

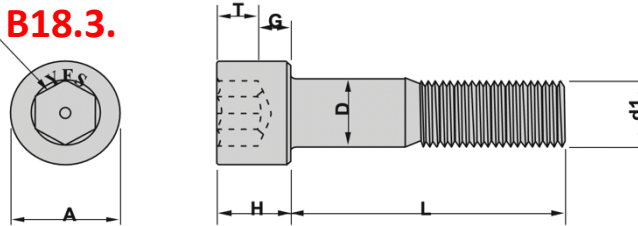


## PRODUCT DATA SHEET

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# Hexagon Socket Head Cap Screws (1960 Series) - Inch 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.

Disclaimer: The above is a compilation of data, from various industry standards. BBI has taken every effort to present the data accurately. However BBI cannot be held liable for any claim traceable to any errors typographical or otherwise contained herein.



## P R O D U C T D A T A S H E E T

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## 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 to 3/4	CW	80,000	50	F837B
		CW1	102,000	59	F837C
316	0 to 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 table below.

Properties	Zinc Clear	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.