FEDERAL SUPPLY CLASS
4730

RATIONALE

NEW STANDARD FOR OPERATING PRESSURES UP TO AND INCLUDING 1500 PSI

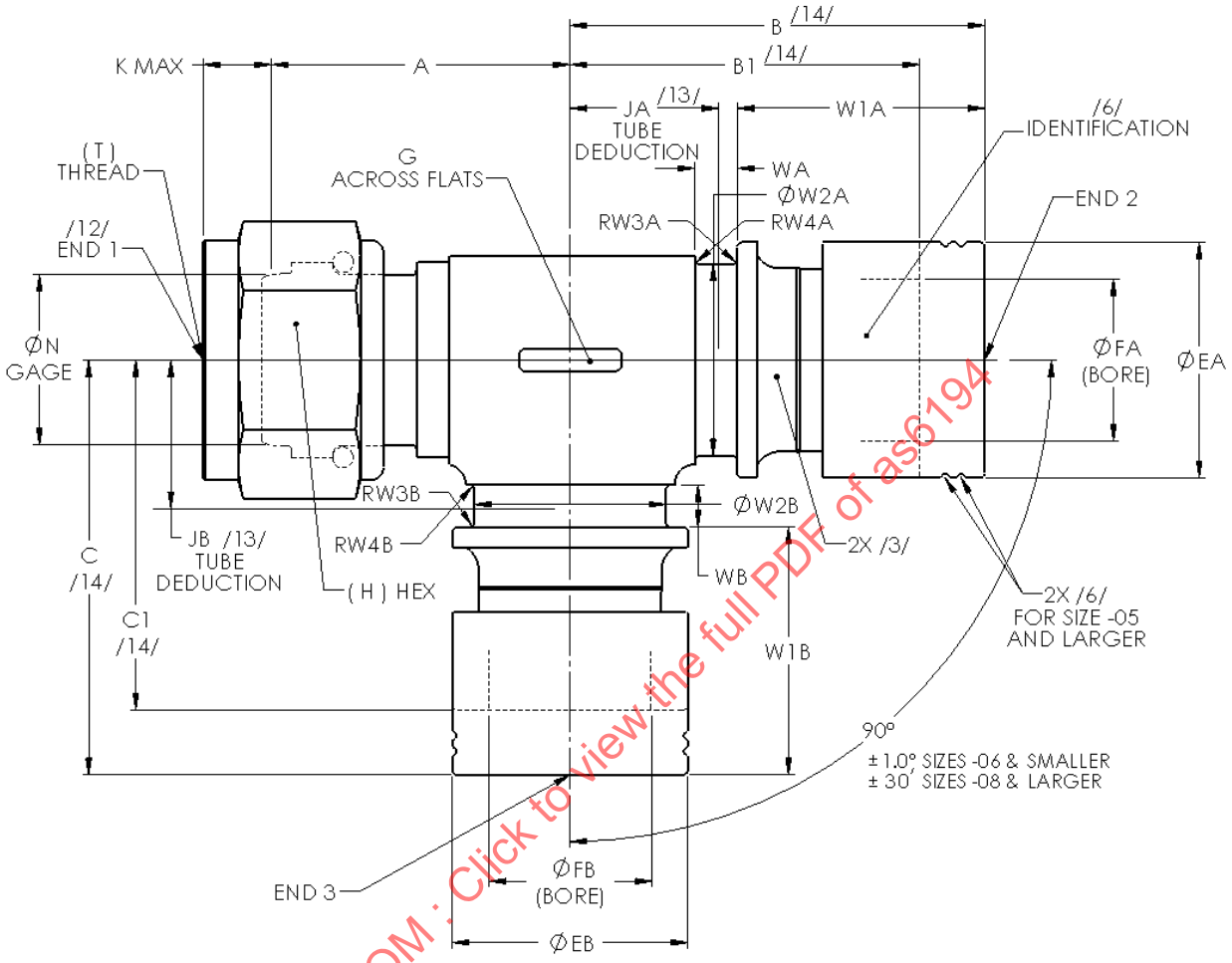
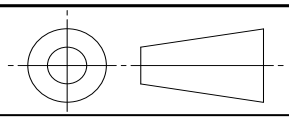


FIGURE 1 - TEE, AXIALLY SWAGED, FEMALE FLARELESS ON THE RUN, AXIALLY SWAGED ON THE SIDE

THIRD ANGLE PROJECTION



ISSUED 2011-08

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS6116 /4/

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING ASSEMBLY, TEE, AXIALLY SWAGED, FEMALE FLARELESS ON THE RUN, AXIALLY SWAGED ON THE SIDE, HYDRAULIC, UP TO 1500 PSI

SAE AS6194

TABLE 1A - DIMENSIONS A THROUGH FB

BASIC NO. AS6194 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	A ±.015	B MAX	B1 MAX	C MAX	C1 MAX	ØEA MAX	ØEB MAX	ØFA MIN	ØFB MIN
040404	.250	.250	.250	.874	1.078	.925	1.112	.959	.435	.435	.253	.253
050505	.3125	.3125	.3125	.949	1.333	1.185	1.258	1.110	.503	.503	.3155	.3155
060606	.375	.375	.375	1.047	1.427	1.200	1.464	1.237	.580	.580	.378	.378
080808	.500	.500	.500	1.230	1.725	1.465	1.765	1.505	.755	.755	.503	.503
101010	.625	.625	.625	1.434	1.805	1.565	1.843	1.603	.929	.929	.629	.629
121212	.750	.750	.750	1.598	2.050	1.770	2.103	1.823	1.150	1.150	.754	.754
161010	1.000	.625	.625	1.864	2.093	1.853	2.093	1.853	.929	.929	.629	.629
161606	1.000	1.000	.375	1.864	2.615	2.235	1.870	1.643	1.474	.580	1.004	.378
161616	1.000	1.000	1.000	1.864	2.615	2.235	2.618	2.238	1.474	1.474	1.004	1.004
202020	1.250	1.250	1.250	2.093	3.060	2.645	3.069	2.654	1.768	1.768	1.255	1.255

TABLE 1B - DIMENSIONS G THROUGH JB

BASIC NO. AS6194 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	G ±.015	JA /13/ TUBE DEDUCTION		JB /13/ TUBE DEDUCTION	
040404	.250	.250	.250	.438	.385	+.150/-.180	.419	+.150/-.180
050505	.3125	.3125	.3125	.465	.510	+.150/-.180	.435	+.150/-.180
060606	.375	.375	.375	.563	.455	+.150/-.195	.492	+.150/-.195
080808	.500	.500	.500	.750	.550	+.150/-.210	.590	+.150/-.210
101010	.625	.625	.625	.875	.625	+.150/-.200	.663	+.150/-.200
121212	.750	.750	.750	1.063	.730	+.150/-.245	.783	+.150/-.245
161010	1.000	.625	.625	1.304	.913	+.150/-.200	.913	+.150/-.200
161606	1.000	1.000	.375	1.304	.925	+.150/-.330	.898	+.150/-.195
161616	1.000	1.000	1.000	1.304	.925	+.150/-.330	.928	+.150/-.330
202020	1.250	1.250	1.250	1.618	1.095	+.150/-.375	1.104	+.150/-.375

TABLE 1C - DIMENSIONS K THROUGH T

BASIC NO. AS6194 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	K MAX	ØN GAGE	(H)	(T) THREAD PER AS8879
040404	.250	.250	.250	.248	.2930	.562	.4375-20 UNJF-3B
050505	.3125	.3125	.3125	.331	.3500	.625	.5000-20 UNJF-3B
060606	.375	.375	.375	.302	.4120	.688	.5625-18 UNJF-3B
080808	.500	.500	.500	.316	.5600	.875	.7500-16 UNJF-3B
101010	.625	.625	.625	.424	.6730	1.000	.8750-14 UNJF-3B
121212	.750	.750	.750	.388	.8100	1.250	1.0625-12 UNJ-3B
161010	1.000	.625	.625	.454	1.0620	1.500	1.3125-12 UNJ-3B
161606	1.000	1.000	.375	.454	1.0620	1.500	1.3125-12 UNJ-3B
161616	1.000	1.000	1.000	.454	1.0620	1.500	1.3125-12 UNJ-3B
202020	1.250	1.250	1.250	.465	1.3160	1.812	1.6250-12 UNJ-3B

TABLE 1D - DIMENSIONS W THROUGH W4 AND WEIGHTS

BASIC NO. AS6194 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	WA MIN	WB MIN	W1A MAX	W1B MAX	ØW2A ±.002	ØW2B ±.002	W3A MAX	W3B MAX	W4A MAX	W4B MAX	WEIGHT APPROX LB/EA
040404	.250	.250	.250	.185	.185	.604	.604	.320	.320	.020	.020	.020	.020	.035
050505	.3125	.3125	.3125	.180	.180	.724	.724	.371	.371	.020	.020	.020	.020	.040
060606	.375	.375	.375	.195	.195	.883	.883	.463	.463	.020	.020	.020	.020	.070
080808	.500	.500	.500	.210	.210	1.076	1.076	.595	.595	.020	.020	.020	.020	.100
101010	.625	.625	.625	.225	.225	1.076	1.076	.758	.758	.020	.020	.020	.020	.150
121212	.750	.750	.750	.235	.235	1.201	1.201	.903	.903	.025	.025	.025	.025	.260
161010	1.000	.625	.625	.225	.225	1.076	1.076	.758	.758	.020	.020	.020	.020	.325
161606	1.000	1.000	.375	.260	.195	1.566	.883	1.196	.463	.035	.020	.035	.020	.365
161616	1.000	1.000	1.000	.260	.260	1.566	1.566	1.196	1.196	.035	.035	.035	.035	.445
202020	1.250	1.250	1.250	.285	.285	1.829	1.829	1.460	1.460	.035	.035	.035	.035	.730

NOTES:

/1/ MATERIALS:

CODE LETTER "D"

BODY - TYPE 6061-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/8.

RING - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

NUT – TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

WIRE - TYPE 302 OR 305, CONDITION A CORROSION RESISTANT STEEL WIRE PER ASTM A580 (SIZES -04 and 05).

- TYPE 2024-T4 OR 2024-T351 ALUMINUM ALLOY WIRE PER AMS-QQ-A-225/6 (SIZES -06 AND LARGER).

2. FINISH:

BODY - CHEMICAL CONVERSION COATED PER MIL-DTL-5541 TYPE I CLASS 3.

RING - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYED GREEN, SIMILAR TO NO. 14187, 14193, OR 14223 OF FED-STD-595 AND SHALL BE DUPLEX SEALED.

NUT - ANODIZED PER MIL-A-8625 TYPE II, CLASS 2, DYED BROWN SIMILAR TO NO. 10080 OF FED-STD-595 AND SHALL BE DUPLEX SEALED.

WIRE - PASSIVATED PER AMS 2700. (SIZES -04 AND -05)

- ANODIZED PER MIL-A-8625 TYPE II, CLASS 2 (YELLOW) WITH DUPLEX SEAL. (SIZES -06 AND LARGER)

/3/ COATINGS/LUBRICANTS:

BODY

a. DRY FILM LUBRICANT PER AS5272 TYPE I MAY BE APPLIED TO THE OD OF THE AXIALLY SWAGED FITTING END. ADDITIONAL LUBRICANT APPLIED SHALL BE SPECIFIED BY MANUFACTURER. THE LUBRICANTS SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

b. POLYTETRAFLUOROETHYLENE (PTFE) COAT, LIGHT GREEN, SHALL BE APPLIED TO PORTIONS OF ID (BORE) UP TO THE FIRST GROOVE. OVERSPRAY IN GROOVE IS NOT PERMITTED.

c. A MINIMUM OF TWO GROOVES (END SIZE -05 AND LARGER) SHALL BE FILLED WITH ELASTOMERIC DIMETHYL SILOXANE COMPOUND. FOR SMALLER SIZE ENDS, A MINIMUM OF ONE GROOVE SHALL BE FILLED WITH THE COMPOUND.

WIRE - SOLID FILM LUBRICANT PER AS5272, TYPE I.

/4/ PROCUREMENT SPECIFICATION: AS6116 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS6116 FOR THIS STANDARD. See www.eauditnet.com FOR THE CURRENT QPL ON-LINE.

5. DIMENSIONS AND TOLERANCES NOT DEFINED ON THIS STANDARD SHALL BE SPECIFIED AND CONTROLLED BY THE MANUFACTURER. THE MANUFACTURER IS RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.

/6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS6116 AND SHALL BE IDENTIFIED ON THE RING IN THE AREA SHOWN. FOR SIZE -05 AND LARGER, THE RING O.D. SHALL HAVE TWO GROOVES INDICATING DUAL SEALING BACK UP FEATURE.

7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS6124.