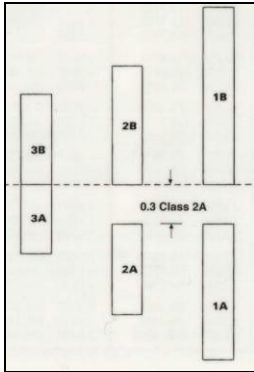


ISO INCH THREAD WITH A STANDARD UNF-3A TOLERANCE

Ref. ASME B1.1 1989 Unified Inch Screw Threads

Relationship between the tolerances

mm to ins. / 25,4
ins. to mm x 25,4



Tolerance class 2A is the foundation

$$\begin{aligned}
 1A &= 1,500 \times 2A & 1B &= 1,950 \times 2A \\
 2A &= 1,000 & 2B &= 1,300 \times 2A \\
 3A &= 0,750 \times 2A & 3B &= 0,975 \times 2A
 \end{aligned}$$

Example :

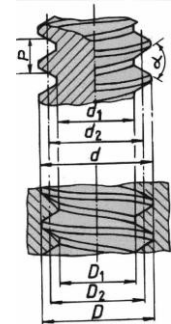
On a 1/2-13 UNC-2A screw the pitch diameter tolerance is 0,127 mm

Allowance from the nominal pitch diameter for 2A and 1A is 0,127 x 0,3 = 0,038 i.e. 0.3 x 2A pitch diameter tolerance

$$1A \text{ is } 0,127 \times 1,5 = 0,1905 \quad 1B \text{ is } 0,127 \times 1,950 = 0,248$$

$$2B \text{ is } 0,127 \times 1,300 = 0,165$$

$$3A \text{ is } 0,127 \times 0,75 = 0,095 \quad 3B \text{ is } 0,127 \times 0,975 = 0,124$$



Denomination	or	d mm (nom.)	d ₂ nom	d ₂ max	d ₂ min
4-48 UNF	0,112-48 UNF	2,845	2,502	2,502	2,456
5-44 UNF	0,125-44 UNF	3,175	2,799	2,799	2,751
6-40 UNF	0,138-40 UNF	3,505	3,094	3,094	3,043
8-36 UNF	0,164-36 UNF	4,166	3,708	3,708	3,655
10-32 UNF	0,190-32 UNF	4,826	4,310	4,310	4,252
12-28 UNF	0,216-28 UNF	5,486	4,897	4,897	4,836
1/4-28 UNF	0,250-28 UNF	6,350	5,761	5,761	5,697
5/16-24 UNF	0,3125-24 UNF	7,937	7,249	7,249	7,181
3/8-24 UNF	0,375-24 UNF	9,525	8,837	8,837	8,763
7/16-20 UNF	0,4375-20 UNF	11,112	10,287	10,287	10,208
1/2-20 UNF	0,500-20 UNF	12,700	11,874	11,874	11,793
9/16-18 UNF	0,5625-18 UNF	14,288	13,371	13,371	13,284
5/8-18 UNF	0,625-18 UNF	15,875	14,958	14,958	14,869
3/4-16 UNF	0,750-16 UNF	19,050	18,019	18,019	17,922
7/8-14 UNF	0,875-14 UNF	22,225	21,046	21,046	20,942
1-12 UNF	1,000-12 UNF	25,400	24,026	24,026	23,914
1 1/8-12 UNF	1,125-12 UNF	28,575	27,201	27,201	27,087
1 1/4-12 UNF	1,250-12 UNF	31,750	30,376	30,376	30,259
1 3/8-12 UNF	1,375-12 UNF	34,925	33,551	33,551	33,431
1 1/2-12 UNF	1,500-12 UNF	38,100	36,725	36,725	36,604