



### **ANSI B18.5 Round Bolt**

Leader-Fastener is a manufacturer and distributor of **ASME B18.5 Round Bolt**. We have a complete line of service from having invested in production plants, export department and to having a quality control team and center to meet your requirements. We regard quality as the life of the company. We persist in good quality as the first policy and have established a set of quality control and inspection system according to the international standard. We have carried out ISO9001 Quality Guarantee System in every course of production, transportation and selling. We do hope we could be your partner in business by topping quality, knight service and

competitive price in the near future and be your friends as well.

This Standard covers the complete general and dimensional data for the various types of inch series bolts generally classified as round head bolts and recognized as an American National Standard.

#### **The key types of bolts covered include:**

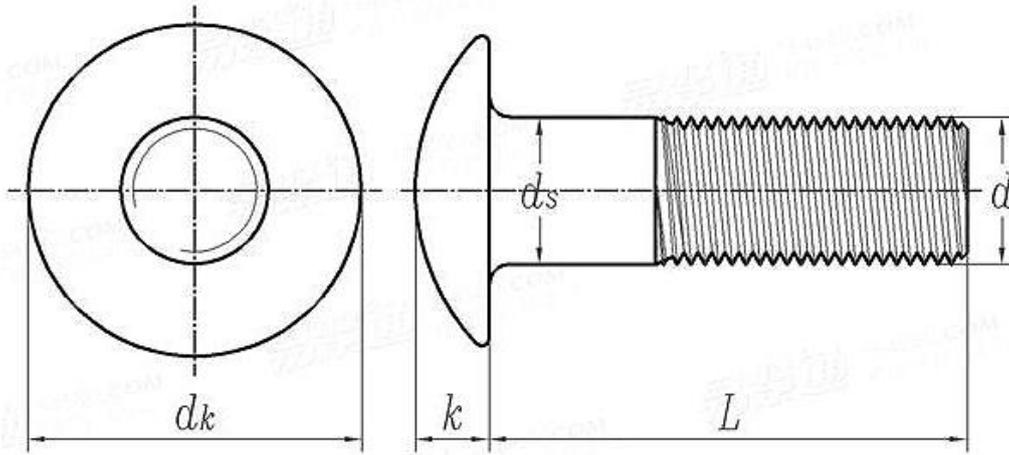
Round head bolts are frequently used in rail, heavy equipment, and agricultural applications. The bolts have a low profile head that does not interfere with many applications where a dramatic protrusion from a hex head or other style would. There are a variety of styles that include underhead features to hold the bolt in place while a nut is being tightened.

Step bolts are of similar design to a round head, square-necked bolt but with a much larger head size.

Elevator bolts are of similar design to the round head bolts but with a comparatively flat head frequently used in agricultural applications such as grain and other such elevators

**ASME B18.5-2012** requires the use of additional standards—published by ASTM, ASME, IFI, and SAE -- in reference to thread dimensions, materials, mechanical properties, and finishes.

**ANSI/ASME B 18.5 - 2012 Round head bolts,(Inch Series) [Table1] (A307, SAE J429, F468, F593)**



Thread Size	10#	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	
d	0.19	0.25	0.3125	0.375	0.4375	0.5	0.625	0.75	0.875	1	
PP	24	20	18	16	14	13	11	10	9	8	
$d_s$	max	0.199	0.260	0.324	0.388	0.452	0.515	0.642	0.768	0.895	1.022
	min	0.182	0.237	0.298	0.360	0.421	0.483	0.605	0.729	0.852	0.976
$d_k$	max	0.469	0.594	0.719	0.844	0.969	1.094	1.344	1.594	1.844	2.094
	min	0.438	0.563	0.688	0.782	0.907	1.032	1.219	1.469	1.719	1.969
k	max	0.114	0.145	0.176	0.208	0.239	0.270	0.344	0.406	0.469	0.531
	min	0.094	0.125	0.156	0.188	0.219	0.250	0.313	0.375	0.438	0.500

**Minimum Thread Length:**

The minimum length of thread shall be equal to twice the basic bolt diameter plus 0.25 in. for nominal bolt lengths of 6 in. or shorter, and twice the basic bolt diameter plus 0.50 in. for longer nominal lengths.

Bolts of nominal lengths too short to accommodate the minimum thread lengths shall be threaded full length.

The length from the head or neck to the first complete (full form) thread shall not exceed the length of 2-1/2 threads for sizes up to and including 1 in., and 3-1/2 threads for sizes over 1 in.