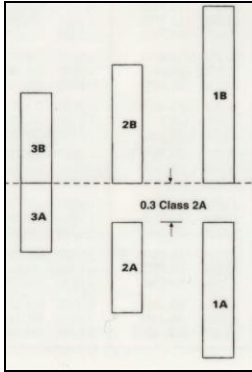


ISO INCH THREAD WITH A STANDARD UNF-1A TOLERANCE

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

$$1A = 1,500 \times 2A$$

$$2A = 1,000$$

$$3A = 0,750 \times 2A$$

$$1B = 1,950 \times 2A$$

$$2B = 1,300 \times 2A$$

$$3B = 0,975 \times 2A$$

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

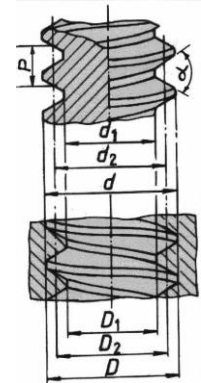
$$1A \text{ is } 0,127 \times 1,5 = \mathbf{0,1905}$$

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

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

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

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



Denomination	or	d mm (nom.)	d ₂ nom	d ₂ max	d ₂ min
$\frac{1}{4}$ -28 UNF	0,250-28 UNF	6,350	5,761	5,735	5,608
$\frac{5}{16}$ -24 UNF	0,3125-24 UNF	7,937	7,249	7,221	7,082
$\frac{3}{8}$ -24 UNF	0,375-24 UNF	9,525	8,837	8,809	8,664
$\frac{7}{16}$ -20 UNF	0,4375-20 UNF	11,112	10,287	10,254	10,097
$\frac{1}{2}$ -20 UNF	0,500-20 UNF	12,700	11,874	11,841	11,679
$\frac{9}{16}$ -18 UNF	0,5625-18 UNF	14,288	13,371	13,335	13,162
$\frac{5}{8}$ -18 UNF	0,625-18 UNF	15,875	14,958	14,922	14,745
$\frac{3}{4}$ -16 UNF	0,750-16 UNF	19,050	18,019	17,981	17,790
$\frac{7}{8}$ -14 UNF	0,875-14 UNF	22,225	21,046	21,006	20,800
1-12 UNF	1,000-12 UNF	25,400	24,026	23,980	23,757
$1\frac{1}{8}$ -12 UNF	1,125-12 UNF	28,575	27,201	27,155	26,927
$1\frac{1}{4}$ -12 UNF	1,250-12 UNF	31,750	30,376	30,330	30,096
$1\frac{3}{8}$ -12 UNF	1,375-12 UNF	34,925	33,551	33,503	33,264
$1\frac{1}{2}$ -12 UNF	1,500-12 UNF	38,100	36,725	36,678	36,434