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NATIONAL AEROSPACE STANDARD

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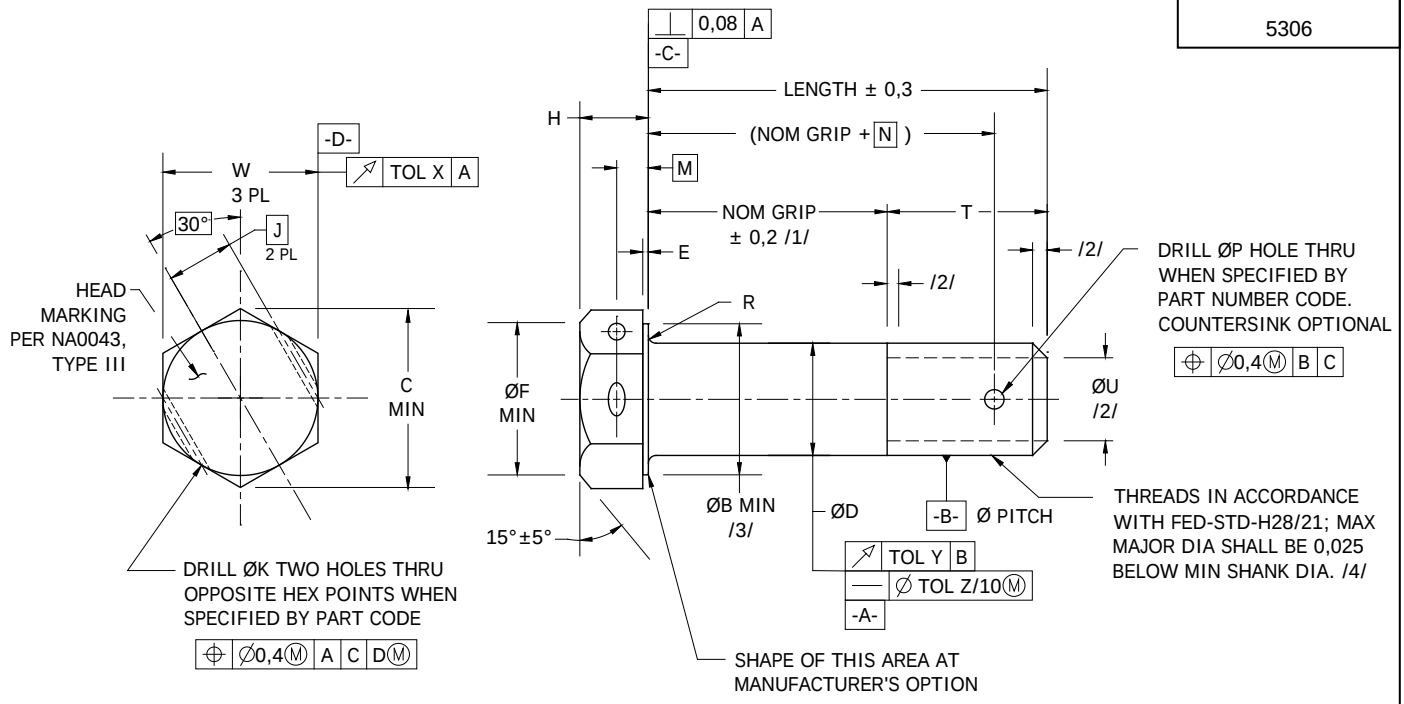
NATIONAL AEROSPACE STANDARDS

FED. SUPPLY CLASS

5306



(5) FIGURE 1 – BOLT CONFIGURATION

TABLE I – DIMENSIONS (5)

DIA CODE	THREAD 4h6h	ØB MIN /3/	C MIN	ØD	E	ØF MIN	H	J BASIC	ØK	M BASIC	N BASIC	ØP	R RAD	(T)	ØU	W	X	Y	Z
050	MJ5 x 0,8	7,4	8,7	4,990 4,965	0,4 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	8,0 7,85	0,25	0,12	0,02
060	MJ6 x 1	9,3	10,9	5,990 5,965	0,4 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	10,0 9,78	0,30	0,12	0,02
080	MJ8 x 1	12,2	14,3	7,987 7,962	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	13,0 12,73	0,40	0,15	0,02
100	MJ10 x 1,25	16,0	18,9	9,987 9,962	0,5 0,2	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	17,0 16,73	0,50	0,15	0,015
120	MJ12 x 1,25	18,0	21,1	11,984 11,959	0,5 0,2	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	19,0 18,67	0,60	0,18	0,015
140	MJ14 x 1,5	21,0	24,5	13,984 13,959	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	22,0 21,67	0,70	0,18	0,015
160	MJ16 x 1,5	23,0	26,8	15,984 15,959	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	24,0 23,67	0,75	0,18	0,015
180	MJ18 x 1,5	26,0	30,2	17,984 17,959	0,6 0,3	26,3	9,0 8,7	11,30	1,74 1,60	4,35	14,5	3,98 3,80	1,3 1,0	22,5	16,0 15,5	27,0 26,67	0,75	0,18	0,015
200	MJ20 x 1,5	29,0	33,6	19,980 19,955	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	30,0 29,67	0,75	0,21	0,015

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FORM 12-01

THIRD ANGLE PROJECTION	CUSTODIAN	REVISION
	NATIONAL AEROSPACE STANDARDS COMMITTEE	5
PROCUREMENT SPECIFICATION: NA0026	TITLE: **BOLT, CLOSE TOLERANCE, HEXAGON HEAD, A286 CRES, 1100 MPa, METRIC**	CLASSIFICATION PART STANDARD: **NA0045**

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MATERIAL:

A286 CRES (UNS S66286) PER PROCUREMENT SPECIFICATION.

HEAT TREATMENT:

1100 MPa MINIMUM ULTIMATE TENSILE.

FINISH:

PASSIVATE PER AMS2700, METHOD 1, CLASS 4.

CODE:

CODE LETTER “H” FOLLOWING BASIC PART NUMBER INDICATES DRILLED HEAD.
CODE LETTERS “DH” FOLLOWING BASIC PART NUMBER INDICATE DRILLED HEAD AND THREADS.
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 LETTER “D” FOLLOWING BASIC PART NUMBER INDICATES DRILLED THREADS. /10/

EXAMPLE OF PART NUMBER:

NA0045 DH 090 016

- 016 — INDICATES GRIP (16mm LONG)
- 090 — INDICATES THREAD (MJ8 x 1 THREAD, 1mm OVERSIZE SHANK)
- DH — INDICATES DRILL TYPE(S) (DRILLED HEAD AND THREADS)
- NA0045 — BASIC PART NUMBER

NOTES:

/1/ GRIP LENGTH SHALL BE MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE END OF THE FULL CYLINDRICAL PORTION OF THE SHANK.

/2/ POINT SHALL BE FLAT AND CHAMFERED 45° APPROXIMATELY FROM “U” DIAMETER.INCOMPLETE THREADS IN ACCORDANCE WITH FED-STD-H28/21.

/3/ WASHER FACE DIAMETER SHALL NOT EXCEED ACTUAL WIDTH ACROSS HEX FLATS; MINIMUM AS TABULATED.

/4/ ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20 SYSTEM 22.

(5) SURFACE ROUGHNESS: BEARING SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, SHANK AND ALL THREAD ELEMENTS, 0,8 MICROMETERS Ra; ALL OTHER SURFACES, 3,2 MICROMETERS Ra PER ASME B46.1.

(6) MAGNETIC PERMEABILITY SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH H = 200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER ASTM A342/A342M, TEST METHOD 3.

(7) REMOVE ALL BURRS AND BREAK SHARP EDGES 0,1 TO 0,4.

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