

HEX BOLT
GRADE 5 UNC



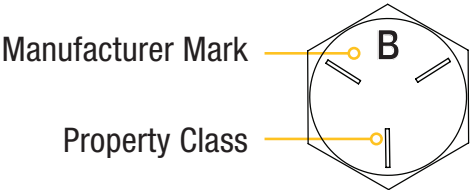
APPLICATION

Bremick® Hex Head UNC Grade 5 bolts are designed for industrial and construction applications where high tensile superior performance is required

PRODUCT ATTRIBUTES

Material Class:	Carbon Steel Grade 5
Thread Form:	Class 2A
Finish:	Zinc Plated
Standard:	Complies to AS/NZS 2465:1999
Mechanical Properties:	Complies to SAE J429:2014
Chemical Composition:	Complies to SAE J429:2014

HEAD MARKING



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

MECHANICAL PROPERTIES

PROPERTIES	TENSILE STRENGTH (ksi)	STRESS UNDER PROOF LOAD (ksi)	HARDNESS	
			ROCKWELL (HRC)	
	MIN	NOM.	MIN	MAX
GRADE 5 ≤ 1"	120	85	25	34
GRADE 5 > 1"	105	74	19	30

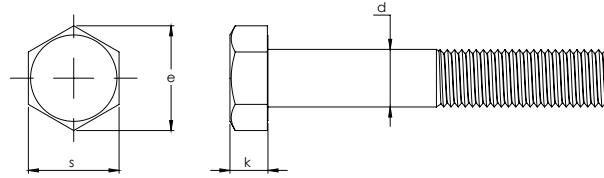
CHEMICAL COMPOSITION (%)

MATERIAL	C		P	S	B	TEMPERING TEMPERATURE °C
	MIN	MAX	MAX	MAX	MAX	MIN
CARBON STEEL	0.25	0.55	0.025	0.025	-	425

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 (inches)	TPI	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		SHANK DIAMETER (d)	
	UNC	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4	20	0.428	0.438	0.488	0.505	0.150	0.163	0.2450	0.2500
5/16	18	0.489	0.500	0.557	0.577	0.195	0.211	0.3065	0.3125
3/8	16	0.551	0.562	0.628	0.650	0.226	0.243	0.3690	0.3750
7/16	14	0.612	0.625	0.698	0.722	0.272	0.291	0.4305	0.4375
1/2	13	0.736	0.750	0.840	0.866	0.302	0.323	0.4930	0.5000
9/16	12	0.798	0.812	0.910	0.938	0.348	0.371	0.5545	0.5625
5/8	11	0.922	0.938	1.051	1.083	0.378	0.403	0.6170	0.6250
3/4	10	1.100	1.125	1.245	1.299	0.455	0.483	0.7410	0.7500
7/8	9	1.285	1.312	1.465	1.516	0.531	0.563	0.8860	0.8750
1	8	1.469	1.500	1.675	1.732	0.591	0.627	0.9900	1.0000
1 1/8	7	1.631	1.688	1.859	1.949	0.658	0.718	1.1140	1.1250
1 1/4	7	1.812	1.875	2.066	2.165	0.749	0.813	1.2390	1.2500
1 3/8	6	1.994	2.062	2.273	2.382	0.810	0.878	1.3630	1.3750
1 1/2	6	2.175	2.250	2.480	2.598	0.902	0.974	1.4880	1.5000
1 3/4	5	2.538	2.625	2.893	3.031	1.054	1.196	1.7160	1.7850
2	4.5	2.900	3.000	3.305	3.464	1.175	1.388	1.9640	2.0390

Note: Dimensions for diameters > 1-1/2 are manufactured to ASME B18.2.1

SOCKET OR SPANNER SIZE (inches)

BOLT DIAMETER	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2
SPANNER SIZE	7/16	1/2	9/16	5/8	3/4	13/16	15/16	1-1/8	1-5/16	1-1/2	1-11/16	1-7/8	2-1/16	2-1/4	2-5/8	3

THREAD LENGTH (inches)

Length	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2
1	3/4	7/8														
1 1/4	3/4	7/8	1	1 1/8												
1 1/2	3/4	7/8	1	1 1/8	1 1/4	1 3/8										
1 3/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2									
2	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4								
2 1/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2							
2 1/2	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4						
2 3/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2					
3	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4				
3 1/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3			
3 1/2	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4		
3 3/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4		
4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	
4 1/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	
4 1/2	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
4 3/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
5	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
5 1/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
5 1/2	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
5 3/4	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
6	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4 1/4
6 1/2	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
7	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
7 1/2	-	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
8	-	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
8 1/2	-	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
9	-	-	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
9 1/2	-	-	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
10	-	-	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
10 1/2	-	-	-	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
11	-	-	-	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
11 1/2	-	-	-	-	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
12	-	-	-	-	1 1/2	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
12 1/2	-	-	-	-	-	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
13	-	-	-	-	-	1 5/8	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
13 1/2	-	-	-	-	-	-	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
14	-	-	-	-	-	-	-	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
14 1/2	-	-	-	-	-	-	-	-	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
15	-	-	-	-	-	-	-	-	-	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2
15 1/2	-	-	-	-	-	-	-	-	-	-	2 3/4	3	3 1/4	3 1/2	4	4 1/2
16	-	-	-	-	-	-	-	-	-	-	-	3	3 1/4	3 1/2	4	4 1/2

ALL SIZES ABOVE THE STEPPED LINE ARE FULLY THREADED

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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