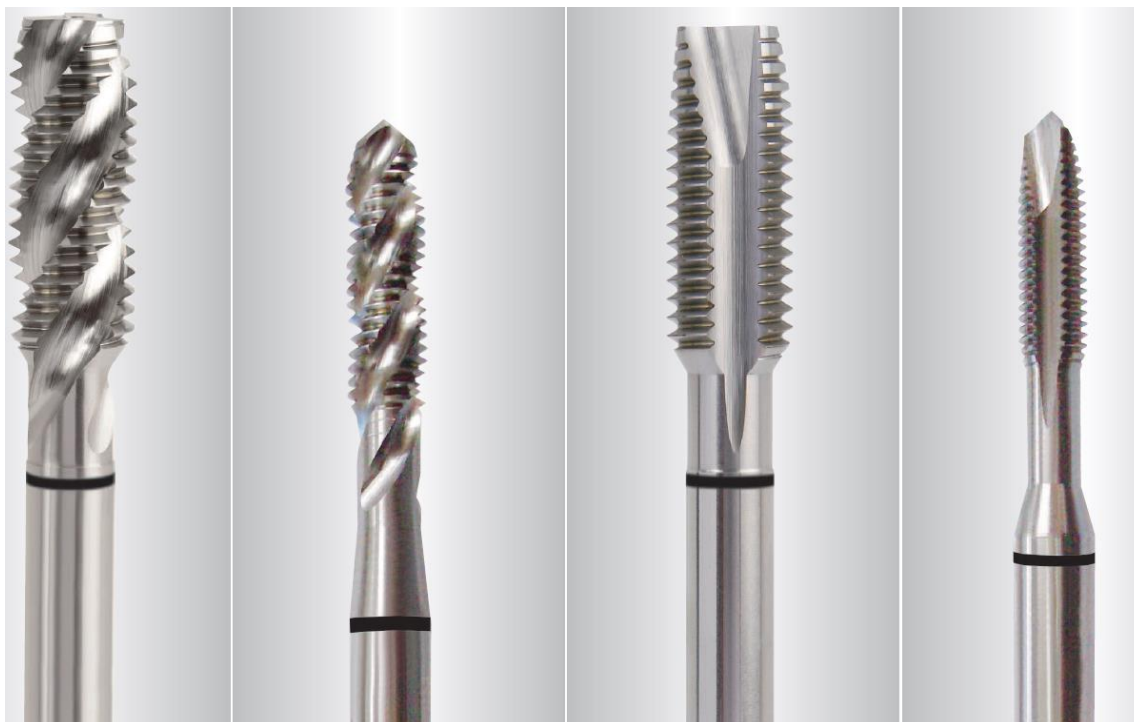
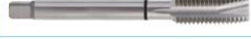
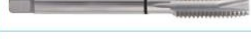
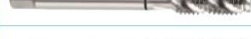
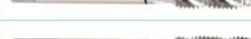


MACHO DE MÁQUINA



COMBO TAPS

● SPIRAL POINT TAP ● SPIRAL FLUTE TAP

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Surface Treatment
● TC814		HSS-E	M	MU	DIN 371/376	ISO 6H	B	Bright
● TC854		HSS-E	MF	MU	DIN 374	ISO 6H	B	Bright
● TC834		HSS-E	UNC	MU	DIN 371/376	2B	B	Bright
● TC874		HSS-E	UNF	MU	DIN 371/374	2B	B	Bright
● TC804		HSS-E	M	MU	DIN 371/376	ISO 6H	C	Bright
● TC844		HSS-E	MF	MU	DIN 374	ISO 6H	C	Bright
● TC824		HSS-E	UNC	MU	DIN 371/376	2B	C	Bright
● TC864		HSS-E	UNF	MU	DIN 371/374	2B	C	Bright

► DIN371 (M2~M10) and DIN376 (M11~M30)

► Coating(TiN, TiCN or TiAlN) or Surface Treatment(Steam Homo) is available on your request.

Unit : N/mm²

○ : Excellent ○ : Good

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

MACHO DE MÁQUINA



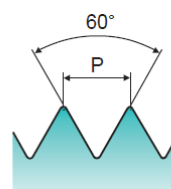
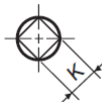
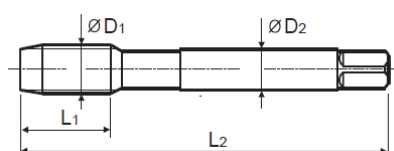
Hole type



DIN 371



DIN 376



M ISO Metric coarse threads DIN 13
Metrisches ISO-Gewinde DIN 13

HSS-E

DIN 371/376

6H

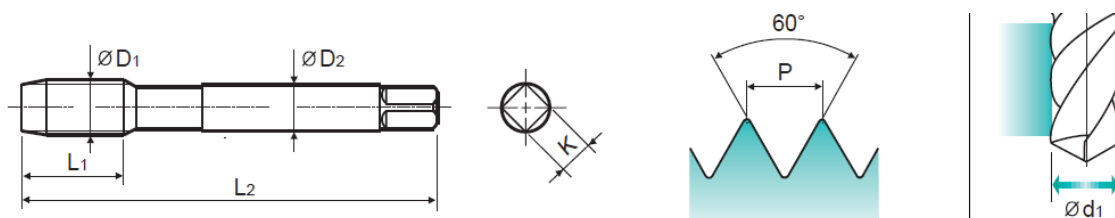
60°

B

Bright

ØD1	P		€	L1	L2	ØD2	K	Ød1
M2	× 0.4	TC814136	8.46 €	8	45	2.8	2.1	1.6
M2.2	× 0.45	TC814156	9.48 €	8	45	2.8	2.1	1.75
M2.3	× 0.4	TC814196	10.68 €	8	45	2.8	2.1	1.9
M2.5	× 0.45	TC814176	7.05 €	9	50	2.8	2.1	2.05
M2.6	× 0.45	TC814496	6.71 €	9	50	2.8	2.1	2.1
M3	× 0.5	TC814206	5.58 €	11	56	3.5	2.7	2.5
M3.5	× 0.6	TC814226	6.33 €	12	56	4	3	2.9
M4	× 0.7	TC814246	5.58 €	13	63	4.5	3.4	3.3
M4.5	× 0.75	TC814266	5.77 €	14	70	6	4.9	3.7
M5	× 0.8	TC814286	5.77 €	15	70	6	4.9	4.2
M6	× 1.0	TC814316	5.77 €	17	80	6	4.9	5
M7	× 1.0	TC814346	6.73 €	17	80	7	5.5	6
M8	× 1.25	TC814366	7.48 €	20	90	8	6.2	6.8
M9	× 1.25	TC814396	9.06 €	20	90	9	7	7.8
M10	× 1.5	TC814426	9.06 €	22	100	10	8	8.5
M11	× 1.5	TC814466	9.95 €	22	100	8	6.2	9.5
M12	× 1.75	TC814506	12.10 €	24	110	9	7	10.2
M14	× 2.0	TC814546	14.67 €	26	110	11	9	12
M16	× 2.0	TC814606	18.45 €	27	110	12	9	14
M18	× 2.5	TC814656	24.08 €	30	125	14	11	15.5
M20	× 2.5	TC814706	28.68 €	32	140	16	12	17.5
M22	× 2.5	TC814746	36.95 €	32	140	18	14.5	18.5
M24	× 3.0	TC814786	38.92 €	34	160	18	14.5	21
M27	× 3.0	TC814866	62.20 €	36	160	20	16	24
M30	× 3.5	TC814946	75.31 €	40	180	22	18	26.5

MACHO DE MÁQUINA



MF ISO Metric fine threads DIN 13 Metrisches ISO-Feingewinde DIN 13

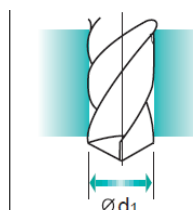
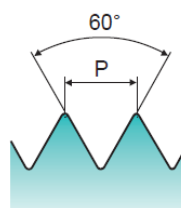
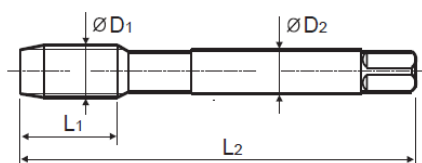
ØD1	P		€	L1	L2	ØD2	K	Ød1
M4	× 0.5	TC854256	9.62 €	10	63	2.8	2.1	3.5
M5	× 0.5	TC854296	9.76 €	11	70	3.5	2.7	4.5
M6	× 0.75	TC854326	9.62 €	13	80	4.5	3.4	5.2
M6	× 0.5	TC854336	9.76 €	13	80	4.5	3.4	5.5
M7	× 0.75	TC854356	14.25 €	14	80	5.5	4.3	6.2
M8	× 1.0	TC854376	10.51 €	17	90	6	4.9	7
M8	× 0.75	TC854386	11.10 €	14	80	6	4.9	7.2
M10	× 1.25	TC854436	12.78 €	22	100	7	5.5	8.8
M10	× 1.0	TC854446	12.28 €	18	90	7	5.5	9
M10	× 0.75	TC854456	15.49 €	18	90	7	5.5	9.2
M12	× 1.5	TC854516	13.71 €	22	100	9	7	10.5
M12	× 1.25	TC854526	14.95 €	22	100	9	7	10.8
M12	× 1.0	TC854536	14.27 €	18	100	9	7	11
M14	× 1.5	TC854556	16.82 €	22	100	11	9	12.5
M14	× 1.25	TC854566	18.19 €	22	100	11	9	12.8
M14	× 1.0	TC854576	17.63 €	18	100	11	9	13
M16	× 1.5	TC854616	21.35 €	22	100	12	9	14.5
M16	× 1.0	TC854626	23.15 €	18	100	12	9	15
M18	× 1.5	TC854676	27.77 €	25	110	14	11	16.5
M18	× 1.0	TC854686	30.50 €	20	110	14	11	17
M20	× 1.5	TC854726	30.76 €	25	125	16	12	18.5
M20	× 1.0	TC854736	33.15 €	20	125	16	12	19
M22	× 1.5	TC854766	35.53 €	25	125	18	14.5	20.5
M22	× 1.0	TC854776	44.42 €	20	125	18	14.5	21
M24	× 2.0	TC854796	43.65 €	27	140	18	14.5	22
M24	× 1.5	TC854806	41.46 €	27	140	18	14.5	22.5
M26	× 1.5	TC854856	53.19 €	28	140	18	14.5	24.5
M27	× 2.0	TC854876	59.51 €	28	140	20	16	25
M27	× 1.5	TC854886	59.07 €	28	140	20	16	25.5
M28	× 1.5	TC854916	60.28 €	28	140	20	16	26.5
M30	× 2.0	TC854966	70.00 €	30	150	22	18	28
M30	× 1.5	TC854976	67.95 €	30	150	22	18	28.5

MACHO DE MÁQUINA

UNC Unified coarse threads
Unified Grobgewinde



HSS-E DIN 371/376 2B 60° B



ØD1	P		€	L1	L2	ØD2	K	Ød1
#4	- 40 UNC	TC834162	8.13 €	11	56	3.5	2.7	2.3
#5	- 40 UNC	TC834202	6.42 €	11	56	3.5	2.7	2.6
#6	- 32 UNC	TC834242	7.26 €	12	56	4	3	2.85
#8	- 32 UNC	TC834282	6.42 €	13	63	4.5	3.4	3.5
#10	- 24 UNC	TC834322	6.64 €	15	70	6	4.9	3.9
#12	- 24 UNC	TC834362	6.64 €	16	80	6	4.9	4.5
1/4"	- 20 UNC	TC834402	6.64 €	17	80	7	5.5	5.2
5/16"	- 18 UNC	TC834442	8.60 €	20	90	8	6.2	6.6
3/8"	- 16 UNC	TC834482	10.37 €	22	100	9	7	8
7/16"	- 14 UNC	TC834522	13.95 €	22	100	8	6.2	9.4
1/2"	- 13 UNC	TC834562	13.95 €	25	110	9	7	10.75
9/16"	- 12 UNC	TC834602	16.87 €	26	110	11	9	12.25
5/8"	- 11 UNC	TC834642	21.19 €	27	110	12	9	13.5
3/4"	- 10 UNC	TC834702	33.01 €	30	125	14	11	16.5
7/8"	- 9 UNC	TC834742	40.92 €	32	140	18	14.5	19.5
1"	- 8 UNC	TC834782	57.02 €	36	160	20	16	22.25

► DIN371 (#4~3/8") and DIN376 (7/16"~1")

Unit : N/mm²

◎ : Excellent ○ : Good

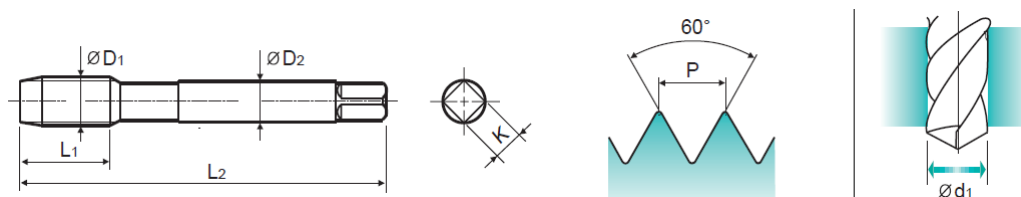
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

MACHO DE MÁQUINA

UNF Unified fine threads
Unified Feingewinde



HSS-E DIN 371/374 2B 60° B



ØD1	P		€	L1	L2	ØD2	K	Ød1
#4	- 48UNF	TC874182	15.90 €	11	56	3.5	2.7	2.4
#5	- 44UNF	TC874222	12.71 €	11	56	3.5	2.7	2.7
#6	- 40UNF	TC874262	12.71 €	12	56	4	3	3
#8	- 36UNF	TC874302	12.71 €	13	63	4.5	3.4	3.5
#10	- 32UNF	TC874342	12.97 €	15	70	6	4.9	4.1
#12	- 28UNF	TC874382	12.71 €	16	80	6	4.9	4.7
1/4"	- 28UNF	TC874422	12.71 €	17	80	7	5.5	5.5
5/16"	- 24UNF	TC874462	13.92 €	17	90	8	6.2	6.9
3/8"	- 24UNF	TC874502	16.26 €	18	100	9	7	8.5
7/16"	- 20UNF	TC874542	19.78 €	22	100	8	6.2	9.9
1/2"	- 20UNF	TC874582	19.78 €	22	100	9	7	11.5
9/16"	- 18UNF	TC874622	22.28 €	22	100	11	9	12.9
5/8"	- 18UNF	TC874662	28.31 €	22	100	12	9	14.5
3/4"	- 16UNF	TC874722	40.66 €	25	110	14	11	17.5
7/8"	- 14UNF	TC874762	46.99 €	26	125	18	14.5	20.5
1"	- 12UNF	TC874802	60.28 €	28	140	20	16	23.25

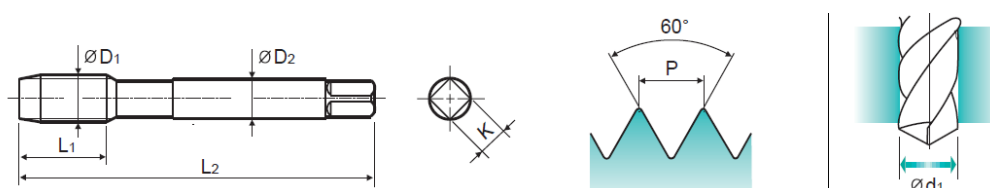
Unit : N/mm²

◎ : Excellent ○ : Good

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

MACHO DE MÁQUINA

M ISO Metric coarse threads DIN 13
Metrisches ISO-Gewinde DIN 13



ØD1	P		€	L1	L2	ØD2	K	Ød1
M2	× 0.4	TC804136	8.41 €	8	45	2.8	2.1	1.6
M2.2	× 0.45	TC804156	9.41 €	8	45	2.8	2.1	1.75
M2.3	× 0.4	TC804196	10.56 €	8	45	2.8	2.1	1.9
M2.5	× 0.45	TC804176	6.98 €	9	50	2.8	2.1	2.05
M2.6	× 0.45	TC804496	6.70 €	9	50	2.8	2.1	2.1
M3	× 0.5	TC804206	5.58 €	6	56	3.5	3.0	2.5
M3.5	× 0.6	TC804226	6.33 €	7	56	4	3.4	2.9
M4	× 0.7	TC804246	5.58 €	7	63	4.5	4.9	3.3
M4.5	× 0.75	TC804266	5.77 €	8	70	6	4.9	3.7
M5	× 0.8	TC804286	5.77 €	8	70	6	4.9	4.2
M6	× 1.0	TC804316	5.77 €	10	80	6	5.5	5
M7	× 1.0	TC804346	7.48 €	10	80	7	6.2	6
M8	× 1.25	TC804366	7.48 €	13	90	8	7.0	6.8
M9	× 1.25	TC804396	9.06 €	13	90	9	8.0	7.8
M10	× 1.5	TC804426	9.06 €	15	100	10	6.2	8.5
M11	× 1.5	TC804466	12.10 €	17	100	8	7	9.5
M12	× 1.75	TC804506	12.10 €	18	110	9	9	10.2
M14	× 2.0	TC804546	14.67 €	20	110	11	9	12
M16	× 2.0	TC804606	18.45 €	20	110	12	11	14
M18	× 2.5	TC804656	24.38 €	25	125	14	12	15.5
M20	× 2.5	TC804706	29.06 €	25	140	16	14.5	17.5
M22	× 2.5	TC804746	36.00 €	25	140	18	14.5	19.5
M24	× 3.0	TC804786	39.19 €	30	160	18	14.5	21
M27	× 3.0	TC804866	56.32 €	30	160	20	16.0	24
M30	× 3.5	TC804946	72.06 €	35	180	22	18.0	26.5

► DIN371 (M2~M10) and DIN376 (M11~M30)

Unit : N/mm²

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

MACHO DE MÁQUINA

MF ISO Metric fine threads DIN 13
Metrisches ISO-Feingewinde DIN 13



ØD1	P		€	L1	L2	ØD2	K	Ød1
M4	× 0.5	TC844256	9.74 €	5	63	2.8	2.1	3.5
M5	× 0.5	TC844296	9.95 €	5	70	3.5	2.7	4.5
M6	× 0.75	TC844326	9.83 €	8	80	4.5	3.4	5.2
M6	× 0.5	TC844336	9.95 €	5	80	4.5	3.4	5.5
M7	× 0.75	TC844356	14.50 €	10	80	5.5	4.3	6.2
M8	× 1.0	TC844376	10.82 €	10	90	6	4.9	7
M8	× 0.75	TC844386	11.38 €	8	80	6	4.9	7.2
M10	× 1.25	TC844436	13.13 €	16	100	7	5.5	8.8
M10	× 1.0	TC844446	12.66 €	10	90	7	5.5	9
M10	× 0.75	TC844456	15.95 €	10	90	7	5.5	9.2
M12	× 1.5	TC844516	14.01 €	15	100	9	7	10.5
M12	× 1.25	TC844526	15.32 €	15	100	9	7	10.8
M12	× 1.0	TC844536	14.67 €	11	100	9	7	11
M14	× 1.5	TC844556	17.29 €	15	100	11	9	12.5
M14	× 1.25	TC844566	18.69 €	15	100	11	9	12.8
M14	× 1.0	TC844576	18.15 €	11	100	11	9	13
M16	× 1.5	TC844616	22.02 €	15	100	12	9	14.5
M16	× 1.0	TC844626	23.89 €	12	100	12	9	15
M18	× 1.5	TC844676	28.49 €	17	110	14	11	16.5
M18	× 1.0	TC844686	31.28 €	13	110	14	11	17
M20	× 1.5	TC844726	31.98 €	17	125	16	12	18.5
M20	× 1.0	TC844736	34.40 €	14	125	16	12	19
M22	× 1.5	TC844766	36.32 €	17	125	18	14.5	20.5
M22	× 1.0	TC844776	45.43 €	14	125	18	14.5	21
M24	× 2.0	TC844796	45.81 €	20	140	18	14.5	22
M26	× 1.5	TC844856	55.85 €	20	140	18	14.5	24.5
M27	× 2.0	TC844876	62.53 €	20	140	20	16	25
M27	× 1.5	TC844886	62.01 €	20	140	20	16	25.5
M28	× 1.5	TC844916	63.28 €	20	140	20	16	26.5
M30	× 2.0	TC844966	73.55 €	22	150	22	18	28
M30	× 1.5	TC844976	71.40 €	22	150	22	18	28.5

MACHO DE MÁQUINA

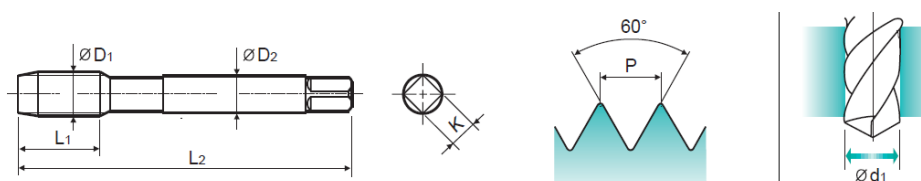
UNC Unified coarse threads
Unified Grobgewinde



DIN 371



DIN 376



ØD1	TPI		€	L1	L2	ØD2	K	Ød1
#4	- 40 UNC	TC824162	8.20 €	6	56	3.5	2.7	2.3
#5	- 40 UNC	TC824202	6.54 €	7	56	3.5	2.7	2.6
#6	- 32 UNC	TC824242	6.54 €	7	56	4	3	2.85
#8	- 32 UNC	TC824282	6.54 €	8	63	4.5	3.4	3.5
#10	- 24 UNC	TC824322	6.75 €	10	70	6	4.9	3.9
#12	- 24 UNC	TC824362	6.75 €	10	80	6	4.9	4.5
1/4"	- 20 UNC	TC824402	6.75 €	13	80	7	5.5	5.2
5/16"	- 18 UNC	TC824442	8.80 €	14	90	8	6.2	6.6
3/8"	- 16 UNC	TC824482	10.54 €	16	100	9	7	8
7/16"	- 14 UNC	TC824522	14.22 €	17	100	8	6.2	9.4
1/2"	- 13 UNC	TC824562	14.22 €	20	110	9	7	10.75
9/16"	- 12 UNC	TC824602	19.03 €	20	110	11	9	12.25
5/8"	- 11 UNC	TC824642	21.58 €	22	110	12	9	13.5
3/4"	- 10 UNC	TC824702	37.95 €	25	125	14	11	16.5
7/8"	-9	TC824742	47.09 €	27	140	18	14.5	19.5
1"	-8	TC824782	62.44 €	30	160	20	16	22.25

► DIN371 (#4~3/8") and DIN376 (7/16"~1")

Unit : N/mm²

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

○ : Excellent ○ : Good

MACHO DE MÁQUINA

UNF Unified fine threads
Unified Feingewinde



DIN 371



DIN 374



ØD1	TPI		€	L1	L2	ØD2	K	Ød1
#4	48UNF	TC864182	16.70 €	6	56	3.5	2.7	2.4
#5	44UNF	TC864222	13.34 €	7	56	3.5	2.7	2.7
#6	- 40UNF	TC864262	13.34 €	7	56	4	3	3
#8	36UNF	TC864302	13.34 €	8	63	4.5	3.4	3.5
#10	- 32UNF	TC864342	13.55 €	10	70	6	4.9	4.1
#12	- 28UNF	TC864382	13.34 €	10	80	6	4.9	4.7
1/4"	- 28UNF	TC864422	13.34 €	10	80	7	5.5	5.5
5/16"	- 24UNF	TC864462	14.60 €	10	90	8	6.2	6.9
3/8"	- 24UNF	TC864502	17.05 €	10	100	9	7	8.5
7/16"	- 20UNF	TC864542	20.79 €	13	100	8	6.2	9.9
1/2"	- 20UNF	TC864582	20.79 €	13	100	9	7	11.5
9/16"	- 18UNF	TC864622	23.36 €	15	100	11	9	12.9
5/8"	- 18UNF	TC864662	29.69 €	15	100	12	9	14.5
3/4"	- 16UNF	TC864722	42.70 €	17	110	14	11	17.5
7/8"	- 14UNF	TC864762	49.33 €	17	125	18	14.5	20.5
1"	- 12UNF	TC864802	63.32 €	20	140	20	16	23.25

► DIN371 (#4~3/8") and DIN376 (7/16"~1")

Unit : N/mm²

◎ : Excellent ○ : Good

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	TI < 700	TI Alloy < 900
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
TI Alloy ≤ 1300	Ni < 600	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎