

FED. SUPPLY CLASS

5310

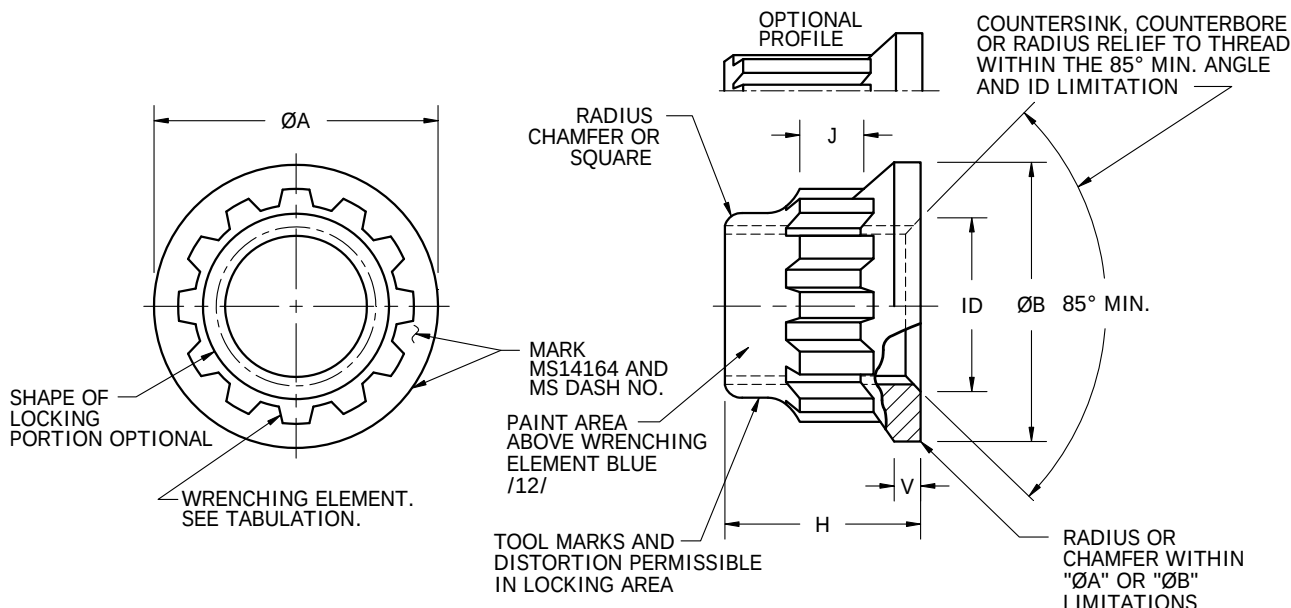


TABLE I – NUT DIMENSIONS AND STRENGTHS

DASH NO.	NOMINAL SIZE	THREAD	MS33787 ELEMENT NUMBER	ØA		ØB MIN	ID		H MAX	V MIN	J MIN	X MIN	ULTIMATE AXIAL STRENGTH LBF MIN	SEATING TORQUE FOR TORQUE EFFECTIVITY TEST LBF-IN	APPROX WEIGHT LB/100
				MAX	MIN		MAX	MIN							
04	1/4	.2500-28 UNJF-3B	10	.438	.428	.408	.280	.250	.300	.030	.110	.003	8,870	130	.41
05	5/16	.3125-24 UNJF-3B	12	.531	.521	.501	.342	.312	.385	.045	.147	.003	14,100	260	.77
06	3/8	.3750-24 UNJF-3B	14	.649	.639	.609	.405	.375	.455	.070	.176	.003	20,900	460	1.20
07	7/16	.4375-20 UNJF-3B	18	.750	.740	.710	.473	.438	.520	.085	.206	.003	28,300	730	1.80
08	1/2	.5000-20 UNJF-3B	20	.828	.818	.788	.535	.500	.600	.105	.235	.003	37,800	1,100	3.50
09	9/16	.5625-18 UNJF-3B	22	.938	.928	.898	.597	.562	.680	.105	.264	.004	47,900	1,600	4.60
10	5/8	.6250-18 UNJF-3B	24	1.050	1.040	1.010	.660	.625	.740	.105	.294	.004	59,900	2,200	6.10
12	3/4	.7500-16 UNJF-3B	30	1.230	1.220	1.190	.785	.750	.900	.130	.353	.004	86,900	3,900	11.00
14	7/8	.8750-14 UNJF-3B	34	1.438	1.428	1.398	.910	.875	1.060	.155	.411	.005	119,000	6,100	17.00
16	1	1.0000-12 UNJF-3B	38	1.625	1.615	1.575	1.035	1.000	1.210	.185	.470	.006	155,000	9,200	25.00

MATERIAL:

ALLOY STEEL, H-11 (UNS T20811) PER AMS6487 OR 17-22A (UNS K14675) PER AMS6304.

HEAT TREATMENT:

48 HRC MAX.

① COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS14164, REVISION A. PART NUMBERS REMAIN MS14164.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 1
PROCUREMENT SPECIFICATION NASM8922	TITLE NUT, WHEEL, SELF-LOCKING, FLANGED, STEEL, 220 KSI Ft_u, 450 °F, SPLINE DRIVE	CLASSIFICATION PART STANDARD NASM14164

SHEET 1 OF 2

FINISH:

CADMIUM PLATE (VACUUM DEPOSIT) IN ACCORDANCE WITH AMS-C-8837, TYPE II, CLASS 2.

LUBRICATION:

LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN THE PROCUREMENT SPECIFICATION.

EXAMPLE OF PART NUMBER:

MS14164-04 = .2500-28 NUT, CADMIUM PLATED, SOLUBLE LUBRICANT.

NOTES:

- (1) SURFACE ROUGHNESS SHALL BE 125 MICROINCHES Ra PER ASME B46.1.
- (2) THREADS PER AS8879 BEFORE LUBRICATION.
- (3) WRENCHING ELEMENT PER MS33787, DRIVERS PER MIL-W-8982.
- (4) DIMENSIONS IN INCHES AND APPLY AFTER FINISH AND PRIOR TO THE APPLICATION OF LUBRICATION UNLESS OTHERWISE SPECIFIED.
- (5) DESIGN AND USAGE INFORMATION: THESE NUTS ARE DESIGNED TO BE USED WITH MS14163 BOLTS AND MS14155 WASHERS.
- (6) PERPENDICULARITY: BEARING SURFACE SHALL BE NORMAL WITH PITCH DIAMETER OF THREAD WITHIN "X" (SEE TABLE) WHEN CHECKED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
- (7) PERFORMANCE PER NASM8922 EXCEPT FOR:
 - a. THREADS AND BEARING SURFACES SHALL BE LUBRICATED WITH MIL-T-5544 AMS2518 COMPOUND FOR WRENCH TORQUE, TORQUE EFFECTIVITY, LOCKING TORQUE, PERMANENT SET, ACCELERATED VIBRATION, STRESS DURABILITY AND STRESS CORROSION.
 - b. TABULATED SEATING TORQUE FOR TORQUE EFFECTIVITY TEST.
 - c. MINIMUM BREAKAWAY 1st CYCLE TORQUE VALUES ARE NOT APPLICABLE. USE MINIMUM BREAKAWAY TORQUE VALUES.
 - d. FOR WRENCHING TORQUE, BOLTS SHALL BE 260 KSI MINIMUM.
- (8) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (9) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (10) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (11) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- /12/ AFTER BAKE, PAINT THE AREA ABOVE WRENCHING ELEMENT WITH NO. 15102 BLUE PER MPI GLOSS LEVEL 5 OR 6.

① COMPLETELY REVISED

REVISION
1
NASM14164
SHEET 2

