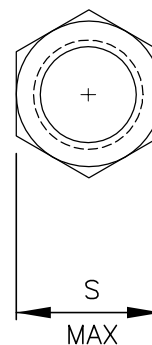
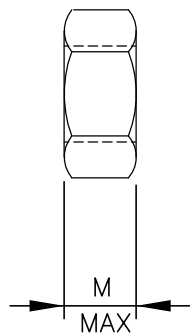


DESIGNATOR	ANSI SIZE	D	M	S
FBX06a	1/4-20 [M6x1]	4/16 [6]	1 3/64 [5.2]	25/64 [10.0]
FBX08a	5/16-18 [M8x1.25]	5/16 [8]	1 7/64 [6.8]	32/64 [13.0]
FBX10a	3/8-16 [M10x1.5]	6/16 [10]	2 1/64 [8.4]	40/64 [16.0]
FBX12a	7/16-14 [M12x1.75]	8/16 [12]	2 7/64 [10.8]	45/64 [18.0]
FBX14a	1/2-13 [M14x2]	9/16 [14]	3 2/64 [12.8]	53/64 [21.0]
FBX16a	5/8-11 [M16x2]	10/16 [16]	3 7/64 [14.8]	60/64 [24.0]
FBX20a	3/4-10 [M20x2.5]	12/16 [20]	4 5/64 [18.0]	1 12/64 [30.0]
FBX24a	1-8 [M24x3]	15/16 [24]	5 4/64 [21.5]	1 26/64 [36.0]



CLASS 4.6 HEX BOLT & NUT

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SPECIFICATIONS

Class 4.6 bolts shall be manufactured according to the geometric specifications included in ANSI B18.2.3.5M. Threads shall conform to ANSI B1.13M for Class 6g threads. Material for zinc-coated bolts shall conform to ASTM F568 for Class 4.6 (400 MPa tensile strength and 240 MPa yield strength). Material for corrosion resistant bolts shall conform to ASTM F568 for Class 8.8.3 (830 MPa tensile strength and 660 MPa yield strength). Bolt heads shall be marked as specified in ASTM F568 Section 9 with the manufacturer's identification symbol and the symbol "4.6" if zinc-coated and "8.8.3" if corrosion resistant steel is used. ASTM F569 Class 4.6 bolts are essentially equivalent to SAE J429 Grade 2 bolts.

Zinc-coated nuts shall be manufactured according to the dimensions and tolerances in ANSI B18.2.4.1M for metric Style 1 hex nuts (shown in drawing). Corrosion resistant nuts shall be manufactured according to the dimensions and tolerances in ANSI B18.2.4.6M for heavy hex nuts (not shown in drawing). Threads shall conform to ANSI B1.13M for Class 6H. Zinc-coated nuts shall conform to the requirements of AASHTO M291M (ASTM A563M) for Class 5 nuts. Corrosion resistant nuts shall conform to the requirements of AASHTO M291M (ASTM A563M) for Class 8S3 nuts.

Zinc-coated bolts and nuts shall be treated according to either AASHTO M232 (ASTM A153) or AASHTO M298 (ASTM B695) for Class 50.

Designator	Stress Area of Threaded Bolt Shank (mm ²)	Minimum Bolt Strength (kN)
FBX06a	20.1	8.0
FBX08a	36.6	14.6
FBX10a	58.0	23.2
FBX12a	84.3	33.7
FBX14a	115.0	46.0
FBX16a	157.0	62.8
FBX20a	245.0	98.0
FBX24a	353.0	141.0

Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance and accepted manufacturing practices.

INTENDED USE

These bolts and nuts are used in various sign systems.

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