

REV.
C

AS1033

PORT #1
NON-REDUCER
SHOWN.
FITTING END
PER AS4395
STYLE S IF
NON-REDUCER;
AS4396
STYLE S
EXCEPT
SHOULDER
IF REDUCER.

3X (T)
LOCATION OF
IDENTIFICATION /4/

PORT #3
REDUCER
SHOWN.

W MIN WALL
THICKNESS
OF CENTER
BODY
SECTION

PORT #2
NON-REDUCER
SHOWN.
2X FITTING END
PER AS4395
STYLE G.
IF NON-REDUCER;
AS4395 STYLE E
EXCEPT HEX
IF REDUCER.

$90^\circ \pm 2.5^\circ$ FOR
TUBE SIZE -06
AND SMALLER
 $\pm 1.5^\circ$ FOR
TUBE SIZE -08
AND LARGER

FEDERAL SUPPLY CLASS

4730

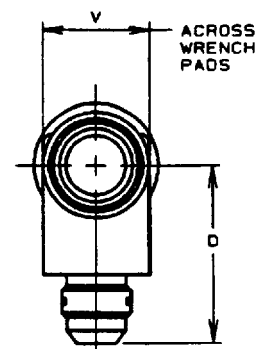


FIGURE 1 - TEE, BULKHEAD ON RUN, REDUCER

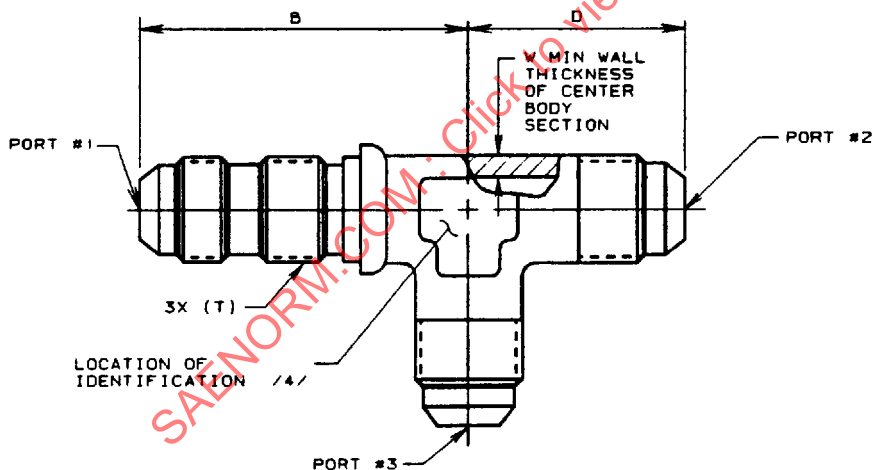
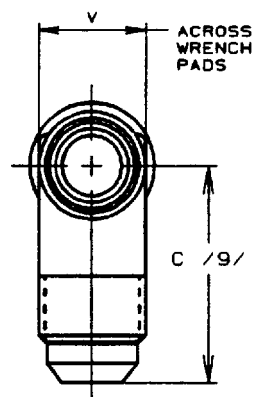
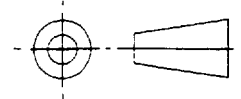


FIGURE 2 - TEE, BULKHEAD ON RUN, NONREDUCER



THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /3/ MIL-F-5509

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400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

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

AS1033

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ISSUED 1962-08 REVISED 1994-01 (C)

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS1033 /8/ /15/ SIZE CODE	C /9/	V	W	LB/EA MAX ALUM	LB/EA MAX CRES	LB/EA MAX TI
02	.851	.312	.090	-	-	-
03	.914	.375	.100	-	-	-
04	.976	.438	.110	-	-	-
05	1.039	.500	.120	-	-	-
06	1.101	.562	.120	-	-	-
08	1.367	.750	.150	-	-	-
10	1.570	.875	.170	-	-	-
12	1.789	1.062	.185	-	-	-
16	1.945	1.312	.205	-	-	-
20	2.180	1.625	.240	-	-	-
24	2.351	1.875	.250	-	-	-
32	2.898	2.562	.350	-	-	-

TABLE 2 - LEG LENGTH B

SIZE OF PORT #1	FORGING SIZE /8/ 02	FORGING SIZE /8/ 03	FORGING SIZE /8/ 04	FORGING SIZE /8/ 05	FORGING SIZE /8/ 06	FORGING SIZE /8/ 08	FORGING SIZE /8/ 10	FORGING SIZE /8/ 12	FORGING SIZE /8/ 16	FORGING SIZE /8/ 20	FORGING SIZE /8/ 24	FORGING SIZE /8/ 32
02	1.429	1.461	1.507	1.538	1.648	1.789	1.929	2.039	2.164	2.445	2.726	3.133
03	-	1.461	1.507	1.538	1.648	1.789	1.929	2.039	2.164	2.445	2.726	3.133
04	-	-	1.601	1.632	1.742	1.883	2.023	2.133	2.258	2.539	2.820	3.227
05	-	-	-	1.632	1.742	1.883	2.023	2.133	2.258	2.539	2.820	3.227
06	-	-	-	-	1.820	1.961	2.101	2.211	2.336	2.617	2.898	3.305
08	-	-	-	-	-	2.117	2.257	2.367	2.492	2.773	3.054	3.461
10	-	-	-	-	-	-	2.398	2.508	2.633	2.914	3.195	3.602
12	-	-	-	-	-	-	-	2.679	2.804	3.085	3.366	3.773
16	-	-	-	-	-	-	-	-	2.804	3.085	3.366	3.773
20	-	-	-	-	-	-	-	-	-	3.132	3.413	3.820
24	-	-	-	-	-	-	-	-	-	-	3.429	3.836
32	-	-	-	-	-	-	-	-	-	-	-	4.117

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TABLE 3 - LEG LENGTH D

SIZE OF PORT #2 OR #3	FORGING SIZE /8/ 02	FORGING SIZE /8/ 03	FORGING SIZE /8/ 04	FORGING SIZE /8/ 05	FORGING SIZE /8/ 06	FORGING SIZE /8/ 08	FORGING SIZE /8/ 10	FORGING SIZE /8/ 12	FORGING SIZE /8/ 16	FORGING SIZE /8/ 20	FORGING SIZE /8/ 24	FORGING SIZE /8/ 32
02	.789	.820	.820	.874	.978	1.064	1.166	1.263	1.373	1.576	1.716	2.201
03	-	.851	.843	.905	1.009	1.095	1.197	1.294	1.404	1.607	1.747	2.232
04	-	-	.914	.976	1.080	1.166	1.268	1.365	1.475	1.678	1.818	2.303
05	-	-	-	.976	1.080	1.166	1.268	1.365	1.475	1.678	1.818	2.303
06	-	-	-	-	1.086	1.172	1.274	1.371	1.481	1.684	1.824	2.309
08	-	-	-	-	-	1.273	1.375	1.472	1.582	1.785	1.925	2.410
10	-	-	-	-	-	-	1.476	1.573	1.683	1.886	2.026	2.511
12	-	-	-	-	-	-	-	1.679	1.789	1.992	2.132	2.617
16	-	-	-	-	-	-	-	-	1.836	2.039	2.179	2.664
20	-	-	-	-	-	-	-	-	-	2.086	2.226	2.711
24	-	-	-	-	-	-	-	-	-	-	2.351	2.836
32	-	-	-	-	-	-	-	-	-	-	-	3.086

TABLE 4 - 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
24	1.500	1.8750-12 UNJ
32	2.000	2.5000-12 UNJ

NOTES:

/1/ MATERIAL:

- 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.
- 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.
- CODE LETTER J - 30304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5639 OR 304 CORROSION RESISTANT STEEL PER QQ-S-763.
- CODE LETTER K - 30316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5648 OR 316 CORROSION RESISTANT STEEL PER QQ-S-763.
- CODE LETTER S - 30347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5646 OR 347 CORROSION RESISTANT STEEL PER QQ-S-763.
- CODE LETTER T - 6AL4V TITANIUM ALLOY FORGING OR BAR PER AMS 4928.

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