AS REQUIRED

D

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MAX

DESIGNATOR	ANSI SIZE	D	M	S
FBX06c	¼-20 [M6x1]	$\frac{4}{16}$ [6]	$\frac{13}{64}$ [5.2]	$\frac{25}{64}$ [10.0]
FBX08c	$\frac{5}{16}$-18[M8x1.25]	$\frac{5}{16}$ [8]	$\frac{17}{64}$ [6.8]	$\frac{32}{64}$ [13.0]
FBX10c	⅜-16 [M10x1.5]	$\frac{6}{16}$ [10]	$\frac{21}{64}$ [8.4]	$\frac{40}{64}$ [16.0]
FBX12c	$\frac{7}{16}$-14 [M12x1.75]	$\frac{8}{16}$ [12]	$\frac{27}{64}$ [10.8]	$\frac{45}{64}$ [18.0]
FBX14c	½-13[M14x2]	$\frac{9}{16}$ [14]	$\frac{32}{64}$ [12.8]	$\frac{53}{64}$ [21.0]
FBX16c	⅝-11 [M16x2]	$\frac{10}{16}$ [16]	$\frac{37}{64}$ [14.8]	$\frac{60}{64}$ [24.0]
FBX20c	¾-10 [M20x2.5]	$\frac{12}{16}$ [20]	$\frac{45}{64}$ [18.0]	$1\frac{12}{64}$ [30.0]
FBX24c	1-8 [M24x3]	$\frac{15}{16}$ [24]	$\frac{54}{64}$ [21.5]	$1\frac{26}{64}$ [36.0]

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MAX

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CLASS 10.9 HEX BOLT & NUT

FBX06c-24c

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SPECIFICATIONS

Class 10.9 bolts shall be manufactured according to the geometric specifications included in ANSI B18.2.3.5M. The threads shall conform to ANSI B1.13M Class 6g. Material for zinc-coated bolts shall conform to ASTM F568 for Class 10.9 (1040 MPa tensile strength and 940 MPa yield strength). ASTM F569 Class 10.9 bolts are essentially equivalent to SAE J429 Grade 8 bolts. Bolt heads shall be marked as specified in ASTM F568 Section 9 with the symbol "10S", and the manufacturer's identification symbol.

Zinc-coated nuts shall be manufactured according to the dimensions and tolerances in ANSI B18.2.4.1M for metric Style 1 hex nuts. Zinc-coated nuts shall conform to the requirements of AASHTO M291M (ASTM A563M) for Class 10 Nuts. Threads shall conform to ANSI B1.13M for Class 6H.

Zinc-coated bolts and nuts shall be treated 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^2)	Minimum Bolt Strength (kN)
FBX06c	20.1	20.9
FBX08c	36.6	38.1
FBX10c	58.0	60.3
FBX12c	84.3	87.7
FBX14c	115.0	120
FBX16c	157.0	163
FBX20c	245.0	255
FBX24c	353.0	367

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.

CLASS 10.9 HEX BOLT AND NUT

FBX06c-24c

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