FEDERAL SUPPLY CLASS
4730

RATIONALE

THIS SAE AEROSPACE STANDARD (AS) ESTABLISHES THE REQUIREMENTS FOR 75 DEGREE FITTING WITH 37 DEGREE SPHERICAL FLARED TUBE.

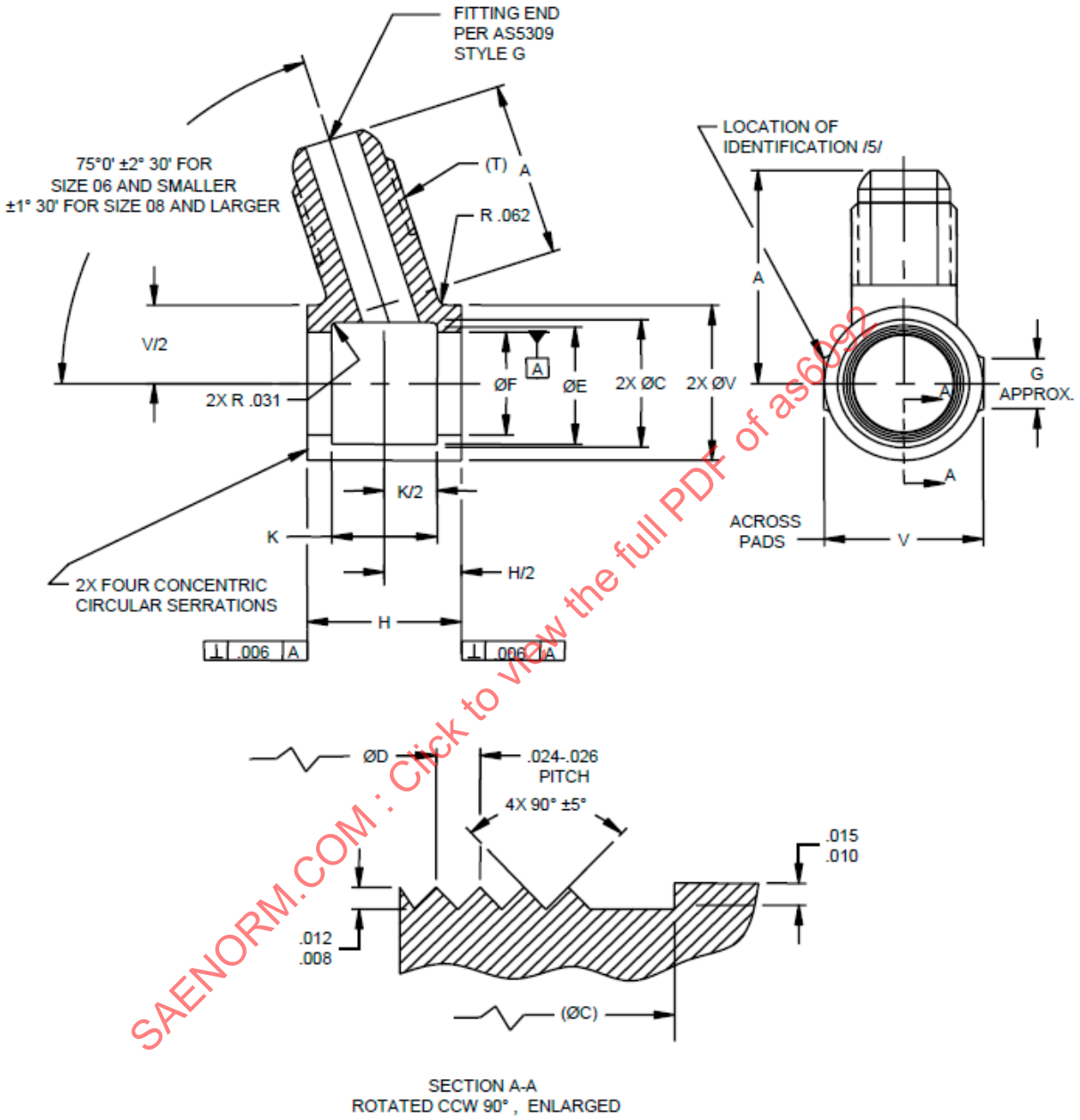

FIGURE 1 - FITTING, CONNECTOR, 75°

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS6092

THIRD ANGLE PROJECTION

ISSUED 2011-05

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS6076

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, 37° SPHERICAL FLARED,
CONNECTOR, MULTIPLE
FLUID PRESSURE LINE, 75°

SAE AS6092

TABLE 1A - DIMENSIONS

BASIC NO. AS6092 /13/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A	A ±.023	C ±.005	D ±.005	E	F ±.001
04	.250	.4375-20 UNJF	.836	.692	.474	.562	.439
05	.312	.5000-20 UNJF	.836	.755	.536	.625	.501
06	.375	.5625-18 UNJF	.838	.817	.599	.750	.564
08	.500	.7500-16 UNJF	1.054	1.005	.786	.937	.751
10	.625	.8750-14 UNJF	1.211	1.130	.911	1.125	.876
12	.750	1.0625-12 UNJ	1.336	1.318	1.099	1.375	1.063
16	1.000	1.3125-12 UNJ	1.523	1.568	1.349	1.687	1.313

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS6092 /13/ SIZE CODE	G	H ±.010	K	V	LB/EA APPROX. REF AL	LB/EA APPROX. REF STEEL	LB/EA APPROX. REF TI
04	.437	.750	.375	.797-.815	.0244	.0700	.0386
05	.437	.750	.500	.797-.815	.0192	.0550	.0303
06	.500	.875	.500	.985-1.003	.0354	.102	.0560
08	.500	1.125	.750	1.173-1.191	.0536	.154	.0849
10	.625	1.375	.812	1.355-1.380	.0871	.250	.138
12	.625	1.625	1.000	1.668-1.693	.145	.415	.229
16	.812	2.125	1.500	2.042-2.072	.242	.695	.383

NOTES:

NOTICE

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

/1/ MATERIAL:

a. CODE LETTER F - TYPE 4130 ALLOY STEEL FORGING OR BAR PER AMS-S-6758 OR AMS6370; OR TYPE 4140 PER AMS6382. /2/

b. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5639.

c. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5648.

d. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5645.

e. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.

f. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY PER AMS4141; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124. /2/

/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 AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.

   b. MATERIAL CODE LETTERS J, K, AND R - PASSIVATE PER AMS2700, TYPE 6 OR 7.

   c. MATERIAL CODE LETTER T - ANODIZE PER AMS2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.

   d. MATERIAL CODE LETTER W:

      1. ANODIZE PER AMS2472 OR MIL-A-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: AS6076 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE NATIONAL AEROSPACE AND DEFENSE CONTRACTORS ACCREDITATION PROGRAM (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 SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS FOLLOWS:

   a. SIZES 04 THROUGH 12 IN ALUMINUM ALLOY AND SIZES 04 THROUGH 16 IN STEEL AND TITANIUM ALLOY AT 3000 psi.

   b. SIZE 16 IN ALUMINUM ALLOY AT 1500 psi.

7. WHEN MACHINED FROM BAR OR OVERSIZED FORGINGS, THE CENTER BODY SECTION SHALL CONFORM TO AS1376, TABLE 8.

8. INTERPRETATION OF DRAWING PER ARP4296.

9. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra. SURFACES OF HEX FLATS MAY BE 250 µin Ra.

10. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

11. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

12. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.016, ANGULAR DIMENSIONS ±0 DEGREES 30'.