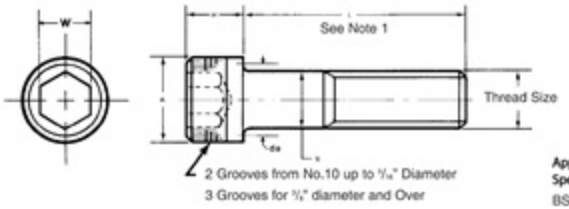
SOCKET HEAD CAP SCREWS - UNC and UNF Threads



Thread size	Threads Per Inch		A	B	da	H	W	Max Tightening Torques lbf.In.				Induced Load lbf.	
								UNPLATED		PLATED			
	UNC	UNF	Max.	Max.	Max	Max.	Nom.	UNC	UNF	UNC	UNF	UNC	UNF
No. 4	40	48	0.183	0.1120	0.1300	0.112	5/64	13.2	14.5	9.9	10.9	640	720
No. 5	40	44	0.205	0.1250	0.1450	0.125	3/32	19.6	20.5	14.7	15.4	860	920
No. 6	32	40	0.226	0.1380	0.1580	0.138	3/32	24.5	27.6	18.4	20.7	960	1120
No. 8	32	36	0.270	0.1640	0.1880	0.164	1/8	45.5	48.0	34.1	36.0	1540	1640
No. 10	24	32	0.312	0.1900	0.2180	0.190	5/32	65.4	75.5	49.1	56.6	1880	2240
No. 12	24	28	0.343	0.2160	0.2440	0.216	5/32	102.0	109.0	76.5	81.8	2650	2890
1/4	20	28	0.375	0.2500	0.2780	0.250	1/16	153	176.0	115.0	132.0	3470	4150
								lbf.In.					
5/16	18	24	0.437	0.3125	0.3469	0.312	7/32	26.3	29.3	19.7	22.0	5830	6680
3/8	16	24	0.562	0.3750	0.4150	0.375	5/16	46.8	53.2	35.1	39.9	8700	10300
7/16	14	20	0.625	0	0.4839	0.437	5/16	75.0	84.0	56.3	63.0	12000	13900
1/2	13	20	0.750	4375	0.5520	0.500	3/8	115.0	129.0	86.3	96.8	16100	18800
9/16	12	18	0.812	24.00	0.6229	0.562	3/8	165.0	185.0	124.0	139.0	20800	23900
5/8	11	18	0.875	27.00	0.6890	0.625	1/2	228.0	258.0	171.0	194.0	25800	30400
3/4	10	16	1.000	30.00	0.8280	0.750	9/16	363.0	405.0	273.0	304.0	34600	39900

ALL DIMENSIONS IN INCHES.

MECHANICAL PROPERTIES

Material	High Grade Alloy Steel	
Heat Treatment	Rc 39-43	
Screw Size	≤0.500	>0.500
Tensile Strength	190,000 lbf/in²	180,000 lbf/in²
Yield Strength	170,000 lbf/in²	162,000 lbf/in²
Shear Strength	114,000 lbf/in²	108,000 lbf/in²
Min. Elongation	9%	9%

NOTES:

1. For body and thread lengths see pages 16 & 17.
2. **Thread Class:** 2A or 3A
3. **da:** Transition Diameter
4. **Working Temperature:** -50°C +300°C
5. Torques calculated in accordance with VDI 2230 "Systematic calculation of high duty bolted joints" with σ 0.2 = 155 K.S.I. and μ = 0.125 for plain finish and μ = 0.094 for plated. Above 0.625" dia. σ 0.2 = 140 K.S.I.