

SOCKET HEAD CAP SCREW UNC



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 UNRC $\leq 1"$ Class 2A UNRC $1" < x \leq 1\text{-}1/2"$
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

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

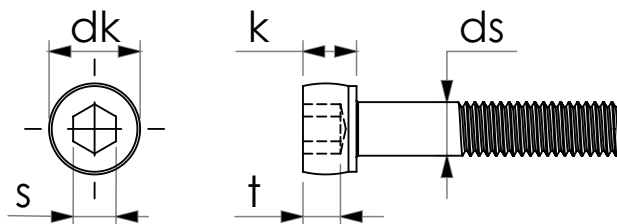
CHEMICAL COMPOSITION (%)

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

FINISH INFORMATION

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#	32	0.1329	0.1380	0.216	0.226	0.134	0.138	0.109	0.064
8#	32	0.1585	0.1640	0.257	0.270	0.159	0.164	0.141	0.077
10#	24	0.1840	0.1900	0.278	0.312	0.185	0.190	0.156	0.090
1/4	20	0.2435	0.2500	0.354	0.375	0.244	0.250	0.188	0.120
5/16	18	0.3053	0.3125	0.446	0.469	0.306	0.312	0.250	0.151
3/8	16	0.3678	0.3750	0.550	0.562	0.368	0.375	0.312	0.182
7/16	14	0.4294	0.4375	0.631	0.656	0.430	0.438	0.375	0.213
1/2	13	0.4919	0.5000	0.725	0.750	0.492	0.500	0.375	0.245
5/8	11	0.6163	0.6250	0.914	0.938	0.616	0.625	0.500	0.307
3/4	10	0.7406	0.7500	1.094	1.125	0.740	0.750	0.625	0.370
7/8	9	0.8647	0.8750	1.291	1.312	0.864	0.875	0.750	0.432
1	8	0.9886	1.0000	1.476	1.500	0.988	1.000	0.750	0.495
1-1/8	7	1.1086	1.1250	1.665	1.688	1.111	1.125	0.875	0.557
1-1/4	7	1.2336	1.2500	1.852	1.875	1.236	1.250	0.875	0.620
1-3/8	6	1.3568	1.3750	2.038	2.062	1.360	1.375	1.000	0.682
1-1/2	6	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**

Whilst every care was taken in the preparation of this publication, Bremick® accepts no responsibility for the accuracy of the information supplied. Bremick® reserves the right to make alterations to specifications as part of ongoing development and improvement. This publication serves as a guide and it's the responsibility of the end user to ensure suitability for their application.
The contents of this publication are the exclusive copyright of Bremick® and may not be reproduced without permission.

Bremick Pty Ltd
Head Office | 88 Dalmeny Avenue, Rosebery 2018
National Distribution Centre | M5/M7 Logistics Park,
Warehouse 4B, 290 Kurrajong Road, Prestons NSW 2170
www.bremick.com.au