



### ASME B18.5.2.3M Round Bolt

Leader-Fastener is a manufacturer and distributor of **ASME B18.5.2.3M 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.

**SME B18.5** is a standard developed through the procedures of The American Society of Mechanical Engineers. B18.5 is under the jurisdiction of **ASME Standards Committee B18** and is the direct responsibility of its Subcommittee 2.

This standard covers the complete general and dimensional data for the various type of inch series bolts generally classified as round head bolts and recognized as American National Standard. Also included is an appendix covering gages and gaging for checking bolt straightness.

The inclusion of dimensional data in this standard is not intended to imply that all of the products described are stock production sizes. Consumers should consult with manufacturers concerning availability of products.

**Round Head Bolt (Formerly Designated Button Head Bolt).** The round head bolt shall have a circular head with a low rounded top surface and a flat bearing surface.

**Round Head Square Neck Bolt (Formerly Designated Round Head Carriage Bolt).** The round head square neck bolt shall have a circular head with a low rounded top surface and flat bearing surface, and an integrally formed square neck under the head.

**Round Head Short Square Neck Bolt.** The round head short square neck bolt shall have a circular head with a low rounded top surface and flat bearing surface, and an integrally formed short length square neck under the head.

**Round Head Ribbed Neck Bolt (Formerly Designated Ribbed Neck Carriage Bolt).** The round head ribbed neck bolt shall have a circular head with a low rounded top surface and flat bearing surface, and a ribbed or splined neck formed on the shank below the head.

**Round Head Fin Neck Bolt (Formerly Designated Fin Neck Carriage Bolt).** The round head fin neck bolt shall have a circular head with a low rounded top surface and flat bearing surface, and two diametrically opposite integrally formed fins at the junction of head with shank.

**Step Bolt.** The step bolt shall have a large circular head with a low rounded top surface and flat bearing surface, and an integrally formed square neck under the head.

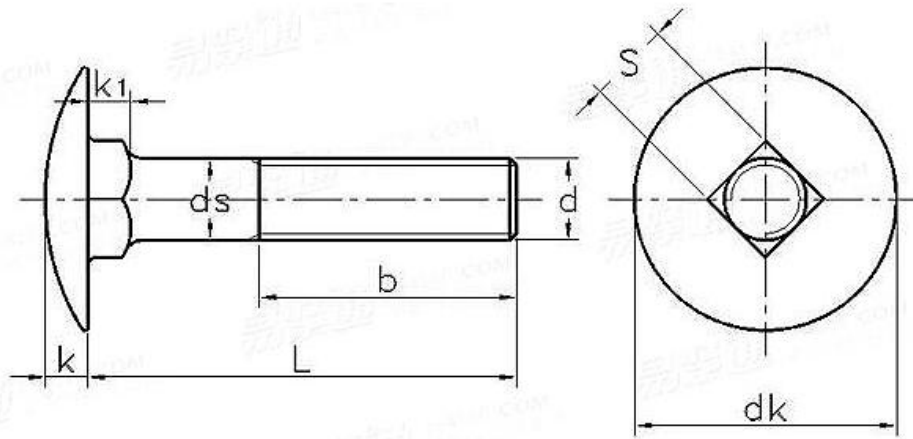
**Countersunk Bolt.** The countersunk bolt shall have a circular head with a flat top surface and a conical bearing surface having a head angle of approximately 80 deg. Countersunk bolts are available with and without a slot in the head, as specified by the purchaser.

Deg Countersunk Square Neck Bolt (Formerly Designated Countersunk Carriage Bolt). The 114 deg countersunk square neck bolt shall have a circular head with a flattop surface and a conical bearing surface having a head angle of approximately 114 deg, and an integrally formed square neck under the head.

Flat Countersunk Head Elevator Bolt. The flat countersunk head elevator bolt shall have a large circular head with a flat top surface and a shallow conical bearing surface, and an integrally formed square neck under the head.

T-Head Bolt. The T-head bolt shall have a rectangular head with a rounded top surface and a flat bearing surface.

### ANSI/ASME B 18.5.2.3M - 1998 Metric round head square neck bolts with large head



Screw Thread		M5	M6	M8	M10	M12	M16	M20
d								
P	Pitch	0.8	1	1.25	1.5	1.75	2	2.5
b	L ≤ 125	16	18	22	26	30	38	46
	125 < L ≤ 200	22	24	28	32	36	44	52
	200 < L	35	37	41	45	49	57	65
dk	max	13	16	20	24	30	38	46
	min	11.9	14.9	18.7	22.7	28.7	36.4	44.4
k <sub>1</sub>	max	4.1	4.6	5.6	6.6	8.8	12.9	15.9
	min	2.9	3.4	4.4	5.4	7.2	11.1	14.1
k	max	3.1	3.6	4.8	5.8	6.8	8.9	10.9
	min	2.5	3	4	5	6	8	10
s	max	5.48	6.48	8.58	10.58	12.7	16.7	20.84
	min	4.52	5.52	7.42	9.42	11.3	15.3	19.16
d <sub>s</sub>	max	5.48	6.48	8.58	10.58	12.7	16.7	20.84
	min	4.36	5.21	7.04	8.86	10.68	14.5	18.16