



TECHNICAL INFORMATION

Tolerance of the tap Designation according		Tolerance of the nut thread	Explanation
DIN 802 DIN	DIN EN 22857 ISO 2857		
4H	ISO 1	4H, 5H	Undersize
6H	ISO 2	4G, 5G, 6H	Standard
6G	ISO 3	6G, 7H, 8H	Oversize (M12x1,5 7G = ISO 2/6H + 0,03 mm)
7G	./.	7G, 8G, (6E)	Oversize (M12x1,5 7G = ISO 2/6H + 0,06 mm)
4HX	ISO 1X	4H, 5H	Manufacturer tolerance for special materials (X = small oversize, 4HX ≈ ISO 2/6H)
6HX	ISO 2X	6H	Manufacturer tolerance for special materials (X = small oversize, 6HX ≈ ISO 3/6G)
6GX	ISO 3X	6G	Manufacturer tolerance for special materials (X = small oversize, 6GX ≈ 7G)
6H + 0,1	ISO 2 + 0,1	4G, 5G, 6H	+ 0,1 mm oversize for galvanic coatings and surface finishing with thickness of layer up to 25 μm
6H + 0,2	ISO 2 x 0,2	4G, 5G, 6H	+ 0,2 mm oversize for galvanic coatings and surface finishing with thickness of layer up to 50 μm

The required oversize of the tap with galvanic coatings depends on the thread angle.
The oversize O can be calculated with the following approach formula: $O = S \times F$.
S = thickness of the layer / F = factor depending on the thread angle a ($F = 2 / \sin a / 2$)

Thread angle	30°	47°/30°	55°	60°	80°	90°
F=	7,727	4,966	4,331	4,000	3,111	2,828

Conversion table - pitch per inch into mm

P (Gg/1")	mm	P (Gg/1")	mm	P (Gg/1")	mm
100	0,254 000	24	1,058 333	5	5,080 000
96	0,264 583	22	1,154 545	4.1/2	5,644 444
80	0,317 500	20	1,270 000	4	6,350 000
72	0,352 778	19	1,336 842	3.1/2	7,257 143
64	0,396 875	18	1,411 111	3.1/4	7,815 385
60	0,423 333	16	1,587 500	3	8,466 667
56	0,453 571	14	1,814 286	2.7/8	8,834 783
48	0,529 167	13	1,953 846	2.3/4	9,236 364
44	0,577 273	12	2,116 667	2.5/8	9,676 190
40	0,635 000	11.1/2	2,208 696	2.1/2	10,160 000
36	0,705 555	11	2,309 091	2.1/4	11,288 889
32	0,793 750	10	2,540 000	2	12,700 000
28	0,907 143	9	2,822 222		
27	0,940 741	8	3,175 000		
26	0,976 923	7	3,628 571		
25	1,016 000	6	4,233 333		

