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REV.
B

AS6159™

FEDERAL SUPPLY CLASS
4730

RATIONALE

REVISE THE FINISH FOR ALUMINUM WIRE BY REPLACING THE DUPLEX SEAL WITH A "NO DUPLEX SEAL" NOTE REQUIREMENT. UPDATE OUTDATED SPECIFICATION CALLOUT TO CURRENT SPECIFICATION. QPL NOTE /4/ REVISED TO REFLECT CURRENT VERBIAGE. DISPOSITION OF INVENTORIED PARTS MANUFACTURED TO PREVIOUS REVISION NOTE 18 ADDED.

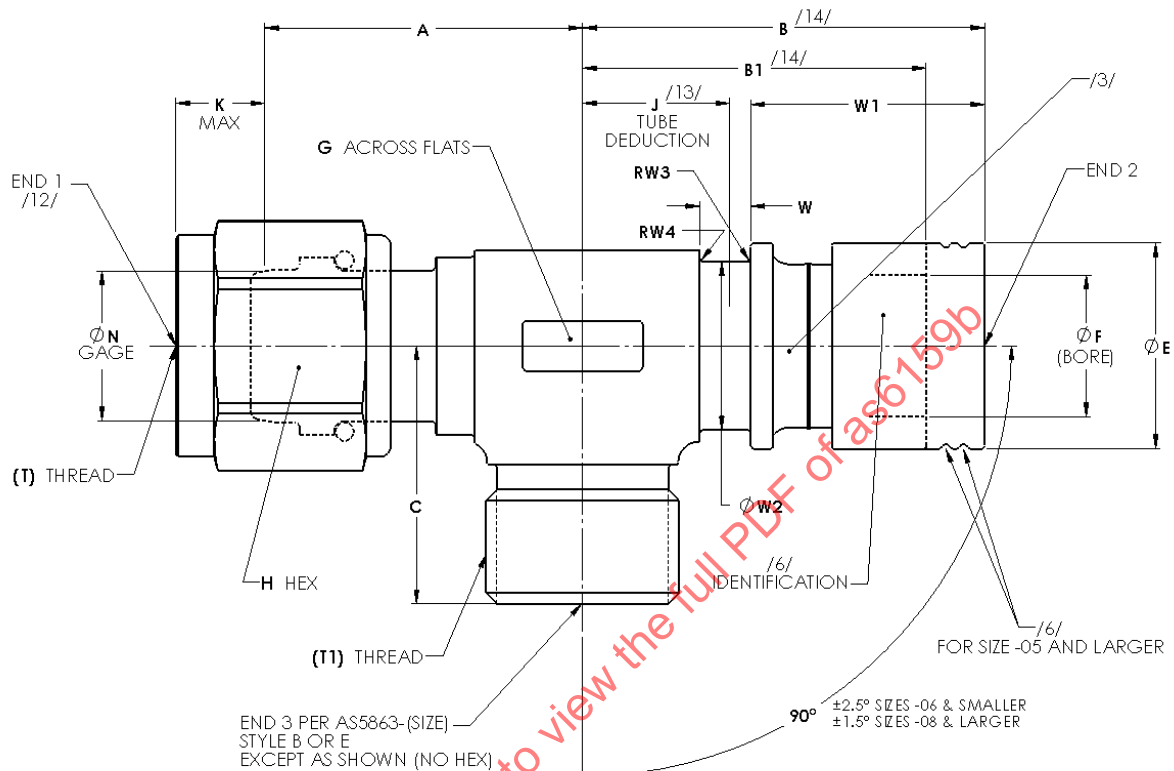
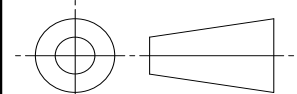


FIGURE 1 - TEE, AXIALLY SWAGED TO FEMALE FLARELESS ON THE RUN, MALE FLARELESS ON THE SIDE

For more information on this standard, visit
<https://www.sae.org/standards/content/AS6159B/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS6116 /4/



AEROSPACE STANDARD

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

AS6159™
SHEET 1 OF 4

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TABLE 1A - DIMENSIONS A THROUGH F

BASIC NO. AS6159 /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 ±.015	ØE MAX	ØF MIN
040404	.250	.250	.250	.874	1.112	.959	.767	.435	.253
050505	.3125	.3125	.3125	.949	1.258	1.110	.786	.503	.3155
060606	.375	.375	.375	1.047	1.464	1.237	.846	.580	.378
080808	.500	.500	.500	1.230	1.765	1.505	1.032	.755	.503
101010	.625	.625	.625	1.434	1.843	1.603	1.158	.929	.629
121212	.750	.750	.750	1.598	2.103	1.823	1.346	1.150	.754
121612	.750	1.000	.750	1.760	2.618	2.238	1.449	1.474	1.004
161616	1.000	1.000	1.000	1.864	2.618	2.238	1.505	1.474	1.004
202020	1.250	1.250	1.250	2.093	3.069	2.654	1.627	1.768	1.255
242424	1.500	1.500	1.500	2.437	3.600	3.105	1.747	2.070	1.505

TABLE 1B - DIMENSIONS G THROUGH J

BASIC NO. AS6159 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	G ±.015	(H)	J /13/ TUBE DEDUCTION
040404	.250	.250	.250	.438	.562	.419 +.150/-.180
050505	.3125	.3125	.3125	.465	.625	.435 +.150/-.180
060606	.375	.375	.375	.563	.688	.492 +.150/-.195
080808	.500	.500	.500	.750	.875	.590 +.150/-.210
101010	.625	.625	.625	.875	1.000	.663 +.150/-.200
121212	.750	.750	.750	1.063	1.250	.783 +.150/-.245
121612	.750	1.000	.750	1.304	1.250	.928 +.150/-.330
161616	1.000	1.000	1.000	1.304	1.500	.928 +.150/-.330
202020	1.250	1.250	1.250	1.618	1.812	1.104 +.150/-.375
242424	1.500	1.500	1.500	1.806	2.125	1.275 +.150/-.425

TABLE 1C - DIMENSIONS K THROUGH T1

BASIC NO. AS6159 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	K MAX	ØN GAGE	(T) THREAD PER AS8879	(T1) THREAD PER AS8879
040404	.250	.250	.250	.248	.2930	.4375-20 UNJF-3B	.4375-20 UNJF-3A
050505	.3125	.3125	.3125	.331	.3500	.5000-20 UNJF-3B	.5000-20 UNJF-3A
060606	.375	.375	.375	.302	.4120	.5625-18 UNJF-3B	.5625-18 UNJF-3A
080808	.500	.500	.500	.316	.5600	.7500-16 UNJF-3B	.7500-16 UNJF-3A
101010	.625	.625	.625	.424	.6730	.8750-14 UNJF-3B	.8750-14 UNJF-3A
121212	.750	.750	.750	.388	.8100	1.0625-12 UNJ-3B	1.0625-12 UNJ-3A
121612	.750	1.000	.750	.388	.8100	1.0625-12 UNJ-3B	1.0625-12 UNJ-3A
161616	1.000	1.000	1.000	.454	1.0620	1.3125-12 UNJ-3B	1.3125-12 UNJ-3A
202020	1.250	1.250	1.250	.465	1.3160	1.6250-12 UNJ-3B	1.6250-12 UNJ-3A
242424	1.500	1.500	1.500	.460	1.5650	1.8750-12 UNJ-3B	1.8750-12 UNJ-3A



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ON THE SIDE, HYDRAULIC, UP TO 1500 PSI

AS6159™
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TABLE 1D - DIMENSIONS W THROUGH W4 AND WEIGHTS

BASIC NO. AS6159 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	W MIN	W1 MAX	ØW2 ±.002	W3 MAX	W4 MAX	WEIGHT APPROX LB/EA
040404	.250	.250	.250	.185	.604	.320	.020	.020	.030
050505	.3125	.3125	.3125	.180	.724	.371	.020	.020	.040
060606	.375	.375	.375	.195	.883	.463	.020	.020	.050
080808	.500	.500	.500	.210	1.076	.595	.020	.020	.095
101010	.625	.625	.625	.225	1.076	.758	.020	.020	.140
121212	.750	.750	.750	.235	1.201	.903	.025	.025	.235
121612	.750	1.000	.750	.260	1.566	1.196	.035	.035	.340
161616	1.000	1.000	1.000	.260	1.566	1.196	.035	.035	.375
202020	1.250	1.250	1.250	.285	1.829	1.460	.035	.035	.615
242424	1.500	1.500	1.500	.310	2.178	1.704	.035	.035	.850

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 COAT PER MIL-DTL-5541 TYPE I CLASS 3.

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

NUT: ANODIZE PER MIL-PRF-8625 TYPE II, CLASS 2, DYED BROWN SIMILAR TO NO. 10080, OF AMS-STD-595 AND SHALL BE DUPLEX SEALED.

WIRE: TYPE 302 OR 305: PASSIVATE PER AMS2700.
TYPE 2024-T4 OR 2024-T351: ANODIZE PER MIL-PRF-8625 TYPE II, CLASS 2 (YELLOW) WITH NO DUPLEX SEAL.

/3/ COATINGS/LUBRICANTS:

BODY:

- DRY FILM LUBRICANT PER AS5272 TYPE I SHALL 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.
- POLYTETRAFLUOROETHYLENE (PTFE) COAT, LIGHT GREEN, SHALL BE APPLIED TO PORTIONS OF ID (BORE) UP TO THE FIRST GROOVE. OVERSPRAY IN GROOVE IS NOT PERMITTED.
- 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 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 PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS6116 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

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.

	AEROSPACE STANDARD	AS6159™ SHEET 3 OF 4	REV. B
	FITTING ASSEMBLY, TEE, AXIALLY SWAGED TO FEMALE FLARELESS ON THE RUN, MALE FLARELESS ON THE SIDE, HYDRAULIC, UP TO 1500 PSI		