

FEDERAL SUPPLY CLASS

4730

REV.
C

AS1031

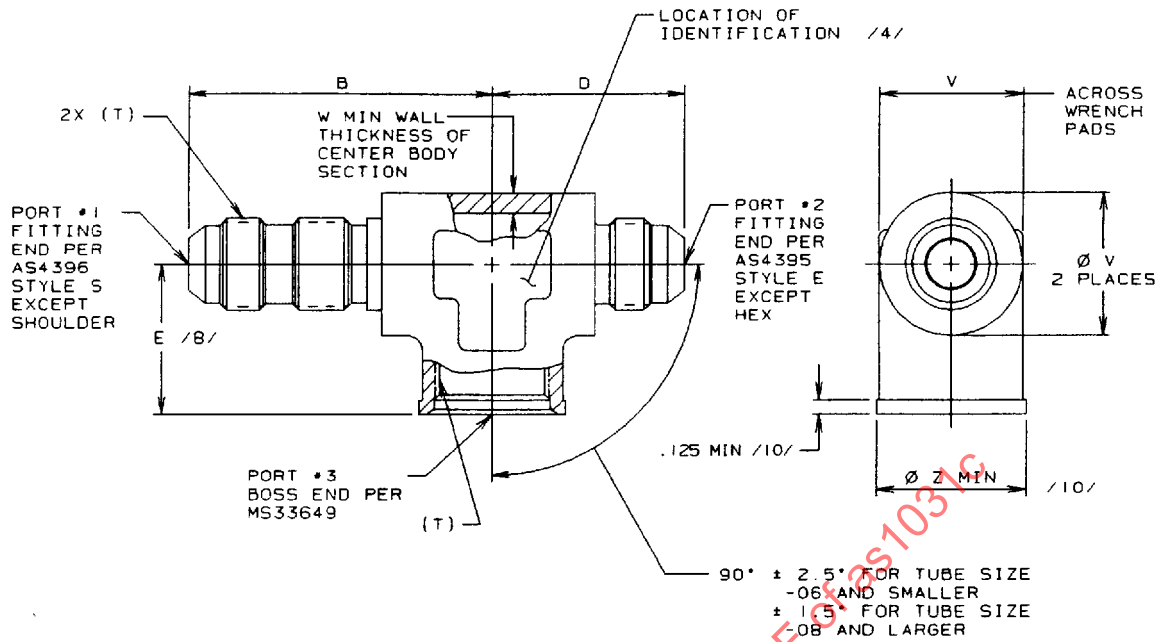


FIGURE 1 - TEE, PORT #3 SHOWN AS NONREDUCER

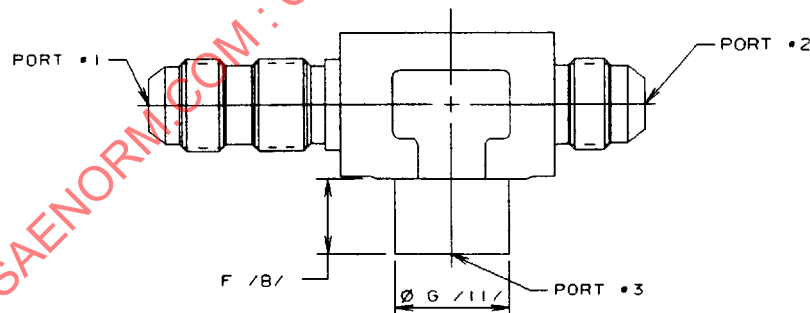
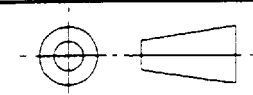


FIGURE 2 - TEE, PORT #3 SHOWN AS REDUCER

THIRD ANGLE PROJECTION



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 STANDARDTEE, STANDARD AND REDUCER, BULKHEAD ON RUN,
INTERNAL PORT ON SIDE, FLARED TUBE**AS1031**

SHEET 1 OF 5

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO.							LB/EA	LB/EA	LB/EA
AS1031							MAX	MAX	MAX
/9/	/17/	E	F			Z			
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	.750	-	-	-
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

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TABLE 3 - LEG LENGTH D

SIZE OF PORT #2	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 #3	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

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TABLE 5 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	(NOMINAL TUBE SIZE) T THREAD	
	PER MIL-S-8879	
02	.125	.3125-24 UNJF
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-D-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.