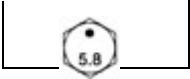


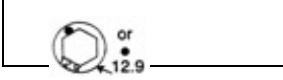
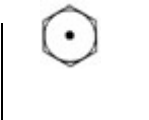





Product Range

Fastener Strength/Grade Markings - Metric Sizes							
Identification Grade Mark	Product Spec.	Fastener Description	Nominal Size Range	Material	Tensile Strength Min. (Map)	Yield Strength Min. (MPa)	Proof Load (MPa)
	Class 5.8	bolts, screws, studs	M5 — M24	Low or medium carbon steel	520	420	380
					(75,900 psi)		
	Class 8.8	bolts, screws, studs	M16— M72	Medium carbon steel, quenched and tempered	830	660	600
					(120,000 psi)		
	Class 10.9	bolts, screws, studs	M5 — M100	Medium carbon alloy steel, quenched and tempered	1040	940	830
					(150,000 psi)		
	Class 12.9	bolts, screws, studs	M1.6— M100	Alloy steel, quenched and tempered	1220	1100	970
					(177,000 psi)		

Fastener Strength/Grade Markings - Inch Sizes

Identification GradeMark	Product Spec.	Fastener Descr.	Nominal Size Range (in.)	Material	Tensile Strength Min. (psi)	Yield Strength Min. (psi)	Proof Load (psi)
	Grade 2	bolts, screws, studs	1/4" through 3/4"	Low or medium carbon steel	74,000	57,000	55,000
	Grade 5	bolts, screws, studs	1/4" through 1"	Medium carbon steel, quenched and tempered	120,000	92,000	85,000
			1-1/8" through 1-1/2"		105,000	81,000	74,000
	Grade 8	bolts, screws, studs	1/4" through 1-1/2"	Medium carbon steel, quenched and tempered	150,000	130,000	120,000
	Socket	socket head cap screws	#0 through 1/2"	Alloy steel, quenched and tempered	180,000	162,000	140,000
	Screw		over 1/2" through 2"		170,000	153,000	135,000