

SOCKET FLAT COUNTERSUNK HEAD CAP SCREWS

ANSI/ASME
B18.3
1986

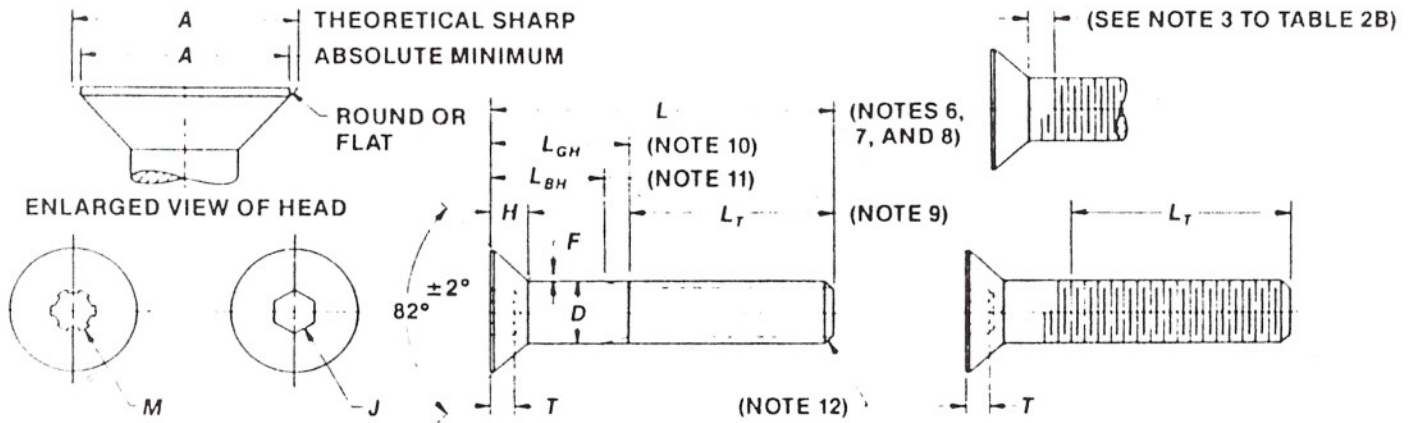


Table 2A Dimensions of Hexagon and Spline Socket Flat Countersunk Head Cap Screws

Nominal Size or Basic Screw Diameter	D		A		H		M	J	T	F				
	Body Diameter		Head Diameter		Head Height									
	Max	Min	Theoretical Sharp Max	Abs Min	Reference	Flushness Tolerance								
											Nom	Min	Max	
0	0.0600	0.0600	0.0568	0.138	0.117	0.044	0.006	0.048	0.035	0.025	0.006			
1	0.0730	0.0730	0.0695	0.168	0.143	0.054	0.007	0.060	0.050	0.031	0.008			
2	0.0860	0.0860	0.0822	0.197	0.168	0.064	0.008	0.060	0.050	0.038	0.010			
3	0.0990	0.0990	0.0949	0.226	0.193	0.073	0.010	0.072	1/16	0.062	0.044	0.010		
4	0.1120	0.1120	0.1075	0.255	0.218	0.083	0.011	0.072	1/16	0.062	0.055	0.012		
5	0.1250	0.1250	0.1202	0.281	0.240	0.090	0.012	0.096	5/64	0.078	0.061	0.014		
6	0.1380	0.1380	0.1329	0.307	0.263	0.097	0.013	0.096	5/64	0.078	0.066	0.015		
8	0.1640	0.1640	0.1585	0.359	0.311	0.112	0.014	0.111	3/32	0.094	0.076	0.015		
10	0.1900	0.1900	0.1840	0.411	0.359	0.127	0.015	0.145	1/8	0.125	0.087	0.015		
1/4	0.2500	0.2500	0.2435	0.531	0.480	0.161	0.016	0.183	5/32	0.156	0.111	0.015		
5/16	0.3125	0.3125	0.3053	0.656	0.600	0.198	0.017	0.216	3/16	0.188	0.135	0.015		
3/8	0.3750	0.3750	0.3678	0.781	0.720	0.234	0.018	0.251	7/32	0.219	0.159	0.015		
7/16	0.4375	0.4375	0.4294	0.844	0.781	0.234	0.018	0.291	1/4	0.250	0.159	0.015		
1/2	0.5000	0.5000	0.4919	0.938	0.872	0.251	0.018	0.372	5/16	0.312	0.172	0.015		
5/8	0.6250	0.6250	0.6163	1.188	1.112	0.324	0.022	0.454	3/8	0.375	0.220	0.015		
3/4	0.7500	0.7500	0.7406	1.438	1.355	0.396	0.024	0.454	1/2	0.500	0.220	0.015		
7/8	0.8750	0.8750	0.8647	1.688	1.604	0.468	0.025	...	9/16	0.562	0.248	0.015		
1	1.0000	1.0000	0.9886	1.938	1.841	0.540	0.028	...	5/8	0.625	0.297	0.015		
1 1/8	1.1250	1.1250	1.1086	2.188	2.079	0.611	0.031	...	3/4	0.750	0.325	0.031		
1 1/4	1.2500	1.2500	1.2336	2.438	2.316	0.683	0.035	...	7/8	0.875	0.358	0.031		
1 3/8	1.3750	1.3750	1.3568	2.688	2.553	0.755	0.038	...	7/8	0.875	0.402	0.031		
1 1/2	1.5000	1.5000	1.4818	2.938	2.791	0.827	0.042	...	1	1.000	0.435	0.031		
See Notes 1, 21	2		3		4		5		19		20		13	

NOTES:

1. Nominal Size. Where specifying nominal size in decimals, zeros preceding decimal and in the fourth decimal place shall be omitted.
2. Body. The term *body* refers to the unthreaded cylindrical portion of the shank for those screws not threaded to the head.

3. Head Diameters. Maximum sharp values under column A are theoretical values only, as it is not practical to make the edges of the head sharp. The maximum sharp value represents the exact diameter of a hole countersunk to exactly 82 deg. in which a screw having maximum head size will fit flush.
4. Head Height. Tabulated values for head height are