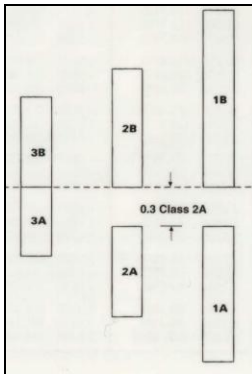


ISO INCH THREAD WITH A STANDARD UNC-3B TOLERANCE

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

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

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

Example :

On a $\frac{1}{2}$ -13 UNC-2A screw the pitch diameter tolerance is **0,127 mm**

Allowance from the nominal pitch diameter for **2A** and **1A**
is $0,127 \times 0,3 = \mathbf{0,038}$ i.e. $0.3 \times 2A$ pitch diameter tolerance

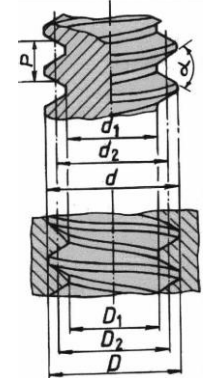
$$1A \text{ is } 0,127 \times 1,5 = \mathbf{0,1905}$$

$$1B \text{ is } 0,127 \times 1,950 = \mathbf{0,248}$$

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

$$3A \text{ is } 0,127 \times 0,75 = \mathbf{0,095}$$

$$3B \text{ is } 0,127 \times 0,975 = \mathbf{0,124}$$



Betegnelse	eller	D mm (nom.)	D ₂ nom	D ₂ min	D ₂ max
3-48 UNC	0,099-48 UNC	2,515	2,172	2,172	2,228
4-40 UNC	0,112-40 UNC	2,845	2,433	2,433	2,494
5-40 UNC	0,125-40 UNC	3,175	2,764	2,764	2,827
6-32 UNC	0,138-32 UNC	3,505	2,990	2,990	3,058
8-32 UNC	0,164-32 UNC	4,166	3,650	3,650	3,721
10-24 UNC	0,190-24 UNC	4,826	4,138	4,138	4,219
12-24 UNC	0,216-24 UNC	5,486	4,798	4,798	4,882
1/4-20 UNC	0,250-20 UNC	6,350	5,525	5,525	5,616
5/16-18 UNC	0,3125-18 UNC	7,937	7,021	7,021	7,120
3/8-16 UNC	0,375-16 UNC	9,525	8,494	8,494	8,603
7/16-14 UNC	0,4375-14 UNC	11,112	9,934	9,934	10,051
1/2-13 UNC	0,500-13 UNC	12,700	11,430	11,430	11,552
9/16-12 UNC	0,5625-12 UNC	14,288	12,913	12,913	13,043
5/8-11 UNC	0,625-11 UNC	15,875	14,376	14,376	14,514
3/4-10 UNC	0,750-10 UNC	19,050	17,399	17,399	17,544
7/8-9 UNC	0,875-9 UNC	22,225	20,391	20,391	20,546
1-8 UNC	1,000-8 UNC	25,400	23,338	23,338	23,505
1 1/8-7 UNC	1,125-7 UNC	28,575	26,218	26,218	26,398
1 1/4-7 UNC	1,250-7 UNC	31,750	29,393	29,393	29,576
1 3/8-6 UNC	1,375-6 UNC	34,925	32,174	32,174	32,372
1 1/2-6 UNC	1,500-6 UNC	38,100	35,349	35,349	35,550
1 3/4-5 UNC	1,750-5 UNC	44,450	41,151	41,151	41,372
2-4 1/2 UNC	2,000-4 1/2 UNC	50,800	47,135	47,135	47,371
2 1/4-4 1/2 UNC	2,250-4 1/2 UNC	57,150	53,485	53,485	53,726
2 1/2-4 UNC	2,500-4 UNC	63,500	59,375	59,375	59,632
2 3/4-4 UNC	2,750-4 UNC	69,850	65,725	65,725	65,987
3-4 UNC	3,000-4 UNC	76,200	74,615	74,615	72,339
3 1/4-4 UNC	3,250-4 UNC	82,550	78,425	78,425	78,694
3 1/2-4 UNC	3,500-4 UNC	88,900	87,775	87,775	85,049
3 3/4-4 UNC	3,750-4 UNC	92,250	91,125	91,125	91,402
4-4 UNC	4,000-4 UNC	101,600	97,475	97,475	97,757