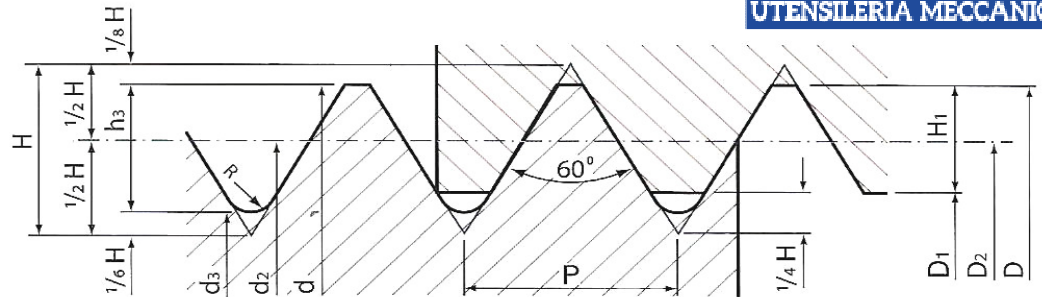


 Rosca interior / Filettatura interna / Rosca interior
 Rosca exterior / Filettatura esterna / Rosca exterior

$D_1 = d - 1,082532 P$
 $d_2 = D_2 = d - 0,649519 P$
 $d_3 = d - 1,22686 P$
 $H = 0,86603 P$
 $H_1 = 0,54127 P$
 $h_3 = 0,61343 P$
 $r = H/6 = 0,14434 P$



Perfil de la rosca / Profilo della filettatura / Perfil da rosca

Diámetro nominal de la rosca Diametro nominale della filettatura Diâmetro nominal da rosca			Paso Passo Passo	Diámetro medio Diametro medio Diâmetro médio	Diámetro núcleo Diametro nocciolo Diâmetro do núcleo	
Serie / Serie / Série			P	d ₂ = D ₂	d ₃	D ₁
1	2	3	mm	mm	mm	mm
M 1*	M 1,1*		0,2	0,870	0,755	0,783
			0,2	0,970	0,855	0,883
M 1,2*	M 1,4*		0,2	1,070	0,955	0,983
			0,2	1,270	1,155	1,183
M 1,6*	M 1,8*		0,2	1,470	1,355	1,383
			0,2	1,670	1,555	1,583
M 2*	M 2,2*		0,25	1,838	1,693	1,729
			0,25	2,038	1,893	1,929
M 2,5*			0,35	2,273	2,071	2,121
M 3*			0,35	2,773	2,571	2,621
	M 3,5*		0,35	3,273	3,071	3,121
M 4			0,5	3,675	3,387	3,459
	M 4,5		0,5	4,175	3,887	3,959
M 5			0,5	4,675	4,387	4,459
		M 5,5	0,5	5,175	4,887	4,959
M 6			0,5	5,675	5,387	5,459
		M 7	0,75	5,513	5,080	5,188
M 6			0,75	6,513	6,080	6,188
			0,5	7,675	7,387	7,459
M 8			0,75	7,513	7,080	7,188
		M 9	1	7,350	6,773	6,917
M 8			0,75	8,513	8,080	8,188
		M 9	1	8,350	7,773	7,917
M 10			0,5	9,675	9,387	9,459
		M 11	0,75	9,513	9,080	9,188
M 10			1	9,350	8,773	8,917
		M 11	1,25	9,188	8,466	8,647
M 10			0,75	10,513	10,080	10,188
		M 12	1	10,350	9,773	9,917
M 12			0,75	11,513	11,080	11,188
			1	11,350	10,773	10,917
M 12			1,25	11,188	10,466	10,647
		M 13	1,5	11,026	10,160	10,376
M 12			1	12,350	11,773	11,917
		M 14	1	13,350	12,773	12,917
M 14			1,25	13,188	12,466	12,647
		M 15	1,5	13,026	12,160	12,376
M 14			1	14,350	13,773	13,917
		M 15	1,5	14,026	13,160	13,376
M 16			1	15,350	14,773	14,917
		M 17	1,5	15,026	14,160	14,376
M 16			1	16,350	15,773	15,917
		M 17	1,5	16,026	15,160	15,376
M 18			1	17,350	16,773	16,917
		M 18	1,5	17,026	16,160	16,376
M 18			2	16,701	15,546	15,835
		M 20	1	19,350	18,773	18,917
M 20			1,5	19,026	18,160	18,376

Macho / Maschio / Macho

Diámetro exterior Diametro esterno Diâmetro exterior	Tolerancia Tolleranza Tolerância	Diámetro medio Diametro medio Diâmetro médio		Diámetro núcleo Diametro nocciolo Diâmetro núcleo
dmin	ISO 2 (6H)	d ₂ min.	d ₂ max.	d ₃ max.
mm	µm	mm	mm	mm
1,016	+ 5/16	0,875	0,886	0,760
1,116	+ 5/16	0,975	0,986	0,860
1,216	+ 5/16	1,075	1,086	0,960
1,416	+ 5/16	1,275	1,286	1,160
1,617	+ 6/17	1,476	1,487	1,361
1,817	+ 6/17	1,676	1,687	1,561
2,018	+ 6/18	1,844	1,856	1,699
2,218	+ 6/18	2,044	2,056	1,899
2,520	+ 7/20	2,280	2,293	2,078
3,021	+ 7/21	2,780	2,794	2,578
3,521	+ 7/21	3,280	3,294	3,078
4,040	+ 24/40	3,699	3,715	3,411
4,540	+ 24/40	4,199	4,215	3,911
5,040	+ 24/40	4,699	4,715	4,411
5,540	+ 24/40	5,199	5,215	4,911
6,045	+ 27/45	5,702	5,720	5,414
6,053	+ 32/53	5,545	5,566	5,112
7,053	+ 32/53	6,545	6,566	6,112
8,045	+ 27/45	7,702	7,720	7,414
8,053	+ 32/53	7,545	7,566	7,112
8,059	+ 35/59	7,385	7,409	6,808
9,053	+ 32/53	8,545	8,566	8,112
9,059	+ 35/59	8,385	8,409	7,808
10,045	+ 27/45	9,702	9,720	9,414
10,053	+ 32/53	9,545	9,566	9,112
10,059	+ 35/59	9,385	9,409	8,808
10,063	+ 38/63	9,226	9,251	8,504
11,053	+ 32/53	10,545	10,566	10,112
11,059	+ 35/59	10,385	10,409	9,808
12,053	+ 32/53	11,545	11,566	11,112
12,063	+ 38/63	11,388	11,413	10,811
12,070	+ 42/70	11,230	11,258	10,508
12,075	+ 45/75	11,071	11,101	10,205
13,063	+ 38/63	12,388	12,413	11,811
14,063	+ 38/63	13,388	13,413	12,811
14,070	+ 42/70	13,230	13,258	12,508
14,075	+ 45/75	13,071	13,101	12,205
15,063	+ 38/63	14,388	14,413	14,811
15,075	+ 45/75	14,071	14,101	13,205
16,063	+ 38/63	15,388	15,413	14,811
16,075	+ 45/75	15,071	15,101	14,205
17,063	+ 38/63	16,388	16,413	15,811
17,075	+ 45/75	16,071	16,101	15,205
18,063	+ 38/63	17,388	17,413	16,811
18,075	+ 45/75	17,071	17,101	16,205
18,085	+ 51/85	16,752	16,786	15,597
20,063	+ 38/63	19,388	19,413	18,811
20,075	+ 45/75	19,071	19,101	18,205

Perfil de la rosca / Profilo della filettatura / Perfil da rosca

Macho / Maschi / Macho

Diámetro nominal de la rosca Diametro nominale della filettatura Diâmetro nominal da rosca			Paso Passo Passo	Diámetro medio Diametro medio Diâmetro médio	Diámetro núcleo Diametro nocciolo Diâmetro do núcleo	
Serie / Serie / Série			P	d ₂ = D ₂	d ₃	D ₁
1	2	3	mm	mm	mm	mm
M 20			2	18,701	17,546	17,835
	M 22		1	21,350	20,773	20,917
	M 22		1,5	21,026	20,160	20,376
	M 22		2	20,701	19,546	19,835
M 24			1	23,350	22,773	22,917
M 24			1,5	23,026	22,160	22,376
M 24		M 25	2	22,701	21,546	21,835
			1	24,350	23,773	23,917
		M 25	1,5	24,026	23,160	23,376
		M 25	2	23,701	22,546	22,835
	M 27		1	26,350	25,773	25,917
	M 27		1,5	26,026	25,160	25,376
	M 27		2	25,701	24,546	24,835
		M 28	1	27,350	26,773	26,917
		M 28	1,5	27,026	26,160	26,376
		M 28	2	26,701	25,546	25,835
M 30			1	29,350	28,773	28,917
M 30			1,5	29,026	28,160	28,376
M 30			2	28,701	27,546	27,835
M 30			3	28,051	26,319	26,752
		M 32	1,5	31,026	30,160	30,376
		M 32	2	30,701	29,546	29,835
	M 33		1,5	32,026	31,160	31,376
	M 33		2	31,701	30,546	30,835
	M 33		3	31,051	29,319	29,752
		M 35	1,5	34,026	33,160	33,376
M 36			1,5	35,026	34,160	34,376
M 36			2	34,701	33,546	33,835
M 36			3	34,051	32,319	32,752
		M 38	1,5	37,026	36,160	36,376
	M 39		1,5	38,026	37,160	37,376
	M 39		2	37,701	36,546	36,835
	M 39		3	37,051	35,319	35,752
		M 40	1,5	39,026	38,160	38,376
		M 40	2	38,701	37,546	37,835
		M 40	3	38,051	36,319	36,752
M 42			1,5	41,026	40,160	40,376
M 42			2	40,701	39,546	39,835
M 42			3	40,051	38,319	38,752
M 42			4	39,402	37,093	37,670
	M 45		1,5	44,026	43,160	43,376
	M 45		2	43,701	42,546	42,835
	M 45		3	43,051	41,319	41,752
	M 45		4	42,402	40,093	40,670
M 48			1,5	47,026	46,160	46,376
M 48			2	46,701	45,546	45,835
M 48			3	46,051	44,319	44,752
M 48			4	45,402	43,093	43,670
		M 50	1,5	49,026	48,160	48,376
		M 50	2	48,701	47,546	47,835
		M 50	3	48,051	46,319	46,752
	M 52		1,5	51,026	50,160	50,376
	M 52		2	50,701	49,546	49,835
	M 52		3	50,051	48,319	48,752
	M 52		4	49,402	47,093	47,670
		M 55	1,5	54,026	53,160	53,376
		M 55	2	53,701	52,546	52,835
		M 55	3	53,051	51,319	51,752
		M 55	4	52,402	50,093	50,670
M 56			1,5	55,026	54,160	54,376
M 56			2	54,701	53,546	53,835
M 56			3	54,051	52,319	52,752

Diámetro exterior Diametro esterno Diâmetro exterior	Tolerancia Tolleranza Tolerância	Diámetro medio Diametro medio Diâmetro médio		Diámetro núcleo Diametro nocciolo Diâmetro núcleo
dmin mm	ISO 2 (6H) µm	d ₂ min. mm	d ₂ max. mm	d ₃ max. mm
20,085	+51/85	18,752	18,786	17,597
22,063	+38/63	21,388	21,413	20,811
22,075	+45/75	21,071	21,101	20,205
22,085	+ 51/85	20,752	20,786	19,597
24,066	+40/66	23,390	23,416	22,813
24,080	+48/ 80	23,074	23,106	22,208
24,090	+53/ 90	22,754	22,791	21,599
25,066	+40/ 66	24,390	24,416	23,813
25,080	+48/ 80	24,074	24,106	23,208
25,090	+53/ 90	23,754	23,791	22,599
27,066	+40/ 66	26,390	26,416	25,813
27,080	+48/ 80	26,074	26,106	25,208
27,090	+53/ 90	25,754	25,791	24,599
28,066	+40/ 66	27,390	27,416	26,813
28,080	+48/ 80	27,074	27,106	26,208
28,090	+53/ 90	26,754	26,791	25,599
30,066	+40/ 66	29,390	29,416	28,813
30,080	+48/ 80	29,074	29,106	28,208
30,090	+53/ 90	28,754	28,791	27,599
30,106	+64/106	28,115	28,157	26,383
32,080	+48/ 80	31,074	31,106	30,208
32,090	+53/ 90	30,754	30,791	29,599
33,080	+48/ 80	32,074	32,106	31,208
33,090	+53/ 90	31,754	31,791	30,599
33,106	+64/106	31,115	31,157	29,383
35,080	+48/ 80	34,074	34,106	33,208
36,080	+48/ 80	35,074	35,106	34,208
36,090	+53/ 90	34,754	34,791	33,599
36,106	+64/106	34,115	34,157	32,383
38,080	+48/ 80	37,074	37,106	36,208
39,080	+48/ 80	38,074	38,106	37,208
39,090	+53/ 90	37,754	37,791	36,599
39,106	+64/106	37,115	37,157	35,383
40,080	+48/ 80	39,074	39,106	38,208
40,090	+53/ 90	38,754	38,791	37,599
40,106	+64/106	38,115	38,157	35,383
42,080	+48/ 80	41,074	41,106	40,208
42,090	+ 53/ 90	40,754	40,791	39,599
42,106	+64/106	40,115	40,157	38,383
42,118	+71/118	39,473	39,520	37,164
45,080	+48/ 80	44,074	44,106	43,208
45,090	+53/ 90	43,754	43,791	42,599
45,106	+64/106	43,115	43,157	41,383
45,118	+71/118	42,473	42,520	40,164
48,085	+51/ 85	47,077	47,111	46,211
48,095	+57/ 95	46,758	46,796	45,603
48,112	+67/112	46,118	46,163	44,386
48,125	+75/125	45,477	45,527	43,168
50,085	+51/ 85	49,077	49,111	48,211
50,095	+57/ 95	48,758	48,796	47,603
50,112	+67/112	48,118	48,163	46,386
52,085	+51/ 85	51,077	51,111	50,211
52,095	+57/ 95	50,758	50,796	49,603
52,112	+67/112	50,118	50,163	48,386
52,125	+75/125	49,477	49,527	47,168
55,085	+51/ 85	54,077	54,111	53,211
55,095	+57/ 95	53,758	53,796	52,603
55,112	+67/112	53,118	53,163	51,386
55,125	+75/125	52,477	52,527	50,168
56,085	+51/ 85	55,077	55,111	54,211
56,095	+57/ 95	54,758	54,796	53,603
56,112	+67/112	54,118	54,163	52,386

Perfil de la rosca / Profilo della filettatura / Perfil da rosca

Diámetro nominal de la rosca Diametro nominale della filettatura Diámetro nominal da rosca			Paso Passo Passo	Diámetro medio Diametro medio Diámetro médio	Diámetro núcleo Diametro nocciolo Diámetro do núcleo	
Serie / Serie / Série			P	d ₂ = D ₂	d ₃	D ₁
1	2	3	mm	mm	mm	mm
M 56		M 58	4	53,402	51,093	51,670
			1,5	57,026	56,160	56,376
			2	56,701	55,546	55,835
			3	56,051	54,319	54,752
	M 60	M 58	4	55,402	53,093	53,670
			1,5	59,026	58,160	58,376
			2	58,701	57,546	57,835
			3	58,051	56,319	56,752
	M 60	M 62	4	57,402	55,093	55,670
			1,5	61,026	60,160	60,376
			2	60,701	59,546	59,835
			3	60,051	58,319	58,752
M 64		M 62	4	59,402	57,093	57,670
			1,5	63,026	62,160	62,376
			2	62,701	61,546	61,835
			3	62,051	60,319	60,752
		M 65	4	61,402	59,093	59,670
			1,5	64,026	63,160	63,376
			2	63,701	62,546	62,835
			3	63,051	61,319	61,752
	M 68	M 65	4	62,402	60,093	60,670
			1,5	67,026	66,160	66,376
			2	66,701	65,546	65,835
			3	66,051	64,319	64,752
	M 68	M 70	4	65,402	63,093	63,670
			1,5	69,026	68,160	68,376
			2	68,701	67,546	67,835
			3	68,051	66,319	66,752
		M 70	4	67,402	65,093	65,670
			6	66,103	62,639	63,505
			1,5	71,026	70,160	70,376
			2	70,701	69,546	69,835
M 72			3	70,051	68,319	68,752
			4	69,402	67,093	67,670
			6	68,103	64,639	65,505
			1,5	74,026	73,160	73,376
		M 75	2	73,701	72,546	72,835
			3	73,051	71,319	71,752
			4	72,402	70,093	70,670
			1,5	75,026	74,160	74,376
	M 76		2	74,701	73,546	73,835
			3	74,051	72,319	72,752
			4	73,402	71,093	71,670
			6	72,103	68,639	69,505
M 80			1,5	79,026	78,160	78,376
			2	78,701	77,546	77,835
			3	78,051	76,319	76,752
			4	77,402	75,093	75,670
	M 85		6	76,103	72,639	73,505
			2	83,701	82,546	82,835
			3	83,051	81,319	81,752
			4	82,402	80,093	80,670
	M 85		6	81,103	77,639	78,505
			2	88,701	87,546	87,835
			3	88,051	86,319	86,752
			4	87,402	85,093	85,670
M 90			6	86,103	82,639	83,505
			2	93,701	92,546	92,835
			3	93,051	91,319	91,752
			4	92,402	90,093	90,670
	M 95		6	91,103	87,639	88,505

Macho / Maschi / Macho

Diámetro exterior Diametro esterno Diámetro exterior	Tolerancia Tolleranza Tolerância	Diámetro medio Diametro medio Diámetro médio		Diámetro núcleo Diametro nocciolo Diámetro do núcleo
dmin	ISO 2 (6H)	d ₂ min.	d ₂ max.	d ₃ max.
mm	µm	mm	mm	mm
56,125	+75/125	53,477	53,527	51,168
58,085	+51/ 85	57,077	57,111	56,211
58,095	+57/ 95	56,758	56,796	55,603
58,112	+67/112	56,118	56,163	54,386
58,125	+75/125	55,477	55,527	53,168
60,085	+51/ 85	59,077	59,111	58,211
60,095	+57/ 95	58,758	58,796	57,603
60,112	+67/112	58,118	58,163	56,386
60,125	+75/125	57,477	57,527	55,168
62,085	+51/ 85	61,077	61,111	60,211
62,095	+57/ 95	60,758	60,796	59,603
62,112	+67/112	60,118	60,163	58,386
62,125	+75/125	59,477	59,527	57,168
64,085	+51/ 85	63,077	63,111	62,211
64,095	+57/ 95	62,758	62,796	61,603
64,112	+67/112	62,118	62,163	60,386
64,125	+75/125	61,477	61,527	59,168
65,085	+51/ 85	64,077	64,111	63,211
65,095	+57/ 95	63,758	63,796	62,603
65,112	+67/112	63,118	63,163	61,386
65,125	+75/125	62,477	62,527	60,168
68,085	+51/ 85	67,077	67,111	66,211
68,095	+57/ 95	66,758	66,796	65,603
68,112	+67/112	66,118	66,163	64,386
68,125	+75/125	65,477	65,527	63,168
70,085	+51/ 85	69,077	69,111	68,211
70,095	+57/ 95	68,758	68,796	67,603
70,112	+67/112	68,118	68,163	66,386
70,125	+75/125	67,477	67,527	65,168
70,150	+90/150	66,193	66,253	62,729
72,085	+51/ 85	71,077	71,111	70,211
72,095	+57/ 95	70,758	70,796	69,603
72,112	+67/112	70,118	70,163	68,386
72,125	+75/125	69,477	69,527	67,168
72,150	+90/150	68,193	68,253	64,729
75,085	+51/ 85	74,077	74,111	73,211
75,095	+57/ 95	73,758	73,796	72,603
75,112	+67/112	73,118	73,163	71,386
75,125	+75/125	72,477	72,527	70,168
76,085	+51/ 85	75,077	75,111	74,211
76,095	+57/ 95	74,758	74,796	73,603
76,112	+67/112	74,118	74,163	72,386
76,125	+75/125	73,477	73,527	71,168
76,150	+90/150	72,193	72,253	68,729
80,085	+51/ 85	79,077	79,111	78,211
80,095	+57/ 95	78,758	78,796	77,603
80,112	+67/112	78,118	78,163	76,386
80,125	+75/125	77,477	77,527	75,168
80,150	+90/150	76,193	76,253	77,729
85,095	+57/ 95	83,758	83,796	82,603
85,112	+67/112	83,118	83,163	81,386
85,125	+75/125	82,477	82,527	80,168
85,150	+90/150	81,193	81,253	77,729
90,095	+57/ 95	88,758	88,796	87,603
90,112	+67/112	88,118	88,163	86,386
90,125	+75/125	87,477	87,527	85,168
90,150	+90/150	86,193	86,253	82,729
95,100	+60/100	93,761	93,801	92,606
95,118	+71/118	93,122	93,169	91,390
95,132	+79/132	92,481	92,534	90,172
95,157	+94/157	91,197	91,260	87,733