

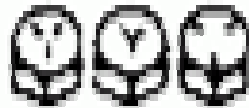
Standard SAE Bolt Dimensions and Grades



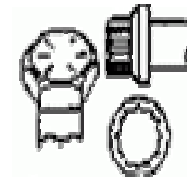
U.S. Customary (5/16 X 18 X 1-1/2)

	5/16	18	1-1/2
Major thread diameter in inches			
Number of threads per inch			
length in inches			
SAE Grade Number	5	8	

Capscrew Head Markings
These are all SAE Grade 5 (3line)



Grade 5 Capscrew



Grade 8 Capscrew

Bolt Assembly Torque (ft-lb) [N•m Chart]
The torque values in the table are based on the use of lubricated threads.
Rosca Estándar

Size	Grade 2 Iron	Grade 5 Iron	Grade 8 Iron	Aluminum
1/4-20 (NC)	6	7	11	6
5/16-18 (NC)	18	15	22	12
3/8-16 (NC)		30	40	20
7/16-14 (NC)	32	45	65	35
1/2-13 (NC)	50	70	95	55
9/16-12 (NC)	70	100	140	80
5/8-11 (NC)	100	135	190	110
3/4-10 (NC)	175	240	340	190
7/8-9 (NC)		360	550	280
1-8 (NC)		530	820	420

Bolt Assembly Torque (ft-lb) [N•m Chart]
The torque values in the table are based on the use of lubricated threads.
Rosca Fina

Size	Grade 2 Iron	Grade 5 Iron	Grade 8 Iron	Aluminum
1/4-28 (NF)	6	9	13	7
5/16-24 (NF)	12	17	24	14
3/8-24 (NF)		30	45	25
7/16-20 (NF)	36	50	70	40
1/2-20 (NF)	55	75	110	60
9/16-18 (NF)	80	110	155	85
5/8-18 (NF)	110	155	215	120
3/4-16 (NF)	200	270	380	210
7/8-14 (NF)		390	610	310
1-14 (NF)		590	890	480