

HEX BOLT
GRADE 8 UNF



BLACK

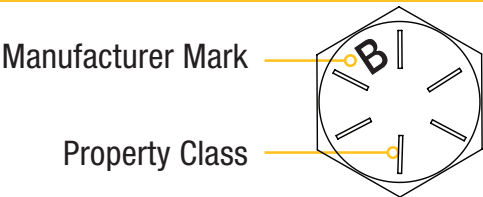
APPLICATION

Bremick® Hex Head UNF Grade 8 bolts are designed for industrial and construction applications where high tensile superior performance is required

PRODUCT ATTRIBUTES

Material Class:	Carbon Steel Grade 8
Thread Form:	Class 2A
Finish:	Plain/Black/Natural
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 (Full-Size Tests)

PROPERTIES	TENSILE STRENGTH (ksi)	STRESS UNDER PROOF LOAD (ksi)	HARDNESS ROCKWELL (HRC)	
	MIN	NOM.	MIN	MAX
GRADE 8	150	120	33	39

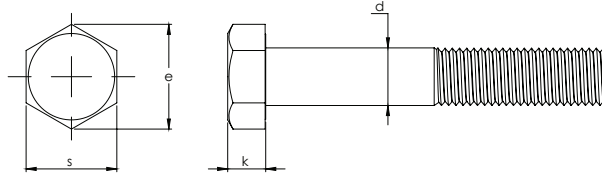
CHEMICAL COMPOSITION (%)

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

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 (inches)	TPI	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		SHANK DIAMETER (d)	
	UNF	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4	28	0.428	0.438	0.488	0.505	0.150	0.163	0.2450	0.2500
5/16	24	0.489	0.500	0.557	0.577	0.195	0.211	0.3065	0.3125
3/8	24	0.551	0.562	0.628	0.650	0.226	0.243	0.3690	0.3750
7/16	20	0.612	0.625	0.698	0.722	0.272	0.291	0.4305	0.4375
1/2	20	0.736	0.750	0.840	0.866	0.302	0.323	0.4930	0.5000
9/16	18	0.798	0.812	0.910	0.938	0.348	0.371	0.5545	0.5625
5/8	18	0.922	0.938	1.051	1.083	0.378	0.403	0.6170	0.6250
3/4	16	1.100	1.125	1.245	1.299	0.455	0.483	0.7410	0.7500
7/8	14	1.285	1.312	1.465	1.516	0.531	0.563	0.8860	0.8750
1	12	1.469	1.500	1.675	1.732	0.591	0.627	0.9900	1.0000
1 1/8	12	1.631	1.688	1.859	1.949	0.658	0.718	1.1140	1.1250
1 1/4	12	1.812	1.875	2.066	2.165	0.749	0.813	1.2390	1.2500
1 3/8	12	1.994	2.062	2.273	2.382	0.810	0.878	1.3630	1.3750
1 1/2	12	2.175	2.250	2.480	2.598	0.902	0.974	1.4880	1.5000

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
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

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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