

REV.
C

AS6099™

RATIONALE

TYPO CORRECTED IN 90 DEGREE DIMENSION IN GRAPHICS. CENTER BODY DIMENSION NOTE 9 REVISED TO REFER TO AS1376 TABLE 1 IN LIEU OF TABLE 11.

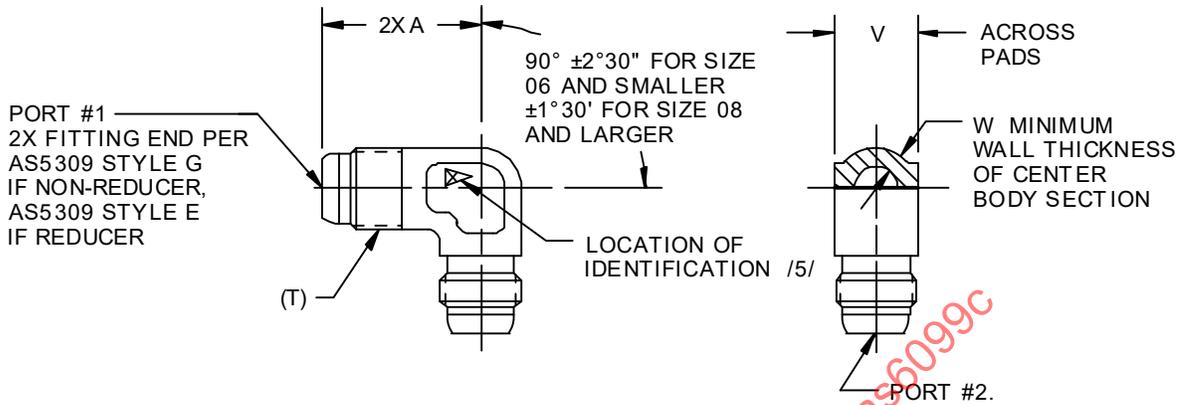


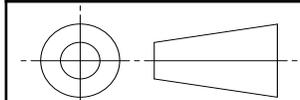
FIGURE 1 - ELBOW, 90 DEGREES

TABLE 1 - DIMENSIONS V AND W /11/

BASIC NO. AS6099 /10/ /17/ SIZE CODE	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	LB/EA APPROX REF TI
02	.297- .314	.090	.0101	.0291	.0161
03	.360- .377	.100	.0151	.0432	.0238
04	.423- .440	.110	.0208	.0597	.0329
05	.485- .502	.120	.0274	.0787	.0434
06	.547- .565	.120	.0360	.103	.0570
08	.735- .753	.150	.0774	.222	.123
10	.860- .878	.170	.0965	.277	.153
12	1.047-1.065	.185	.191	.548	.302
16	1.292-1.317	.205	.285	.818	.451
20	1.605-1.630	.240	.485	1.39	.769
24	1.855-1.880	.240	.671	1.93	1.06
32	2.542-2.572	.350	1.65	4.73	2.61

For more information on this standard, visit
<https://www.sae.org/standards/content/AS6099C/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4841 /4/



AEROSPACE STANDARD

FITTING, ELBOW, 90°,
STANDARD AND REDUCER,
FLARED, 37° SPHERICAL

AS6099™
SHEET 1 OF 4

REV.
C

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TABLE 2 - LEG LENGTH A

FORGING SIZE /10/	TUBE SIZE OF PORT #1 AND #2 02	TUBE SIZE OF PORT #1 AND #2 03	TUBE SIZE OF PORT #1 AND #2 04	TUBE SIZE OF PORT #1 AND #2 05	TUBE SIZE OF PORT #1 AND #2 06	TUBE SIZE OF PORT #1 AND #2 08	TUBE SIZE OF PORT #1 AND #2 10	TUBE SIZE OF PORT #1 AND #2 12	TUBE SIZE OF PORT #1 AND #2 16	TUBE SIZE OF PORT #1 AND #2 20	TUBE SIZE OF PORT #1 AND #2 24	TUBE SIZE OF PORT #1 AND #2 32
02	.788	-	-	-	-	-	-	-	-	-	-	-
03	.820	.851	-	-	-	-	-	-	-	-	-	-
04	.820	.843	.914	-	-	-	-	-	-	-	-	-
05	.874	.905	.976	.976	-	-	-	-	-	-	-	-
06	.978	1.009	1.080	1.080	1.086	-	-	-	-	-	-	-
08	1.064	1.095	1.166	1.166	1.172	1.273	-	-	-	-	-	-
10	1.166	1.197	1.268	1.268	1.274	1.375	1.476	-	-	-	-	-
12	1.263	1.294	1.365	1.365	1.371	1.472	1.573	1.679	-	-	-	-
16	1.373	1.404	1.475	1.475	1.481	1.582	1.683	1.789	1.836	-	-	-
20	1.576	1.607	1.678	1.678	1.684	1.786	1.886	1.992	2.039	2.086	-	-
24	1.716	1.747	1.818	1.818	1.824	1.925	2.026	2.132	2.179	2.226	2.351	-
32	2.201	2.232	2.303	2.303	2.309	2.410	2.511	2.617	2.664	2.711	2.836	3.086

TABLE 3 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	NOMINAL TUBE SIZE	T THREAD PER AS8879 CLASS 3A
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

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NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

- a. CODE LETTER F: TYPE 4140 ALLOY STEEL BAR PER AMS6349 OR AMS6382 OR 4130 STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758 EXCEPT HEAT TREATMENT PER PROCUREMENT SPECIFICATION.
- b. CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5639, EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION.
- c. CODE LETTER K: TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5648, EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION.
- d. CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5645, EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION.
- e. CODE LETTER T: TYPE 6Al-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- f. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141 OR AMS-QQ-A-367; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER F: SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTER W: SEE ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- c. OTHER MATERIAL CODE LETTERS: NONE.

/3/ FINISH:

- a. MATERIAL CODE LETTER F: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK.
- b. MATERIAL CODE LETTER J, K, R: PASSIVATE PER AMS2700, TYPE 6 OR 7.
- c. MATERIAL CODE LETTER T: FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 OR ANODIZE PER AMS2488, TYPE 2.
- d. MATERIAL CODE LETTER W:
 1. ANODIZE PER AMS2472 OR MIL-PRF-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
 2. W CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. HIGH PURITY ALUMINUM COAT PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: AS4841 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE NADCAP QUALIFIED MANUFACTURER LIST (QML) FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT www.eAuditNet.com.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZE 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTER "AS," AND MATERIAL CODE LETTER.
 - b. FOR SIZE 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, AND MATERIAL CODE LETTER.
6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN TUBING CONNECTION SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION.

	AEROSPACE STANDARD	AS6099™ SHEET 3 OF 4	REV. B
	FITTING, ELBOW, 90°, STANDARD AND REDUCER, FLARED, 37° SPHERICAL		