



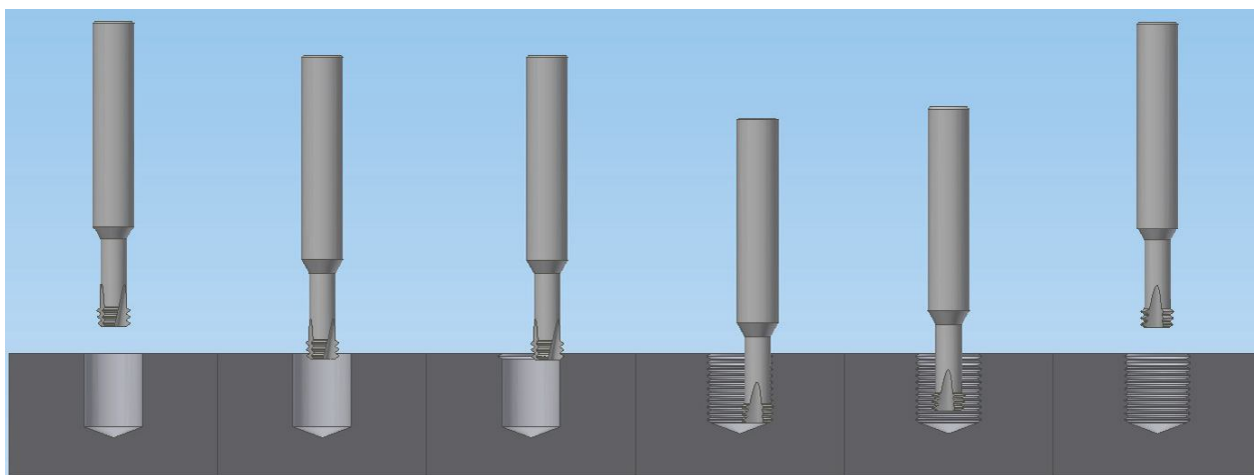
MINI THREAD

Mini frese a filettare in metallo duro integrale

Mini Carbide threading Mills



-  - PER MICROFILETTATURE
 - 3 ELICHE E 3 DENTI PER FILETTARE AD ALTISSIMA VELOCITÀ
 - RIDUZIONE DEL COSTO UTENSILE PER FILETTATURE CORTE
 - IDEALE PER FILETTARE IN MATERIALI TENACI
 - CONTROLLO DELLA PROFONDITÀ DI FILETTATURA
 - DISPONIBILE 2XØ E 3XØ
-  - FOR MICRO-THREADS
 - 3 HELIX AND TEETH FOR HIGH SPEED THREADING
 - TOOL'S COSTS REDUCTION FOR SHORTER THREADS
 - SUITABLE FOR THREADING ON HARD MATERIALS
 - MORE CONTROL ON THREADING'S DEEPNESS
 - AVAILABLE ON 2XØ AND 3XØ OF LENGHT



Velocità di taglio e avanzamenti

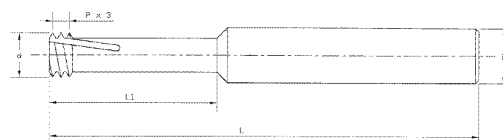
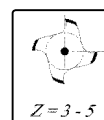
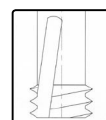
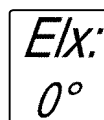
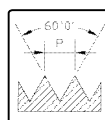
Cutting speed and feed advance

Materiale	Gruppo materiale						
		Non rivestita - <i>Uncoated</i>			Rivestita X-TOP - <i>Coated X-TOP</i>		
		Vc	Fz		Vc	Fz	
1	1.1 Acciaio Dolce Magnetico - Magnetic Soft Iron	80-120	0,015	0,05	100-150	0,03	0,1
	1.2 Acciaio da Costruzione - Structural Case Hardened Steel	80-120	0,015	0,05	100-150	0,03	0,1
	1.3 Acciaio al Carbonio - Carbon Steel	80-120	0,015	0,05	100-150	0,03	0,1
	1.4 Acciaio Legato - Alloy Steel	80-120	0,015	0,05	100-150	0,03	0,1
	1.5 Acciaio Legato Temprato - Alloy Heat Treated Steel	80-120	0,015	0,05	100-150	0,03	0,1
	1.6 Acciaio Legato Temprato - Alloy Heat Treated Steel						
	1.7 Acciaio Legato 45 HRC - Hardened Steel to 45 HRC						
	1.8 Acciaio Legato 58 HRC - Hardened Steel to 58 HRC						
2	2.1 Acciaio Inossidabile - Stainless steel						
	2.2 Austenico - Austenitic						
	2.3 Ferrico + Austenico - Ferritic Austenitic						
3	3.1 Ghisa lamellare - Grey Cast Iron	50-100	0,03	0,08	100-200	0,05	0,15
	3.2 Ghisa lamellare trattata - Grey Cast Iron heat treated	50-100	0,03	0,08	100-200	0,05	0,15
	3.3 Ghisa sferoidale - Spher Cast Iron	50-100	0,03	0,08	100-200	0,05	0,15
	3.4 Ghisa sferoidale trattata - Sphere Cast Iron heat treated	50-100	0,03	0,08	100-200	0,05	0,15
	3.5 Ghisa sferoidale trattata - Sphere Cast Iron heat treated	50-100	0,03	0,08	100-200	0,05	0,15
	3.6 Ghisa malleabile - Malleable Iron	50-100	0,03	0,08	100-200	0,05	0,15
	3.7 Ghisa Malleabile trattata - Malleable Iron treated	50-100	0,03	0,08	100-200	0,05	0,15
4	4.1 Titanio Non Legato - Pure Titanium						
	4.2 Titanio Legato - Titanium Alloys						
	4.3 Titanio Legato - Titanium Alloys						
5	5.1 Nichel non legato - Pure Nichel						
	5.2 Nichel legato - Nichel alloys heat resistant						
	5.3 Nichel legato - Nichel alloys high heat resistant						
6	6.1 Rame non legato - Non-alloy copper						
	6.2 Ottone, Bronzo - Short chip brass, bronze, red brass	50-100	0,03	0,08	100-200	0,05	0,15
	6.3 Ottone a truciolo lungo - long chip brass	50-100	0,03	0,08	100-200	0,05	0,15
	6.4 Bronzo alta resistenza - Cu-Al-Fe alloy (Ampco)						
7	7.1 Alluminio MG non legato - Alu MG Non Alloy	100-300	0,025	0,05	100-400	0,05	0,2
	7.2 Alluminio Legato ≤ 5% Si - Alu Cast Alloy Si ≤ 5%	100-300	0,025	0,05	100-400	0,05	0,2
	7.3 Alluminio Legato ≥ 5% Si - Alu Cast Alloy Si ≥ 5% ≤ 10	100-300	0,025	0,05	100-400	0,05	0,2
	7.4 Alluminio Legato ≥ 10% Si - Alu Cast Alloy Si ≥ 10%	100-250	0,025	0,05	100-300	0,05	0,2
8	8.1 Termoplastici - Thermoplastics	50-100	0,025	0,05	100-200	0,05	0,2
	8.2 Plastiche termoindurenti - Thermosetting plastics	50-100	0,025	0,05	100-200	0,05	0,2
	8.3 Plastiche rinforzate - Fibre reinforced plastics	50-100	0,025	0,05	100-200	0,05	0,2

VC=Velocità di taglio in mm. Fz=Avanzamento al dente in mm.
VC=Cutting speed in mm. Fz=Milim feed in mm/tooth.



- Mini frese a filettare in metallo duro integrale, senza foro di lubrificazione.
- Mini Solid carbide threading mill, without coolant hole.



MA - Lunghezza 2 x Ø

Filettatura	P	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
M2x0,40	0,40	1,55	4	57	4,60	3	TTMINI0204000	66,00	TTMINI0204002	75,00
M2,2x0,45	0,45	1,72	4	57	5,10	3	TTMINI0220450	66,00	TTMINI0220452	75,00
M2,5x0,45	0,45	2,00	4	57	5,80	3	TTMINI0250450	66,00	TTMINI0250452	75,00
M3x0,50	0,50	2,70	6	57	6,50	3	TTMINI0305000	75,00	TTMINI0305002	79,50
M4x0.70	0.70	3.15	6	57	8.3	3	TTMINI0407000	75,00	TTMINI0407002	79,50
M5x0.80	0.80	4.05	6	57	10.4	3	TTMINI0508000	75,00	TTMINI0508002	79,50
M6x1.00	1.00	4.80	6	57	12.5	3	TTMINI0610000	75,00	TTMINI0610002	79,50
M8x1.25	1.25	6.50	8	63	16.6	3	TTMINI0812500	85,00	TTMINI0812502	94,00
M10x1.50	1.50	8.20	10	75	20.8	3	TTMINI1015000	103,00	TTMINI1015002	114,00
M12x1.75	1.75	9.90	10	75	25.0	3	TTMINI1217500	103,00	TTMINI1217502	114,00
M16x2,00	2.00	11,80	12	90	34,00	4	TTMINI1620000	122,00	TTMINI1620002	135,00
M20x2.50	2,50	15,00	16	120	43,00	5	TTMINI2025000	147,00	TTMINI2025002	164,00

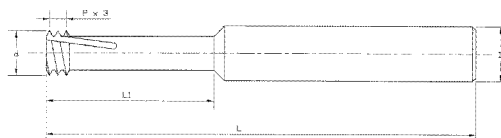
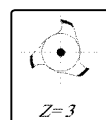
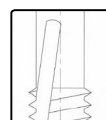
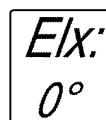
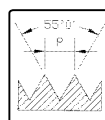
MA - Lunghezza 3 x Ø

Filettatura	P	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
M2x0,40	0,40	1,55	4	57	6,90	3	TTMINI0204001	66,00	TTMINI0204003	75,00
M2,2x0,45	0,45	1,72	4	57	7,65	3	TTMINI0220451	66,00	TTMINI0220453	75,00
M2,5x0,45	0,45	2,00	4	57	8,70	3	TTMINI0250451	66,00	TTMINI0250453	75,00
M3x0,50	0,50	2,70	6	57	9,50	3	TTMINI0305001	75,00	TTMINI0305003	79,50
M4x0.70	0.70	3.15	6	57	12.3	3	TTMINI0407001	75,00	TTMINI0407003	79,50
M5x0.80	0.80	4.05	6	57	15.4	3	TTMINI0508001	75,00	TTMINI0508003	79,50
M6x1.00	1.00	4.80	6	57	18.5	3	TTMINI0610001	75,00	TTMINI0610003	79,50
M8x1.25	1.25	6.50	8	63	24.6	3	TTMINI0812501	85,00	TTMINI0812503	94,00
M10x1.50	1.50	8.20	10	75	31,20	3	TTMINI1015001	103,00	TTMINI1015003	114,00
M12x1.75	1.75	9.90	10	80	37,50	3	TTMINI1217501	103,00	TTMINI1217503	114,00
M16x2,00	2,00	11,80	12	90	51,00	4	TTMINI1620001	122,00	TTMINI1620003	135,00
M20x2.50	2,50	15,00	16	120	64,50	5	TTMINI2025001	147,00	TTMINI2025003	164,00

Altri diametri e misure a richiesta • Other size are available on request



- Mini frese a filettare in metallo duro integrale, senza foro di lubrificazione.
- Mini Solid carbide threading mill, without coolant hole.



GAS - Lunghezza 2 x Ø

Filettatura	fil x 1"	d	D	Lt	L1	Z	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo
							Codice	€	Codice	€
G 1/8	28"	7,80	8,00	63	19,50	3	TTMINI0828550	85,00	TTMINI0828552	94,00
G 1/4 - 3/8	19"	10,00	10,00	75	30,00	3	TTMINI1019550	103,00	TTMINI1019552	114,00
G 1/2 - 3/8	14"	12,00	12,00	90	37,00	3	TTMINI1214550	122,00	TTMINI1214552	135,00
G > 1	11"	16,00	16,00	120	44,00	3	TTMINI1611550	147,00	TTMINI1611552	164,00

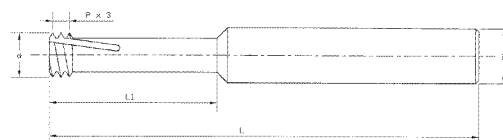
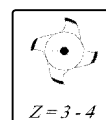
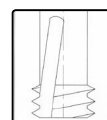
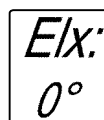
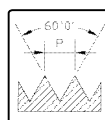
GAS - Lunghezza 3 x Ø

Filettatura	fil x 1"	d	D	Lt	L1	Z	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo
							Codice	€	Codice	€
G 1/8	28"	7,80	8,00	63	29,30	3	TTMINI0828551	85,00	TTMINI0828553	94,00
G 1/4 - 3/8	19"	10,00	10,00	75	45,00	3	TTMINI1019551	103,00	TTMINI1019553	114,00
G 1/2 - 3/8	14"	12,00	12,00	90	55,50	3	TTMINI1214551	122,00	TTMINI1214553	135,00
G > 1	11"	16,00	16,00	120	66,00	3	TTMINI1611551	147,00	TTMINI1611553	164,00

Altri diametri e misure a richiesta • Other size are available on request



- Mini frese a filettare in metallo duro integrale, senza foro di lubrificazione.
- Mini Solid carbide threading mill, without coolant hole.



UNC - Lunghezza 2 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
10-32"	32"	3,10	6	57	9,6	3	TTMINI1032UN0	75,00	TTMINI1032UN2	82,00
10-24"	24"	3,58	6	57	10,2	3	TTMINI10UNC00	75,00	TTMINI10UNC02	82,00
1/4-20"	20"	4,88	6	57	13,4	3	TTMINI1/4UNC0	75,00	TTMINI1/4UNC2	82,00
5/16-18"	18"	6,00	6	57	17,0	3	TTMIN5/16UNC0	75,00	TTMIN5/16UNC2	82,00
3/8-16"	16"	6,70	8	63	22,0	3	TTMINI3/8UNC0	85,00	TTMINI3/8UNC2	94,00
7/16-14"	14"	7,70	8	63	25,0	3	TTMINI7/16UNC0	85,00	TTMINI7/16UNC2	94,00
1/2-13"	13"	9,20	10	75	27,5	3	TTMINI1/2UNC0	103,00	TTMINI1/2UNC2	115,00
9/16-12"	12"	10,50	12	90	31,5	3	TTMINI9/16UNC0	124,00	TTMINI9/16UNC2	144,00
5/8-11"	11"	11,40	12	90	34,5	3	TTMINI5/8UNC0	124,00	TTMINI5/8UNC2	144,00
3/4-10"	10"	14,40	16	120	41,5	4	TTMINI3/4UNC0	147,00	TTMINI3/4UNC2	175,00

UNC - Lunghezza 3 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
10-32"	32"	3,10	6	57	14,4	3	TTMINI1032UN1	75,00	TTMINI1032UN3	82,00
10-24"	24"	3,58	6	57	15,3	3	TTMINI10UNC01	75,00	TTMINI10UNC03	82,00
1/4-20"	20"	4,88	6	57	20,1	3	TTMINI1/4UNC1	75,00	TTMINI1/4UNC3	82,00
5/16-18"	18"	6,00	6	57	25,5	3	TTMIN5/16UNC1	75,00	TTMIN5/16UNC3	82,00
3/8-16"	16"	6,70	8	63	33,0	3	TTMINI3/8UNC1	85,00	TTMINI3/8UNC3	94,00
7/16-14"	14"	9,00	10	75	34,95	3	TTMINI7/16UNC1	85,00	TTMINI7/16UNC3	94,00
1/2-13"	13"	9,20	10	75	41,25	3	TTMINI1/2UNC1	103,00	TTMINI1/2UNC3	115,00
9/16-12"	12"	10,50	12	90	47,3	3	TTMINI9/16UNC1	124,00	TTMINI9/16UNC3	144,00
5/8-11"	11"	11,40	12	90	51,8	3	TTMINI5/8UNC1	124,00	TTMINI5/8UNC3	144,00
3/4-10"	10"	14,40	16	120	62,3	4	TTMINI3/4UNC1	147,00	TTMINI3/4UNC3	175,00

UNF - Lunghezza 2 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
8-32"	32"	3,10	6	57	9,6	3	TTMINI832UNF0	75,00	TTMINI832UNF2	82,00
1/4-28"	28"	5,25	6	57	19,6	3	TTMINI1/4UNF0	75,00	TTMINI1/4UNF2	82,00
5/16-24"	24"	6,68	8	63	24,5	3	TTMINI5/16UNF0	86,00	TTMINI5/16UNF2	94,00
7/16-20"	20"	9,55	10	75	28,5	3	TTMINI7/16UNF0	108,00	TTMINI7/16UNF2	115,00
5/8-18"	18"	12,00	12	90	35,00	3	TTMINI5/8UNF0	124,00	TTMINI5/8UNF2	144,00

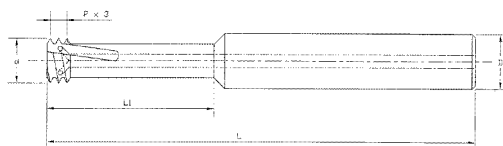
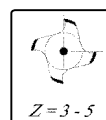
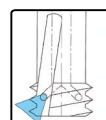
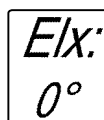
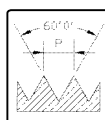
UNF - Lunghezza 3 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
8-32"	32"	3,10	6	57	14,40	3	TTMINI832UNF1	75,00	TTMINI832UNF3	82,00
1/4-28"	28"	5,25	6	57	29,40	3	TTMINI1/4UNF1	75,00	TTMINI1/4UNF3	82,00
5/16-24"	24"	6,68	8	63	36,75	3	TTMINI5/16UNF1	86,00	TTMINI5/16UNF3	94,00
7/16-20"	20"	9,55	10	75	42,75	3	TTMINI7/16UNF1	108,00	TTMINI7/16UNF3	115,00
5/8-18"	18"	12,00	12	90	52,50	3	TTMINI5/8UNF1	124,00	TTMINI5/8UNF3	144,00

Altri diametri e misure a richiesta • Other size are available on request



- Mini frese a filettare in metallo duro integrale, con fori di lubrificazione laterali.
- Mini solid carbide threading mill, with lateral coolant holes.



MA - Lunghezza 2 x Ø

Filettatura	P	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
M8x1.25	1.25	6.50	8	63	16.6	3	TTMINI0812506	126,00	TTMINI0812507	142,00
M10x1.50	1.50	8.20	10	75	20.8	3	TTMINI1015006	140,00	TTMINI1015007	154,00
M12x1.75	1.75	9.90	10	75	25.0	3	TTMINI1217506	140,00	TTMINI1217507	154,00
M16x2,00	2,00	11,80	12	90	34,00	4	TTMINI1620006	149,00	TTMINI1620007	163,00
M20x2.50	2,50	15,00	16	120	43,00	5	TTMINI2025006	169,00	TTMINI2025007	182,00

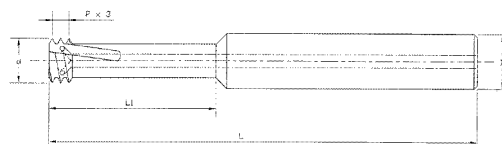
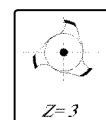
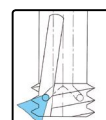
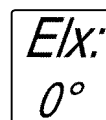
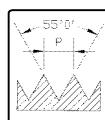
MA - Lunghezza 3 x Ø

Filettatura	P	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
M8x1.25	1.25	6.50	8	63	24.6	3	TTMINI0812508	126,00	TTMINI0812509	142,00
M10x1.50	1.50	8.20	10	75	31,20	3	TTMINI1015008	140,00	TTMINI1015009	154,00
M12x1.75	1.75	9.90	10	75	37,50	3	TTMINI1217508	140,00	TTMINI1217509	154,00
M16x2,00	2,00	11,80	12	90	51,00	4	TTMINI1620008	149,00	TTMINI1620009	163,00
M20x2.50	2,50	15,00	16	120	64,50	5	TTMINI2025008	169,00	TTMINI2025009	182,00

Altri diametri e misure a richiesta • Other size are available on request



- Mini frese a filettare in metallo duro integrale, con fori di lubrificazione laterali.
- Mini solid carbide threading mill, with lateral coolant holes.



GAS - Lunghezza 2 x Ø

							Non rivestita	Prezzo	Rivestita X-TOP	Prezzo
Filettatura	fil x 1"	d	D	Lt	L1	Z	Codice	€	Codice	€
G 1/8	28"	7,80	8,00	63	19,50	3	TTMINI0828556	114,00	TTMINI0828557	126,00
G 1/4 - 3/8	19"	10,00	10,00	75	30,00	3	TTMINI1019556	139,00	TTMINI1019557	154,00
G 1/2 - 3/8	14"	12,00	12,00	90	37,00	3	TTMINI1214556	148,00	TTMINI1214557	163,00
G > 1	11"	16,00	16,00	120	44,00	3	TTMINI1611556	160,00	TTMINI1611557	183,00

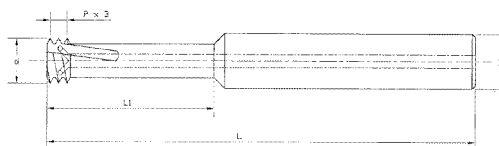
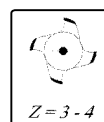
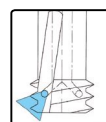
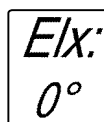
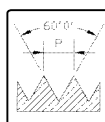
GAS - Lunghezza 3 x Ø

							Non rivestita	Prezzo	Rivestita X-TOP	Prezzo
Filettatura	fil x 1"	d	D	Lt	L1	Z	Codice	€	Codice	€
G 1/8	28"	7,80	8,00	63	29,30	3	TTMINI0828558	114,00	TTMINI0828559	136,00
G 1/4 - 3/8	19"	10,00	10,00	75	45,00	3	TTMINI1019558	139,00	TTMINI1019559	154,00
G 1/2 - 3/8	14"	12,00	12,00	90	55,50	3	TTMINI1214558	142,00	TTMINI1214559	163,00
G > 1	11"	16,00	16,00	120	66,00	3	TTMINI1611558	160,00	TTMINI1611559	183,00

Altri diametri e misure a richiesta • Other size are available on request



- Mini frese a filettare in metallo duro integrale, con fori di lubrificazione laterali.
- Mini solid carbide threading mill, with lateral coolant holes.



UNC - Lunghezza 2 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
5/16-18"	18"	6,00	6	57	17,0	3	TTMIN5/16UNC6	101,00	TTMIN5/16UNC7	113,00
3/8-16"	16"	6,70	8	63	22,0	3	TTMINI3/8UNC6	126,00	TTMINI3/8UNC7	141,00
7/16-14"	14"	7,70	8	63	25,0	3	TTMINI7/16UNC6	126,00	TTMINI7/16UNC7	141,00
1/2-13"	13"	9,20	10	75	27,5	3	TTMINI1/2UNC6	139,00	TTMINI1/2UNC7	154,00
9/16-12"	12"	10,50	12	90	31,5	3	TTMINI9/16UNC6	148,00	TTMINI9/16UNC7	163,00
5/8-11"	11"	11,40	12	90	34,5	3	TTMINI5/8UNC6	148,00	TTMINI5/8UNC7	163,00
3/4-10"	10"	14,40	16	120	41,5	4	TTMINI3/4UNC6	160,00	TTMINI3/4UNC7	183,00

UNC - Lunghezza 3 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
5/16-18"	18"	6,00	6	57	25,5	3	TTMIN5/16UNC8	101,00	TTMIN5/16UNC9	113,00
3/8-16"	16"	6,70	8	63	33,0	3	TTMINI3/8UNC8	126,00	TTMINI3/8UNC9	141,00
7/16-14"	14"	9,00	10	75	34,95	3	TTMINI7/16UNC8	126,00	TTMINI7/16UNC9	141,00
1/2-13"	13"	9,20	10	75	41,25	3	TTMINI1/2UNC8	139,00	TTMINI1/2UNC9	154,00
9/16-12"	12"	10,50	12	90	47,3	3	TTMINI9/16UNC8	148,00	TTMINI9/16UNC9	163,00
5/8-11"	11"	11,40	12	90	51,8	3	TTMINI5/8UNC8	148,00	TTMINI5/8UNC9	163,00
3/4-10"	10"	14,40	16	120	62,3	4	TTMINI3/4UNC8	160,00	TTMINI3/4UNC9	183,00

UNF - Lunghezza 2 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
1/4-28"	28"	5,25	6	57	19,6	3	TTMINI1/4UNF6	103,00	TTMINI1/4UNF7	113,00
5/16-24"	24"	6,68	8	63	24,5	3	TTMINI5/16UNF6	126,00	TTMINI5/16UNF7	141,00
7/16-20"	20"	9,55	10	75	28,5	3	TTMINI7/16UNF6	139,00	TTMINI7/16UNF7	154,00
5/8-18"	18"	12,00	12	90	35,00	3	TTMINI5/8UNF6	148,00	TTMINI5/8UNF7	163,00

UNF - Lunghezza 3 x Ø - Z=3

Filettatura	filx1"	d	D	Lt	L1	Z	Non rivestita Codice	Prezzo €	Rivestita X-TOP Codice	Prezzo €
1/4-28"	28"	5,25	6	57	29,40	3	TTMINI1/4UNF8	101,00	TTMINI1/4UNF9	113,00
5/16-24"	24"	6,68	8	63	36,75	3	TTMINI5/16UNF8	126,00	TTMINI5/16UNF9	141,00
7/16-20"	20"	9,55	10	75	42,75	3	TTMINI7/16UNF8	139,00	TTMINI7/16UNF9	154,00
5/8-18"	18"	12,00	12	90	52,50	3	TTMINI5/8UNF8	148,00	TTMINI5/8UNF9	163,00

Altri diametri e misure a richiesta • Other size are available on request

25