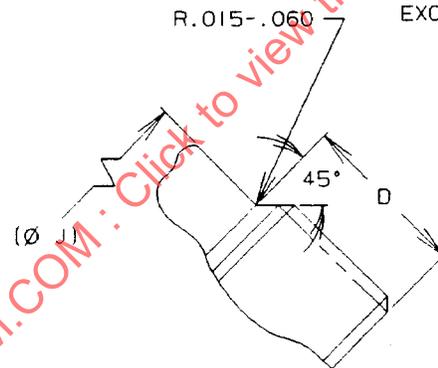
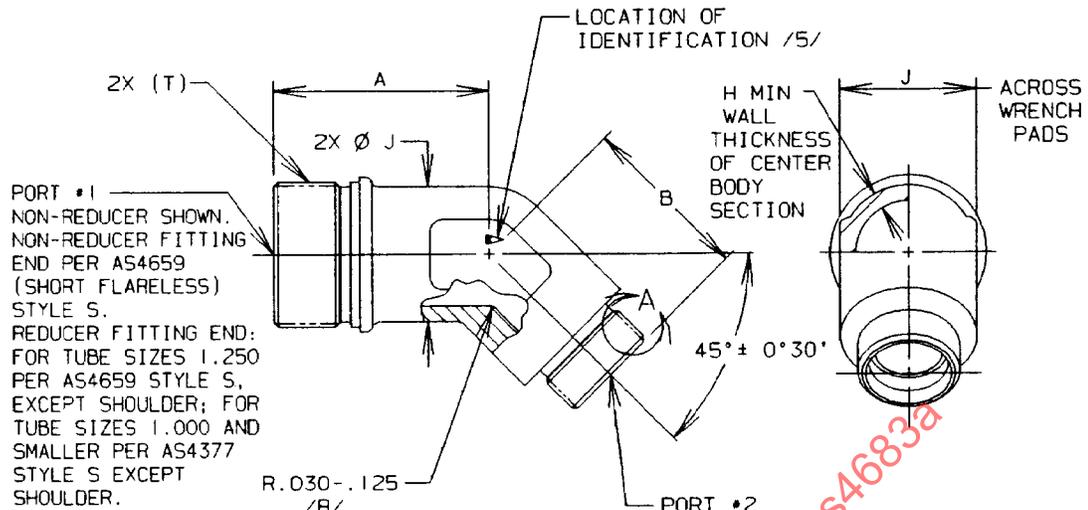


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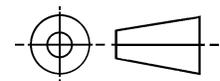
FEDERAL SUPPLY CLASS
4730



VIEW A
ENLARGED
NON-REDUCER
ONLY

FIGURE 1 - FITTING, ELBOW, 45°, REDUCER

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ MIL-F-18280

SAE The Engineering Society
For Advancing Mobility
Land Sea Air and Space
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

FITTING, ELBOW, 45°, REDUCER, BULKHEAD,
FLARELESS AND SHORT FLARELESS

AS4683
SHEET 1 OF 4

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ISSUED 1992-07 REVISED 1994-12 REAFFIRMED 2000-11

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO.					LB/EA	LB/EA	LB/EA
AS4683					J	MAX	MAX
/9/	/17/				MAX	MAX	MAX
SIZE	CODE	D	H	+ .005/- .020	ALUM	CRES	TI
20		.517	.124	1.375	.350	.971	.555
24		.614	.156	1.688	.474	1.316	.752

TABLE 2 - LEG LENGTH A

SIZE OF PORT	FORGING SIZE /9/ 20	FORGING SIZE /9/ 24
02	1.852	1.867
03	1.899	1.914
04	1.962	1.977
05	1.962	2.023
06	2.008	2.195
08	2.180	2.336
10	2.321	2.445
12	2.430	2.445
14	2.430	2.445
16	2.430	2.445
20	2.217	2.233
24	--	2.233

TABLE 3 - LEG LENGTH B

SIZE OF PORT	FORGING SIZE /9/ 20	FORGING SIZE /9/ 24
02	1.148	1.242
03	1.199	1.289
04	1.226	1.320
05	1.226	1.320
06	1.243	1.336
08	1.335	1.429
10	1.398	1.429
12	1.461	1.555
14	1.461	1.555
16	1.461	1.555
20	1.236	1.330
24	--	1.330

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TABLE 4 - TUBE SIZE AND CORRESPONDING THREADS

PORT SIZE	(NOMINAL TUBE SIZE)	T THREAD PER MIL-S-8879
02	.125	.3125-24UNJF
03	.188	.3750-24UNJF
04	.250	.4375-20UNJF
05	.312	.5000-20UNJF
06	.375	.5625-18UNJF
08	.500	.7500-16UNJF
10	.625	.8750-14UNJF
12	.750	1.0625-12UNJ
14	.875	1.1875-12UNJ
16	1.000	1.3125-12UNJ
20	1.250	1.5625-12UNJ
24	1.500	1.8125-12UNJ

NOTES:

/1/ MATERIAL:

- a. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY PER AMS 4928
- b. CODE LETTER V: TYPE 15-5PH CORROSION RESISTANT STEEL PER AMS 5659
- c. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS 4141 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER T: NONE
- b. MATERIAL CODE LETTER V: HEAT TREAT TO CONDITION H-1075 PER AMS 2759/3
- c. MATERIAL CODE LETTER W: NONE

/3/ FINISH:

- a. MATERIAL CODE LETTER T: FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486
- b. MATERIAL CODE LETTER V:
 - (1) V CODE PARTS TO BE PASSIVATED ONLY WILL HAVE NO FINISH CODE LETTER AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: PASSIVATE PER QQ-P-35, TYPE II OR VIII.
 - (2) V CODE PARTS TO BE CADMIUM PLATED ONLY WILL HAVE THE FINISH CODE LETTER "P" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2.
- c. MATERIAL CODE LETTER W: ANODIZE PER AMS 2472 OR PER MIL-A-8625, TYPE II, CLASS 2 DYED BROWN SIMILAR TO COLOR 10080 OF FED-STD-595

/4/ PROCUREMENT SPECIFICATION: MIL-F-18280 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION AS APPLICABLE IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B. MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE, BASIC PART NUMBER, AND MATERIAL CODE LETTER.

6. THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH OPERATING PRESSURES AS FOLLOWS:

- a. SIZES -20 AND -24 TITANIUM ALLOY AND CORROSION RESISTANT STEEL AT 3000 psi
- b. SIZES -20 AND -24 ALUMINUM ALLOY AT 600 psi

LARGEST PORT DETERMINES PRESSURE RATING.