FEDERAL SUPPLY CLASS
4730

RATIONALE

AS1735D HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

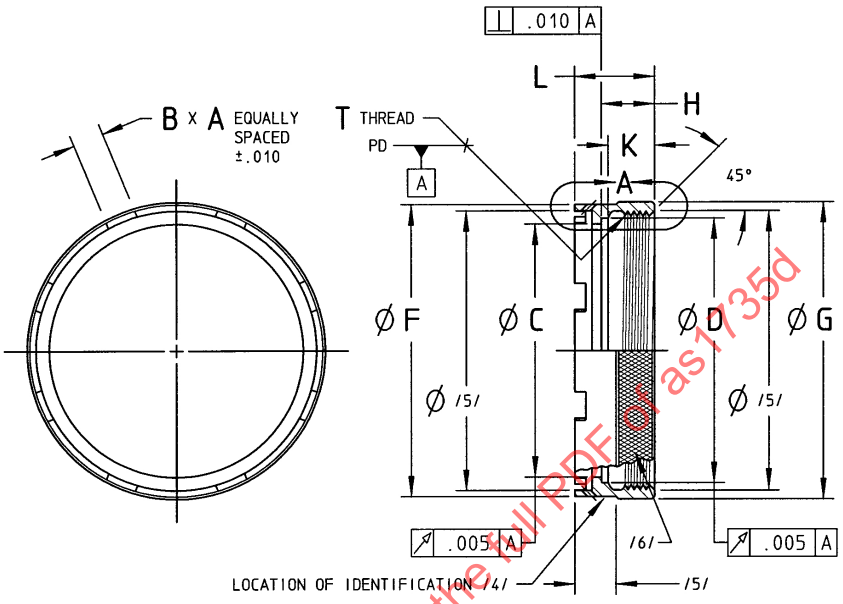
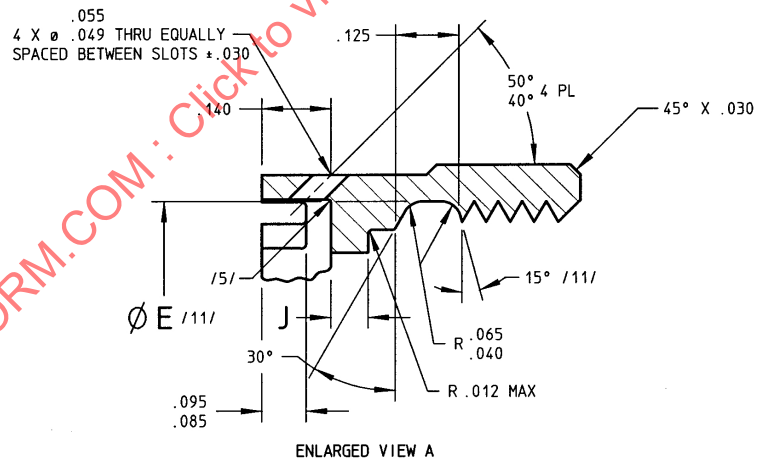


FIGURE 1 - NUT

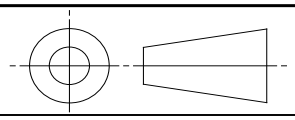


ENLARGED VIEW A

FIGURE 1 - NUT

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS1735D

THIRD ANGLE PROJECTION



ISSUED 1984-01 REVISED 2009-05 REAFFIRMED 2015-01

CUSTODIAN: G-3/G-3A

PROCUREMENT SPECIFICATION: /3/ AS1730

AEROSPACE STANDARD

NUT, COUPLING, RIGID, FIXED CAVITY, THREADED, FERRULE TYPE TUBE ENDS, TYPE II

AS1735
SHEET 1 OF 4

REV. D

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: +1 724-776-4970 (outside USA)**
Fax: 724-776-0790 **Email: CustomerService@sae.org** **SAE WEB ADDRESS: http://www.sae.org**

TABLE 1 - NUT DIMENSIONS

BASIC NO. AS1735 SIZE CODE /15/	(TUBE SIZE)	THREAD T PER FED-STD-H28/2 OR ASME B1.1 /10/ MOD	A	B PL	C +.005 -.000	D	D TOL
04	.250	.687-12 UN-2B	.187	4	.529	.583	+.002/-.000
05	.312	.750-12 UN-2B	.187	4	.580	.644	+.002/-.000
06	.375	.812-12 UN-2B	.187	4	.635	.689	+.002/-.000
08	.500	.937-12 UN-2B	.187	8	.762	.815	+.003/-.000
10	.625	1.062-12 UN-2B	.187	8	.900	.960	+.003/-.000
12	.750	1.250-12 UNF-2B	.187	8	1.033	1.128	+.003/-.000
16	1.000	1.500-12 UNF-2B	.187	8	1.284	1.386	+.003/-.000
20	1.250	1.750-12 UN-2B	.187	8	1.534	1.628	+.003/-.000
24	1.500	2.000-12 UN-2B	.250	8	1.783	1.878	+.003/-.000
28	1.750	2.250-12 UN-2B	.250	8	2.045	2.138	+.003/-.000
32	2.000	2.500-12 UN-2B	.250	8	2.292	2.382	+.003/-.000
36	2.250	2.750-12 UN-2B	.250	8	2.549	2.638	+.003/-.000
40	2.500	3.000-12 UN-2B	.250	8	2.800	2.888	+.003/-.000
44	2.750	3.250-12 UN-2B	.250	8	3.045	3.138	+.003/-.000
48	3.000	3.625-12 UN-2B	.250	8	3.395	3.513	+.004/-.000
56	3.500	4.125-12 UN-2B/	.250	8	3.895	4.013	+.004/-.000
64	4.000	4.625-12 UNS-2B/10/	.250	8	4.395	4.513	+.004/-.000
72	4.500	5.125-12 UNS-2B/10/	.250	8	4.895	5.015	+.005/-.000
80	5.000	5.625-12 UNS-2B/10/	.250	8	5.378	5.500	+.005/-.000

TABLE 2 - NUT DIMENSIONS AND WEIGHTS

BASIC NO. AS1735 SIZE CODE /15/	E +.010 -.000 /11/	F +010 -.000	G MAX	H +.010 -.000	J ±.015	K	L MAX	ALUM WEIGHT LB/EA APPROX REF
04	.691	.787	.829	.338	.065	.300	.553	.009
05	.753	.850	.892	.338	.065	.300	.553	.010
06	.816	.912	.954	.338	.065	.300	.553	.011
08	.941	1.037	1.079	.338	.065	.300	.553	.013
10	1.066	1.172	1.214	.354	.065	.315	.569	.016
12	1.253	1.360	1.402	.354	.065	.315	.569	.019
16	1.503	1.610	1.652	.354	.065	.315	.569	.023
20	1.753	1.860	1.902	.414	.065	.375	.629	.030
24	2.003	2.110	2.152	.429	.065	.375	.644	.035
28	2.253	2.360	2.402	.429	.065	.375	.644	.039
32	2.503	2.620	2.662	.429	.065	.375	.644	.046
36	2.753	2.870	2.912	.455	.100	.392	.705	.058
40	3.003	3.125	3.162	.455	.100	.392	.705	.063
44	3.253	3.370	3.412	.455	.100	.392	.705	.068
48	3.628	3.751	3.793	.455	.100	.392	.705	.079
56	4.128	4.256	4.298	.455	.100	.392	.705	.092
64	4.613	4.756	4.798	.455	.100	.392	.705	.104
72	5.113	5.266	5.308	.543	.130	.475	.823	.144
80	5.613	5.765	5.807	.543	.130	.475	.823	.161

NOTES:

1. MATERIAL CODE D:

   a. ALUMINUM ALLOY 2024-T6, 2024-T851, OR 2024-T8511 PER AMS-QQ-A-225/6, ASTM B 210, AMS-QQ-A-200/3, OR AMS-WW-T-700/3.

   b. ALUMINUM ALLOY 2014-T6 PER AMS-QQ-A-225/4 OR AMS-QQ-A-200/2.

2. FINISH: MATERIAL CODE D: ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, COLOR MAGENTA.

/3/ PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST FOR PRI-QPL-AS1730 FOR THIS STANDARD. SEE www.eauditnet.com. FOR CURRENT QPL ON-LINE.

/4/ IDENTIFICATION PER AS478 METHOD 30 INCLUDING THE MANUFACTURER'S NAME, TRADEMARK, OR CAGE CODE, COMPLETE "AS" PART NUMBER, AND DATE OF MANUFACTURE IN QUARTERS (3Q95 = THIRD QUARTER 1995). SIZES 12 AND SMALLER MAY BE INDIVIDUALLY PLACED IN A PLASTIC BAG WITH A TAG PER AS478 METHOD 35D CONTAINING THIS INFORMATION. ALL PARTS SHALL BE MARKED AS A MINIMUM WITH THE MANUFACTURES NAME, TRADEMARK OR CAGE CODE AND DATE OF MANUFACTURE.

/5/ THE MANUFACTURER WILL SPECIFY AND CONTROL CERTAIN SPECIFIC DIMENSIONS AND TOLERANCES AND WILL BE RESPONSIBLE TO ASSURE COMPATIBILITY WITH THE ASSEMBLY AND COMPLIANCE WITH THE PERFORMANCE REQUIREMENTS OF AS1730.

/6/ KNURL MAY BE MEDIUM DIAMOND, MEDIUM PLAIN SPIRAL, OR FINE STRAIGHT.

7. LUBRICATION: THREADS SHALL BE COATED WITH SOLID FILM LUBRICANT TO A THICKNESS OF .0003 TO .0005 PER AS5272 TYPE I (MIL-L-46010 HAS BEEN SUPERSEDED BY MIL-PRF-46010) OVERSPRAY ALLOWED.

8. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME Y14.36. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra.

9. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

/10/ NUT SIZES 64, 72, AND 80 HAVE THREADS WITH REDUCED PITCH DIAMETERS AS FOLLOWS:

   a. 64: 4.5559 +.0087/-.0000

   b. 72: 5.0559 +.0087/-.0000

   c. 80: 5.5559 +.0090/-.0000

/11/ NO THREAD MARKS ON DIAMETER “E”. THREAD MARKS IN .040/.065 RADIUS ADJACENT TO THE 15 DEGREE THREAD CHAMFER IS ACCEPTABLE.

12. INVENTORIED PARTS CONFORMING TO THE PREVIOUS REVISION MAYBE USED TO DEPLETION.

13. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±2 DEGREES.

14. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.