FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECTED END 1 TO STYLE "E" IN FIGURE 1. UPDATED NOTE /4/ TO DELETE "PRI" STATEMENT AND CORRECT THE NADCAP SCOPE TO AC7112, AC7112/2 ADDED USAGE/CAUTIONARY STATEMENT TO NOTE /1A/.

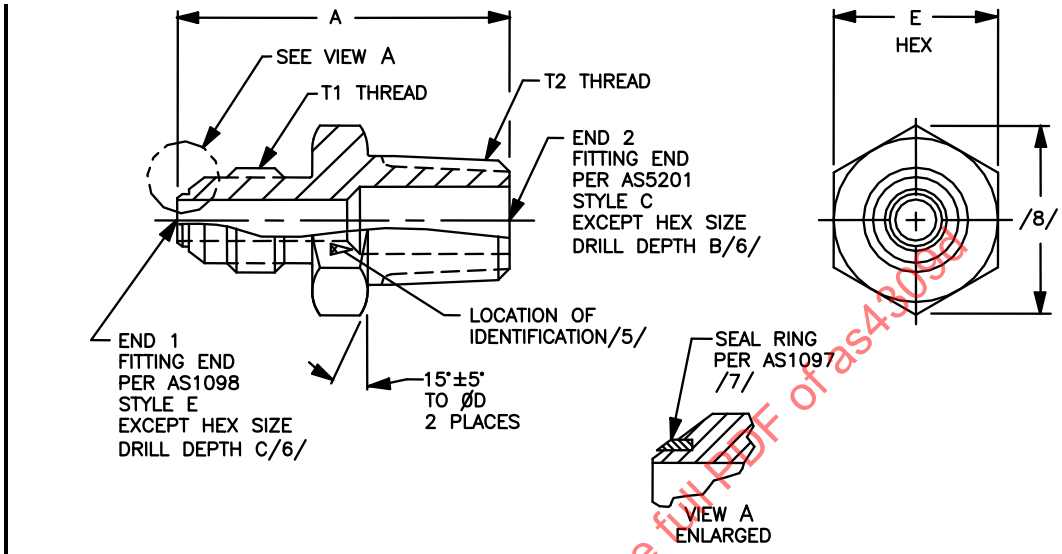
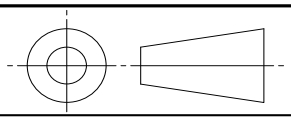


FIGURE 1 - FITTING, NIPPLE, FLARED TUBE TO PIPE THREAD

ISSUED 1993-08 REAFFIRMED 2001-12 REVISED 2015-03

THIRD ANGLE PROJECTION



SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS4309D

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ KSC-F-124

AEROSPACE STANDARD

FITTING, NIPPLE, FLARED
TUBE TO PIPE THREAD,
FOR SEAL RING

AS4309
SHEET 1 OF 4

REV. D

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NUMBER AS4309 /16/ SIZE CODE	(NOMINAL TUBE SIZE) END 1	T1 THREAD PER AS8879 CLASS 3A END 1	(NOMINAL PIPE SIZE) END 2	T2 THREAD PER AS71051 ANPT END 2	A +.000 -.075	B	C	D ±.010	E	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES
0402	.250	.4375-20UNJF	.125	.1250-27	1.125	.469	--	.480	.490 - .502	.0132	.0367
0404	.250	.4375-20UNJF	.250	.2500-18	1.391	.688	--	.542	.552 - .565	.0211	.0584
0602	.375	.5625-18UNJF	.125	.1250-27	1.203	--	.688	.605	.615 - .628	.0195	.0538
0604	.375	.5625-18UNJF	.250	.2500-18	1.391	.688	--	.605	.615 - .628	.0241	.0669
0606	.375	.5625-18UNJF	.375	.3750-18	1.422	.688	--	.730	.740 - .753	.0323	.0897
0608	.375	.5625-18UNJF	.500	.5000-14	1.641	.875	--	.855	.865 - .878	.0504	.140
0804	.500	.7500-16UNJF	.250	.2500-18	1.516	--	.844	.792	.802 - .815	.0412	.114
0806	.500	.7500-16UNJF	.375	.3750-18	1.516	.688	--	.792	.802 - .815	.0424	.118
0808	.500	.7500-16UNJF	.500	.5000-14	1.735	.875	--	.855	.865 - .878	.0577	.160
1004	.625	.8750-14UNJF	.250	.2500-18	1.722	--	.844	.918	.928 - .941	.0638	.177
1006	.625	.8750-14UNJF	.375	.3750-18	1.656	.812	--	.918	.928 - .941	.0590	.164
1008	.625	.8750-14UNJF	.500	.5000-14	1.844	.906	--	.918	.928 - .941	.0682	.189
1012	.625	.8750-14UNJF	.750	.7500-14	1.859	.906	--	1.103	1.113 - 1.128	.0894	.248
1204	.750	1.0625-12UNJ	.250	.2500-18	1.843	--	1.046	1.103	1.113 - 1.128	.0958	.265
1206	.750	1.0625-12UNJ	.375	.3750-18	1.859	--	1.000	1.103	1.113 - 1.128	.0967	.268
1208	.750	1.0625-12UNJ	.500	.5000-14	1.969	--	1.063	1.103	1.113 - 1.128	.0967	.268
1212	.750	1.0625-12UNJ	.750	.7500-14	1.969	.906	--	1.103	1.113 - 1.128	.103	.285
1216	.750	1.0625-12UNJ	1.000	1.0000-11.5	2.203	1.063	--	1.353	1.363 - 1.380	.152	.422
1608	1.000	1.3125-12UNJ	.500	.5000-14	2.015	--	.906	1.353	1.363 - 1.380	.134	.372
1612	1.000	1.3125-12UNJ	.750	.7500-14	2.047	--	1.094	1.353	1.363 - 1.380	.140	.388
1616	1.000	1.3125-12UNJ	1.000	1.0000-11.5	2.234	1.125	--	1.353	1.363 - 1.380	.158	.439
2012	1.250	1.6250-12UNJ	.750	.7500-14	2.140	--	1.031	1.666	1.676 - 1.693	.216	.598
2016	1.250	1.6250-12UNJ	1.000	1.0000-11.5	2.344	--	1.250	1.666	1.676 - 1.693	.231	.640
2020	1.250	1.6250-12UNJ	1.250	1.2500-11.5	2.375	1.188	--	1.728	1.676 - 1.693	.256	.710
2412	1.500	1.8750-12UNJ	.750	.7500-14	2.203	--	1.031	1.978	1.988 - 2.005	.275	.763
2416	1.500	1.8750-12UNJ	1.000	1.0000-11.5	2.453	--	1.156	1.978	1.988 - 2.005	.308	.855
2420	1.500	1.8750-12UNJ	1.250	1.2500-11.5	2.562	--	1.344	1.978	1.988 - 2.005	.332	.919
2424	1.500	1.8750-12UNJ	1.500	1.5000-11.5	2.593	1.031	--	1.978	1.988 - 2.005	.342	.946
2816	1.750	2.2500-12UNJ	1.000	1.0000-11.5	2.797	--	1.125	2.349	2.359 - 2.385	.424	1.189
2820	1.750	2.2500-12UNJ	1.250	1.2500-11.5	2.812	--	1.500	2.349	2.359 - 2.385	.456	1.277
2824	1.750	2.2500-12UNJ	1.500	1.5000-11.5	2.844	--	1.438	2.349	2.359 - 2.385	.470	1.317
3220	2.000	2.5000-12UNJ	1.250	1.2500-11.5	3.079	--	1.500	2.599	2.609 - 2.635	.581	1.627
3224	2.000	2.5000-12UNJ	1.500	1.5000-11.5	3.094	--	1.438	2.599	2.609 - 2.635	.595	1.667
3232	2.000	2.5000-12UNJ	2.000	2.0000-11.5	3.125	1.438	--	2.599	2.609 - 2.635	.648	1.817

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.
DESIGNERS AND USERS SHOULD NOTE THAT RESISTANCE TO CORROSION AND STRESS CORROSION FOR 2024 ALLOY IS POOR. WHEN USED IN SALT LADEN ENVIORNMENTS. IT IS RECOMMENDED THAT 7075, CODE "W" MATERIAL BE CONSIDERED AS AN ALTERNATIVE.

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.

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:

a. ALL CODE LETTERS: NONE

3. FINISH:

a. MATERIAL CODE LETTER D: ANODIZE PER AMS2472 OR MIL-A-8625 TYPE II, CLASS 2, DYE BLUE AND DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

b. MATERIAL CODE LETTERS J, K, R, AND S; PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.

c. MATERIAL CODE LETTER W: ANODIZE PER AMS2472 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 THE NATIONAL AEROSPACE AND DEFENSE CONTRACTORS ACCREDITATION PROGRAM (NADCAP) QUALIFIED MANUFACTURER LIST (QML) AC7112, AC7112/2 FOR SIMILAR FLARED FITTINGS. THE QML IS AVAILABLE AT 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/ 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 AS4296.

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