



CARRIAGE BOLTS, FIN NECK

ASME B18.5-1990

Nominal Size or Basic Bolt Diameter	D		W		H		T		A		F		R		
	Body Diameter		Head Diameter		Head Height		Fin Thickness		Distance Across Fins		Fin Depth		Fillet Radius		
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
10	0.1900	0.199	0.182	0.469	0.438	0.114	0.094	0.098	0.078	0.395	0.375	0.088	0.076	0.031	0.015
1/4	0.2500	0.260	0.237	0.594	0.563	0.145	0.125	0.114	0.094	0.458	0.438	0.104	0.094	0.031	0.015
5/16	0.3125	0.324	0.298	0.719	0.688	0.176	0.156	0.145	0.125	0.551	0.531	0.135	0.125	0.031	0.015
3/8	0.3750	0.388	0.360	0.844	0.782	0.208	0.188	0.161	0.141	0.645	0.625	0.151	0.141	0.031	0.015
7/16	0.4375	0.452	0.421	0.969	0.907	0.239	0.219	0.192	0.172	0.739	0.719	0.182	0.172	0.031	0.015
1/2	0.5000	0.515	0.483	1.094	1.032	0.270	0.250	0.208	0.188	0.833	0.813	0.198	0.188	0.031	0.015

Tolerance on Length	Nominal Bolt Size	Nominal Screw Length									
		Up to 1 in., incl.		Over 1 in. to 2 1/2 in., incl.		Over 2 1/2 in. to 4 in., incl.		Over 4 in. to 6 in., incl.		Over 6 in.	
	#10 thru 3/8	+0.02	-0.03	+0.02	-0.04	+0.04	-0.06	+0.06	-0.10	+0.10	-0.18
7/16 and 1/2	+0.02	-0.03	+0.04	-0.05	+0.06	-0.08	+0.08	-0.10	+0.12	-0.18	

Description	A round head bolt with a flat bearing surface which intersects with the shank at a 90° angle. Where the bearing surface and shank meet are two fins, 180° opposite each other. The bolt is made from low carbon steel.
Applications/Advantages	Primarily used in thin plywood to keep the bolt from turning when nut is being tightened.
Material	Bolts shall be made from a carbon steel which conforms to the following chemical composition requirements-- <i>Carbon:</i> 0.55% maximum; <i>Phosphorus:</i> 0.060% maximum; <i>Sulfur:</i> 0.150% maximum
Hardness	Rockwell B69 - 100
Tensile Strength	60,000 psi. minimum
Yield Strength	36,000 psi. minimum
Elongation	18% minimum
Reduction of Area	35% minimum
Plating	See Appendix-A for plating information.