FEDERAL SUPPLY CLASS
4730

RATIONALE

ADDED SIZE CODE 121012. ADDED NOTES 17 AND 18 RECOMMENDING USE OF SIZE CODES 060406 AND 121012 IN PLACE OF 040606 AND 101212. REVISED NOTE 14 FOR DEFINITION CORRECTION OF DIMENSION “A1” AND “B1” (FITTING BODY LENGTH). ADDED SUFFIX CODE “B” FOR FITTING ASSEMBLIES WITH BLUE ANODIZED RINGS AND NOTE 16 AS AN OPTION FOR FUTURE REPLACEMENT OF ”NO CODE” BLUE COATING OR PAINT. CORRECTED “F” AND “FA” FOR 121210, 121212, 161616, AND 202020 AND “FA” FOR 101212. CORRECT “K” FOR 101010, 121210, AND 161616. UPDATED FIGURE AND WEIGHTS. REVISED NOTES 1, 3, 7, AND 15. ADDED NOTES 13, 19, AND AS6449 AS A NEW LUBRICANT TYPE.

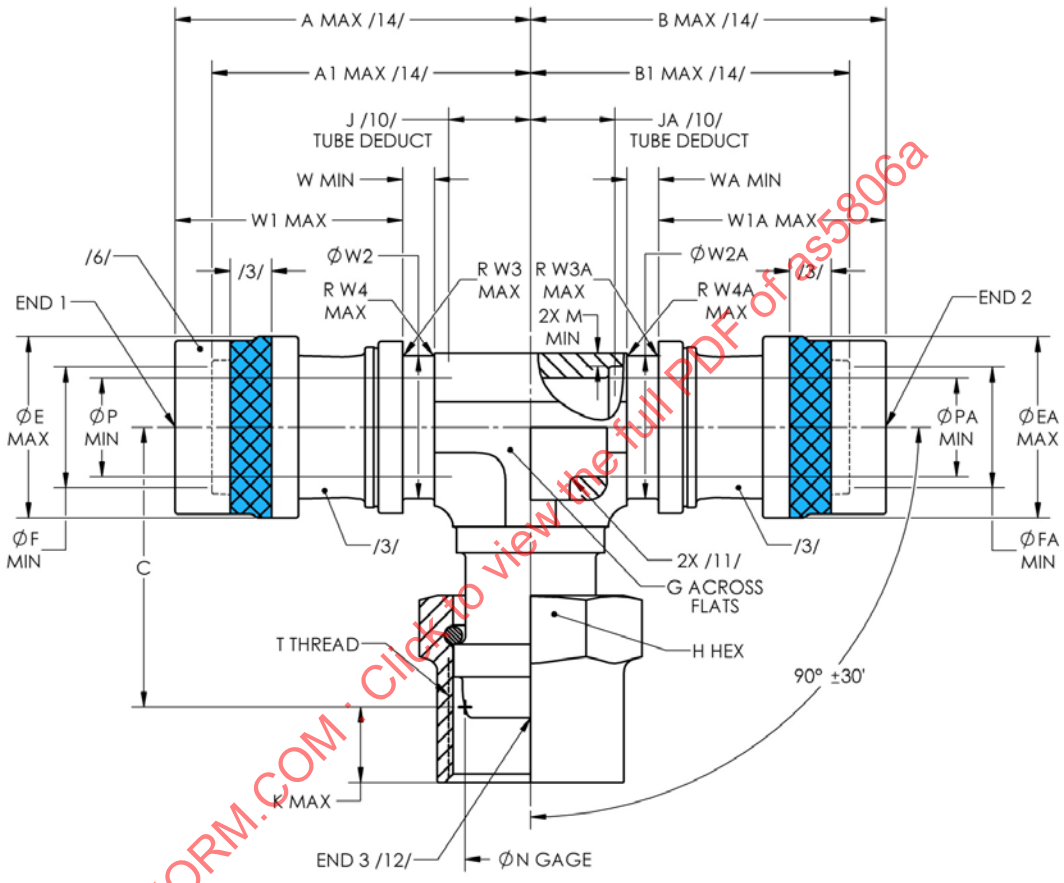
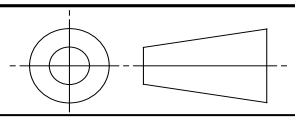


FIGURE 1 - TEE, AXIALLY SWAGED ON THE RUN, FEMALE FLARELESS ON THE BRANCH

(SEE TABLES 1A, 1B, 1C, AND 1D FOR DIMENSIONS AND WEIGHTS)

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS5806A

THIRD ANGLE PROJECTION



ISSUED 2008-06 REAFFIRMED 2015-04 REVISED 2016-01

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/

AEROSPACE STANDARD

(R) FITTING ASSEMBLY, TEE, AXIALLY SWAGED ON THE RUN, FEMALE FLARELESS ON THE BRANCH, HYDRAULIC, 3,000 PSI

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: +1 724-776-4970 (outside USA)**
Fax: 724-776-0790 **Email: CustomerService@sae.org** **SAE WEB ADDRESS: http://www.sae.org**

TABLE 1A - DIMENSIONS A THROUGH EA

	BASIC NO. AS5806 /15/ 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	.878	.466	.466
/17/	040606	.2500	.3750	.3750	.998	.911	1.215	1.099	1.040	.466	.609
	060406	.3750	.2500	.3750	1.215	1.099	.998	.911	1.040	.609	.466
	060604	.3750	.3750	.2500	1.215	1.099	1.215	1.099	.937	.609	.609
	060606	.3750	.3750	.3750	1.215	1.099	1.215	1.099	1.040	.609	.609
	080606	.5000	.3750	.3750	1.516	1.370	1.308	1.192	1.133	.783	.609
	080806	.5000	.5000	.3750	1.516	1.370	1.516	1.370	1.133	.783	.783
	080808	.5000	.5000	.5000	1.516	1.370	1.516	1.370	1.229	.783	.783
	100808	.6250	.5000	.5000	1.873	1.669	1.579	1.433	1.310	.939	.783
	101004	.6250	.6250	.2500	1.873	1.669	1.873	1.669	1.107	.939	.939
	101006	.6250	.6250	.3750	1.873	1.669	1.873	1.669	1.185	.939	.939
	101008	.6250	.6250	.5000	1.873	1.669	1.873	1.669	1.310	.939	.939
	101010	.6250	.6250	.6250	1.873	1.669	1.873	1.669	1.435	.939	.939
/18/	101212	.6250	.7500	.7500	1.998	1.794	2.149	1.944	1.592	.939	1.122
	121012	.7500	.6250	.7500	2.149	1.944	1.998	1.794	1.592	1.122	.939
	121210	.7500	.7500	.6250	2.149	1.944	2.149	1.944	1.560	1.122	1.122
	121212	.7500	.7500	.7500	2.149	1.944	2.149	1.944	1.592	1.122	1.122
	161616	1.0000	1.0000	1.0000	2.606	2.392	2.606	2.392	1.862	1.495	1.495
	202020	1.2500	1.2500	1.2500	3.020	2.796	3.020	2.796	2.024	1.758	1.758

TABLE 1B - DIMENSIONS F THROUGH JA

	BASIC NO. AS5806 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	F MIN.	FA MIN.	G	(H)	J /10/ TUBE DEDUCTION		JA /10/ TUBE DEDUCTION	
	040404	.2500	.2500	.2500	.253	.253	.348- .380	.563	.353	±.150	.353	±.150
/17/	040606	.2500	.3750	.3750	.253	.378	.477- .509	.688	.416	±.150	.416	±.150
	060406	.3750	.2500	.3750	.378	.253	.477- .509	.688	.416	±.150	.416	±.150
	060604	.3750	.3750	.2500	.378	.378	.477- .509	.563	.416	±.150	.416	±.150
	060606	.3750	.3750	.3750	.378	.378	.477- .509	.688	.416	±.150	.416	±.150
	080606	.5000	.3750	.3750	.504	.378	.615- .647	.688	.517	±.175	.509	±.150
	080806	.5000	.5000	.3750	.504	.504	.615- .647	.688	.517	±.175	.517	±.175
	080808	.5000	.5000	.5000	.504	.504	.615- .647	.875	.517	±.175	.517	±.175
	100808	.6250	.5000	.5000	.629	.504	.751- .783	.875	.580	±.175	.580	±.175
	101004	.6250	.6250	.2500	.629	.629	.751- .783	.563	.580	±.175	.580	±.175
	101006	.6250	.6250	.3750	.629	.629	.751- . 783	.688	.580	±.175	.580	±.175
	101008	.6250	.6250	.5000	.629	.629	.751- .783	.875	.580	±.175	.580	±.175
	101010	.6250	.6250	.6250	.629	.629	.751- .783	1.000	.580	±.175	.580	±.175
/18/	101212	.6250	.7500	.7500	.629	.754	.893- .925	1.250	.705	±.175	.712	±.175
	121012	.7500	.6250	.7500	.754	.629	.893- .925	1.250	.712	±.175	.705	±.175
	121210	.7500	.7500	.6250	.754	.754	.893- .925	1.000	.712	±.175	.712	±.175
	121212	.7500	.7500	.7500	.754	.754	.893- .925	1.250	.712	±.175	.712	±.175
	161616	1.0000	1.0000	1.0000	1.004	1.004	1.181-1.213	1.500	.878	±.200	.878	±.200
	202020	1.2500	1.2500	1.2500	1.255	1.255	1.609-1.641	2.000	1.009	±.200	1.009	±.200

TABLE 1C - DIMENSIONS K THROUGH W1A

	BASIC NO. AS5806 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	K MAX.	M MIN.	Ø N GAGE	P MIN.	PA MIN.	T THREAD PER AS8879	W MIN.	WA MIN.	W1 MAX.	W1A MAX.
	040404	.2500	.2500	.2500	.325	.043	.2930	.198	.198	.4375-20 UNJF-3B	.123	.123	.488	.488
	040606	.2500	.3750	.3750	.337	.045	.4160	.198	.302	.5625-18 UNJF-3B	.123	.153	.488	.675
/17/	060406	.3750	.2500	.3750	.337	.045	.4160	.302	.198	.5625-18 UNJF-3B	.153	.123	.675	.488
	060604	.3750	.3750	.2500	.325	.045	.2930	.302	.302	.4375-20 UNJF-3B	.153	.153	.675	.675
	060606	.3750	.3750	.3750	.337	.045	.4160	.302	.302	.5625-18 UNJF-3B	.153	.153	.675	.675
	080606	.5000	.3750	.3750	.337	.052	.4160	.401	.302	.5625-18 UNJF-3B	.165	.153	.871	.675
	080806	.5000	.5000	.3750	.337	.052	.4160	.401	.401	.5625-18 UNJF-3B	.165	.165	.871	.871
	080808	.5000	.5000	.5000	.380	.052	.5600	.401	.401	.7500-16 UNJF-3B	.165	.165	.871	.871
	100808	.6250	.5000	.5000	.380	.057	.5600	.507	.401	.7500-16 UNJF-3B	.140	.165	1.190	.871
	101004	.6250	.6250	.2500	.325	.057	.2930	.507	.507	.4375-20 UNJF-3B	.140	.140	1.190	1.190
	101006	.6250	.6250	.3750	.337	.057	.4160	.507	.507	.5625-18 UNJF-3B	.140	.140	1.190	1.190
	101008	.6250	.6250	.5000	.380	.057	.5600	.507	.507	.7500-16 UNJF-3B	.140	.140	1.190	1.190
	101010	.6250	.6250	.6250	.418	.057	.6860	.507	.507	.8750-14 UNJF-3B	.140	.140	1.190	1.190
	101212	.6250	.7500	.7500	.433	.065	.8100	.507	.604	1.0625-12 UNJ-3B	.140	.154	1.190	1.327
/18/	121012	.7500	.6250	.7500	.433	.065	.8100	.604	.507	1.0625-12 UNJ-3B	.154	.140	1.327	1.190
	121210	.7500	.7500	.6250	.418	.065	.6860	.604	.604	.8750-14 UNJF-3B	.154	.154	1.327	1.327
	121212	.7500	.7500	.7500	.433	.065	.8100	.604	.604	1.0625-12 UNJ-3B	.154	.154	1.327	1.327
	161616	1.0000	1.0000	1.0000	.447	.084	1.0620	.802	.802	1.3125-12 UNJ-3B	.167	.167	1.612	1.612
	202020	1.2500	1.2500	1.2500	.460	.174	1.3160	1.011	1.011	1.6250-12 UNJ-3B	.185	.185	1.886	1.886

TABLE 1D - DIMENSIONS W2 THROUGH W4A AND WEIGHTS

	BASIC NO. AS5806 /15/ 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	.041
/17/	040606	.2500	.3750	.3750	.3005	.4475	.018	.033	.065	.065	.066
	060406	.3750	.2500	.3750	.4475	.3005	.033	.018	.065	.065	.066
	060604	.3750	.3750	.2500	.4475	.4475	.033	.033	.065	.065	.065
	060606	.3750	.3750	.3750	.4475	.4475	.033	.033	.065	.065	.073
	080606	.5000	.3750	.3750	.5945	.4475	.033	.033	.129	.065	.106
	080806	.5000	.5000	.3750	.5945	.5945	.033	.033	.129	.129	.119
	080808	.5000	.5000	.5000	.5945	.5945	.033	.033	.129	.129	.141
	100808	.6250	.5000	.5000	.7365	.5945	.021	.033	.078	.129	.186
	101004	.6250	.6250	.2500	.7365	.7365	.021	.021	.078	.078	.169
	101006	.6250	.6250	.3750	.7365	.7365	.021	.021	.078	.078	.176
	101008	.6250	.6250	.5000	.7365	.7365	.021	.021	.078	.078	.199
	101010	.6250	.6250	.6250	.7365	.7365	.021	.021	.078	.078	.239
/18/	101212	.6250	.7500	.7500	.7365	.8805	.021	.024	.078	.089	.331
	121012	.7500	.6250	.7500	.8805	.7365	.024	.021	.089	.078	.331
	121210	.7500	.7500	.6250	.8805	.8805	.024	.024	.089	.089	.327
	121212	.7500	.7500	.7500	.8805	.8805	.024	.024	.089	.089	.356
	161616	1.0000	1.0000	1.0000	1.1725	1.1725	.027	.027	.099	.099	.683
	202020	1.2500	1.2500	1.2500	1.4345	1.4345	.030	.030	.113	.113	1.194

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.

NUT - AMS4965 TITANIUM ALLOY, 6.0Al - 4.0V SOLUTION HEAT TREATED AND AGED OR AMS4928 TITANIUM ALLOY, 6.0Al - 4.0V ANNEALED.

WIRE - AMS5637 STEEL, CORROSION RESISTANT, BARS AND WIRE, 18Cr - 9.0Ni (SAE 30302) SOLUTION HEAT TREATED, COLD DRAWN AND STESS RELIEVED, 125 KSI TENSILE STRENGTH.

- AS5685 STEEL, CORROSION RESISTANT, SAFETY WIRE 18Cr - 11.5Ni (UNS S30500) WIRE, SOLUTION HEAT TREATED, COLD FINISHED.

- ASTM A580 STEEL, CORROSION RESISTANT, WIRE, TYPE 302 OR 305 CONDITION A, COLD FINISHED.

2. FINISH:

TITANIUM - NONE REQUIRED

CRES - PASSIVATION PER AMS2700, TYPE 6 OR 7.

/3/ COATINGS/LUBRICANTS /16/:

a. NO SUFFIX CODE LETTER

(1) RING - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE COLORED RING OR SHALL BE COMPLETELY COLORED BLUE TO MATCH THE SWAGE TOOL COLOR CODE SPECIFIED IN THE AS5959 INSTALLATION PROCEDURE. BLUE PTFE COATING OR PAINT SHALL BE RESISTANT TO AS1241 FLUID WHEN USED. MARKING METHODS SHALL BE IN ACCORDANCE WITH AS5958.

(2) BODY - LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV, PTFE OR PETROLEUM-BASED LUBRICANT SHALL BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM BASED LUBRICANT AND/OR AS5272 LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

(3) NUT - LUBRICATE ID THREADS AND WIRE GROOVE LOAD BEARING SHOULDER OR MATING WIRE GROOVE LOAD BEARING SHOULDER WITH LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV.

(4) WIRE - LUBRICATE THE WIRE WITH LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV.

b. SUFFIX CODE LETTER "B"

(1) RING - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE ANODIZED RING OR SHALL BE COMPLETELY ANODIZED BLUE TO MATCH THE SWAGE TOOL COLOR CODE SPECIFIED IN THE AS5959 INSTALLATION PROCEDURE. MARKING METHODS SHALL BE IN ACCORDANCE WITH AS5958.

(2) BODY - LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV, PTFE OR PETROLEUM-BASED LUBRICANT SHALL BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT AND/OR AS5272 LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

(3) NUT - LUBRICATE ID THREADS AND WIRE GROOVE LOAD BEARING SHOULDER OR MATING WIRE GROOVE LOAD BEARING SHOULDER WITH LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV.

(4) WIRE - LUBRICATE THE WIRE WITH LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II, OR PER AS6449 TYPE III OR IV.