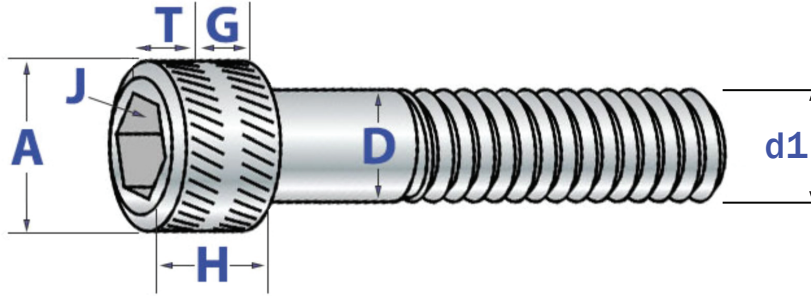


PRODUCT DATA SHEET

Hexagon Socket Head Cap Screws (1960 Series)

1.0 Dimensions: ASME B18.3



Nominal Size or Basic Product Diameter d1	D		A		H		J	T	G
	Body Diameter		Head Diameter		Head Height		Key Size	Key Engagement	Wall Thickness
	Max	Min	Max	Min	Max	Min	Nom	Min	Min
# 0	0.0600	0.0568	0.096	0.091	0.060	0.057	0.050	0.025	0.020
# 1	0.0730	0.0695	0.118	0.112	0.073	0.070	1/16	0.031	0.025
# 2	0.0860	0.0822	0.140	0.134	0.086	0.083	5/64	0.038	0.029
# 3	0.0990	0.0949	0.161	0.154	0.099	0.095	5/64	0.044	0.034
# 4	0.1120	0.1075	0.183	0.176	0.112	0.108	3/32	0.051	0.038
# 5	0.1250	0.1202	0.205	0.198	0.125	0.121	3/32	0.057	0.043
# 6	0.1380	0.1329	0.226	0.216	0.138	0.134	7/64	0.064	0.047
# 8	0.1640	0.1585	0.270	0.257	0.164	0.159	9/64	0.077	0.056
# 10	0.1900	0.1840	0.312	0.298	0.190	0.185	5/32	0.090	0.065
1/4	0.2500	0.2435	0.375	0.354	0.250	0.244	3/16	0.120	0.095
5/16	0.3125	0.3053	0.469	0.446	0.312	0.306	1/4	0.151	0.119
3/8	0.3750	0.3678	0.562	0.540	0.375	0.368	5/16	0.182	0.143
7/16	0.4375	0.4294	0.656	0.631	0.438	0.430	3/8	0.213	0.166
1/2	0.5000	0.4919	0.750	0.725	0.500	0.492	3/8	0.245	0.190
5/8	0.6250	0.6163	0.938	0.914	0.625	0.616	1/2	0.307	0.238
3/4	0.7500	0.7406	1.125	1.094	0.750	0.740	5/8	0.370	0.285
7/8	0.8750	0.8647	1.312	1.291	0.875	0.864	3/4	0.432	0.333
1	1.0000	0.9886	1.500	1.476	1.000	0.988	3/4	0.495	0.380
1-1/8	1.1250	1.1086	1.688	1.665	1.125	1.111	7/8	0.557	0.428
1-1/4	1.2500	1.2336	1.875	1.852	1.250	1.236	7/8	0.620	0.475
1-3/8	1.3750	1.3568	2.062	2.038	1.375	1.360	1	0.682	0.523
1-1/2	1.5000	1.4818	2.250	2.224	1.500	1.485	1	0.745	0.570
1-3/4	1.7500	1.7295	2.625	2.597	1.750	1.734	1-1/4	0.870	0.665
2	2.0000	1.9780	3.000	2.970	2.000	1.983	1-1/2	0.995	0.760
2-1/4	2.2500	2.2280	3.375	3.344	2.250	2.232	1-3/4	1.120	0.855
2-1/2	2.5000	2.4762	3.750	3.717	2.500	2.481	1-3/4	1.245	0.950

Notes: Thread Class of Fit: Sizes up to 1 inch: 3A. Above 1 inch: 2A. Zinc plated screws above 1 inch must meet 3A GO & 2A NO GO thread ring gage condition.

PRODUCT DATA SHEET

Hexagon Socket Head Cap Screws (1960 Series)

2.0 Mechanical Properties (For Full Size Screw Testing):

2.1 Steel - ASTM A574

Nominal Size	Tensile Strength Minimum	Proof Load	Rockwell Hardness
Less than 1/2 inch	180,000 PSI	140,000 PSI	HRC 39 - 44
Greater than 1/2 inch	170,000 PSI	135,000 PSI	HRC 37 - 44

Notes: The screws will only have manufacturer's marking on the head.

2.1 Stainless Steel - ASTM F837

Classification		Condition	Tensile Strength Minimum PSI	Hardness Minimum HRA	Grade Marking
Type	Nominal Size				
304 (18-8)	0 - 3/4	CW	80,000	50	F837B
		CW1	102,000	59	F837C
316	0 - 3/4	CW	80,000	50	F837E
		CW1	102,000	59	F837F

Notes: The screws will also have manufacturer's marking on the head, in addition to the grade marking as mentioned in the table. Screws will be passivated.

3.0 Surface Finish: Thermal Black Oxide / Zinc. Zinc & Mechanical zinc details given in the table below.

Properties	Zinc	Mechanical Zinc
Type	Trivalent (Cr + 3)	Trivalent (Cr + 3)
Color	Clear	Clear
Minimum Coating Thickness	0.0001" / 3 Microns	0.0003" / 8 Microns
Specification	ASTM F1941 / F1941M. Fe/Zn 3AN	ASTM B695. Class 8. Type II.