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**REV. E**

**AS3478™**

RATIONALE

FEDERAL SUPPLY CLASS  
5310

RESTRUCTURE NOTES 1, 2, AND 3 FOR CLARITY AND ADD EXCEPTION FOR RECRYSTALLIZED MICROSTRUCTURE, FIGURE REDRAWN, ADD NEW NOTE FOR DISPOSITION OF EXISTING INVENTORY, GENERAL EDITORIAL AND FORMAT CHANGES.

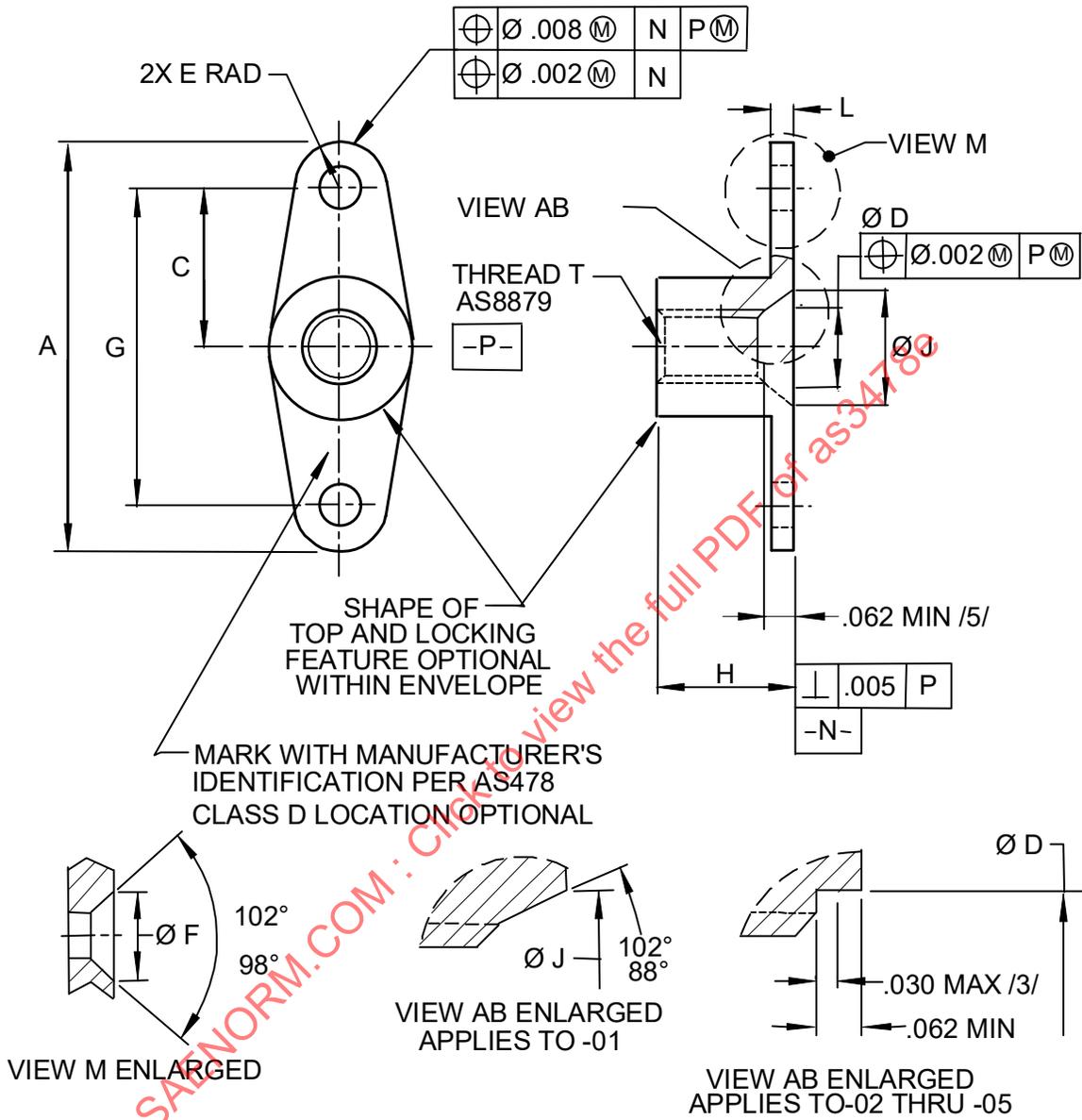
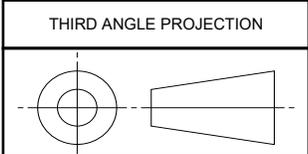


FIGURE 1 - NUT

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS3478E/>



CUSTODIAN: E-25		PROCUREMENT SPECIFICATION: AS4393 /2/	
	<b>AEROSPACE STANDARD</b>		<b>AS3478™</b> SHEET 1 OF 3
	(R) NUT, SELF-LOCKING, PLATE, TWO LUG, LOW HEIGHT, UNS S66286, CLASS: 125 KSI/800 °F		

ISSUED 1991-02 REAFFIRMED 2019-08 REVISED 2020-07

**TABLE 1A - PART NUMBERS AND DIMENSIONS T, A B, C, D, E, AND F**

PART NUMBER	THREAD T	A MAX	ØB	C	ØD MIN	E MIN	ØF
AS3478-01	.1380-32 UNJC-3B	.948	.239-.265	.339-.349	---	.100	.190-.210
AS3478-02	.1640-32 UNJC-3B	.948	.277-.297	.339-.349	.168	.100	.190-.210
AS3478-03	.1900-32 UNJF-3B	.948	.308-.328	.339-.349	.194	.100	.190-.210
AS3478-04	.2500-28 UNJF-3B	1.260	.375-.414	.495-.505	.254	.100	.190-.200
AS3478-05	.3125-24 UNJF-3B	1.292	.485-.505	.495-.505	.317	.125	.220-.240

**TABLE 1B - DIMENSIONS G, H, J, K, L AXIAL STRENGTH, AND APPROX MASS**

PART NUMBER	G	H MAX	ØJ MAX	K	L MAX	AXIAL STRENGTH LBF MIN	APPROX MASS LB/100
AS3478-01	.686- .690	.171	.206	.098-.103	.047	1130	.18
AS3478-02	.686- .690	.250	---	.098-.103	.047	1720	.28
AS3478-03	.686- .690	.250	---	.098-.103	.047	2460	.29
AS3478-04	.998-1.002	.281	---	.098-.103	.055	4580	.53
AS3478-05	.998-1.002	.328	---	.130-.135	.055	7390	.80

NOTES:

1. MATERIAL: CORROSION AND HEAT RESISTANT ALLOY AMS5525, AMS5731, OR AMS5734 (UNS S66286). COMPOSITION SIMILAR TO UNS S66286.
- 1/2/ PROCUREMENT SPECIFICATION: AS4393, EXCEPT AS FOLLOWS:
  - a. HEAT TREATMENT: AFTER FORMING, PLATE NUTS SHALL BE PRECIPITATION HEATED TO A HARDNESS NOT TO EXCEED THAT SPECIFIED IN NOTE 2f.
  - b. FINISH: NUT - SILVER PLATE PER AMS2411; SILVER PLATE ONLY ON THREADS, EXCEPT: SIZE -01 MAY HAVE OPTIONAL COVERAGE ON COUNTERSINK. SIZE -02 THROUGH -05 SILVER PLATING IS OPTIONAL IN THE COUNTERBORE OR COUNTERSINK AND MAY BE INCOMPLETE, BUT NO PLATING SHALL EXTEND TO THE BEARING SURFACE OR THE TOP OF THE NUT. DIMENSIONS APPLY AFTER PLATING.
  - c. BAKE AT 800 °F ± 15 °F IN LIEU OF 1200 °F ± 15 °F FOR NUTS TESTED AFTER BAKE.
  - d. AXIAL STRENGTH LOAD IS PER NASM25027. SEE TABLE 1B.
  - e. COMPLETELY RECRYSTALLIZED STRUCTURE IS NOT REQUIRED.
  - f. HARDNESS: 44 HRC MAXIMUM.
- 1/3/ SIZE -01 SHALL BE COUNTERSUNK TO DIAMETER J. SIZE -02 AND LARGER SHALL BE COUNTERBORED TO DIAMETER D AND .062 MINIMUM DEPTH.
4. REMOVE BURRS AND SHARP EDGES.
5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICRONS Ra.
6. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982 (ASME PUBLICATION).
7. DIMENSIONS ARE IN INCHES.
8. DO NOT USE UNASSIGNED PART NUMBERS.
9. CLASSIFICATION: 125 KSI MINIMUM AXIAL STRENGTH AT ROOM TEMPERATURE. 800 °F MAXIMUM BAKING TEMPERATURE FOR NUTS TESTED AFTER BAKING.

	<b>AEROSPACE STANDARD</b>	<b>AS3478™</b> SHEET 2 OF 3	<b>REV.</b> <b>E</b>
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