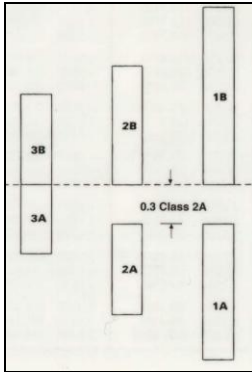


## ISO INCH THREAD WITH A STANDARD UNF-2B TOLERANCE

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

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

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

$$2A = 1,000$$

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

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

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

Example :

On a  $\frac{1}{2}$ -13 UNF-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

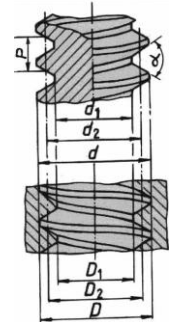
$$1A \text{ is } 0,127 \times 1,5 = \mathbf{0,1905}$$

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

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

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

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



| Betegnelse             | eller         | D mm (nom.) | D <sub>2</sub> nom | D <sub>2</sub> min | D <sub>2</sub> max |
|------------------------|---------------|-------------|--------------------|--------------------|--------------------|
| 4-48 UNF               | 0,112-48 UNF  | 2,845       | 2,502              | 2,502              | 2,581              |
| 5-44 UNF               | 0,125-44 UNF  | 3,175       | 2,799              | 2,799              | 2,880              |
| 6-40 UNF               | 0,138-40 UNF  | 3,505       | 3,094              | 3,094              | 3,180              |
| 8-36 UNF               | 0,164-36 UNF  | 4,166       | 3,708              | 3,708              | 3,800              |
| 10-32 UNF              | 0,190-32 UNF  | 4,826       | 4,310              | 4,310              | 4,409              |
| 12-28 UNF              | 0,216-28 UNF  | 5,486       | 4,897              | 4,897              | 5,004              |
| $\frac{1}{4}$ -28 UNF  | 0,250-28 UNF  | 6,350       | 5,761              | 5,761              | 5,870              |
| $\frac{5}{16}$ -24 UNF | 0,3125-24 UNF | 7,937       | 7,249              | 7,249              | 7,371              |
| $\frac{3}{8}$ -24 UNF  | 0,375-24 UNF  | 9,525       | 8,837              | 8,837              | 8,961              |
| $\frac{7}{16}$ -20 UNF | 0,4375-20 UNF | 11,112      | 10,287             | 10,287             | 10,424             |
| $\frac{1}{2}$ -20 UNF  | 0,500-20 UNF  | 12,700      | 11,874             | 11,874             | 12,017             |
| $\frac{9}{16}$ -18 UNF | 0,5625-18 UNF | 14,288      | 13,371             | 13,371             | 13,520             |
| $\frac{5}{8}$ -18 UNF  | 0,625-18 UNF  | 15,875      | 14,958             | 14,958             | 15,110             |
| $\frac{3}{4}$ -16 UNF  | 0,750-16 UNF  | 19,050      | 18,019             | 18,019             | 18,184             |
| $\frac{7}{8}$ -14 UNF  | 0,875-14 UNF  | 22,225      | 21,046             | 21,046             | 21,224             |
| 1-12 UNF               | 1,000-12 UNF  | 25,400      | 24,026             | 24,026             | 24,219             |
| $1\frac{1}{8}$ -12 UNF | 1,125-12 UNF  | 28,575      | 27,201             | 27,201             | 27,399             |
| $1\frac{1}{4}$ -12 UNF | 1,250-12 UNF  | 31,750      | 30,376             | 30,376             | 30,579             |
| $1\frac{3}{8}$ -12 UNF | 1,375-12 UNF  | 34,925      | 33,551             | 33,551             | 33,759             |
| $1\frac{1}{2}$ -12 UNF | 1,500-12 UNF  | 38,100      | 36,725             | 36,725             | 36,937             |