color*	Giallo - Oro *Golden Yellow*	Grigio - Blu *Gray - Blue*	Grigio - Argento *Gray - Silver*	Nero - Viola *Black - Violet*	Grigio - Nero *Gray - Black*

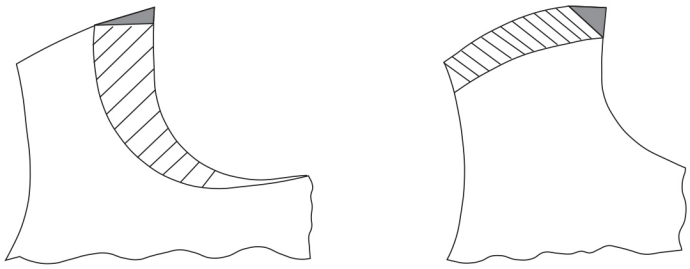
DIFETTO / *LACK*	CAUSE PRINCIPALI / *MAIN CAUSES*	RIMEDIO / *ACTION*
ROTTURA DEL MASCHIO DURANTE LA CORSA DI MASCHIATURA *BREAKING OF THE TAP DURING THE TAPPING*	1. preforo troppo piccolo / *pilot hole too small* 2. maschio usurato / *tap worn out* 3. affilatura male eseguita / *sharpening badly executed* 4. disassamento o disallineamento tra il maschio e il foro da maschiare / *misalignment or mismatch between the tap and the hole to be tapped* 5. maschio urta sul fondo del foro / *tap hits the bottom of the hole* 6. intasamento dei canali di scarico / *obstruction of the outlet channels* 7. non corretto fissaggiodel pezzo da maschiare / *Incorrect fastening of the piece to be tapped*	1. verificare il diametro di foratura / *check the diameter of the pilot hole* 2. prowedere alla sostituzione o alla corretta riaffilatura delll'utensile / *replace the tap* 3. riaffilare correttamente il maschio / *properly sharpen the tap* 4. allineare e centrare correttamente / *align and properly center* 5. regolare correttamente la corsa / *roperly adjust the stroke* 6. sostituire il maschio con uno di tipo più idoneo / *replace tap with one more suitable* 7. prowedere ad un fissaggio corretto / *provide for a correct fixing*
ROTTURA DEL MASCHIO DURANTE LA CORSA DI RITORNO *BREAKING OF THE TAP DURING THE STROKE RETURN*	1. non corretta rettifica dell'imbocco / *Incorrect grinding of the entrance* 2. sagoma dei canali di scarico non idonea / *shape of the outlet channels unsuitable* 3. non corretto fissaggio del pezzo da maschiare / *Incorrect fastening of the piece to be tapped* 4. inversione o velocità di ritorno non adeguate / *reverse or return speed not right*	1. rettificare correttamente l'imbocco / *grinding properly the chamfer* 2. rettificare correttamente le scanalature in modo da evitare l'interferenza dei trucioli / *grinding properly the grooves so as to avoid the interference of the chips* 3. fissare correttamente il pezzo in modo da evitare gli effetti negativi dell'inversione di coppia al momento del ritorno / *properly fix the piece in order to avoid the negative effects of the reversal of torque at the time of return* 4. impostarecorrettamente la macchina ed usare portamaschi idonei / *set the machine properly and use tap holders appropriate*
USURA ECCESSIVA DEL MASCHIO *EXCESSIVE WEAR OF THE TAP*	1. angolo di taglio non adatto al materiale da lavorare / *cutting angle not suitable for the material to be machined* 2. lubrorefrigerazione non adatta / *coolant not suitable* 3. mancanza di trattamento superficiale adatto / *lack of suitable surface treatment* 4. velocità di maschiatura errata / *tapping speed wrong*	1. riaffilare correttamente il maschio / *resharpen correctly the tap* 2. usare tipo e quantità di lubrorefrigerante appropriato / *use the appropriate type and amount of coolant* 3. usare un maschio con trattamento superficiale / *Use a tap with a surface treatment* 4. impostare la velocità di taglio adatta al materiale da lavorare / *set the cutting speed suitable for the material to be machined*
ROTTURA DEI FILETTI D'IMBOCCO DEL MASCHIO *BREAKING OF CHAMFER'S THREADS OF THE TAP*	1. angolo di taglio non adatto / *cutting angle not suitable* 2. non corretta rettifica dell'imbocco / *Incorrect grinding of the chamfer* 3. diametro del preforo / *diameter of the drive hole* 4. centraggi e allineamenti scorretti / *centering and alignment incorrect*	1. riaffilare correttamente il maschio / *resharpen correctly the tap* 2. rettificare correttamente l'imbocco / *adjust properly the chamfer* 3. correggere il diametro di foratura / *correct the drilling diameter* 4. procedere ad un impostazione corretta di tutti i parametri di lavorazione / *proceed with a correct setting of all the working parameters*
ROTTURA DEI FILETTI DEL MASCHIO DOPO L'IMBOCCO *BREAKING OF THREADS AFTER THE CHAMFER OF THE TAP*	1. sagoma dei canali di scarico non idonea / *hape of the outlet channels unsuitable* 2. intasamento dei canali di scarico / *obstruction of the outlet channels* 3. velocità di taglio non adatta / *cutting speed is not suitable*	1. riaffilare correttamente le scanalature in modo da evitare l'interferenza dei trucioli / *resharpen correctly the grooves in order to avoid the interference of the chips* 2. sostituire il maschio con uno di tipo più idoneo / *replace the tap with one more suitable* 3. impostare una velocità di taglio corretta / *set a correct cutting speed*
IL MASCHIO PRODUCE UNA FILETTATURA MAGGIORATA *TAP PRODUCES AN INCREASED THREAD*	1. angolo di taglio e/o spoglia dell'imbocco non idonei / *cutting angle and/or rake of chamfer unsuitable* 2. eccessiva o scarsa spinta assiale del maschio / *excessive or bad axial thrust of the male* 3. lubrificazione non idonea / *lubrication unsuitable* 4. dissassamento maschio / foro da filettare / *male/ tapping hole off-axis*	1. riaffilare correttamente il maschio / *resharpen correctly the tap* 2. correggere la spinta o se possibile, usare sistemi d'avanzamento con patrona o con dispositivi di compensazione / *fix the push or use systems of advancement with compensation devices* 3. prowedere alla lubrificazione adatta / *provide lubrication suitable* 4. allineare e centrare correttamente / *align and properly center*
IL MASCHIO PRODUCE UNA FILETTATURA MINORATA *TAP PRODUCES AN UNDERSIZED THREAD*	1. angolo di taglio non adatto / *cutting angle not suitable* 2. maschio usurato / *tap worn out*	1. riaffilare correttamente il maschio / *resharpen correctly the tap* 2. sostituire o riaffilare il maschio / *use a new tap*
IL MASCHIO PRODUCE FILETTI STRAPPATI E SI VERIFICA UN FENOMENO DI GRIPPAGGIO *TAP PRODUCES RIPPED THREADS AND HAPPENS AN EVENT OF SEIZURE*	1. angolo di taglio non idoneo / *cutting angle unsuitable* 2. maschio usurato / *tap worn out* 3. lubrificazione non adatta / *lubrication not suitable* 4. preforo troppo piccolo / *pilot hole too small*	1. riaffilare correttamente il maschio / *resharpen correctly the tap* 2. sostituire o riaffilare il maschio / *use a new tap* 3. usare tipo e quantità di lubrificante appropriati / *use the appropriate type and amount of lubricant* 4. correggere il diametro di foratura / *correct the drilling diameter*

AFFILATURA / *SHARPENING*

AFFILATURA / *SHARPENING*

È importante affilare in tempo il maschio quando presenta sintomi di usura. Ciò si riconosce da una **cattiva qualità** della filettatura. Non intervenendo preventivamente si ottiene un aumento del consumo del tagliente del maschio. L'affilatura del maschio serve a rigenerare gli spigoli consumati dall' usura, ciò è molto importante per la durata del maschio e per la qualità delle superfici filettate. L'utensile non affilato aumenta il momento torcente dell'utensile, e può portare alla rottura del maschio.

It is important to sharpen on time the tap when it has symptoms of wear. This is visible by a poor quality of the thread. Not acting in advance you get an increase in the consumption of the sharp of the tap. The sharpening of the tap serves to regenerate the edges consumed by wear, this is very important for the life of the tap and for the quality of the threaded surfaces. The unsharpened tool increases the torque of the tool, and can lead to the breakdown of the tap.



SI DEVE PROCEDERE COME SEGUE / *PROCEED AS FOLLOW*

1) affilatura imbocco: la produzione di trucioli è più alta all'imbocco, e per tale ragione che l'usura dell'imbocco è più intensa, l'imbocco deve essere perfettamente centrato onde evitare gli effetti visibili. Pericolo: rottura del maschio durante la corsa di ritorno.

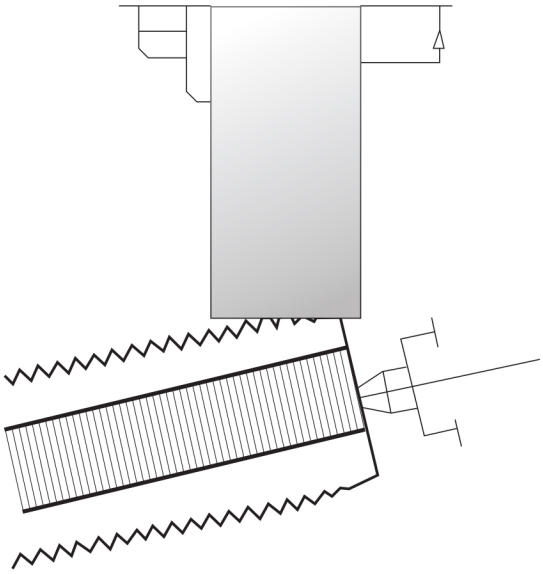
   Sharpening chamfer: chips production is higher at the entrance, it is for this reason that the wear of the chamfer is more intense, the chamfer must be perfectly centered to prevent the visible effects. Danger: tap breakage during the return stroke

2) affilatura scanalature, si deve fare su un'affilatrice per maschi dotata di divisore o di una patrona.

   * Scanalature diritte si ripassa la superficie di spoglia superiore.
   * Scanalature diritte imbocco corretto si riaffila solo la scanalatura tagliente.
   * Scanalature elicoidali si affilano seguendo il passo elica.

   Sharpening flutes, you should do on a sharpener for taps with a divider.

   ** Straight flutes goes over the upper rake surface.*
   ** Straight flutes spiral point is regrinds only the flute's edge.*
   ** Helical flutes are sharpened following the step helix.*



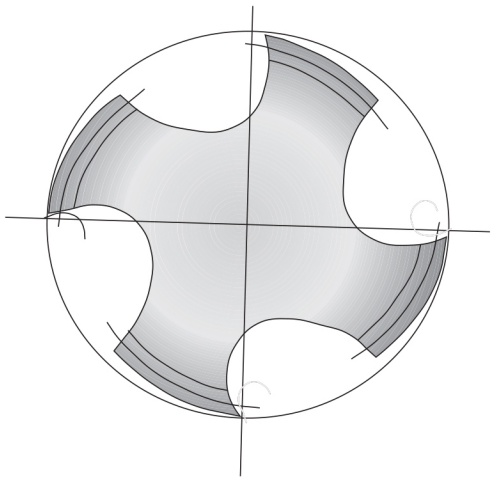
CONTROLLI / *CHECKS*

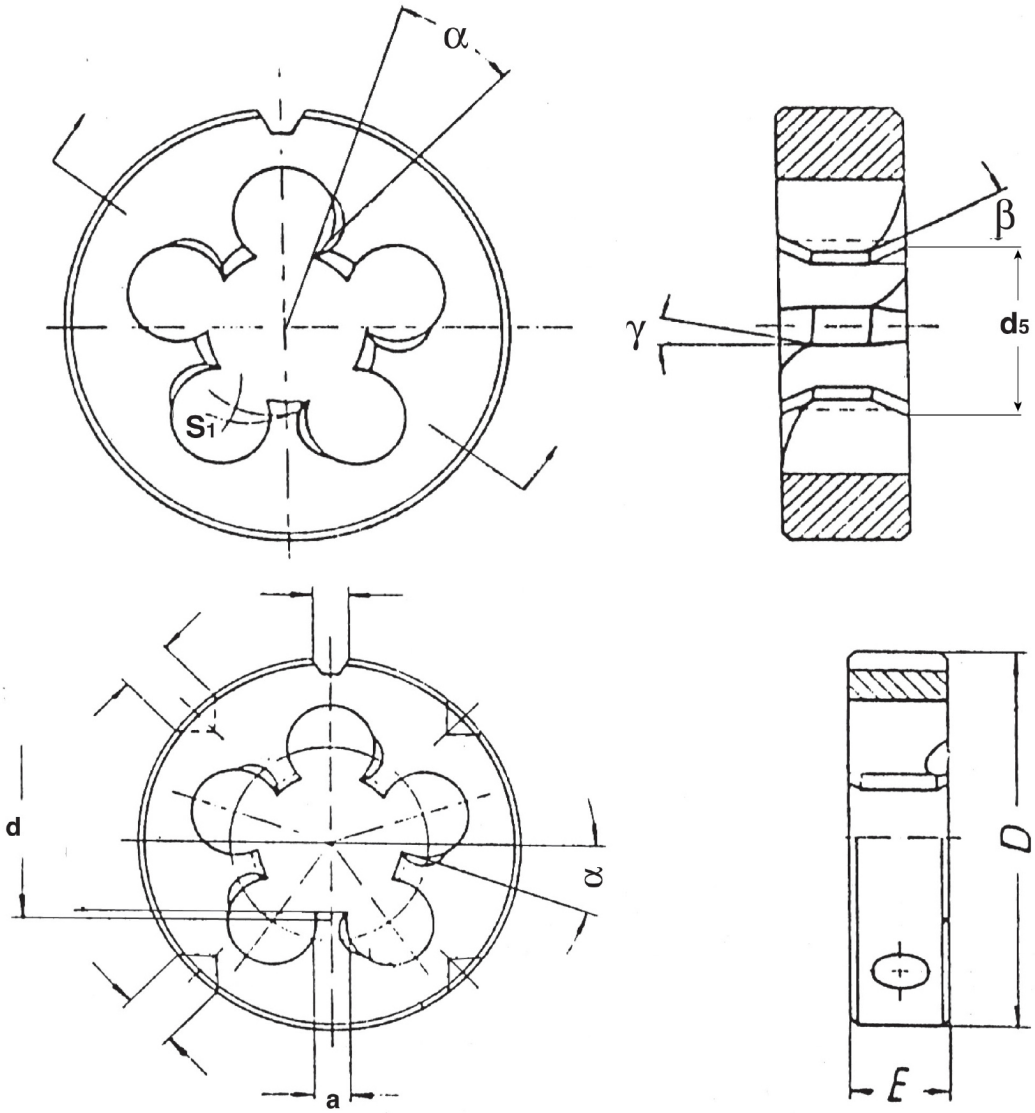
Dopo l'affilatura del maschio si deve controllare:
Imbocco: vedere se centrato
il numero di spire e l' angolo devono essere uguali
i taglienti devono essere concentrici.

Dato che la zona dell'imbocco è soggetta ad usura, è necessario ripristinarla correttamente. Se l'usura si presenta anche sui fianchi del filetto, si consiglia di accorciare il maschio prima di procedere alla riaffilatura. Dopo l' affilatura è bene eseguire una pulizia delle bave createsi, che si possono togliere con una spazzola metallica. Pericolo: alesature, filettature lasche.

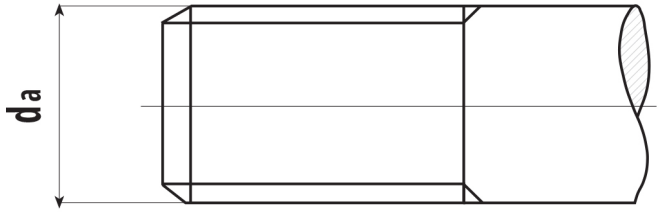
After the sharpening of the tap, it must be checked:
Chamfer: check if it is centered
the number of turns and the angle must be the same
the cutting edges should be concentric.

Since that the chamfer area is subject to wear, it is necessary to restore it properly. If the wear is also present on the flanks of the thread, it is recommended to shorten the tap prior to regrinding. After the sharpness it is good to clean the burr, which can be removed with a wire brush.
Danger: boring, loose threads.





α	Semiangolo di imbocco / *Chamfer angle*
β	Angolo di imbocco corretto / *Spiral point angle*
γ	Spoglia radiale sull'imbocco / *Chamfer radial relief*
S_1	Angolo di taglio / *Rake angle*
E	Spessore della filiera / *Die thickness*
D	Diametro della filiera / *Die O.D.*
d	Diametro nominale della filettatura / *Thread diamete*
d_5	Diametro in punta sull'imbocco / *Chamfer diameter*
a	Larghezza del tagliente / *Width of land*



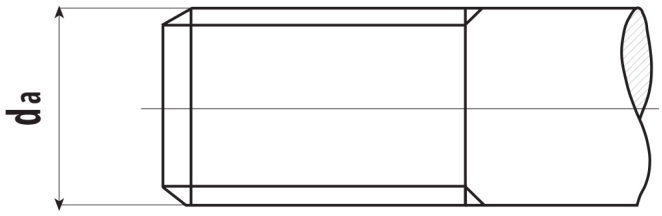
M	
d x p	min-max
M 1 x 0.25	0.91 - 0.98
M 1.2 x 0.25	1.11 - 1.18
M 1.4 x 3	1.30 - 1.38
M 1.6 x 0.35	1.49 - 1.58
M 1.7 x 0.35	1.59 - 1.68
M 1.8 x 0.35	1.69 - 1.78
M 2 x 0.4	1.88 - 1.98
M 2.2 x 0.45	2.08 - 2.18
M 2.3 x 0.4	2.18 - 2.28
M 2.5 x 0.45	2.38 - 2.48
M 2.6 x 0.45	2.48 - 2.58
M 3 x 0.5	2.87 - 2.98
M 3.5 x 0.6	3.35 - 3.47
M 4 x 0.7	3.83 - 3.97
M 4.5 x 0.75	4.33 - 4.47
M 5 x 0.8	4.82 - 4.97
M 5.5 x 0.9	5.31 - 5.47
M 6 x 1	5.79 - 5.97
M 7 x 1	6.79 - 6.97
M 8 x 1.25	7.76 - 7.97
M 9 x 1.25	8.76 - 8.97
M 10 x 1.5	9.73 - 9.96
M 11 x 1.5	10.73 - 10.96
M 12 x 1.75	11.70 - 11.96
M 14 x 2	13.68 - 13.96
M 16 x 2	15.68 - 15.96
M 18 x 2.5	17.62 - 17.95
M 20 x 2.5	19.62 - 19.95
M 22 x 2.5	21.62 - 21.95
M 24 x 3	23.57 - 23.95
M 27 x 3	26.57 - 26.95
M 30 x 3.5	29.52 - 29.94
M 33 x 3.5	32.52 - 32.94
M 36 x 4	35.49 - 35.94
M 39 x 4	38.49 - 38.94
M 42 x 4.5	41.43 - 41.93
M 45 x 4.5	44.43 - 44.93
M 48 x 5	47.39 - 47.92
M 52 x 5	51.39 - 51.92
M 56 x 5.5	55.36 - 55.92
M 60 x 5.5	59.36 - 59.92

MF	
d x p	min-max
M 2 x 0.25	1.91 - 1.98
M 2.2 x 0.25	2.11 - 2.18
M 2.5 x 0.35	2.39 - 2.48
M 3 x 0.35	2.89 - 2.98
M 3.5 x 0.35	3.39 - 3.48
M 4 x 0.5	3.87 - 3.98
M 5 x 0.5	4.87 - 4.98
M 6 x 0.5	5.87 - 5.98
M 6 x 0.75	5.83 - 5.97
M 7 x 0.5	6.87 - 6.98
M 7 x 0.75	6.83 - 6.97
M 8 x 0.75	7.83 - 7.97
M 8 x 1	7.79 - 7.97
M 9 x 0.5	8.87 - 8.98
M 9 x 1	8.79 - 8.97
M 10 x 0.75	9.83 - 9.97
M 10 x 1	9.79 - 9.97
M 10 x 1.25	9.76 - 9.97
M 11 x 0.5	10.87 - 10.98
M 11 x 0.75	10.83 - 10.97
M 11 x 1	10.79 - 10.97
M 11 x 1.25	10.76 - 10.97
M 12 x 0.75	11.83 - 11.97
M 12 x 1	11.79 - 11.97
M 12 x 1.25	11.76 - 11.97
M 12 x 1.5	11.73 - 11.96
M 13 x 0.5	12.87 - 12.98
M 13 x 0.75	12.83 - 12.97
M 13 x 1	12.79 - 12.97
M 14 x 0.5	13.87 - 13.98
M 14 x 0.75	13.83 - 13.97
M 14 x 1	13.79 - 13.97
M 14 x 1.25	13.76 - 13.97
M 14 x 1.5	13.73 - 13.96
M 15 x 1	14.79 - 14.97
M 15 x 1.5	14.73 - 14.96
M 16 x 1	15.79 - 15.97
M 16 x 1.25	15.76 - 15.97
M 16 x 1.5	15.73 - 15.96
M 17 x 1	16.79 - 16.97
M 17 x 1.5	16.73 - 16.96
M 18 x 1	17.79 - 17.93
M 18 x 1.5	17.73 - 17.96
M 18 x 2	17.68 - 17.96
M 20 x 1	19.79 - 19.97
M 20 x 1.5	19.73 - 19.96
M 20 x 2	19.68 - 19.96
M 22 x 1	21.79 - 21.97
M 22 x 1.5	21.73 - 21.96
M 22 x 2	21.68 -21.96
M 24 x 1	23.79 - 23.97
M 24 x 1.5	23.73 - 23.96
M 24 x 2	23.68 - 23.96

MF	
d x p	min-max
M 25 x 1	24.79 - 24.97
M 25 x 1.5	24.73 - 24.96
M 25 x 2	24.68 - 24.96
M 26 x 1	25.79 - 25.97
M 26 x 1.5	25.73 - 25.96
M 26 x 2	25.68 - 25.96
M 27 x 1	26.79 - 26.97
M 27 x 1.5	26.73 - 26.96
M 27 x 2	26.68 - 26.96
M 28 x 1	27.79 - 27.93
M 28 x 1.5	27.73 - 27.96
M 28 x 2	27.68 - 27.96
M 30 x 1	29.79 - 29.97
M 30 x 1.5	29.73 - 29.96
M 30 x 2	29.68 - 29.96
M 32 x 1	31.79 - 31.97
M 32 x 1.5	31.73 - 31.96
M 32 x 2	31.68 - 31.96
M 33 x 1.5	32.73 - 32.96
M 33 x 2	32.68 - 32.96
M 34 x 1.5	33.73 - 33.96
M 35 x 1.5	34.73 - 34.96
M 36 x 1.5	35.73 - 35.96
M 36 x 2	35.68 - 35.96
M 36 x 3	35.57 - 35.95
M 38 x 1.5	37.73 - 37.96
M 39 x 2	38.68 - 38.96
M 39 x 3	38.57 - 38.95
M 40 x 1.5	39.73 - 39.96
M 40 x 2	39.68 - 39.96
M 42 x 1.5	41.73 - 41.96
M 42 x 2	41.68 - 41.96
M 42 x 3	41.57 - 41.95
M 45 x 1.5	44.73 - 44.96
M 45 x 2	44.68 - 44.96
M 45 x 3	44.57 - 44.95
M 48 x 1.5	47.73 - 47.96
M 48 x 2	47.68 - 47.96
M 48 x 3	47.57 - 47.95
M 50 x 1.5	49.73 - 49.96
M 50 x 2	49.68 - 49.96
M 50 x 3	49.57 - 49.95
M 52 x 1.5	51.73 - 51.96
M 52 x 2	51.68 - 51.96
M 52 x 3	51.57 - 51.95
M 56 x 1.5	55.73 - 55.96
M 56 x 2	55.68 - 55.96
M 56 x 3	55.57 - 55.95
M 56 x 4	55.49 - 55.94
M 60 x 1.5	59.73 -59.96
M 60 x 2	59.68 - 59.96
M 60 x 3	59.57 - 59.95
M 60 x 4	59.49 - 59.94

MF		
d	p	min-max
1'1/16	- 12	26.65 - 26.94
1'1/8	- 8	28.14 - 28.52
1'3/16	- 12	29.82 - 30.11
1'1/4	- 8	31.31 - 31.69
1'5/16	- 12	33.00 - 33.28
1'3/8	- 8	34.48 - 34.86
1'1/2	- 8	37.66 - 38.04
1'5/8	- 8	40.83 - 41.21
1'5/8	- 12	40.93 - 41.22
1'3/4	- 8	44.01 - 44.39
1'3/4	- 12	44.11 - 44.39
1'7/8	- 8	47.18 - 47.56
1'7/8	- 12	47.28 - 47.57
2'	- 8	50.36 - 50.74
2'	- 12	50.45 -50.74
2'1/8	- 12	53.63 - 53.92
2'1/4	- 8	56.80 - 57.09
2'3/8	- 12	59.98 - 60.26
2'1/2	- 8	63.05 - 63.43
2'1/2	- 12	63.15 - 63.44
2'3/4	- 8	69.40 - 69.78
3'	- 8	75.75 - 76.13
3'	- 12	75.85 - 76.14

MF		
d	p	min-max
3/16	- 32	4.63 - 4.76
1/4	- 26	6.20 - 6.35
5/16	- 22	7.78 - 7.93
3/8	- 20	9.35 - 9.52
7/16	- 18	10.93 - 11.13
1/2	- 16	12.51 - 12.7
5/8	- 14	15.66 - 15.87
3/4	- 12	18.86 - 19.05
7/8	- 11	21.99 - 22.22



UNC	
d p	min-max
1 -64	1.74 - 1.83
2 -56	2.06 - 2.16
3 -48	2.33 - 2.49
4 - 40	2.69 - 2.82
5 -40	3.02 - 3.15
6 -32	3.33 - 3.48
8 -32	3.9 - 4.14
10 -24	4.61 - 4.80
12 -24	5.27 - 5.46
1/4 -20	6.11 - 6.32
5/16 -18	7.68 - 7.90
3/8 -16	9.25 - 9.49
7/16 -14	10.81 - 11.07
1/2 -13	12.38 - 12.66
9/16 -12	13.95 - 14.24
5/8 -11	15.52 - 15.83
3/4 -10	18.67 - 19.0
7/8 - 9	21.82 - 22.17
1' - 8	24.96 - 25.34
1'1/8 - 7	28.10 - 28.51
1'1/4 - 7	31.27 - 31.69
1'3/8 - 6	34.40 - 34.86
1'1/2 - 6	37.57 - 38.03
1'3/4 - 5	43.86 - 44.38
2'- 4 1/2	50.11 - 50.72

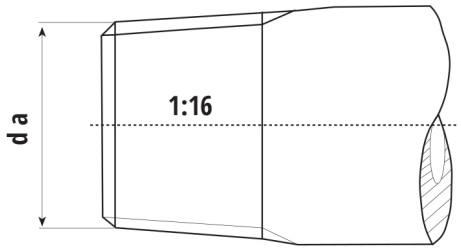
UNF	
d p	min-max
0 - 80	1.37 - 1.50
1 - 72	1.75 - 1.83
2 - 64	2.07 - 2.16
3 - 56	2.39 - 2.49
4 - 48	2.71 - 2.82
5 - 44	3.03 - 3.15
6 - 40	3.35 - 3.48
8 - 36	4.00 - 4.14
10 - 32	4.65 - 4.80
12 - 28	5.29 - 5.46
1/4 - 28	6.16 - 6.32
5/16 - 24	7.72 - 7.91
3/8 - 24	9.31 - 9.49
7/16 - 20	10.87 -11.07
1/2 - 20	12.46 -12.66
9/16 - 18	14.03 -14.25
5/8 - 18	15.61-15.83
3/4 - 16	18.77-19.01
7/8 - 14	21.92-22.18
1' - 12	25.06-25.35
1'1/8 -12	28.24-28.52
1'1/4 -12	31.41-31.70
1'3 /8-12	34.58-34.87
1'1/2-12	37.76-38.05

UNEF	
d p	min-max
12 - 32	5.30 - 5.46
1/4 - 32	6.17 - 6.32
5/16 - 32	7.76 - 7.91
3/8 - 32	9.34 - 9.5
7/16 - 28	10.91-11.08
1/2 - 28	12.50-12.67
9/16 - 24	14.07-14.25
5/8 - 24	15.66-15.84
3/4 - 20	18.81-19.01
7/8 - 20	21.91-22.18
1' - 20	25.15-25.36
1'1/8 - 18	28.31-28.53
1'1/4 - 18	31.48-31.70
1'3/8 - 1	34.61-34.88

UNEF	
d p	min-max
7 - 20	12.3 - 12.5
9 - 18	15 - 15.2
11 - 18	18.4 - 18.6
13.5 -18	20.2 - 20.4
16 - 18	22.3 - 22.5
21 - 16	28. - 28.3
29 - 16	36.7 - 37
36 - 16	46.7 - 47
42 - 16	53.7 - 54
48 - 16	59
	59.3

BSW	
d p	min-max
3/32 - 48	2.28 - 2.38
1/8 - 40	3.06 - 3.17
5/32 - 32	3.84 - 3.96
3/16 - 24	4.62 - 4.76
7/32 - 24	5.41 - 5.55
1/4 - 20	6.19 - 6.35
5/16 - 18	7.77 - 7.93
3/8 - 16	9.34 - 9.52
7/16 - 14	10.92 -11.13
1/2 - 12	12.49 -12.7
9/16 - 12	14.07 -14.28
5/8 - 11	15.65 -15.87
3/4 - 10	18.81 -19.05
7/8 - 9	21.97 -22.22
1' - 8	25.13 -25.4
1'1/8 - 7	28.29 -28.57
1'1/4 - 7	31.46 -31.75
1'3/8 - 6	34.62 -34.92
1'1/2 - 6	37.79 -38.1
1'5/8 - 5	40.94 -4127
1'3/4 - 5	44.11 -44.45
1'7/8 -41/2	47.26 -47.62
2' - 41/2	50.43 -50.8

G	
d p	min-max
1/8 - 28	9.51 - 9.72
1/4 - 19	12.90 - 13.15
3/8 - 19	16.41 - 16.66
1/2 - 14	20.67 - 20.95
5/8 - 14	22.62 - 22.91
3/4 - 14	26.15 - 26.44
7/8 - 14	29.91 - 30.20
1' - 11	32.88 - 33.24
1'1/8 -11	37.53 - 37.89
1'1/4 -11	41.55 - 41.91
1'1/2 -11	47.44 - 47.80
1'3/4 -11	53.38 - 53.74
2' - 11	59.25 - 59.61
2'1/4 -11	65.27 - 65.71
2'1/2 -11	74.75 - 75.18
2'3/4 -11	81.1 - 81.53
3' -11	87.45 - 87.88



UNC		
d p	min	max
1/16 - 27	7 . 5 2	7 . 6 4
1/8 - 27	9 . 8 7	9 . 9 9
1/4 - 18	13.10	13.26
3/8 - 18	16.52	16.66
1/2 - 14	20.55	20.71
3/4 - 14	25.87	26.03
1' -11 1/2	32.42	32.59
1'1/4 -11 1/2	41.14	41.32
1'1/2 - 11 1/2	47.21	47.39
2' - 8	59.25	59.4

NPTF		
d p	min	max
1/16 - 27	7 . 5 2	7 . 6 2
1/8 - 27	9 . 8 7	9 . 9 6
1/4 - 18	13.13	13.21
3/8 - 18	16.55	16.63
1/2 - 14	20.62	20.70
3/4 - 14	25.93	26.02
1' -11 1/2	32.47	32.56
1'1/4 -11 1/2	41.20	41.29
1'1/2 - 11 1/2	47.27	47.36
2' - 8	59.28	59.37

NPTF		
d p	mis.	toll.
1/16 - 28	7.47	± 0.05
1/8 - 28	9.48	± 0.05
1/4 - 19	12.78	± 0.08
3/8 - 19	16.26	± 0.08
1/2 - 14	20.44	± 0.11
3/4 - 14	25.85	± 0.11
1' - 11	32.60	± 0.14

		# Werkstoff	DIN	UNI	AISI/SAE ASTM
1.1	**Acciaio dolce, da costruzione, da cementazione, alta velocità** ***Soft Steel, Structural Steel, Casehardening Steel, Super Cutting Steel***	1,1141	CK15	-	1018
		1,7131	16MnCr5	16MnCr5	-
		1,0570	St52-3N	Fe510FN	1024
		1,0401	C15	C15	M1015
		1,0116	Fe36DOD1	Fe360CFN	A284GrD
		1,1121	CK10	2C10	-
		1,0715	9SMn28	CF9Mn28	1213
		1,0718	9SMnPb28	CF9SMnPb28	12L13
		1,0726	35S20	-	1140
1.2	**Acciaio al carbonio** ***Carbon Steel***	1,1191	C45E	C46	-
		1,1203	C55E	-	-
		1,1231	C67E	C70	-
		1,1248	C75E	C75	1078
		1,1274	C101E	C100	-
1.3	**Acciaio legato** ***Alloyed Steel***	1,0503	C45	C45	1045
		1,0535	C55	C55	1055
		1,1525	C80W1	C80KU	W108
		1,2067	102Cr6	-	L1
		1,2330	35CrMo4	35CrMo4	4135
1.4	**Acciaio legato bonificato / alta resistenza** ***High Tensile Steel***	1,7220	36CrMo4	36CrMo4KB	4137
		1,7228	50CrMo4	-	4150
		1,7361	32CrMo12	32CrMo12	-
		1,6511	36CrNiMo4	36NiCrMo7KB	4340
		1,6580	30CrNiMo8	30NiCrMo8	-
		1,6582	36CrNiMo6	35NiCrMo6KB	4337
		1,7223	41CrMo4	41CrMo4	4140
2.1	**Acciaio Inox automatico** ***Free-cutting Inox Steel***	1,4305	X8CrNiS18-19	X10CrNiS1809	303
		1,4104	X14CrMoS17	X10CrS17	A430F
2.2	**Acciaio Inox austenitico** ***Austenitic Inox Steel***	1,4311	X2CrNiN18-10	X2CrNiN1810	304LN
		1,4404	X2CrNiMo17-12-2	X2CrNiMo1712	316L
		1,4435	X2CrNiMo18-14-3	X2CrNiMo1713	-
		1,4841	X15CrNiSi25-20	X16CrNiSi2520	314
		1,4305	X8CrNiS18-9	X10CrNiS1809	303
		1,4301	X5CrNi1810	X5CrNi1810	304
		1,4401	X5CrNiMo17-12-2	X5CrNiMo1712	316
		-	duplex	duplex	A182
2.3	**Acciaio inox ferritico-ferritico+austenitico-martensitico** ***Inox Steel Austenitic - Austenitic+Ferritic - Martensitic***	1,4110	X55CrMo14	-	-
		1,4521	X2CrMoTi18-2	-	443
		1,4510	X3CrTi17	X6CrTi17	430Ti
		1,4462	X2CrNiMoN22-5-3	-	S31803
2.4	**Leghe Ni Cr ad alta resistenza** ***Ni Cr Alloys high strength***	1,4542	X7CrNiAl17-4	-	630
		1,4545	X4CrNiCu16-6	-	-
		1,4547	X2CrNiMo20-18-6	-	254SMO
		1,4876	X10NiCrAlTi32-20	-	B163
		1,4958	X7CrNiAlTi21-31	-	N08811
3.1	**Ghisa grigia** ***Cast Iron***	0,6015	GG15	G15	A48-25B
		0,6025	GG25	G25	A48-40B
		0,6030	GG30	G30	A48-45B
		0,6035	GG35	G35	A48-50B
		0,6040	GG40	-	A48-60B
3.2	**Ghisa malleabile e sferoidale** ***Malleable and Spheroidal Cast Iron***	0,7040	GGG40	GS400-12	60-40-18
		0,7060	GGG60	GS600-3	80-55-06
		0,7070	GGG70	GS700-2	100-70-03
		0,7080	GGG80	GS800-2	120-90-02

		# Werkstoff	DIN	UNI	AISI/SAE ASTM
4.1	Titanio puro *Titanium*	3,7024	Ti99,8	-	-
		3,7034	Ti99,7	-	4902
		3,7055	-	-	R50550
		3,7064	Ti99,5	-	4901
4.2	Leghe di Titanio *Titanium Alloys*	3,7124	TiCu2	-	-
		3,7184	TiAl4Mo4Sn2Si05	-	-
		3,7174	TiAl6VSn2	-	-
5.1	Nichel puro *Nickel*	1,3911	RNi24	-	-
		1,3926	RNi12	-	-
		1,3927	RNi8	-	-
5.2	Leghe di Nichel *Nickel Alloys*	2,4668	NiCr19Fe19NbMo	-	-
		2,4360	NiCu30Fe	-	4544
		2,4816	NiCr15Fe	-	5540
		2,4631	NiCr20TiAl	-	-
		2,4665	NiCr22Fe18Mo	-	5536E
6.1	Rame puro, rame elettrolitico *Copper and Electrolytic Copper*	2,0060	ECu57	-	C11000
		2,0065	ECu58	-	
		2,0070	SeCu	-	C10300
6.2	Ottone a truciolo corto - bronzo *Brass with short chip - Bronze*	2,0401	CuZn39Pb3	-	C38500
		2,0402	CuZn40Pb2	-	C3800
		2,0580	CuZn40Mn1Pb	-	-
		2,0410	CuZn44Pb2	-	-
		2,1086	G-CuSn10	-	C90250
		2,0882	CuNi30Mn1Fe	-	C71500
6.3	Ottone a truciolo lungo *Brass with long chip*	2,0240	CuZn15	-	C23000
		2,0265	CuZn30	-	C26000
		2,0335	CuZn36	-	C27000
		2,0360	CuZn40	-	C28000
7.1	Magnesio e sue leghe *Magnesium and its Alloys*	3,5612	MgAl6Zn1	-	SAE530
		3,5632	MgAl6Zn3	-	SAE50
		3,5912	MgAL9Zn1	AZ91hp	SAE501
		3,5812	MgAl8Zn1	AZ81hp	AZ81
		3,5161	MgZn6Zr	-	-
8.1	Alluminio puro e leghe di Al con Si < 0,5% *Aluminum and Al with Si < 0,5% Alloys*	3,0205	Al99	3567	1200
		3,0305	Al99,9	-	1090
		3,0505	AlMn0	-	3105
		3,0525	AlMn1Mg0,5	-	3005
		3,3315	AlMg1	5764	5005A
		3,3525	AlMg2Mn03	P-AlMg2Mn	5251
		3,3542	G-AlMg3Cu	-	-
		3,3555	AlMg5	3576	5056A
		3,0615	AlMgSiPb	-	6012
		3,1325	AlCuMg1	3579	2017A
		3,4365	AlZnMgCu1,5	3735	7075
8.2	Leghe di Al con Si < 10% *Al with Si < 10% Alloys*	3,2315	AlMgSi1	3571	6082
		3,3210	AlMgSi07	-	6005A
		3,2134	GAlSi5Cu1Mg	3600	355,1
		3,2151	GAlSi6Cu4	3052	319
		3,2341	GAlSi5Mg	3054	-
		3,2381	GAlSi10Mg	-	A360
		3,2581	GAlSi12	4514	A413
		3,2585	S-AlSi12	-	4047
8.3	Leghe di Al con Si > 10% *Al with Si > 10% Alloys*		AlSi17Cu4	-	390
			AlSi18	-	-
			AlSi21CuNiMg	-	393

HV Vickers	HC Rockwell	HB Brinell	Resistenza *Strength*	Tensile
Durezza *Hardness*	Durezza *Hardness*	Durezza *Hardness*	N/mm²	Ton/sq
940	68			
900	67			
864	66			
829	65			
800	64			
773	63			
745	62			
720	61			
698	60			
675	59			
655	58		2200	142
650		618	2180	141
640		608	2145	139
639	57	607	2140	138
630		599	2105	136
620		589	2070	134
615	56	584	2050	133
610		580	2030	131
600		570	1995	129
596	55	567	1980	128
590		561	1955	126
580		551	1920	124
578	54	549	1910	1 24
570		542	1880	122
560	53	532	1845	119
550		523	1810	117
544	52	517	1790	116
540		513	1775	115
530		504	1740	113
527	51	501	1730	112
520		494	1700	110
514	50	488	1680	109
510		485	1665	108
500		475	1630	105
497	49	472	1620	105
490		466	1595	103
484	48	460	1570	102
480		456	1555	101
473	47	449	1530	99
470		447	1520	98
460		437	1485	96
458	46	435	1480	96
450		428	1455	94
446	45	424	1440	93
440		418	1420	92

HV Vickers	HC Rockwell	HB Brinell	Resistenza *Strength*	Tensile
Durezza *Hardness*	Durezza *Hardness*	Durezza *Hardness*	N/mm²	Ton/sq
434	44	416	1400	91
423	43	402	1360	88
413	42	393	1330	86
403	41	383	1300	84
390	40	372	1260	82
382	39	363	1230	80
373	38	354	1200	78
364	37	346	1170	76
355	36	3637	1140	74
350		333	1125	73
345	35	328	1110	72
340		323	1095	71
336	34	319	1080	70
330		314	1060	69
327	33	311	1050	68
320		304	1030	67
317	32	301	1020	66
310	31	295	995	64
302	30	287	970	63
300		285	965	62
295		280	950	61
293	29	278	940	61
290		276	930	60
287	28	273	920	60
285		271	915	59
280	27	266	900	58
275		261	880	57
272	26	258	870	56
270		257	865	56
268	25	255	860	56
265		252	850	55
260	24	247	835	54
255	23	242	820	53
250	22	238	800	52
245		233	785	51
243	21	231	780	50
240		228	770	50
235		223	755	49
230		219	740	48
225		214	720	47
220		209	705	46
215		204	690	45
210		199	675	44
205		195	660	43
200		190	640	41

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