

SOCKET HEAD CAP SCREW
UNF



PLAIN

APPLICATION

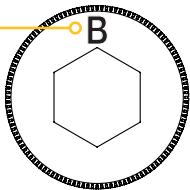
Bremick® Socket head cap screws are used in a variety of applications. They provide strong clamping force and can be used in applications with limited space

PRODUCT ATTRIBUTES

Material Class:	Alloy Steel ASTM A574
Thread Form:	Class 3A UNRF $\leq 1"$ Class 2A UNRF $1" < x \leq 1\text{-}1/2"$
Finish:	Plain/Black/Natural
Standard:	Complies to ASME B18.3:2012
Mechanical Properties:	Complies to ASTM A574:2021
Chemical Composition:	Complies to ASTM A574:2021

HEAD MARKING

Manufacturer Mark



In some cases, the Bremick head mark will be replaced by the mark of the original manufacturer

MECHANICAL PROPERTIES (Full-Size Tests)

NOMINAL DIAMETER (inches)	TENSILE STRENGTH (ksi)	PROOF LOAD (ksi)	HARDNESS	
			ROCKWELL (HRC)	
			MIN	MAX
$\leq 0.5"$	180	140	39	44
$0.5" < X < 1.0"$	170	135	37	44
$\geq 1.0"$	170	135	37	44

CHEMICAL COMPOSITION (%)

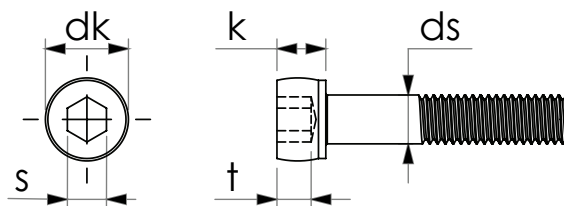
ANALYSIS	C	P	S
	MIN	MAX	MAX
HEAT	0.33	0.035	0.040
PRODUCT	0.31	0.040	0.045

FINISH INFORMATION

PLAIN / BLACK / NATURAL

DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
Plain, Black & Natural are all terms referring to the fastener not having a coating applied. The product has a light oil added.	Plain or uncoated fasteners offer no corrosion protection they are supplied lightly oiled to inhibit the rust process prior to installation and help during installation.	—

DIMENSIONAL DATA (inches)



DIAMETER	TPI	BODY DIAMETER (ds)		HEAD DIAMETER (dk)		HEAD HEIGHT (k)		HEXAGON SOCKET SIZE (s)	KEY ENGAGEMENT (t)
		MIN	MAX	MIN	MAX	MIN	MAX	NOMINAL	MIN
6#	40	0.1329	0.1380	0.216	0.226	0.134	0.138	0.109	0.064
8#	36	0.1585	0.1640	0.257	0.270	0.159	0.164	0.141	0.077
10#	32	0.1840	0.1900	0.278	0.312	0.185	0.190	0.156	0.090
1/4	28	0.2435	0.2500	0.354	0.375	0.244	0.250	0.188	0.120
5/16	24	0.3053	0.3125	0.446	0.469	0.306	0.312	0.250	0.151
3/8	24	0.3678	0.3750	0.550	0.562	0.368	0.375	0.312	0.182
7/16	20	0.4294	0.4375	0.631	0.656	0.430	0.438	0.375	0.213
1/2	20	0.4919	0.5000	0.725	0.750	0.492	0.500	0.375	0.245
5/8	18	0.6163	0.6250	0.914	0.938	0.616	0.625	0.500	0.307
3/4	16	0.7406	0.7500	1.094	1.125	0.740	0.750	0.625	0.370
7/8	14	0.8647	0.8750	1.291	1.312	0.864	0.875	0.750	0.432
1	12	0.9886	1.0000	1.476	1.500	0.988	1.000	0.750	0.495
1-1/8	12	1.1086	1.1250	1.665	1.688	1.111	1.125	0.875	0.557
1-1/4	12	1.2336	1.2500	1.852	1.875	1.236	1.250	0.875	0.620
1-3/8	12	1.3568	1.3750	2.038	2.062	1.360	1.375	1.000	0.682
1-1/2	12	1.4818	1.5000	2.224	2.250	1.485	1.500	1.000	0.745

SOCKET OR SPANNER SIZE (inches)

SCREW DIAMETER	6#	8#	10#	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
SOCKET SIZE	7/64	9/64	5/32	3/16	1/4	5/16	3/8	3/8	1/2	5/8	3/4	3/4	7/8	7/8	1	1

THREAD LENGTH (inches)

NOMINAL LENGTH	6#	8#	10#	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
0.88												
1												
1.25	0.75	0.87	0.87									
1.5	1	1.12	1.12	1								
1.75	0.75	0.87	0.87	1.25	1.13	1.25						
2	1	1.12	1.12	1	1.38	1.5	1.38					
2.25	0.75	0.87	0.87	1.25	1.13	1.25	1.63	1.5				
2.5	1	1.12	1.12	1	1.38	1.5	1.38	1.75	109			
2.75	0.75	0.87	0.87	1.25	1.13	1.25	1.63	2	2			
3	-	1.12	1.12	1	1.38	1.5	1.38	1.5	2.25			
3.25	-	0.87	0.87	1.25	1.13	1.25	1.63	1.75	1.75	2.25	2.25	
3.5	-	-	1.12	1	1.38	1.5	1.38	2	2	2.5	2.5	2.5
3.75	-	-	0.87	1.25	1.13	1.25	1.63	1.5	2.25	2.75	2.75	2.75
4	-	-	1.12	1	1.38	1.5	1.38	1.75	1.75	2	3	3
4.25	-	-	-	1.25	1.13	1.25	1.63	2	2	2.25	2.25	3.25
4.5	-	-	-	1	1.38	1.5	1.38	1.5	2.25	2.5	2.5	2.5
4.75	-	-	-	1.25	1.13	1.25	1.63	1.75	1.75	2.75	2.75	2.75
5	-	-	-	1	1.38	1.5	1.38	2	2	2	3	3
5.25	-	-	-	-	1.13	1.25	1.63	1.5	2.25	2.25	2.25	3.25
5.5	-	-	-	-	1.38	1.5	1.38	1.75	1.75	2.5	2.5	2.5
5.75	-	-	-	-	1.13	1.25	1.63	2	2	2.75	2.75	2.75
6	-	-	-	-	1.38	1.5	1.38	1.5	2.25	2	3	3
6.25	-	-	-	-	1.13	1.25	1.63	1.75	1.75	2.25	2.25	3.25
6.5	-	-	-	-	-	1.5	1.38	2	2	2.5	2.5	2.5
6.75	-	-	-	-	-	1.25	1.63	1.5	2.25	2.75	2.75	2.75
7	-	-	-	-	-	1.5	1.38	1.75	1.75	2	3	3
7.25	-	-	-	-	-	1.25	1.63	2	2	2.25	2.25	3.25
7.5	-	-	-	-	-	1.5	1.38	1.5	2.25	2.5	2.5	2.5
7.75	-	-	-	-	-	-	1.63	1.75	1.75	2.75	2.75	2.75
8	-	-	-	-	-	-	1.38	2	2.25	2	3	3
8.5	-	-	-	-	-	-	1.38	1.5	1.75	2.5	2.5	2.5
9	-	-	-	-	-	-	1.38	2	2.25	2	3	3
9.5	-	-	-	-	-	-	-	1.5	1.75	2.5	2.5	2.5
10	-	-	-	-	-	-	-	2	2.25	2	3	3
11	-	-	-	-	-	-	-	-	1.75	2	3	3
12	-	-	-	-	-	-	-	-	1.75	2	3	3
13	-	-	-	-	-	-	-	-	-	2	3	3
14	-	-	-	-	-	-	-	-	-	2	3	3
15	-	-	-	-	-	-	-	-	-	2	3	3
16	-	-	-	-	-	-	-	-	-	-	3	3
17	-	-	-	-	-	-	-	-	-	-	3	3
18	-	-	-	-	-	-	-	-	-	-	3	3
19	-	-	-	-	-	-	-	-	-	-	-	3
20	-	-	-	-	-	-	-	-	-	-	-	3

ALL SIZES ABOVE THE STEPPED LINE
ARE FULLY THREADED

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