

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

**REV. D**

**AS1100™**

FEDERAL SUPPLY CLASS  
4730

RATIONALE

MATERIAL RECOMMENDATION NOTE ADDED. RECOMMENDATION MATERIAL FLAG NOTE /16/ CALLOUT FOR MATERIALS D AND S ADDED. SPECIFICATION CALLOUTS UPDATED TO CURRENT NOMENCLATURE. OPTIONAL SPECIFICATION ADDED FOR ANODIZING TO MATERIAL CODE LETTER D. PROCUREMENT SPECIFICATION NOTE UPDATED. CUSTODIAN CHANGED FROM G3D TO G3B. FLAG NOTE /16/ ADDED.

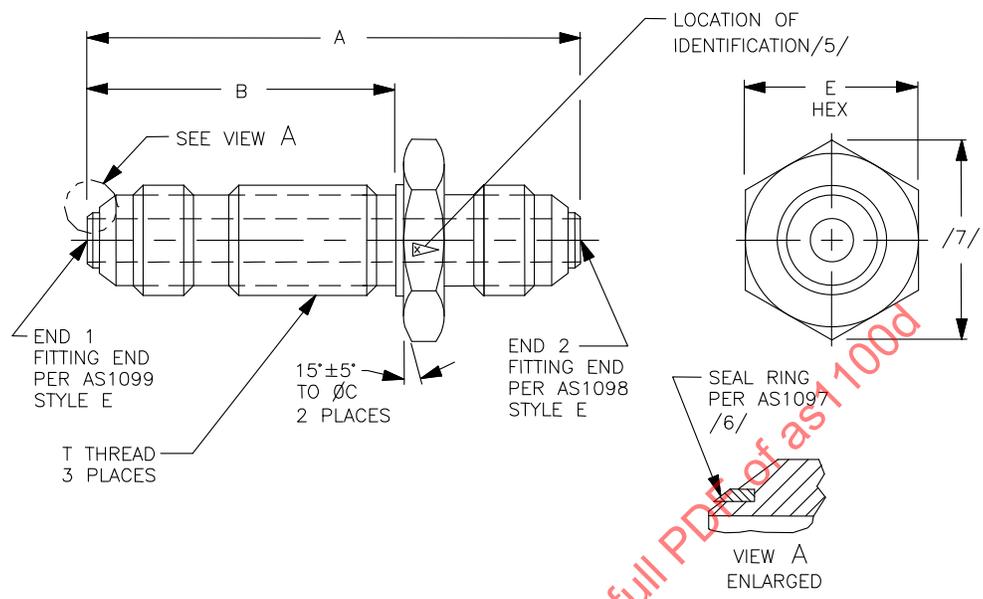


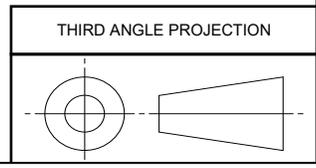
FIGURE 1 - FITTING, UNION, FLARED TUBE, BULKHEAD AND UNIVERSAL

TABLE 1 - DIMENSIONS A-E AND WEIGHTS

BASIC NUMBER AS1100	NOMINAL TUBE SIZE	T THREAD PER AS8879 CLASS 3A	A	B	C	E	LB/EA APPROX REF ALUM	LB/EA APPROX REF GRES
/15/ 04	.250	.4375-20UNJF	+0.00 -0.090	+0.00 -0.045	±.010	.678- .691	.0241	.070
06	.375	.5625-18UNJF	2.234	1.297	.792	.802- .815	.0393	.114
08	.500	.7500-16UNJF	2.469	1.453	.980	.990-1.003	.0713	.207
10	.625	.8750-14UNJF	2.734	1.594	1.103	1.113-1.128	.110	.319
12	.750	1.0625-12UNJ	3.047	1.766	1.353	1.363-1.380	.166	.481
16	1.000	1.3125-12UNJ	3.094	1.766	1.603	1.613-1.630	.226	.655
20	1.250	1.6250-12UNJ	3.172	1.812	1.853	1.863-1.880	.319	.926
24	1.500	1.8750-12UNJ	3.328	1.828	2.099	2.109-2.135	.442	1.282
28	1.750	2.2500-12UNJ	3.594	1.984	2.474	2.484-2.510	.648	1.881
32	2.000	2.5000-12UNJ	3.844	2.110	2.724	2.734-2.760	.831	2.415

NOT RECOMMENDED IN PART /16/

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS1100D/>



CUSTODIAN: G-3/G-3B      PROCUREMENT SPECIFICATION: KSC-F-124 /4/

	<b>AEROSPACE STANDARD</b>	<b>AS1100™</b> SHEET 1 OF 3	<b>REV. D</b>
	FITTING, UNION, FLARED TUBE BULKHEAD AND UNIVERSAL, FOR SEAL RING		

ISSUED 1976-01    REAFFIRMED 2005-06    REVISED 2023-06

NOTES:

/1/ MATERIAL:

- a. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4112; OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6.
- b. CODE LETTER J: 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5639.
- c. CODE LETTER K: 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5648.
- d. CODE LETTER R: 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5645.
- e. CODE LETTER S: 347 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5646. /16/
- f. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

2. HEAT TREAT PER PROCUREMENT SPECIFICATION.

3. FINISH:

- a. MATERIAL CODE LETTER D: ANODIZE PER MIL-PRF-8625 OR AMS2472, TYPE II, CLASS 2, DYE BLUE AND DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTERS J, K, R, AND S; PASSIVATE PER AMS 2700, TYPE 6 OR TYPE 7.
- c. MATERIAL CODE LETTER W: ANODIZE PER AMS2472 OR MILPRF-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: KSC-F-124 JOHN F. KENNEDY SPACE CENTER, NASA, SPECIFICATION FOR FITTINGS (PRESSURE CONNECTIONS), FLARED TUBE. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) SHALL BE LISTED IN THE NADCAP QUALIFIED MANUFACTURER LIST (QML) AC7112, AC7112/2 FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT [www.eAuditNet.com](http://www.eAuditNet.com).

/5/ IDENTIFICATION: MARK PER AS478 CLASS C OR CLASS D; METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZES 06 (.375 OD TUBE SIZE) AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS," AND MATERIAL CODE LETTER.
- b. FOR SIZES 08 (.500 OD TUBE SIZE) AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, AND MATERIAL CODE LETTER.

/6/ THE SEAL RING IS ORDERED SEPARATELY AS AN AS1097.

/7/ HEX CORNERS MAY BE ROUNDED PER ARP1942.

8. INTERPRETATION OF DRAWING PER AS4296.

9. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M: REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED; MACHINED SURFACES ARE TO BE 125 MICROINCHES Ra.

10. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

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

12. DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED; TOLERANCES: LINEAR DIMENSIONS  $\pm 0.016$ ; ANGULAR DIMENSIONS  $\pm 0^{\circ}30'$ .

13. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

	<b>AEROSPACE STANDARD</b>	<b>AS1100™</b> SHEET 2 OF 3	<b>REV.</b> <b>D</b>
	FITTING, UNION, FLARED TUBE BULKHEAD AND UNIVERSAL, FOR SEAL RING		