

PRODUCT INFORMATION SHEET

CARRIAGE BOLT, INCH SERIES, GRADE A

Typical Material: Low Carbon Steel

Material and Mechanical Properties: Purchased to meet ASTM A307 Grade A.

Dimensions: ASME B18.5, Round Head Square Neck Bolt, Rolled Threads

Hot-Dip Galvanized: Purchased to meet ASTM A153 and/or ASTM F2329.

- Full thread to 6 inches in length.
- Undersize body and 6 inches of threads on lengths over 6 to 12 inches.
- 6 inches threads and full size body on lengths over 12 inches.

Zinc Plating: Purchased to meet ASTM F1941 FeZn3A

Hot-Dip Galvanized: Purchased to meet ASTM A153

Typical Hardness: HRB 69-100

Tensile Strength: 60,000 PSI Minimum



TENSILE STRENGTH - NC THREADS ASTM A307 GRADE A

Size	PSI	Pounds
1/4-20	60,000	1,900
5/16-18	60,000	3,100
3/8-16	60,000	4,650
7/16-14	60,000	6,350
1/2-13	60,000	8,500
9/16-12	60,000	11,000
5/8-11	60,000	13,550
3/4-10	60,000	20,050
7/8-9	60,000	27,700
1-8	60,000	36,350

LENGTH TOLERANCES - CARRIAGE BOLTS

Nominal Length	Nominal Size			
	#10 to 3/8	7/16 & 1/2	9/16 to 3/4	7/8 to 1
Tolerance on Length				
Up to & incl. 1"	+0.02/-0.03	+0.02/-0.03		
Over 1" to 2 1/2", incl.	+0.02/-0.04	+0.04/-0.05	+0.06/-0.08	+0.08/-0.10
Over 2 1/2" to 4", incl.	+0.04/-0.06	+0.06/-0.08	+0.08/-0.10	+0.10/-0.14
Over 4" to 6", incl.	+0.06/-0.10	+0.08/-0.10	+0.10/-0.10	+0.12/-0.16
Over 6"	+0.10/-0.18	+0.12/-0.18	+0.14/-0.18	+0.16/-0.20



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