

High-Tensile and Stainless Steel Head Markings

Imperial					
Head Marking	Grade and Material	Nominal Size Range (inches)	Mechanical Properties		
			Proof Load (psi)	Min. Yield Strength (psi)	Min. Tensile Strength (psi)
No markings 	Grade 2 Low or medium Carbon Steel	1/4 through 3/4	55,000	57,000	74,000
		Over 3/4 through 1-1/2	33,000	36,000	60,000
3 radial lines 	Grade 5 Medium Carbon Steel, quenched and tempered	1/4 through 1	85,000	92,000	120,000
		Over 1 through 1-1/2	74,000	81,000	105,000
6 radial lines 	Grade 8 Medium Carbon Alloy quenched and tempered	1/4 through 1-1/2	120,000	130,000	150,000

Metric Bolts					
Head Marking	Class and Material	Nominal Size Range	Mechanical Properties		
			Proof Load (MPa)	Min. Yield Strength (MPa)	Min. Tensile Strength (MPa)
	Class 8.8 Medium Carbon Steel, quenched and tempered	All sizes below M16	580	640	800
		M16 - M72	600	660	830
	Class 10.9 Alloy Steel, quenched and tempered	M6 - M48	830	940	1040
	Class 12.9 Alloy Steel, quenched and tempered	M6 - M48	970	1100	1220
	Class 50 Austenitic Steel with 16-18.5% Chromium and 10-15% Nickel	M20 - M48	–	210	500
	Class 70 Austenitic Steel with 16-18.5% Chromium and 10-15% Nickel	M6 - M20	–	450	700
	Class 80 Austenitic Steel with 16-18.5% Chromium and 10-15% Nickel	M6 - M36	–	600	800