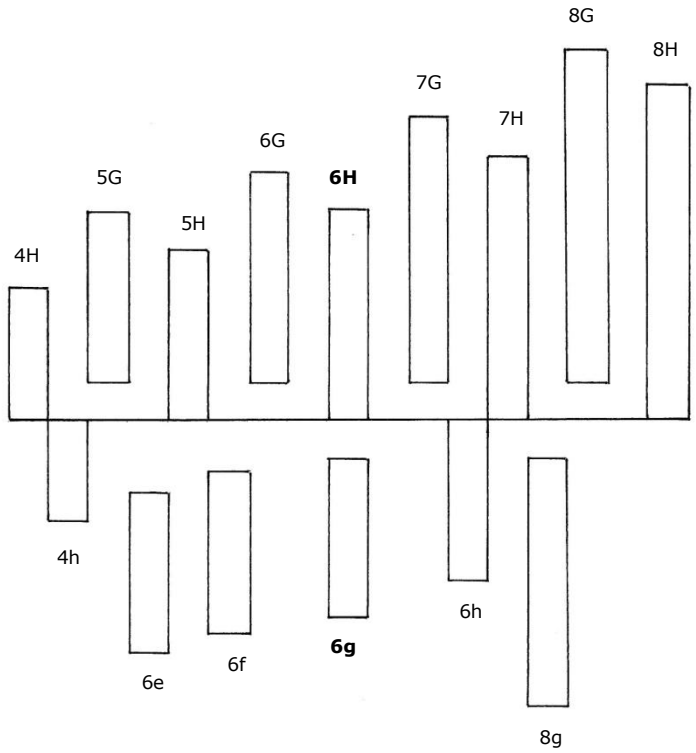
THREAD PITCH DIAMETER TOLERANCE AREAS



METRIC THREADS

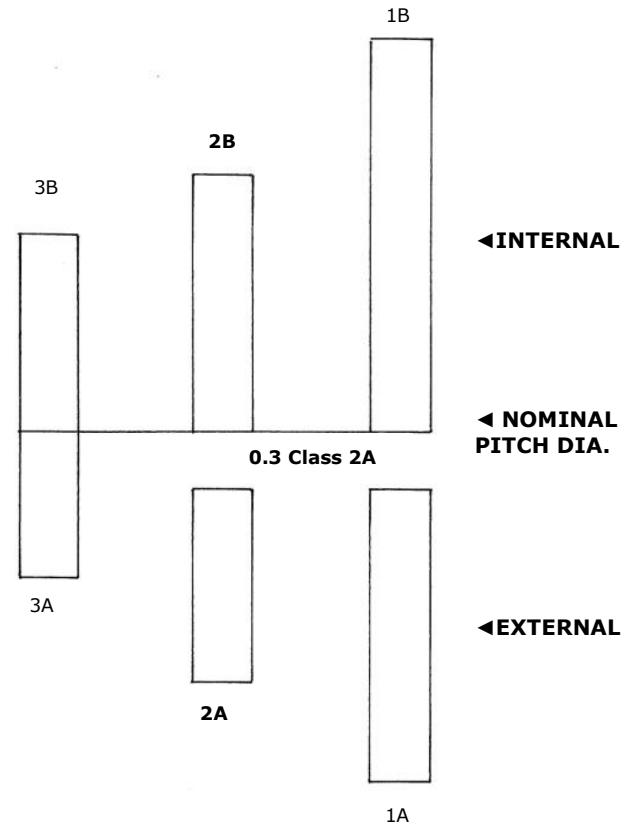
REF.: ISO 965

Internal metric thread are symbolized by a capital letter and external by a small letter.

If no tolerance is given on an internal metric thread then it is 6H and on an external metric thread 6g.

There are a few more tolerance areas than those shown and for complete information it is recommended that the standard ISO 965 be read.

The figure is only to give an indication of tolerance size and the positioning with regard to the nominal pitch diameter



UNIFIED INCH SCREW THREADS

REF.: ASME B1.1

Tolerance Class 2A is the foundation. If this tolerance is know all others are easily calculated.

i.e.

1A = 1.500 X 2A	**1B = 1.950 X 2A**
2A = 1.000 x 2A	**2B = 1.300 x 2A**
3A = 0.750 x 2A	**3B = 0.950 x 2A**

Allowance from the nominal pitch diameter for 2A and 1A is 0.3 times class 2A.

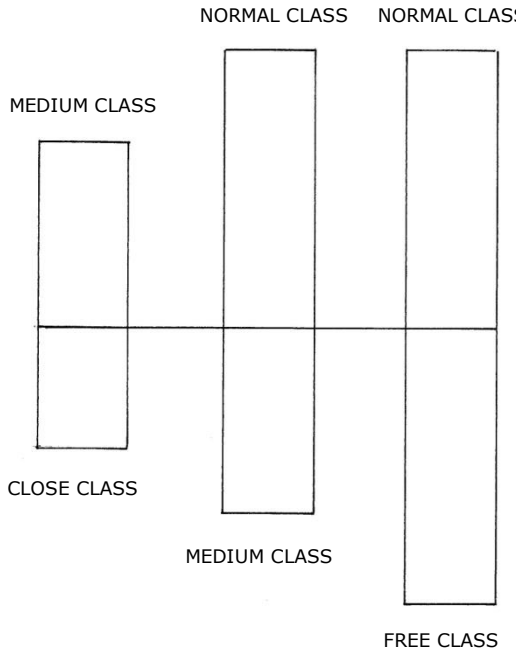
Internal unified thread are symbolized by a capital letter B and external by a capital A.

If no tolerance is given on an internal unified thread then it is 2B and on an external unified thread 2A.

For complete information it is recommended that the standard ASME B1.1 be read.

The figure is only to give an indication of tolerance size and the positioning with regard to the nominal pitch diameter

THREAD PITCH DIAMETER TOLERANCE AREAS



◄**INTERNAL**

◄ **NOMINAL PITCH DIA.**

◄**EXTERNAL**

PARALLEL SCREW THREADS OF WHITWORTH FORM

REF.: British Standard 84

With internal threads if the tolerance for Medium Class is 100 then Normal Class will be 150.

With external threads if the tolerance for Medium Class is 100 then Close Class will be $66^2/_3$ and Free Class 150.

N.B. This thread type has no allowance between minimum internal pitch diameter and maximum external pitch diameter so there is a risk of too tight a fit at those tolerance limits.

Surface plating or treating

It is worth remembering that when a thread is surface treated/plated (chrome, zinc, anodizing, galvanizing etc.) then the specified layer thickness will add 4x to what is specified as there are 4 thread flanks. With electro polishing the pitch diameter will be reduced 4x the specification.

i.e, 10µm will give 40µm (0.04mm) and 0.001" will give 0.004"