

FEDERAL SUPPLY CLASS  
4730

REV. C  
AS1032

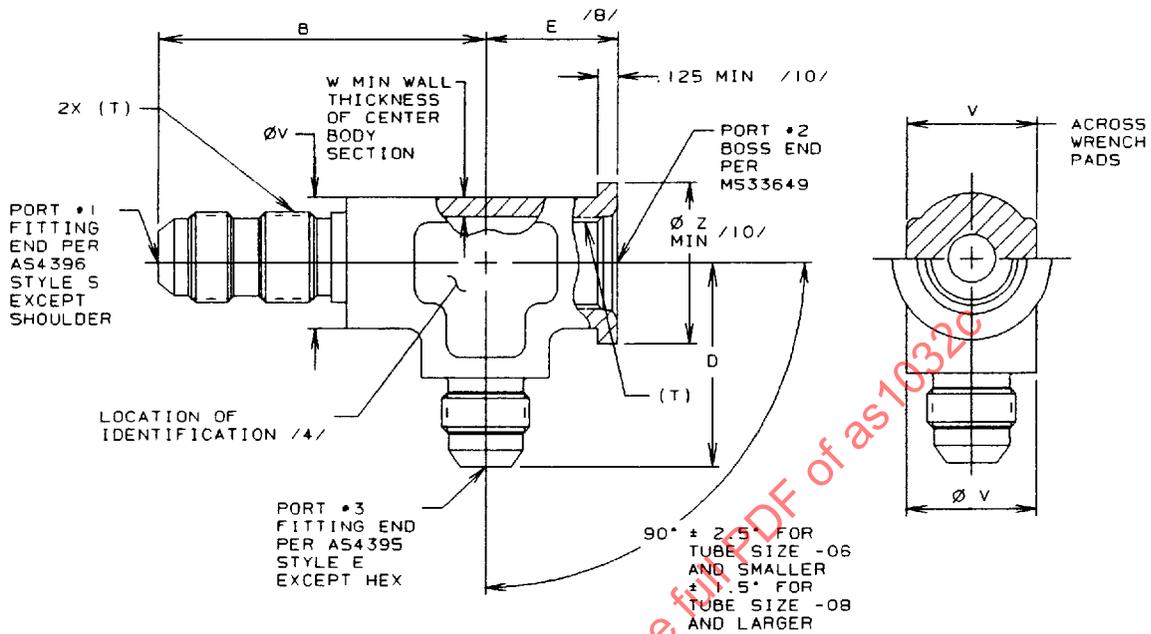


FIGURE 1 - TEE, PORT #2 SHOWN AS NONREDUCER

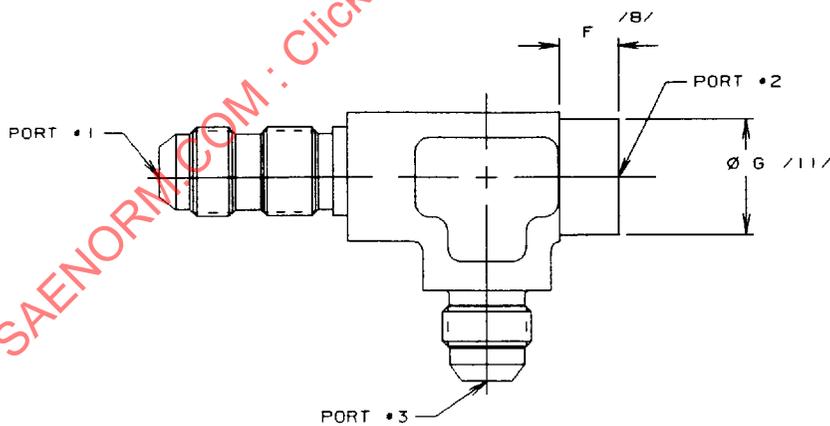
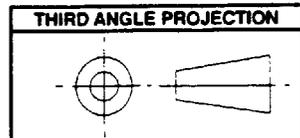


FIGURE 2 - TEE, PORT #2 SHOWN AS REDUCER



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /3/ MIL-F-5509

**SAE** The Engineering Society  
For Advancing Mobility  
Land Sea Air and Space  
**INTERNATIONAL**

400 Commonwealth Drive, Warrendale, PA 15096-0001

**AEROSPACE STANDARD**

TEE, STANDARD AND REDUCER, BULKHEAD AND  
INTERNAL PORT ON RUN, FLARED TUBE

**AS1032**

SHEET 1 OF 5

**REV.**

**C**

ISSUED 1962-08-15 REVISED 1993-05-07 (C)

SAE Technical Standards Board 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 reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

REV.  
C

AS1032

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS1032							LB/EA	LB/EA	LB/EA
/9/	/17/	E	F	Z		MAX	MAX	MAX	
SIZE	CODE	/8/	/8/	V	W	/10/	ALUM	CRES	TI
02		.648	-	.500	.090	.562	-	-	-
03		.711	-	.562	.100	.625	-	-	-
04		.773	.375	.750	.110	-	-	-	-
05		.773	.375	.750	.120	-	-	-	-
06		.836	.375	.875	.120	-	-	-	-
08		1.023	.469	1.062	.150	-	-	-	-
10		1.180	.625	1.062	.170	1.125	-	-	-
12		1.367	.688	1.312	.185	1.375	-	-	-
16		1.555	.719	1.625	.205	1.625	-	-	-
20		1.742	.781	1.875	.240	1.938	-	-	-

TABLE 2 - LEG LENGTH B

SIZE OF PORT #1	FORGING SIZE /9/ 02	FORGING SIZE /9/ 03	FORGING SIZE /9/ 04	FORGING SIZE /9/ 05	FORGING SIZE /9/ 06	FORGING SIZE /9/ 08	FORGING SIZE /9/ 10	FORGING SIZE /9/ 12	FORGING SIZE /9/ 16	FORGING SIZE /9/ 20
02	1.491	1.523	1.679	1.679	1.851	1.851	1.929	2.008	2.227	2.367
03	-	1.523	1.679	1.679	1.851	1.851	1.929	2.008	2.227	2.367
04	-	-	1.773	1.773	1.945	1.945	2.023	2.102	2.321	2.461
05	-	-	-	1.773	1.945	1.945	2.023	2.102	2.321	2.461
06	-	-	-	-	2.023	2.023	2.101	2.180	2.399	2.539
08	-	-	-	-	-	2.179	2.257	2.336	2.555	2.695
10	-	-	-	-	-	-	2.398	2.477	2.696	2.836
12	-	-	-	-	-	-	-	2.648	2.867	3.007
16	-	-	-	-	-	-	-	-	2.867	3.007
20	-	-	-	-	-	-	-	-	-	3.054

REV.  
C

AS1032

TABLE 3 - LEG LENGTH D

SIZE OF PORT #3	FORGING SIZE /9/ 02	FORGING SIZE /9/ 03	FORGING SIZE /9/ 04	FORGING SIZE /9/ 05	FORGING SIZE /9/ 06	FORGING SIZE /9/ 08	FORGING SIZE /9/ 10	FORGING SIZE /9/ 12	FORGING SIZE /9/ 16	FORGING SIZE /9/ 20
02	.929	.961	1.109	1.109	1.165	1.232	1.338	1.420	1.623	1.763
03	-	.992	1.140	1.140	1.196	1.283	1.369	1.451	1.654	1.794
04	-	-	1.211	1.211	1.267	1.354	1.440	1.522	1.725	1.865
05	-	-	-	1.211	1.267	1.354	1.440	1.522	1.725	1.865
06	-	-	-	-	1.273	1.360	1.446	1.528	1.731	1.871
08	-	-	-	-	-	1.461	1.547	1.629	1.832	1.972
10	-	-	-	-	-	-	1.648	1.730	1.933	2.073
12	-	-	-	-	-	-	-	1.836	2.039	2.179
16	-	-	-	-	-	-	-	-	2.086	2.226
20	-	-	-	-	-	-	-	-	-	2.273

TABLE 4 - TURNED DIA G /11/

SIZE OF PORT #2	FORGING SIZE /9/ 03	FORGING SIZE /9/ 04	FORGING SIZE /9/ 05	FORGING SIZE /9/ 06	FORGING SIZE /9/ 08	FORGING SIZE /9/ 10	FORGING SIZE /9/ 12	FORGING SIZE /9/ 16	FORGING SIZE /9/ 20
02	-	.594	.594	.594	.594	.594	.594	.594	.594
03	-	.656	.656	.656	.656	.656	.656	.656	.656
04	-	-	-	.719	.719	.719	.719	.719	.719
05	-	-	-	.781	.781	.781	.781	.781	.781
06	-	-	-	-	.844	.844	.844	.844	.844
08	-	-	-	-	-	-	1.062	1.062	1.062
10	-	-	-	-	-	-	-	1.188	1.188
12	-	-	-	-	-	-	-	1.438	1.438
16	-	-	-	-	-	-	-	-	1.688

REV.  
C

AS1032

TABLE 5 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	(NOMINAL TUBE                      T THREAD SIZE)                      PER MIL-S-8879	
	02	.125
03	.188	.3750-24 UNJF
04	.250	.4375-20 UNJF
05	.312	.5000-20 UNJF
06	.375	.5625-18 UNJF
08	.500	.7500-16 UNJF
10	.625	.8750-14 UNJF
12	.750	1.0625-12 UNJ
16	1.000	1.3125-12 UNJ
20	1.250	1.6250-12 UNJ

## NOTES:

## /1/ MATERIAL:

- a. NO CODE LETTER - 1137 STEEL FORGING OR BAR PER AMS 5024 OR ASTM A 108, OR 4130 STEEL FORGING OR BAR PER AMS 6370 OR MIL-S-6758.
- b. CODE LETTER D - 2014T6 ALUMINUM ALLOY FORGING PER AMS 4133 OR QQ-A-367; OR 2024T6 ALUMINUM ALLOY BAR PER AMS 4112 OR QQ-A-225/6; OR 2024T851 ALUMINUM ALLOY BAR PER QQ-A-225/6.
- c. CODE LETTER J - 30304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5639 OR 304 CORROSION RESISTANT STEEL PER QQ-S-763.
- d. CODE LETTER K - 30316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5648 OR 316 CORROSION RESISTANT STEEL PER QQ-S-763.
- e. CODE LETTER S - 30347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5646 OR 347 CORROSION RESISTANT STEEL PER QQ-S-763.
- f. CODE LETTER T - 6AL4V TITANIUM ALLOY FORGING OR BAR PER AMS 4928.
- g. CODE LETTER W - 7075T73 ALUMINUM ALLOY FORGING PER AMS 4141 OR QQ-A-367; OR 7075T7351 ALUMINUM ALLOY BAR PER AMS 4124; OR 7075T73 ALUMINUM ALLOY BAR PER QQ-A-225/9.

## 2. FINISH:

- a. NO MATERIAL CODE LETTER - CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2, DYE BLACK.
- b. MATERIAL CODE LETTER D - ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL.
- c. MATERIAL CODE LETTER J - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- d. MATERIAL CODE LETTER K - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- e. MATERIAL CODE LETTER S - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- f. MATERIAL CODE LETTER T - FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486.
- g. MATERIAL CODE LETTER W - ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL.

- /3/ PROCUREMENT SPECIFICATION: MIL-F-5509 EXCEPT AS SPECIFIED ON THIS STANDARD. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.