

HEX BOLT UNF F593C STAINLESS STEEL



APPLICATION

Bremick® Hex Head UNF 304 Stainless Steel bolts are designed for industrial and construction applications where extreme corrosion performance is required

PRODUCT ATTRIBUTES

Material Class: 304 STAINLESS STEEL 1-CW1-F593C

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
F593C	100-150	65	B95-C32

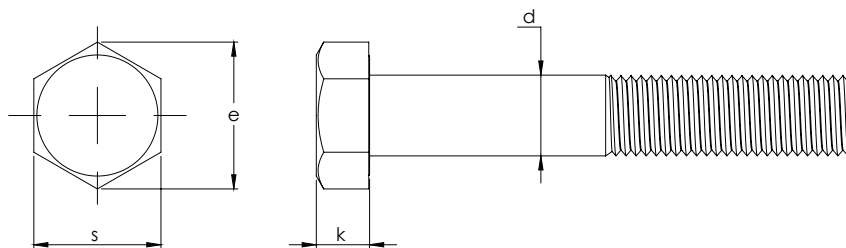
CHEMICAL COMPOSITION (%)

STAINLESS STEEL GRADE	C	Mn	P	S	Si	Cr	Ni	Cu
	MAX	MAX	MAX	MAX	MAX	RANGE	RANGE	MAX
304	0.08	2.00	0.045	0.030	1.00	18.0-20.0	8.0-10.5	1.00

MATERIAL INFORMATION

STAINLESS STEEL 304		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
304 is the most commonly used stainless steel. It is an austenitic, offers excellent strength and corrosion resistance.	Bremick® 304 Stainless Steel provides an extreme level of protection and is recommended for wet external application. Bremick® 304 Stainless Steel is an austenitic stainless steel that offers all round performance.	Extreme

DIMENSIONAL DATA (mm)



DIAMETER (in)	TPI	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		SHANK MAJOR DIAMETER (d)	
	UNF	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4	28	0.425	0.438	0.484	0.505	0.150	0.188	0.237	0.260
5/16	24	0.484	0.500	0.552	0.577	0.195	0.235	0.298	0.324
3/8	24	0.544	0.562	0.620	0.650	0.226	0.268	0.360	0.388
7/16	20	0.603	0.625	0.687	0.722	0.272	0.316	0.421	0.452
1/2	20	0.725	0.750	0.826	0.866	0.302	0.364	0.482	0.515
5/8	18	0.906	0.938	1.033	1.083	0.378	0.444	0.605	0.642

SOCKET OR SPANNER SIZE (mm)

BOLT DIAMETER	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2
SPANNER SIZE	0.438	0.5	0.562	0.625	0.75	0.938	1.125	1.312	1.5	1 2/3	1 7/8	2 1/4

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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