

SOCKET HEAD CAP SCREW
UNF



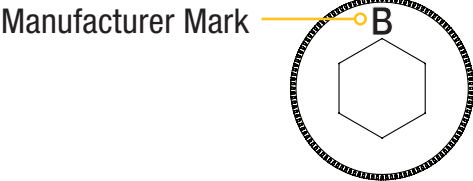
APPLICATION

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:	Zinc Plated
Standard:	Complies to ASME B18.3:2012
Mechanical Properties:	Complies to ASTM A574:2021
Chemical Composition:	Complies to ASTM A574:2021

HEAD MARKING



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

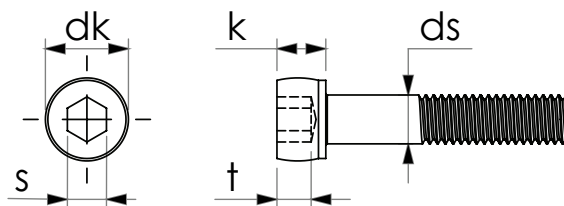
CHEMICAL COMPOSITION (%)

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

FINISH INFORMATION

ZINC PLATED		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
Zinc Plating is a process of depositing a thin layer of zinc onto the surface of a steel object through electroplating. The steel object is then passivated with a transparent conversion layer.	Bremick® Zinc Plated Coating provides a low level of corrosion protection and is recommended for dry internal application. Bremick® Zinc Plating complies with AS1789.	Low.

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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