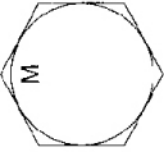
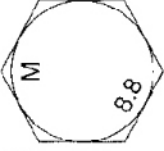
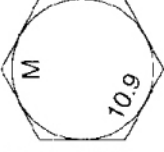
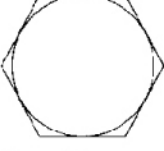

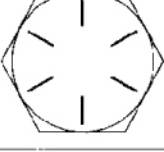





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BOLT HEAD MARKINGS - WHAT DO THEY MEAN?

MARKING	DESIGNATION	STRENGTH
	LOW TENSILE ISO METRIC	4.6, 4.8 Prop Class 5.6, 5.8 Prop Class 400 MPa, 500 MPa
	HIGH TENSILE ISO METRIC	8.8 Property Class 800 MPa
	HIGH TENSILE ISO METRIC	10.9 Property Class 1000 MPa
	LOW TENSILE IMPERIAL	Grade 1, 58,000 psi Grade 2, 72,000 psi
	HIGH TENSILE IMPERIAL	Grade 5 120,000 psi
	HIGH TENSILE IMPERIAL	Grade 8 150,000 psi
	HIGH TENSILE STRUCTURAL	8.8 Property Class 830 MPa

METRIC BOLTS: As bolts tensile strength is measured in megapascals the first digit represents MPa in multiples of 100.

e.g. 8 = 800 MPa
 4 = 400 MPa

The second digit represents the amount of elasticity (stretch) before breaking — this is measured as a percentage difference to be deducted.

e.g. .8 = 20% stretch
 .6 = 40% stretch

IMPERIAL BOLTS: The tensile strength is measured in tons per sq inch or 1000's of pounds per sq inch.

e.g. 28 TSI
 or 62220 PSI

Grades 2, 5, 8 etc are used to indicate different tensile strengths but have no relevance to each other or actual measurements.



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HIGH TENSILE BOLTS & NUTS



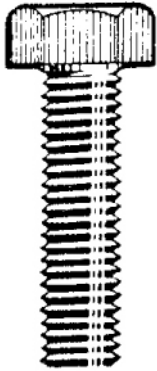
STANDARD BOLTS & NUTS

Grade: 5, 8 (UNF, UNC – 1/2" dia to 1" dia only), Class 8.8 (metric)
 Available: Black, Zinc
 Threads: ISO Metric, UNC, UNF, BSF



HT BOLTS & NUTS METRIC FINE

Class: 8.8
 Available: Zinc
 Threads: M6 (x .75p), M8 (x 1.0p), M10 (x 1.25p), M12 (x 1.25 and 1.5p), M14 (1.5p and 2.0p), M16 (x 1.5p), M18 (x 1.5p and 2.5p), M20 (x 1.5p), M22 (1.5p and 2.5p), M24 (2.0p)



HT SET SCREWS

Grade: 5, Class 8.8 (metric)
 Available: Black, Zinc
 Threads: ISO Metric, UNC, UNF



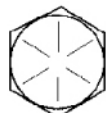
HIGH STRENGTH FRICTION GRIP BOLTS & NUTS

These bolts are used where loads are transmitted through the joined members by nature of the clamping force produced by the bolts, with the result that the bolts are subjected to tensile stresses only, whereas rivets in riveted joints are subjected at the same time to shear and bearing stresses.

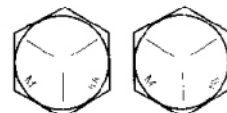
Available: Black, Galvanised
 Thread: Metric



U.N.F./U.N.C. SAE GRADE 5
(High Tensile)



U.N.F./U.N.C. SAE GRADE 8
(Higher Tensile)



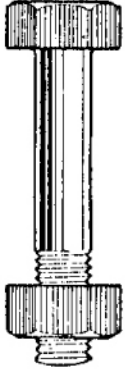
HIGH STRENGTH (METRIC)



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MILD STEEL BOLTS & NUTS



ENGINEERS BOLTS & NUTS

Class: 4.6

Available: Black, Zinc, Galvanised.

Thread: ISO Metric

Diameters: M6, M8, M10, M12, M16, M20, M24, M30



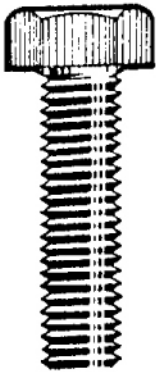
COACH (CARRIAGE) BOLTS & NUTS

Class: 4.6

Available: Black, Zinc, Galvanised

Thread: ISO Metric

Diameters: M6, M8, M10, M12, M16, M20, M24, M30



HEXAGON HEAD SET SCREWS

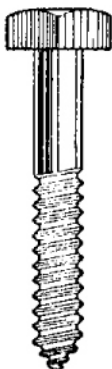
Class: 4.6

Available: Black, Zinc, Galvanised

Thread: ISO Metric, BSW

Diameters: M4, M5, M6, M8, M10, M12, M16

$\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$



HEXAGON HEAD COACH SCREWS

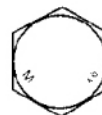
Class: 4.6

Available: Galvanised

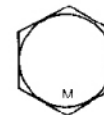
Diameters: M6, M8, M10, M12, M16, M20

BOLT IDENTIFICATION

(Head marking definitions on



METRIC CLASS 4.6
(Mild Steel)



METRIC CLASS 8.8
(High tensile)

