FEDERAL SUPPLY CLASS
4730

RATIONALE

NEW STANDARD FOR OPERATING PRESSURES UP TO AND INCLUDING 3000 PSI.

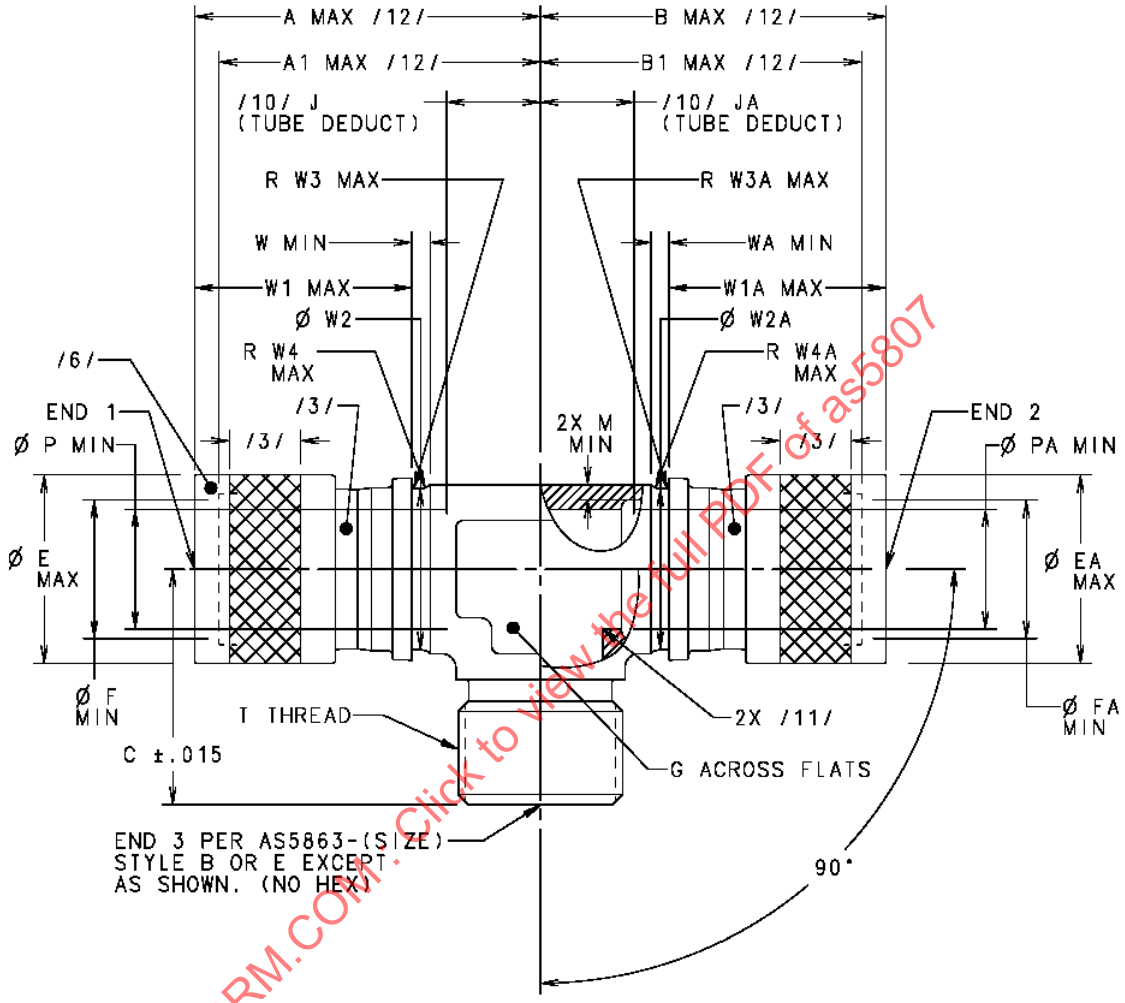
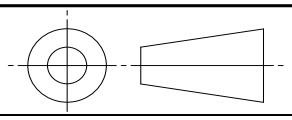


FIGURE 1 - TEE, AXIALLY SWAGED, MALE FLARELESS ON BRANCH

THIRD ANGLE PROJECTION



ISSUED 2008-07

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING ASSEMBLY, TEE, AXIALLY SWAGED ON THE RUN, MALE FLARELESS ON THE BRANCH HYDRAULIC, 3000 PSI

SAE AS5807
SHEET 1 OF 4

TABLE 1A - DIMENSIONS A THROUGH EA

BASIC NO. AS5807 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	A MAX.	A1 MAX.	B MAX.	B1 MAX.	C ±.015	E MAX.	EA MAX
040404	.2500	.2500	.2500	.935	.848	.935	.848	.767	.466	.466
060606	.3750	.3750	.3750	1.215	1.099	1.215	1.099	.846	.609	.609
080808	.5000	.5000	.5000	1.516	1.370	1.516	1.370	1.032	.783	.783
100806	.6250	.5000	.3750	1.873	1.669	1.579	1.433	1.002	.939	.783
101010	.6250	.6250	.6250	1.873	1.669	1.873	1.669	1.158	.939	.939
121212	.7500	.7500	.7500	2.149	1.944	2.149	1.944	1.346	1.122	1.122
161616	1.0000	1.0000	1.0000	2.606	2.392	2.606	2.392	1.505	1.495	1.495
202020	1.2500	1.2500	1.2500	3.020	2.796	3.020	2.796	1.627	1.758	1.758

TABLE 1B - DIMENSIONS F THROUGH JA

BASIC NO. AS5807 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	F MIN.	FA MIN.	G	J /10/ TUBE DEDUCT.		JA /10/ TUBE DEDUCT.	
040404	.2500	.2500	.2500	.253	.253	.380- .348	.353	±.150	.353	±.150
060606	.3750	.3750	.3750	.378	.378	.509- .477	.416	±.150	.416	±.150
080808	.5000	.5000	.5000	.504	.504	.647- .615	.517	±.175	.517	±.175
100806	.6250	.5000	.3750	.629	.504	.783- .751	.580	±.175	.580	±.175
101010	.6250	.6250	.6250	.629	.629	.783- .751	.580	±.175	.580	±.175
121212	.7500	.7500	.7500	.754	.754	.925- .893	.712	±.175	.712	±.175
161616	1.0000	1.0000	1.0000	1.004	1.004	1.213-1.181	.878	±.200	.878	±.200
202020	1.2500	1.2500	1.2500	1.255	1.255	1.641-1.609	1.009	±.200	1.009	±.200

TABLE 1C - DIMENSIONS M THROUGH W1A

BASIC NO. AS5807 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	M MIN.	P MIN.	PA MIN.	T THREAD PER AS8879	W MIN.	WA MIN.	W1 MAX.	W1A MAX.
040404	.2500	.2500	.2500	.043	.198	.198	.4375-20 UNJF-3A	.123	.123	.488	.488
060606	.3750	.3750	.3750	.045	.302	.302	.5625-18 UNJF-3A	.153	.153	.675	.675
080808	.5000	.5000	.5000	.052	.401	.401	.7500-16 UNJF-3A	.165	.165	.871	.871
100806	.6250	.5000	.3750	.057	.507	.401	.5625-18 UNJF-3A	.140	.165	1.190	.871
101010	.6250	.6250	.6250	.057	.507	.507	.8750-14 UNJF-3A	.140	.140	1.190	1.190
121212	.7500	.7500	.7500	.065	.604	.604	1.0625-12 UNJ-3A	.154	.154	1.327	1.327
161616	1.0000	1.0000	1.0000	.084	. 802	.802	1.3125-12 UNJ-3A	.167	.167	1.612	1.612
202020	1.2500	1.2500	1.2500	.174	1.011	1.011	1.6250-12UNJ-3A	.185	.185	1.886	1.886

TABLE 1D - DIMENSIONS W2 THROUGH W4A AND WEIGHT

BASIC NO. AS5807 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	W2 ±.0015	W2A ±.0015	W3 MAX.	W3A MAX.	W4 MAX.	W4A MAX.	WEIGHT LB/EA APPROX. REF.
040404	.2500	.2500	.2500	.3005	.3005	.018	.018	.065	.065	.027
060606	.3750	.3750	.3750	.4475	.4475	.033	.033	.065	.065	.054
080808	.5000	.5000	.5000	.5945	.5945	.033	.033	.065	.065	.107
100806	.6250	.5000	.3750	.7365	.5945	.021	.033	.078	.065	.145
101010	.6250	.6250	.6250	.7365	.7365	.021	.021	.078	.078	.174
121212	.7500	.7500	.7500	.8805	.8805	.024	.024	.089	.089	.280
161616	1.0000	1.0000	1.0000	1.1725	1.1725	.027	.027	.099	.099	.568
202020	1.2500	1.2500	1.2500	1.4345	1.4345	.030	.030	.113	.113	.960

NOTES:

/1/ MATERIALS:

CODE LETTER "T"

RING - AMS4965 TITANIUM ALLOY, 6.0AL 4.0V SOLUTION HEAT TREATED AND AGED OR AMS4928 TITANIUM ALLOY 6.0AL 4.0V ANNEALED WITH HIGH STRENGTH CARBON FIBER/EPOXY RESIN COMPOSITE REINFORCEMENT.

BODY - AMS4928 TITANIUM ALLOY, 6.0AL 4.0V ANNEALED

2. FINISH:

TITANIUM - NONE REQUIRED

/3/ COATINGS/LUBRICANTS:

RING - THE OUTER SURFACE SHALL HAVE A .125 in MINIMUM WIDTH BLUE COLORED RING OR COMPLETELY COLORED BLUE TO MATCH THE ASSEMBLY TOOLING COLOR CODE SPECIFIED IN AS5959 ASSEMBLY PROCEDURE. AN AS1241 FLUID RESISTANT PTFE COATING OR PAINT SHALL BE USED. THE SWAGE RING IS COLOR CODED BLUE TO INDICATE THE AXIALLY SWAGE END IS QUALIFIED TO 5080 PSI AND IS INSTALLED WITH THE SAME TOOLING AS THE 5080 PSI RATED FITTING

BODY - SOLID FILM LUBRICANT PER AS5272, TYPE I OR II, OR PTFE BASED LUBRICANT MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE AS5272 OR PTFE BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

/4/ PRODUCT SPECIFICATION: AS5958 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED AND ASSEMBLED BY AN ACCREDITED MANUFACTURER OR ASSEMBLED BY AN ACCREDITED ASSEMBLING DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS5958 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 AS5958 AND SHALL BE IDENTIFIED ON EITHER RING.

7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS5959.

8. SURFACE TEXTURE SHALL BE IN ACCORDANCE WITH AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ASME B46.1 AND THE SYMBOLS IN ACCORDANCE WITH ASME Y14.36M. UNLESS OTHERWISE SPECIFIED, THE MAXIMUM MACHINED SURFACES SHALL BE 125 µin Ra AND THE FORGED SURFACES SHALL BE 250 µin Ra.

9. DIMENSIONS AND TOLERANCES PER AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ASME Y14.5M -1994.

a. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

b. DIMENSIONAL TOLERANCES SHALL BE ±.005 in UNLESS OTHERWISE SPECIFIED

c. ANGULAR TOLERANCES SHALL BE ±0.50 degrees UNLESS OTHERWISE SPECIFIED

d. BREAK ALL EDGES .003 TO .010 in UNLESS OTHERWISE SPECIFIED

/10/ THIS DIMENSION IS THE ALLOWABLE TUBE END POSITIONING FOR SYSTEM LAYOUT DESIGN.

/11/ .030 MIN RADIUS UNLESS QUALIFICATION OF SPECIAL PROCESS WITH SMALLER RADIUS.