

REV.  
A

AS4328

FEDERAL SUPPLY CLASS  
4030

RATIONALE

CORRECTING TYPOS AND UPDATING TO THE LATEST FORMAT AND SPECIFICATION CHANGES.

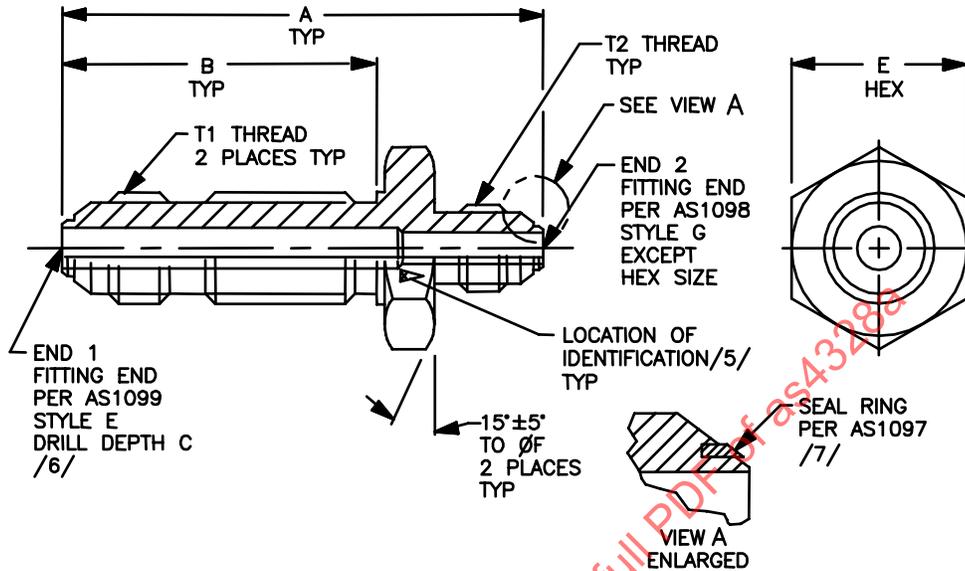


FIGURE 1 - FITTING, UNION, REDUCER, FLARED TUBE END REDUCED

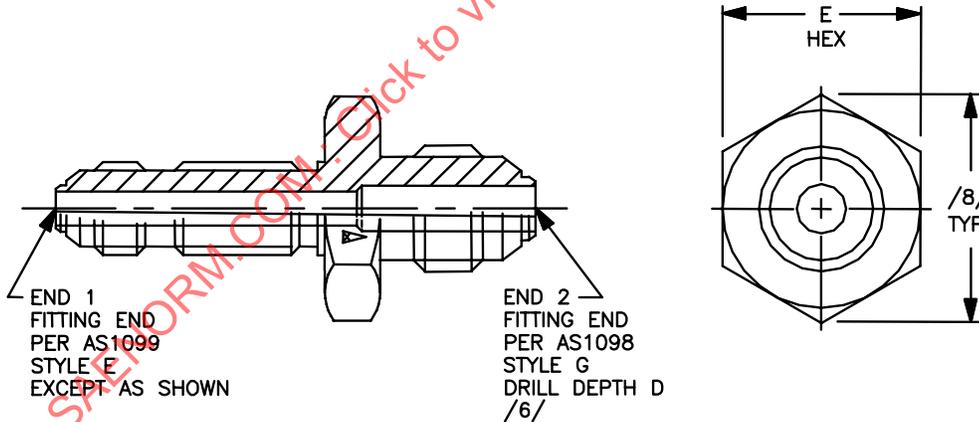
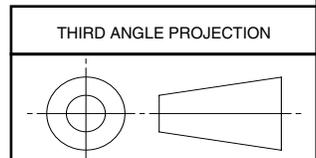


FIGURE 2 - FITTING, UNION, REDUCER, BULKHEAD END REDUCER SAME AS FIGURE 1 EXCEPT AS SHOWN



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ KSC-F-124

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

(R) FITTING, UNION, REDUCER,  
BULKHEAD, FLARED TUBE,  
FOR SEAL RING

**AS4328**  
SHEET 1 OF 4

**REV. A**

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ISSUED 1993-08 REAFFIRMED 2001-12 REVISED 2006-03

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NUMBER AS4328 /16/ SIZE CODE	(NOMINAL TUBE SIZE) END 1	T1 THREAD PER AS8879 CLASS 3A END 1	(NOMINAL TUBE SIZE) END 2	T2 THREAD PER AS8879 CLASS 3A END 2				E	F ±.010	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	
				A +0.00 -.090	B +0.00 -.045	C +0.00 -.045	D +0.00 -.045					
0406	.250	.4375-20UNJF	.375	.5625-18UNJF	2.147	1.208	--	.457	.802-.815	.792	.0442	.122
0408	.250	.4375-20UNJF	.500	.7500-16UNJF	2.225	1.208	--	.538	.990-1.003	.980	.0639	.177
0410	.250	.4375-20UNJF	.625	.8750-14UNJF	2.350	1.208	--	.618	1.113-1.128	1.103	.0958	.266
0412	.250	.4375-20UNJF	.750	1.0625-12UNJ	2.491	1.208	--	.703	1.363-1.380	1.353	.131	.362
0416	.250	.4375-20UNJF	1.000	1.3125-12UNJ	2.538	1.208	--	.741	1.613-1.630	1.603	.179	.497
0420	.250	.4375-20UNJF	1.250	1.6250-12UNJ	2.569	1.208	--	.778	1.863-1.880	1.853	.243	.674
0604	.375	.5625-18UNJF	.250	.4375-20UNJF	2.219	1.286	.883	--	.802-.815	.792	.0466	.129
0608	.375	.5625-18UNJF	.500	.7500-16UNJF	2.303	1.286	--	.538	.990-1.003	.980	.0690	.191
0610	.375	.5625-18UNJF	.625	.8750-14UNJF	2.428	1.286	--	.618	1.113-1.128	1.103	.0898	.249
0612	.375	.5625-18UNJF	.750	1.0625-12UNJ	2.569	1.286	--	.703	1.363-1.380	1.353	.136	.376
0804	.500	.7500-16UNJF	.250	.4375-20UNJF	2.352	1.442	1.008	--	.990-1.003	.980	.0771	.214
0806	.500	.7500-16UNJF	.375	.5625-18UNJF	2.358	1.442	1.008	--	.990-1.003	.980	.0796	.221
0810	.500	.7500-16UNJF	.625	.8750-14UNJF	2.584	1.442	--	.618	1.113-1.128	1.103	.110	.304
0812	.500	.7500-16UNJF	.750	1.0625-12UNJ	2.725	1.442	--	.703	1.363-1.380	1.353	.155	.430
0816	.500	.7500-16UNJF	1.000	1.3125-12UNJ	2.772	1.442	--	.741	1.613-1.630	1.603	.204	.565
1004	.625	.8750-14UNJF	.250	.4375-20UNJF	2.517	1.583	1.121	--	1.113-1.128	1.103	.103	.286
1006	.625	.8750-14UNJF	.375	.5625-18UNJF	2.523	1.583	1.121	--	1.113-1.128	1.103	.106	.293
1008	.625	.8750-14UNJF	.500	.7500-16UNJF	2.624	1.583	1.121	--	1.113-1.128	1.103	.115	.319
1012	.625	.8750-14UNJF	.750	1.0625-12UNJ	2.866	1.583	--	.703	1.363-1.380	1.353	.169	.469
1016	.625	.8750-14UNJF	1.000	1.3125-12UNJ	2.913	1.583	--	.741	1.613-1.630	1.603	.218	.604
1204	.750	1.0625-12UNJ	.250	.4375-20UNJF	2.723	1.755	1.258	--	1.363-1.380	1.353	.161	.448
1206	.750	1.0625-12UNJ	.375	.5625-18UNJF	2.729	1.755	1.258	--	1.363-1.380	1.353	.164	.455
1208	.750	1.0625-12UNJ	.500	.7500-16UNJF	2.830	1.755	1.258	--	1.363-1.380	1.353	.173	.481
1210	.750	1.0625-12UNJ	.625	.8750-14UNJF	2.931	1.755	1.258	--	1.363-1.380	1.353	.182	.505
1216	.750	1.0625-12UNJ	1.000	1.3125-12UNJ	3.084	1.755	--	.741	1.613-1.630	1.603	.247	.686
1220	.750	1.0625-12UNJ	1.250	1.6250-12UNJ	3.115	1.755	--	.778	1.863-1.880	1.853	.312	.864
1604	1.000	1.3125-12UNJ	.250	.4375-20UNJF	2.723	1.755	1.258	--	1.613-1.630	1.603	.212	.589
1608	1.000	1.3125-12UNJ	.500	.7500-16UNJF	2.830	1.755	1.258	--	1.613-1.630	1.603	.244	.676
1610	1.000	1.3125-12UNJ	.625	.8750-14UNJF	2.931	1.755	1.258	--	1.613-1.630	1.603	.233	.646
1612	1.000	1.3125-12UNJ	.750	1.0625-12UNJ	3.037	1.755	1.258	--	1.613-1.630	1.603	.250	.692
1620	1.000	1.3125-12UNJ	1.250	1.6250-12UNJ	3.115	1.755	--	.778	1.863-1.880	1.853	.333	.923
1624	1.000	1.3125-12UNJ	1.500	1.8750-12UNJ	3.256	1.755	--	.878	2.109-2.135	2.099	.415	1.150
2004	1.250	1.6250-12UNJ	.250	.4375-20UNJF	2.754	1.802	1.295	--	1.863-1.880	1.853	.299	.828
2012	1.250	1.6250-12UNJ	.750	1.0625-12UNJ	3.068	1.802	1.295	--	1.863-1.880	1.853	.336	.931
2016	1.250	1.6250-12UNJ	1.000	1.3125-12UNJ	3.015	1.802	1.295	--	1.863-1.880	1.853	.331	.917
2024	1.250	1.6250-12UNJ	1.500	1.8750-12UNJ	3.303	1.802	--	.878	2.109-2.135	2.099	.470	1.300
2416	1.500	1.8750-12UNJ	1.000	1.3125-12UNJ	3.147	1.817	1.308	--	2.109-2.135	2.099	.425	1.180
2420	1.500	1.8750-12UNJ	1.250	1.6250-12UNJ	3.194	1.817	1.308	--	2.109-2.135	2.099	.459	1.270
2820	1.750	2.2500-12UNJ	1.250	1.6250-12UNJ	3.379	1.973	1.433	--	2.484-2.510	2.474	.549	1.540
2824	1.750	2.2500-12UNJ	1.500	1.8750-12UNJ	3.504	1.973	1.433	--	2.484-2.510	2.474	.584	1.640
3224	2.000	2.5000-12UNJ	1.500	1.8750-12UNJ	3.629	2.098	1.533	--	2.734-2.760	2.724	.679	1.900
3228	2.000	2.5000-12UNJ	1.750	2.2500-12UNJ	3.754	2.098	1.533	--	2.734-2.760	2.724	.731	2.050



SAE Aerospace  
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## AEROSPACE STANDARD

(R) FITTING, UNION, REDUCER,  
BULKHEAD, FLARED TUBE,  
FOR SEAL RINGAS4328  
SHEET 2 OF 4REV.  
A

## NOTES:

## /1/ MATERIAL:

- a. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS 4112; 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 AMS 5639.
- c. CODE LETTER K: 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5648.
- d. CODE LETTER R: 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5645.
- e. CODE LETTER S: 347 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5646.
- f. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124.

## 2. HEAT TREAT:

- a. ALL CODE LETTERS: NONE

## 3. FINISH:

- a. MATERIAL CODE LETTER D: ANODIZE PER AMS-A-8625 TYPE II, CLASS 2, DYE BLUE AND DUPLEX SEAL PER PROCURMENT 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 AMS 2472 OR MIL-A-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 SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN "PERFORMANCE REVIEW INSTITUTE" (PRI) "QUALIFIED MANUFACTURER LIST" (QML) FOR THIS TYPE PRODUCT. THE QML IS AVAILABLE AT [www.eauditnet.com](http://www.eauditnet.com). NADCAP QML AS7112, 7112/2.

/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.
- c. MATERIAL CODE LETTER W: ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/6/ AT THE OPTION OF THE MANUFACTURER, THE SMALLER DIAMETER MAY BE DRILLED THRU.

/7/ THE SEAL RING IS ORDERED SEPARATELY AS AN AS1097.

/8/ HEX CORNERS MAY BE ROUNDED PER ARP1942.

9. INTERPRETATION OF DRAWING PER ARP4296.