

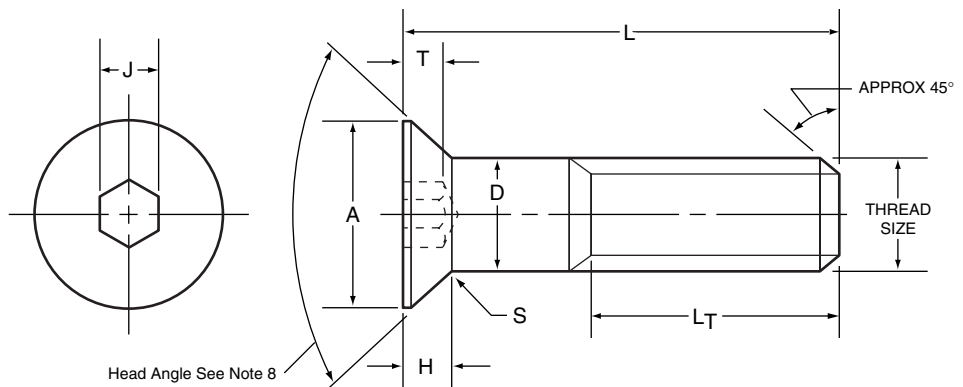
# METRIC SOCKET FLAT HEAD CAP SCREWS

## 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.	LT 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.)