

REV.
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AS1038

FEDERAL SUPPLY CLASS

4730

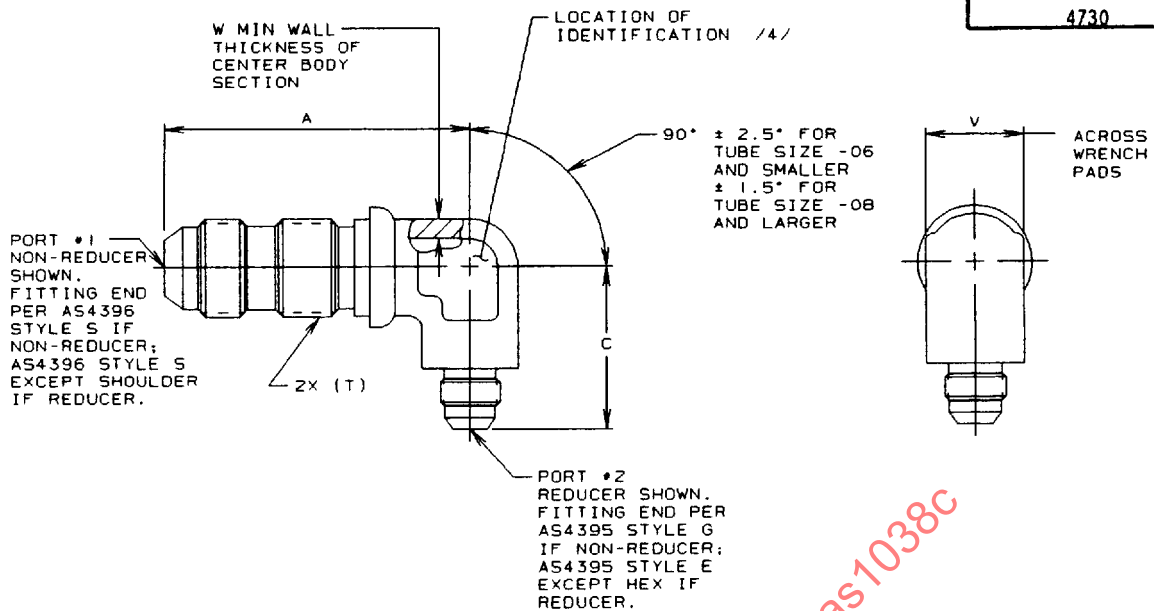
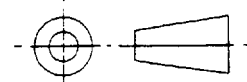


FIGURE 1 - ELBOW, 90°, BULKHEAD

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS1038	/8/	/14/	V	W	LB/EA	LB/EA	LB/EA
					MAX ALUM	MAX CRES	MAX TI
02			.312	.090	-	-	-
03			.375	.100	-	-	-
04			.438	.110	-	-	-
05			.500	.120	-	-	-
06			.562	.120	-	-	-
08			.750	.150	-	-	-
10			.875	.170	-	-	-
12			1.062	.185	-	-	-
16			1.312	.205	-	-	-
20			1.625	.240	-	-	-
24			1.875	.250	-	-	-
32			2.562	.350	-	-	-

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 STANDARD

ELBOW, 90°, STANDARD AND REDUCER,
BULKHEAD, FLARED TUBE

AS1038

SHEET 1 OF 4

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TABLE 2 - LEG LENGTH A

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

TABLE 3 - LEG LENGTH C

SIZE OF PORT #2	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	.851	.883	.883	.937	.993	1.158	1.260	1.373	1.482	1.669	1.716	2.031
03	-	.914	.905	.968	1.024	1.189	1.291	1.404	1.513	1.700	1.747	2.044
04	-	-	.976	1.039	1.095	1.260	1.362	1.475	1.584	1.771	1.818	2.115
05	-	-	-	1.039	1.095	1.260	1.362	1.475	1.584	1.771	1.818	2.115
06	-	-	-	-	1.101	1.266	1.368	1.481	1.590	1.777	1.824	2.121
08	-	-	-	-	-	1.367	1.469	1.582	1.691	1.878	1.925	2.222
10	-	-	-	-	-	-	1.570	1.683	1.792	1.979	2.026	2.323
12	-	-	-	-	-	-	-	1.789	1.898	2.085	2.132	2.429
16	-	-	-	-	-	-	-	-	1.945	2.132	2.179	2.476
20	-	-	-	-	-	-	-	-	-	2.179	2.226	2.523
24	-	-	-	-	-	-	-	-	-	-	2.351	2.648
32	-	-	-	-	-	-	-	-	-	-	-	2.898

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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:

- 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 2024T651 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-O-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.