



DESIGNATOR	ANSI SIZE	D	M	S
FBX06b	1/4-20 [M6x1]	4/16 [6]	1 1/64 [5.7]	25/64 [10.0]
FBX08b	5/16-18 [M8x1.25]	5/16 [8]	19/64 [7.5]	32/64 [13.0]
FBX10b	3/8-16 [M10x1.5]	6/16 [10]	23/64 [9.3]	40/64 [16.0]
FBX12b	1/2-14 [M12x1.75]	8/16 [12]	30/64 [12.0]	45/64 [18.0]
FBX14b	3/4-13 [M14x2]	9/16 [14]	35/64 [14.1]	53/64 [21.0]



## CLASS 9.8 HEX BOLT & NUT

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## SPECIFICATIONS

Class 9.8 bolts shall be manufactured according to the geometric specifications included in ANSI B18.2.3.5M using material conforming to ASTM F568 Class 9.8 (900 MPa tensile strength and 720 MPa yield strength). The threads shall conform to ANSI B1.13M Class 6g. Bolt heads shall be marked as specified in ASTM F568 section 9. ASTM F569 Class 9.8 bolts are essentially equivalent to SAE J429 Grade 5 bolts.

Nuts shall be manufactured according to the dimensions and tolerances in ANSI B18.2.4.4M for metric Style 2 hex nuts. Zinc-coated nuts shall conform to the requirements of AASHTO M291M (ASTM A563M) for Class 12 Nuts. Nut threads shall conform to ANSI B1.13M for Class 6H.

Bolts and nuts shall be zinc-coated according to either AASHTO M232 (ASTM A153) for Class C or AASHTO M298 (ASTM B695) for Class 50, Type 1.

Designator	Stress Area of Threaded Bolt Shank (mm <sup>2</sup> )	Minimum Bolt Strength (kN)
FBX06a	20.1	18.0
FBX08a	36.6	32.9
FBX10a	58.0	52.2
FBX12a	84.3	75.9
FBX14a	115.0	104.0

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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