



Tolerancias

Dimensiones límites $A_0 - A_U$ (mín-máx)
para roscas externas e internas (tornillos/tuercas)
con roscas normal y finas (RN/RF)
(Selección de la norma DIN 13-20, 21, 22, 27)

			Rosca exterior / tornillo							Rosca interior / tuerca							
Rosca Diám.	Paso P		Flancos Línea de cero h / H	Tol	Diám. Exterior		Diám. Flancos		Diám. Núcleo		Tol	Diám. Exterior		Diám. Flancos		Diám. Núcleo	
d/D	RN	RF		d min	d ₂ máx	min	d ₃ máx	min	d máx	d ₂ máx	min	d ₃ máx	min				
M 3	0,5		2,675	6g	2,980	2,874	2,655	2,580	2,367	2,273	6H	2,980		2,675	2,775	2,459	2,599
				6e	2,950	2,844	2,625	2,550	2,337	2,243	6G	2,950		2,695	2,795	2,479	2,619
M 4	0,7		3,545	6g	3,978	3,838	3.523	3,433	3,119	3,002	6H	3,978		3,545	3,663	3,242	3,422
				6e	3,944	3,804	3.489	3,399	3,085	2,968	6G	3,944		3,567	3,685	3,264	3,444
M 5	0,8		4,480	6g	4,976	4,826	4.456	4,361	3,995	3,869	6H	4,976		4,480	4,605	4,134	4,334
				6e	4,940	4,790	4.420	4,325	3,959	3,833	6G	4,940		4,504	4,629	4,158	4,358
M 6	1		5,350	6g	5,974	5,794	5.324	5,212	4,747	4,596	6H	5,974		5,350	5,500	4,917	5,153
				6e	5,940	5,760	5.290	5,178	4,713	4,562	6G	5,940		5,376	5,526	4,943	5,179
M 8	1,25		7,188	6g	7,972	7,760	7.160	7,042	6,438	6,272	6H	7,972		7,188	7,348	6,647	6,912
				8e	7,937	7,602	7.125	6,935	6,403	6,165	6G	7,937		7,216	7,376	6,675	6,940
	1		7,350	6g	7,974	7,794	7.324	7,212	6,747	6,596	6H	7,974		7,350	7,500	6,917	7,153
				8e							6G						
M10	1,5		9,026	6g	9,968	9,732	8.994	8,862	8,128	7,938	6H	9,968		9,026	9,206	8,376	8,676
				8e	9,933	9,558	8.959	8,747	8,093	7,823	6G	9,933		9,058	9,238	8,408	8,708
	1,25		9,188	6g	9,972	9,760	9.160	9,042	8,438	8,272	6H	9,972		9,188	9,348	8,647	8,912
				8e							6G						
M12	1,75		10,863	6g	11,966	11,701	10.829	10,679	9,819	9,602	6H	11,966		10,863	11,063	10,106	10,441
				8e	11,929	11,504	10.792	10,556	9,782	9,479	6G	11,929		10,897	11,097	10,140	10,475
	1,5		11,026	6g	11,968	11,732	10.994	10,854	10,128	9,930	6H	11,968		11,026	11,216	10,376	10,676
				8e							6G						
M14	2		12,701	6g	13,962	13,682	12.663	12,503	11,508	11,271	6H	13,962		12,701	12,913	11,835	12,210
				8e	13,929	13,479	12.630	12,380	11,475	11,148	6G	13,929		12,739	12,951	11,873	12,248
	1,5		13,026	6g	13,968	13,732	12.994	12,854	12,128	11,930	6H	13,968		13,026	13,216	12,376	12,676
				8e							6G						
M16	2		14,701	6g	15,962	15,682	14.663	14,503	13,508	13,271	6H	15,962		14,701	14,913	13,835	14,210
				8e	15,929	15,479	14.630	14,380	13,475	13,148	6G	15,929		14,739	14,951	13,873	14,248
	1,5		15,026	6g	15,968	15,732	14.994	14,854	14,128	13,930	6H	15,968		15,026	15,216	14,376	14,676
				8e							6G						
M18	2,5		16,376	6g	17,958	17,623	16.334	16,164	14,891	14,625	6H	17,958		16,373	16,600	15,294	15,744
				8e	17,920	17,390	16.296	16,031	14,853	14,492	6G	17,920		16,418	16,642	15,336	15,786
	2		16,701	6g	17,962	17,682	16.663	16,503	15,508	15,271	6H	17,962		16,701	16,913	15,835	16,210
				8e							6G						
M20	2,5		18,376	6g	19,958	19,623	18.334	18,164	16,891	16,625	6H	19,958		18,376	18,600	17,294	17,744
				8e	19,920	19,390	18.296	18,031	16,853	16,492	6G	19,920		18,418	18,642	17,336	17,786
	2		18,701	6g	19,962	19,682	18.663	18,503	17,508	17,271	6H	19,962		18,701	18,913	17,835	18,210
				8e							6G						
M22	2,5		20,376	6g	21,958	21,623	20.334	20,164	18,891	18,625	6H	21,958		20,376	20,600	19,294	19,744
				8e	21,920	21,390	20.296	20,031	18,853	18,492	6G	21,920		20,418	20,642	19,336	19,786
	2		20,701	6g	21,962	21,682	20.663	20,503	19,508	19,271	6H	21,962		20,701	20,913	19,835	20,210
				8e							6G						
M24	3		22,051	6g	23,952	23,577	22.003	21,803	20,271	19,955	6H	23,952		22,051	22,316	20,752	21,252
				8e	23,915	23,315	21.966	21,651	20,234	19,803	6G	23,915		22,099	22,364	20,800	21,300
	2		22,701	6g	23,962	23,682	22.663	22,493	21,508	21,261	6H	23,962		22,701	22,925	21,835	22,210
				8e							6G						
M27	3		25,051	6g	26,952	26,577	25.003	24,803	23,271	22,955	6H	26,952		25,051	25,316	23,752	24,252
				8e	26,915	26,315	24.966	24,651	23,234	22,803	6G	26,915		25,099	25,364	23,800	24,300
	2		25,701	6g	26,962	26,682	25.663	25,493	24,508	24,261	6H	26,962		25,701	25,925	24,835	25,210
				8e							6G						
M30	3,5		27,727	6g	29,947	29,522	27.674	27,462	25,653	25,306	6H	29,947		27,727	28,007	26,211	26,771
				8e	29,910	29,240	27.637	27,302	25,616	25,146	6G	29,910		27,780	28,060	26,264	26,824
	2		28,701	6g	29,952	29,577	28.003	27,803	26,271	25,955	6H	29,952		28,051	28,316	26,752	27,252
				8e							6G						
M33	3,5		30,727	6g	32,947	32,522	30.674	30,462	28,653	28,306	6H	32,947		30,727	31,007	29,211	29,771
				8e	32,910	32,240	30.637	30,302	28,616	28,146	6G	32,910		30,780	31,060	29,264	29,824
	2		31,701	6g	32,962	32,682	31.663	31,493	30,508	30,261	6	32,962		31,701	31,925	30,835	31,210
				8e							6G						
M36	4		33,402	6g	35,940	32,465	33.342	33,118	31,033	30,655	6H	35,940		33,402	33,702	31,670	32,270
				8e	35,905	35,155	33.307	32,952	30,998	30,489	6G	35,905		33,462	33,762	31,730	32,330
	3		24,051	6g	35,952	35,577	34.003	33,803	32,271	31,955	6H	35,952		34,051	34,316	32,752	33,252
				8e							6G						

Dimensiones en milímetros

UNC	Diám.	Nº.	0	1	2	3	4	5	6	8	10	12								
UNF	Pulgadas												1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
BSW	Diám.	d/D																		
BSF	En mm		1,524	1,854	2,184	2,515	2,845	3,175	3,505	4,166	4,826	5,486	6,35	7,94	9,53	11,1	12,70	14,29	15,88	19,05
Ww	Diám.																			
Tubo	Pulgadas		1/16	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	G = rosca cilíndrica exterior e interior R = Rosca exterior cónica* Rp = rosca interior cilíndrica *a = Distancia a la superficie de medición al comienzo de la rosca en mm					
G / R / Rp	Diám.	d/D																		
	En mm		7,72	9,73	13,16	16,66	20,96	26,44	33,25	41,91	47,80	59,61	75,18	87,88						
	Distancia a		4,0	4,0	6,0	6,4	8,2	9,5	10,4	12,7	12,7	15,9	17,5	20,6						