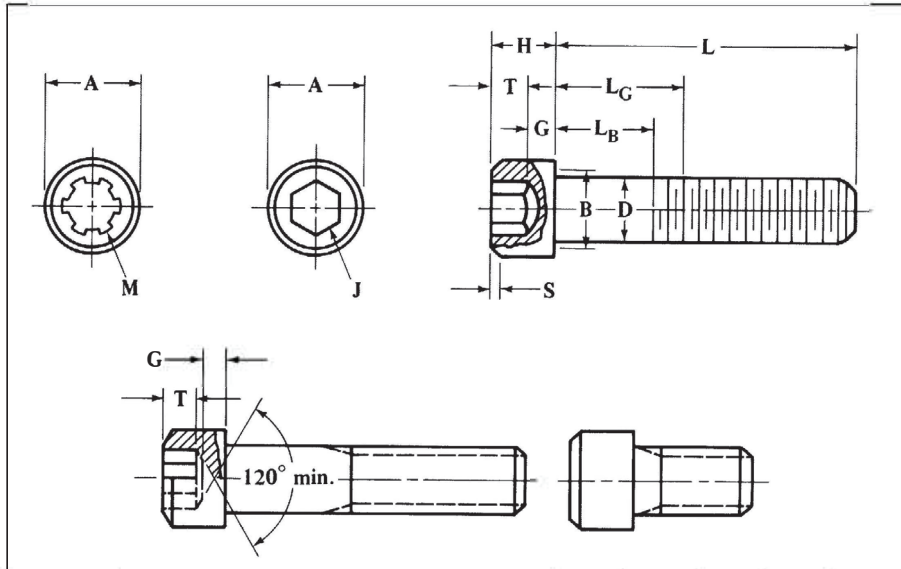


METRIC SCREWS AND BOLTS

Table 23. American National Standard Socket Head Cap Screws—Metric Series
ANSI/ASME B18.3.1M-1986



Nom. Size and Thread Pitch	Body Diameter <i>D</i>		Head Diameter <i>A</i>		Head Height <i>H</i>		Chamfer or Radius <i>S</i>	Hexagon Socket Size ^a <i>J</i>	Spline Socket Size ^a <i>M</i>	Key Engagement <i>T</i>	Transition Dia. <i>B</i> ^a
	Max	Min	Max	Min	Max	Min	Max	Nom.	Nom.	Min	Max
M1.6 × 0.35	1.60	1.46	3.00	2.87	1.60	1.52	0.16	1.5	1.829	0.80	2.0
M2 × 0.4	2.00	1.86	3.80	3.65	2.00	1.91	0.20	1.5	1.829	1.00	2.6
M2.5 × 0.45	2.50	2.36	4.50	4.33	2.50	2.40	0.25	2.0	2.438	1.25	3.1
M3 × 0.5	3.00	2.86	5.50	5.32	3.00	2.89	0.30	2.5	2.819	1.50	3.6
M4 × 0.7	4.00	3.82	7.00	6.80	4.00	3.88	0.40	3.0	3.378	2.00	4.7
M5 × 0.8	5.00	4.82	8.50	8.27	5.00	4.86	0.50	4.0	4.648	2.50	5.7
M6 × 1	6.00	5.82	10.00	9.74	6.00	5.85	0.60	5.0	5.486	3.00	6.8
M8 × 1.25	8.00	7.78	13.00	12.70	8.00	7.83	0.80	6.0	7.391	4.00	9.2
M10 × 1.5	10.00	9.78	16.00	15.67	10.00	9.81	1.00	8.0	...	5.00	11.2
M12 × 1.75	12.00	11.73	18.00	17.63	12.00	11.79	1.20	10.0	...	6.00	14.2
M14 × 2 ^b	14.00	13.73	21.00	20.60	14.00	13.77	1.40	12.0	...	7.00	16.2
M16 × 2	16.00	15.73	24.00	23.58	16.00	15.76	1.60	14.0	...	8.00	18.2
M20 × 2.5	20.00	19.67	30.00	29.53	20.00	19.73	2.00	17.0	...	10.00	22.4
M24 × 3	24.00	23.67	36.00	35.48	24.00	23.70	2.40	19.0	...	12.00	26.4
M30 × 3.5	30.00	29.67	45.00	44.42	30.00	29.67	3.00	22.0	...	15.00	33.4
M36 × 4	36.00	35.61	54.00	53.37	36.00	35.64	3.60	27.0	...	18.00	39.4
M42 × 4.5	42.00	41.61	63.00	62.31	42.00	41.61	4.20	32.0	...	21.00	45.6
M48 × 5	48.00	47.61	72.00	71.27	48.00	47.58	4.80	36.0	...	24.00	52.6

^a See also Table 25.

^b The M14 × 2 size is not recommended for use in new designs.

All dimensions are in millimeters

L_G is grip length and *L_B* is body length (see Table 14).

For length of complete thread, see Table 14.

For additional manufacturing and acceptance specifications, see ANSI/ASME B18.3.1M-1986.