METRIC SOCKET BUTTON HEAD CAP SCREWS

Dimensions

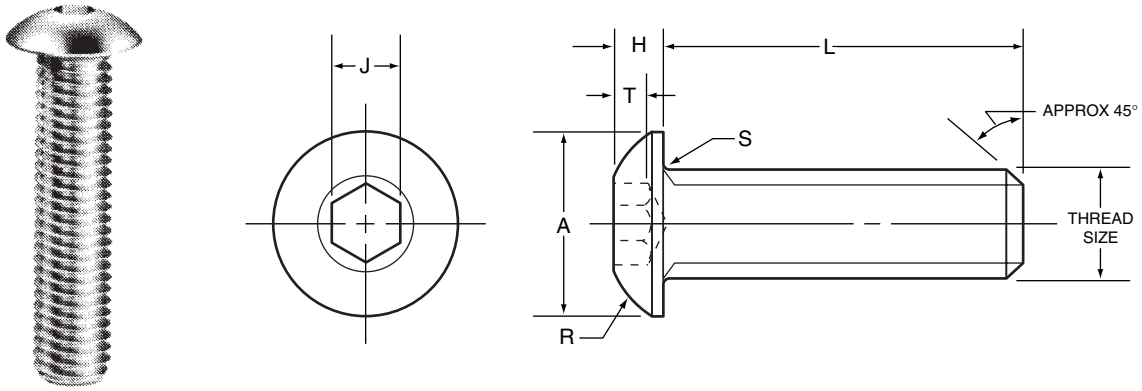
Threads: ANSI B1.13M, ISO 262(coarse series only)

Similar Specifications: ISO 7380

General Note: Flat, countersunk head cap screws and button head cap screws are designed and recommended for moderate fastening applications: machine guards, hinges, covers, etc. They are not suggested for use in critical high strength applications where socket head cap screws should be used.

NOTES

1. **Material:** ASTM F835M
2. **Dimensions:** ANSI B18.3.4M
3. **Property Class:** 12.9
4. **Hardness:** Rc 38-43
5. **Tensile Stress:** 1040 MPa
6. **Shear Stress:** 630 MPa
7. **Yield Stress:** 945 MPa
8. Bearing surface of head square with body within 2°.
9. **Thread Class:** 5g 6g



LENGTH TOLERANCE

nominal screw length	nominal screw diameter M3 thru M16 tolerance on lgth., mm
Up to 16 mm, incl.	±0.3
Over 16 to 60 mm, incl.	±0.5
Over 60 mm	±0.8

DIMENSIONS

APPLICATION DATA

nom. thread size	pitch	A max.	H max.	T min.	R ref.	S ref.	J nom.	recommended seating torque** plain N-m	recommended seating torque** plain in-lbs.
M3	0.5	5.70	1.65	1.05	2.95	.35	2.0	1.2	11
M4	0.7	7.60	2.20	1.35	4.10	.35	2.5	2.8	25
M5	0.8	9.50	2.75	1.92	5.20	.45	3.0	5.5	50
M6	1.0	10.50	3.30	2.08	5.60	.45	4.0	9.5	85
M8	1.285	14.00	4.40	2.75	7.50	.45	5.0	24.0	210
M10	1.50	18.00	5.50	3.35	10.00	.60	6.0	47.0	415
M12	1.75	21.00	6.60	4.16	11.00	.60	8.0	82.0	725
*M16	2.0	28.00	8.60	5.20	15.00	.60	10.0	205.0	1800

All dimensions in millimeters.
*Non-stock Diameter
**Torque calculated to induce 420 MPa in the screw threads.
Torque values are for plain screws. (See Note, page 1.)