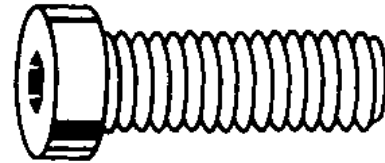


SOCKET CAP SCREWS



Nominal Size	Basic Screw Diameter	Head Diameter		Head Height		Hex Socket Size	Key Engagement	Fillet		Tensile Strength Pounds Min.		Tightening Torque Inch Pounds
		Max	Min	Max	Min		Min	Max	Min	UNRC	UNRF	
8	0.1640	.270	.265	.082	.079	.0781	.060	.012	.007	2,310	2,440	19.4
10	0.1900	.312	.307	.095	.092	.0938	.072	.014	.009	2,890	3,300	33.5
1/4	0.2500	.375	.369	.125	.121	.1250	.094	.014	.009	5,250	6,000	77:9
5/16	0.3125	.437	.431	.156	.152	.1562	.120	.017	.012	8,650	9,550	156.0
3/8	0.3750	.562	.556	.187	.182	.1875	.145	.020	.015	12,800	14,450	273.0
1/2	0.5000	.750	.743	.250	.244	.2500	.184	.026	.020	23,400	26,350	615.0
Tolerance on Length		Nominal Screw Size				Nominal Screw Length						
						0 thru 3/8				Up to 1 in., Incl.		
						-0.03			0.04			
		1/2				-0.03			-0.06			

Description	Similar to a standard alloy socket cap screw except the head height is 50% of the standards and the socket size is smaller. The low-head style is supplied only in plain steel.
Applications/Advantages	Used in applications where the limited clearance would not accommodate the head height of a standard socket cap screw. Also used in counterbore holes of material too thin for a regular socket cap screw. However, because of their design, they cannot withstand the same preloads as a standard socket head.
Material	Cap screws shall be made from an alloy steel which conforms to the following chemical composition requirements (per product analysis)-- <i>Carbon</i> : 0.31% minimum; <i>Phosphorus</i> : 0.040% maximum; <i>Sulfur</i> : 0.045% maximum. Also, one or more of the following elements shall be present in sufficient quantity to meet the performance requirements listed below: chromium, nickel, molybdenum or vanadium.
Heat Treatment	Cap screws shall be heat treated by oil quenching from above the transformation temperature and then tempered at a temperature not lower than 650°F.
Hardness	Rockwell C38 minimum
Tensile Strength	170,000 psi. minimum
Yield Strength	150,000 psi. minimum
Elongation	10% minimum (applies to machined specimens of length at least 4D where D equals the nominal diameter of the specimen)
Reduction of Area	33% minimum (applies to machined specimens)