

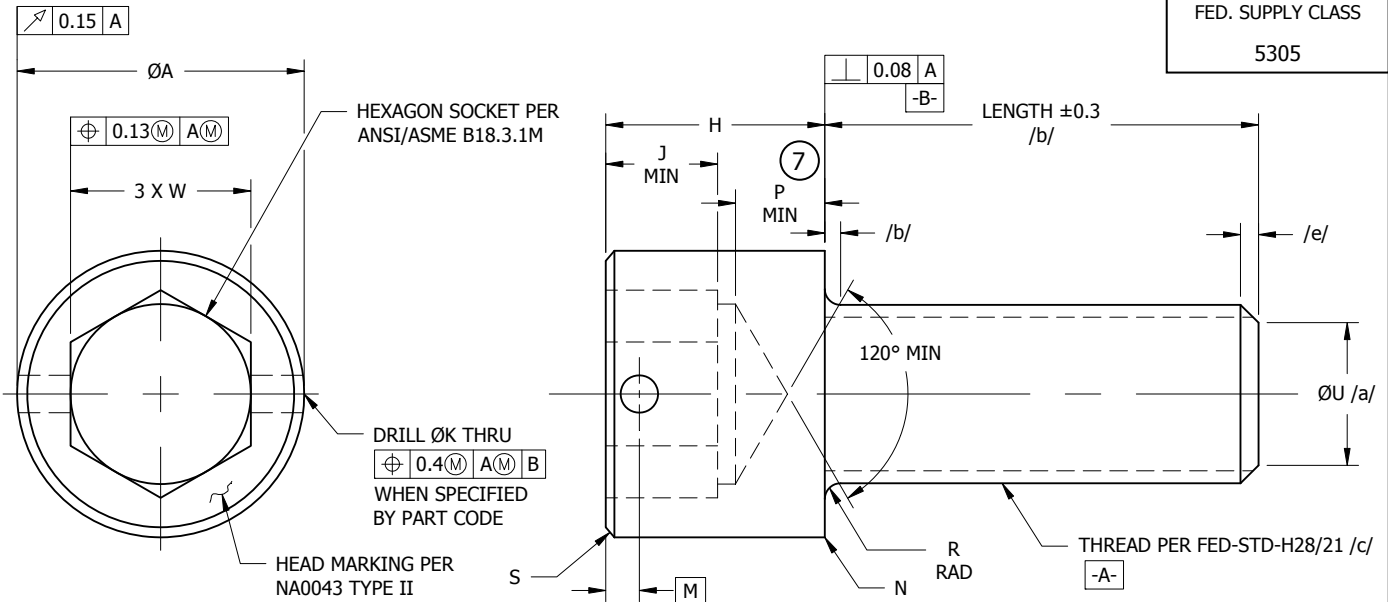


TABLE I – DIMENSIONAL AND STRENGTH INFORMATION

DIA CODE	THREAD 4h6h	ØA	H	S /d/ /6/	N /d/ /6/	J	P	M	ØK	R RAD	ØU /a/	W SOCKET SIZE	TENSILE FORCE N /f/ MIN	TENSILE FORCE N MIN
Ø16 A016	MJ1.6 x 0.35	3.00 2.87	1.60 1.52	0.16 MAX	0.08 MAX	0.8 MIN	0.54 MIN	— BASIC	—	0.3 0.1	1.1 0.6	1.545 1.520	~~1-630~~	1,300
Ø20 A020	MJ2 x 0.4	3.80 3.65	2.00 1.91	0.20 MAX	0.08 MAX	1.0 MIN	0.68 MIN	—	—	0.3 0.1	1.4 0.9	1.545 1.520	~~2-620~~	2,100
Ø25 A025	MJ2.5 x 0.45	4.50 4.33	2.50 2.40	0.25 MAX	0.08 MAX	1.25 MIN	0.85 MIN	—	—	0.3 0.1	1.9 1.4	2.045 2.020	~~4-210~~	3,370
Ø30 A030	MJ3 x 0.5	5.50 5.32	3.00 2.89	0.30 MAX	0.13 MAX	1.5 MIN	1.0 MIN	0.75	1.14 1.00	0.4 0.2	2.3 1.8	2.560 2.520	~~6-160~~	4,930
Ø40 A040	MJ4 x 0.7	7.00 6.80	4.00 3.88	0.40 MAX	0.13 MAX	2.0 MIN	1.5 MIN	1.23	1.14 1.00	0.4 0.2	3.0 2.5	3.071 3.020	~~10-900~~	8,720
Ø50 A050	MJ5 x 0.8	8.50 8.27	5.00 4.86	0.50 MAX	0.13 MAX	2.5 MIN	1.9 MIN	1.3	1.14 1.00	0.5 0.3	4.0 3.5	4.084 4.020	~~17-400~~	13,900
Ø60 A060	MJ6 x 1	10.00 9.74	6.00 5.85	0.60 MAX	0.20 MAX	3.0 MIN	2.3 MIN	1.4	1.54 1.40	0.7 0.5	4.7 4.2	5.084 5.020	~~24-800~~	19,800
Ø80 A080	MJ8 x 1	13.00 12.70	8.00 7.83	0.80 MAX	0.20 MAX	4.0 MIN	3.2 MIN	1.4	1.54 1.40	0.7 0.5	6.7 6.2	6.095 6.020	~~46-600~~	37,300
Ø100 A100	MJ10 x 1.25	16.00 15.67	10.00 9.81	1.0 MAX	0.20 MAX	5.0 MIN	4.0 MIN	1.5	1.74 1.60	0.8 0.6	8.4 7.9	8.115 8.025	~~72-900~~	58,300

- /a/ POINT SHALL BE FLAT AND CHAMFERED 45° APPROXIMATELY FROM U DIAMETER.
- /b/ SCREWS 40 mm OR LESS IN LENGTH SHALL HAVE COMPLETE THREADS TO WITHIN TWO THREAD PITCHES PLUS THE MAXIMUM FILLET RADIUS OF THE HEAD BEARING SURFACE. LONGER SCREWS SHALL HAVE A MINIMUM COMPLETE THREAD OF 35 mm. DIAMETER OF UNTHREADED PORTION OF SCREW SHALL NOT BE LESS THAN MINIMUM PITCH DIAMETER NOR MORE THAN MAXIMUM MAJOR DIAMETER OF THREAD.
- /c/ ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20 SYSTEM 22.
- /d/ RADIUS OR CHAMFER. PARTS FABRICATED WITH 0.3-0.1 RAD, (N), PRIOR TO 31 MAY 1996, WHICH WERE OTHERWISE ACCEPTABLE AT THE TIME OF MANUFACTURE, MAY BE SUPPLIED TO DEPLETION.
- /e/ INCOMPLETE THREADS, 1.5 MAX.
- /f/ INACTIVE FOR NEW DESIGN.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 7
PROCUREMENT SPECIFICATION NOTED	TITLE SCREWS, CAP, HEXAGON SOCKET HEAD, FULL THREAD A-286, 1100 MPa, METRIC	CLASSIFICATION PART STANDARD

MATERIAL:

CRES - A286 (UNS S66286) CONFORMING TO THE CHEMISTRY OF AMS5731, AMS5732, AMS5737 OR AMS5853.

HEAT TREAT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS-H-6875 OR AMS2759 FOR A-286 CRES;

CRES: 1100 MPa MINIMUM ULTIMATE TENSILE.

FINISH:

PASSIVATE PER AMS2700, METHOD 1, CLASS 4.

CODE:

THE LETTER "A" FOLLOWED BY THREE NUMBERS DESIGNATE NOMINAL THREAD SIZE AS TABULATED IN TABLE I. SECOND THREE NUMBERS DESIGNATE NOMINAL LENGTH IN EVEN NUMBER INCREMENTS. SEE TABLE II FOR RECOMMENDED LIMITS.

DRILL: CODE LETTER "H" BEFORE DIAMETER CODE DESIGNATES DRILLED HEAD.

EXAMPLE OF PART NUMBER:

NA0069-030016: SCREW; MJ3 x 0.5 THREAD; 16 mm LONG.
~~NA0069-A030016: SCREW; MJ3 x 0.5 THREAD; 16 mm LONG. /11/~~
~~NA0069A030016: SCREW; MJ3 x 0.5 THREAD; 16 mm LONG. /11/~~
~~NA0069H030016: SCREW; MJ3 x 0.5 THREAD; 16 mm LONG; DRILLED HEAD~~
 NA0069HA030016: SCREW; MJ3 x 0.5 THREAD; 16 mm LONG; DRILLED HEAD

NOTES:

- (1) SURFACE TEXTURE PER ASME B46.1. BEARING SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, SHANK AND ALL THREAD ELEMENTS 0.8 μ m MAXIMUM. ALL OTHER SURFACES 3.2 μ m MAXIMUM.
- (2) 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 A 342/A 342M, TEST METHOD 3.
- (3) SCREWS SHALL BE FREE FROM BURRS AND SLIVERS. BREAK SHARP EDGES 0.1 TO 0.4.
- (4) DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- (5) DIMENSIONING AND TOLERANCES PER ANSI Y14.5M-1982.
- /6/ DIMENSIONING OF "S" AND "N" FEATURES PER ANSI (ASME) B18.3.1M.
- (7) DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (8) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (9) FOR DESCRIPTION OF STATUS NOTES SEE NAS10000.

REVISION

7

Documents
SHEET 2



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