

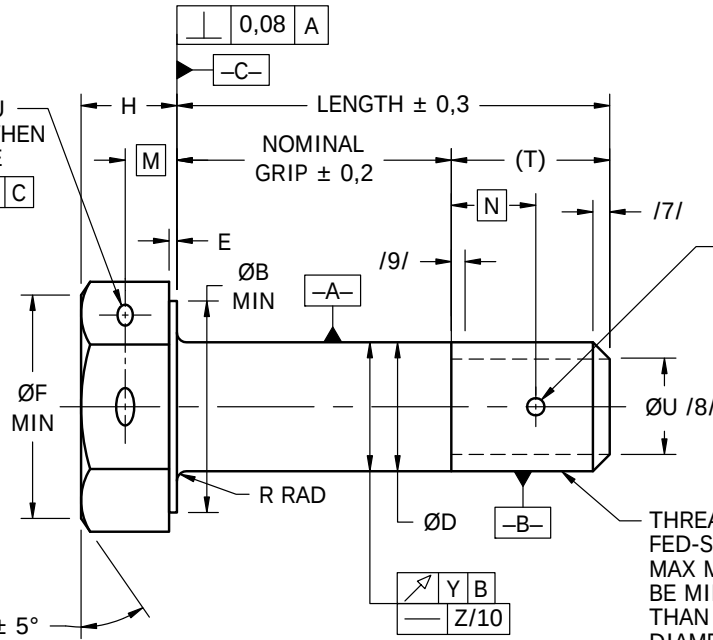
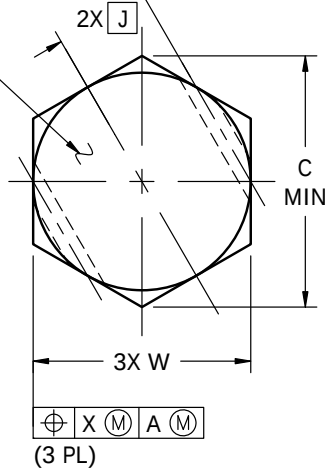
FED. SUPPLY CLASS

5306

HEAD MARKING
PER NA0043, TYPE III.
LOCATION OPTIONAL.

DRILL 2X ØK HOLES THRU
OPPOSITE HEX POINTS WHEN
SPECIFIED BY PART CODE

⊕ Ø0,4 (M) A (M) C



⊕ Ø0,4 (M) B (M)
DRILL ØP ONE HOLE
THRU WHEN
SPECIFIED BY PART
CODE. COUNTERSINK
OPTIONAL.

THREAD PER
FED-STD-H28/21 EXCEPT
MAX MAJOR DIAMETER TO
BE MINIMUM OF 0,025 LESS
THAN ACTUAL SHANK
DIAMETER. /10/

FIGURE 1 – BOLT

TABLE I – GENERAL REQUIREMENTS

DIA CODE	THREAD 4h6h	ØB MIN	C MIN	ØD	E	ØF MIN	H	J BASIC	ØK	M BASIC	N BASIC	ØP	R RAD	(T)	ØU	W	X FIM	Y FIM	Z FIM	TENSILE FORCE MIN N
050	MJ5 x 0,8	7,4	8,7	5	0,5 0,2	7,4	3,0 2,7	3,25	1,14 1,00	1,35	6,0	1,64 1,50	0,5 0,3	9,0	4,0 3,5	8,00 7,85	0,25	0,12	0,02	7 900
060	MJ6 x 1	9,3	10,9	6	0,5 0,2	9,4	3,5 3,2	4,10	1,54 1,40	1,60	7,0	1,64 1,50	0,7 0,5	10,0	4,7 4,2	10,00 9,78	0,30	0,12	0,02	11 200
080	MJ8 x 1	12,2	14,3	8	0,5 0,2	12,3	4,5 4,2	5,35	1,54 1,40	2,10	7,5	2,04 1,90	0,7 0,5	11,5	6,7 6,2	13,00 12,73	0,40	0,15	0,02	21 200
100	MJ10 x 1,25	16,0	18,9	10	0,6 0,3	16,3	5,0 4,7	7,10	1,74 1,60	2,35	9,0	2,54 2,40	0,8 0,6	14,5	8,4 7,9	17,00 16,73	0,50	0,15	0,015	33 100
120	MJ12 x 1,25	18,0	21,1	12	0,6 0,3	18,3	6,0 5,7	7,90	1,74 1,60	2,85	10,0	2,54 2,40	0,9 0,6	16,0	10,4 9,9	19,00 18,67	0,60	0,18	0,015	49 100
140	MJ14 x 1,5	21,0	24,5	14	0,6 0,3	21,3	7,0 6,7	9,20	1,74 1,60	3,35	12,0	3,14 3,00	1,1 0,8	19,0	12,0 11,5	22,00 21,67	0,70	0,18	0,015	66 600
160	MJ16 x 1,5	23,0	26,8	16	0,6 0,3	23,3	8,0 7,7	10,05	1,74 1,60	3,85	13,0	3,14 3,00	1,1 0,8	20,5	14,0 13,5	24,00 23,67	0,75	0,18	0,015	88 600
180	MJ18 x 1,5	26,0	30,2	18	0,6 0,3	26,3	9,0 8,7	11,30	1,74 1,60	4,35	14,0	3,98 3,80	1,3 1,0	22,5	16,0 15,5	27,00 26,67	0,75	0,18	0,015	114 000
200	MJ20 x 1,5	29,0	33,6	20	0,6 0,3	29,3	10,0 9,7	12,60	1,74 1,60	4,85	15,0	3,98 3,80	1,3 1,0	24,5	18,0 17,5	30,00 29,67	0,75	0,21	0,015	142 000

① COMPLETELY REVISED

THIRD ANGLE PROJECTION	
PROCUREMENT SPECIFICATION	NA0271

CUSTODIAN	NATIONAL AEROSPACE STANDARDS COMMITTEE
TITLE	BOLT, CLOSE TOLERANCE, HEXAGON HEAD, 300 SERIES CRES, 500 MPa Ft _u , METRIC

REVISION	1
CLASSIFICATION PART STANDARD	NA0272

MATERIAL:

CRES 300 SERIES IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

HEAT TREATMENT:

NONE

FINISH:

PASSIVATE PER AMS2700, METHOD 1, TYPE 2, CLASS 4.

CODE:

THE FIRST THREE NUMBERS INDICATE NOMINAL SHANK DIAMETER IN MILLIMETERS AND TENTHS AS TABULATED.

SECOND THREE NUMBERS INDICATE NOMINAL GRIP LENGTH IN MILLIMETERS AS TABULATED.

DRILL CODE:

DASH FOLLOWING BASIC PART NUMBER INDICATES AN UNDRILLED PART.

CODE LETTER "D" FOLLOWING BASIC PART NUMBER INDICATES DRILLED THREADS.

CODE LETTER "H" FOLLOWING BASIC PART NUMBER INDICATES DRILLED HEAD.

CODE LETTER "DH" FOLLOWING BASIC PART NUMBER INDICATES DRILLED HEAD AND THREADS.

EXAMPLES OF PART NUMBER:

NA0272-080016 = BOLT: MJ8 x 1 THREAD; 16 mm GRIP
 NA0272D080016 = BOLT: MJ8 x 1 THREAD; 16 mm GRIP, DRILLED THREADS
 NA0272H080016 = BOLT: MJ8 x 1 THREAD; 16 mm GRIP, DRILLED HEAD
 NA0272DH080016 = BOLT: MJ8 x 1 THREAD; 16 mm GRIP, DRILLED HEAD AND THREADS

NOTES:

- (1) SURFACE ROUGHNESS: BEARING SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, ØD AND ALL THREAD ELEMENTS: 0,8 MICROMETERS Ra; ALL OTHER SURFACES: 3,2 MICROMETERS Ra PER ASME B46.1.
- (2) REMOVE ALL BURRS AND BREAK SHARP EDGES 0,1 TO 0,4.
- (3) DIMENSIONS IN MILLIMETERS AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (4) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994 AND NA0156.
- (5) MAGNETIC PERMEABILITY SHALL BE LESS THAN 2,0 (AIR = 1,0) FOR A FIELD STRENGTH H = 16 kA/m USING A MAGNETIC PERMEABILITY INDICATOR PER ASTM A342/A342M, TEST METHOD 3.
- (6) IF REQUIRED, TENSILE TESTING OF BOLTS REQUIRING CROSS-DRILLED THREADS SHALL BE PERFORMED PRIOR TO DRILLING AND THE APPLICATION OF PLATING AND/OR COATINGS. WHEN BOLTS HAVE BEEN DRILLED, STRENGTH MAY BE VERIFIED BY SHEAR TESTING, IN LIEU OF TENSILE TESTING, IN ACCORDANCE WITH NASM1312. USERS SHOULD BE AWARE THAT FASTENERS WITH CROSS-DRILLED THREADS MAY EXHIBIT A REDUCTION IN TENSILE STRENGTH.
- /7/ INCOMPLETE THREADS 1,5 MAX.

REVISION
1
NA0272
SHEET 2

① COMPLETELY REVISED



Documents
SHEET 2

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