

METRIC SOCKET FLAT HEAD CAP SCREWS

Viewmold provides high quality injection mold tooling

Dimensions

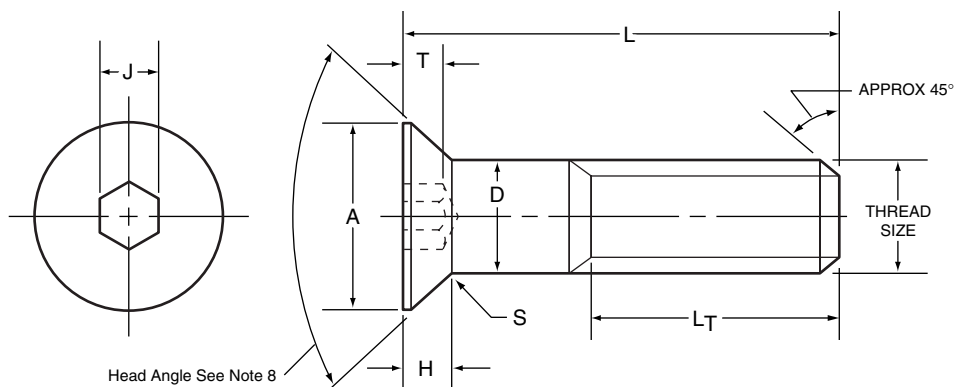
Threads: ANSI B1.13M, ISO 262 (coarse series only)

Applicable or Similar Specification: DIN ENISO10642

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:** B18.3.5M
- 3. Property Class:** 12.9
- 4. Hardness:** Rc 38-43 (alloy steel)
- 5. Tensile Stress:** 1040MPa
- 6. Shear Stress:** 630 MPa
- 7. Yield Stress:** 945 MPa
- 8. Sizes:** For sizes up to and including M20, head angle shall be 92°/90°. For larger sizes head angle shall be 62°/60°.
- 9. Thread Class:** 4g 6g



LENGTH TOLERANCE

| nominal screw length | nominal screw diameter | |
|-------------------------|------------------------|--|
| | M3 thru M24 | |
| | 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.*** | D max. | H ref. | T min. | S ref. | L _T min. | J nom. | recommended seating torque** | |
|------------------|-------|--------------|-----------|-----------|-----------|-----------|------------------------|-----------|------------------------------|---------|
| | | | | | | | | | plain | |
| | | | | | | | | | N-m | in-lbs. |
| M3 | 0.5 | 6.72 | 3 | 1.7 | 1.10 | 0.50 | 18 | 2 | 1.2 | 11 |
| M4 | 0.7 | 8.96 | 4 | 2.3 | 1.55 | 0.70 | 20 | 2.5 | 2.8 | 25 |
| M5 | 0.8 | 11.20 | 5 | 2.8 | 2.05 | 0.70 | 22 | 3 | 5.5 | 50 |
| M6 | 1.0 | 13.44 | 6 | 3.3 | 2.25 | 0.85 | 24 | 4 | 9.5 | 85 |
| M8 | 1.25 | 17.92 | 8 | 4.4 | 3.20 | 1.20 | 28 | 5 | 24 | 210 |
| M10 | 1.50 | 22.40 | 10 | 5.5 | 3.80 | 1.50 | 32 | 6 | 47 | 415 |
| M12 | 1.75 | 26.88 | 12 | 6.5 | 4.35 | 1.85 | 36 | 8 | 82 | 725 |
| M16 | 2.00 | 33.60 | 16 | 7.5 | 4.89 | 1.85 | 44 | 10 | 205 | 1800 |
| M20 | 2.50 | 40.32 | 20 | 8.5 | 5.45 | 1.85 | 52 | 12 | 400 | 3550 |
| *M24 | 3.00 | 40.42 | 24 | 14.0 | 10.15 | 2.20 | 60 | 14 | 640 | 5650 |

All dimensions in millimeters.

***Maximum to theoretical sharp corner

*Non-stock Diameter

**Torque calculated to induce 420 MPa in the screw threads.

Torque values are for plain screws. (See Note, page 1.)