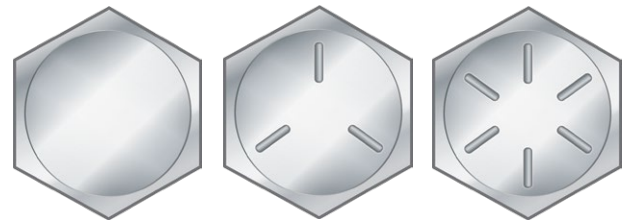






FASTENER SUPERSTORE FASTENER GUIDE

Bolt Grades & Head Markings

Many of our bolt styles are available in various grade and class options with each grade containing distinctive head markings. The following markings are the primary indicators used on our parts.





STANDARD PARTS

Grade of Material	Marking	Appearance	Nominal Size Range	Proof Load (PSI)	Yield Strength (Min. PSI)	Tensile Strength (Min. PSI)
Grade 2	No Marking		1/4" - 3/4"	55,000	57,000	74,000
			3/4" - 1 1/2"	33,000	36,000	60,000
Grade 5	3 Radial Lines		1/4" - 1"	85,000	92,000	120,000
			1" - 1 1/2"	74,000	81,000	105,000
Grade 8	6 Radial Lines		1/4" - 1 1/2"	120,000	130,000	150,000
18-8 & 316 Stainless	No Standard Marking		Up to 1"		45,000 minimum	85,000 minimum
A325 Structural Bolts	A325		1/2" - 1"	85,000	92,000	120,000
			1 1/8" - 1 1/2"	74,000	81,000	105,000

FASTENER SUPERSTORE **FASTENER GUIDE**

Bolt Grades & Head Markings *cont.*

METRIC PARTS

Class of Material	Marking	Appearance	Nominal Size Range	Proof Load (MPA)	Yield Strength (Min. MPA)	Tensile Strength (Min. MPA)
Class 8.8	8.8		<16mm	580	640	800
			16mm - 72 mm	600	660	830
Class 10.9	10.9		5mm - 100mm	830	940	1040

Proof Load - The amount of tensile (pull apart) stress that a bolt must be able to withstand without permanent deformation.

Yield Strength - The amount of tensile stress at which a specific permanent deformation will take place.

Tensile Strength - The maximum amount of tensile stress that can take place before a bolt breaks or fractures.

Fastener SuperStore carries these grade options in the following standard categories:

Grade 2	Grade 5	Grade 8	A325
Hex Cap Screws	Carriage Bolts	Carriage Bolts	Structural Bolts
	Hex Cap Screws	Hex Cap Screws	
	Hex Tap Bolts	Hex Flange / Frame Bolts	
	Plow Bolts	Hex Tap Bolts	
		Plow Bolts	

Fastener SuperStore carries these grade options in the following metric categories:

Class 8.8	Class 10.9
Hex Cap Screws	Hex Cap Screws
Hex Flange / Frame Bolts	Hex Flange / Frame Bolts

