

HEX BOLT UNC F593G STAINLESS STEEL



APPLICATION

Bremick® Set Screw UNC 316 Stainless Steel bolts are designed for industrial and construction applications where ultimate corrosion performance is required

PRODUCT ATTRIBUTES

Material Class: 316 STAINLESS STEEL 2-CW1-F593G

Thread Form: Class 2A

Standard: Complies to ASME B18.2.1:2012

Mechanical Properties: Complies to ASTM F593:2024

Chemical Composition: Complies to ASTM F593:2024

HEAD MARKING



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

MECHANICAL PROPERTIES (Full-Size Tests)

ALLOY MECHANICAL PROPERTY MARKING	TENSILE STRENGTH (ksi)	YIELD STRENGTH (ksi)	HARDNESS
			ROCKWELL
	RANGE	MIN	RANGE
F593G	100~150	65	B95-C32

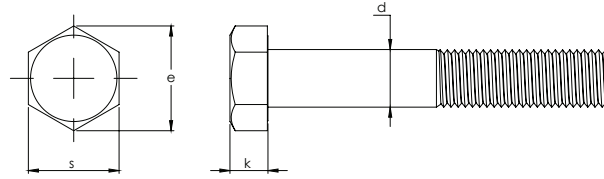
CHEMICAL COMPOSITION (%)

STAINLESS STEEL GRADE	C	Mn	P	S	Si	Cr	Ni	Mo
	MAX	MAX	MAX	MAX	MAX	RANGE	RANGE	RANGE
316	0.08	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	2.00-3.00

MATERIAL INFORMATION

STAINLESS STEEL 316		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
316 is a Marine Grade SS – It contains 2-3% Molybdenum which provides highest possible corrosion protection than 304 Stainless steel.	Bremick® 316 Stainless Steel provides the ultimate level of protection and is recommended for external application and marine environments.	Ultimate

DIMENSIONAL DATA (inches)



DIAMETER (inches)	TPI UNC	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		MAJOR DIAMETER (d)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4	20	0.425	0.438	0.484	0.505	0.150	0.188	0.237	0.260
5/16	18	0.484	0.500	0.552	0.577	0.195	0.235	0.298	0.324
3/8	16	0.554	0.562	0.620	0.650	0.226	0.268	0.360	0.388
7/16	14	0.603	0.625	0.687	0.722	0.272	0.316	0.421	0.452
1/2	13	0.725	0.750	0.826	0.866	0.302	0.364	0.482	0.515
5/8	11	0.906	0.938	1.033	1.083	0.378	0.444	0.605	0.642

SOCKET OR SPANNER SIZE (inches)

BOLT DIAMETER	1/4	5/16	3/8	7/16	1/2	5/8
SPANNER SIZE	4/9	1/2	5/9	5/8	3/4	1

THREAD LENGTH (inches)

Length	1/4	5/16	3/8	7/16	1/2	5/8
1	3/4	7/8	ALL SIZES ABOVE THE STEPPED LINE ARE FULLY THREADED			
1 1/4	3/4	7/8	1			
1 1/2	3/4	7/8	1	1 1/8	1 1/4	
1 3/4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
2	3/4	7/8	1	1 1/8	1 1/4	1 1/2
2 1/4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
2 1/2	3/4	7/8	1	1 1/8	1 1/4	1 1/2
2 3/4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
3	3/4	7/8	1	1 1/8	1 1/4	1 1/2
3 1/4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
3 1/2	3/4	7/8	1	1 1/8	1 1/4	1 1/2
3 3/4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
4	3/4	7/8	1	1 1/8	1 1/4	1 1/2
4 1/4	-	7/8	1	1 1/8	1 1/4	1 1/2
4 1/2	-	7/8	1	1 1/8	1 1/4	1 1/2
4 3/4	-	7/8	1	1 1/8	1 1/4	1 1/2
5	-	7/8	1	1 1/8	1 1/4	1 1/2
5 1/4	-	-	1	1 1/8	1 1/4	1 1/2
5 1/2	-	-	1	1 1/8	1 1/4	1 1/2
5 3/4	-	-	1	1 1/8	1 1/4	1 1/2
6	-	-	1	1 1/8	1 1/4	1 1/2
6 1/2	-	-	-	1 3/8	1 1/2	1 3/4
7	-	-	-	1 3/8	1 1/2	1 3/4
7 1/2	-	-	-	1 3/8	1 1/2	1 3/4
8	-	-	-	1 3/8	1 1/2	1 3/4

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