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REV.
B

AS5804™

FEDERAL SUPPLY CLASS
4730

RATIONALE

REVISED NOTE 14 FOR DEFINITION CORRECTION OF DIMENSIONS "B1" AND "C1" (FITTING BODY LENGTHS). 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 "JB" FOR 101004 AND 101006, AND "K" FOR 060406, 060604, 100808, 101004, 101006, 101008, 101010, 101212, 161616, AND 202020. UPDATED FIGURE AND WEIGHTS. REVISED NOTES 1, 3, 7, AND 15. ADDED NOTES 13 AND 17 AND AS6449 AS A NEW LUBRICANT TYPE.

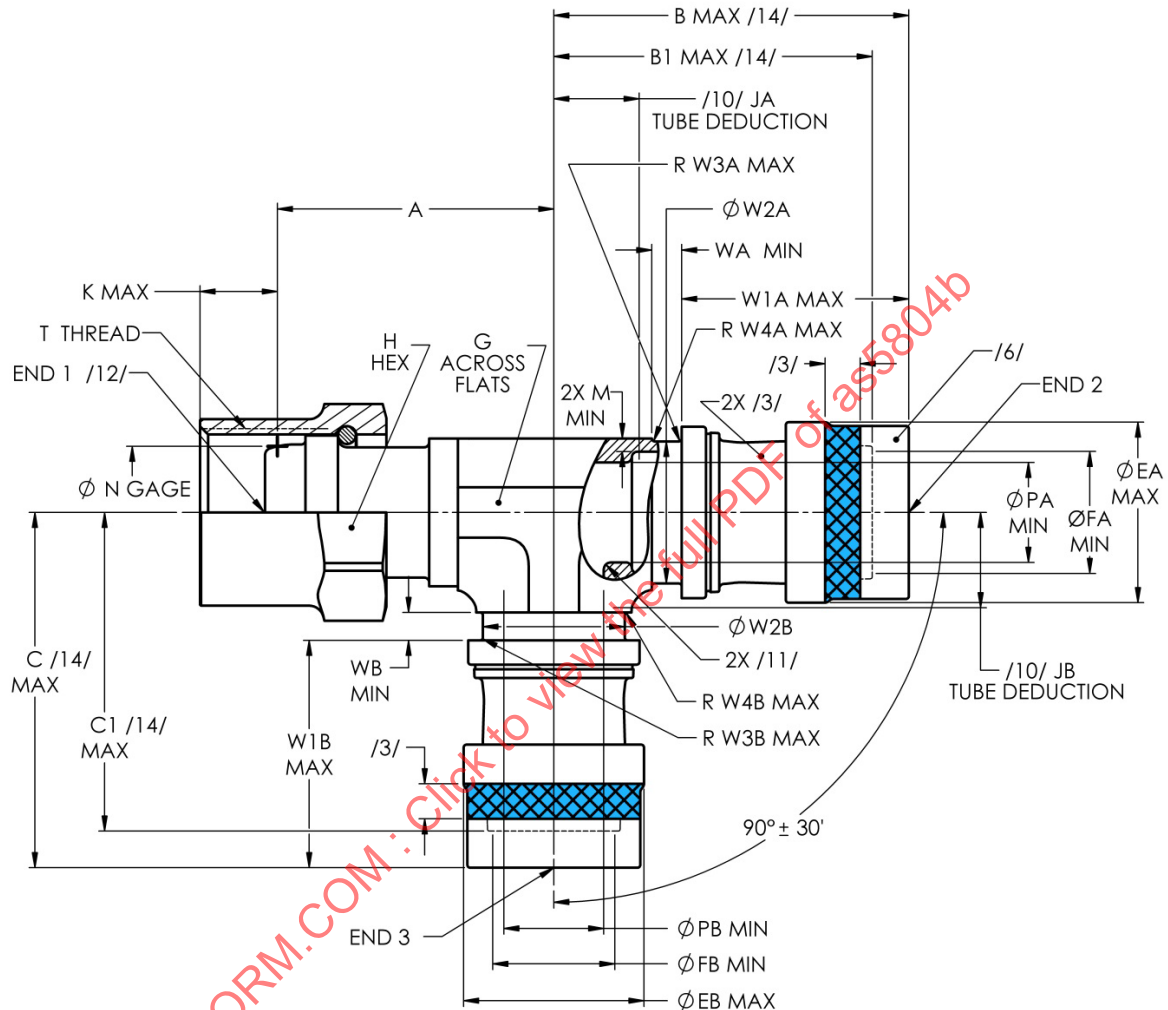
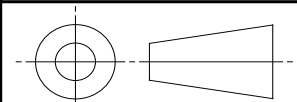


FIGURE 1 - TEE, FEMALE FLARELESS AND AXIALLY SWAGED ON THE RUN, AXIALLY SWAGED ON THE BRANCH

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

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS5804B>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS5958



AEROSPACE STANDARD

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

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SHEET 1 OF 5

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

TABLE 1A - DIMENSIONS A THROUGH FB

BASIC NO. AS5804 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	T THREAD PER AS8879	A ±.015	B MAX.	B1 MAX.	C MAX.	C1 MAX.	EA MAX.	EB MAX.	FA MIN.	FB MIN.
040404	.2500	.2500	.2500	.4375-20 UNJF-3B	.878	.935	.848	.935	.848	.466	.466	.253	.253
040606	.2500	.3750	.3750	.4375-20 UNJF-3B	.937	1.215	1.099	1.215	1.099	.609	.609	.378	.378
060406	.3750	.2500	.3750	.5625-18 UNJF-3B	1.040	.998	.911	1.215	1.099	.466	.609	.253	.378
060604	.3750	.3750	.2500	.5625-18 UNJF-3B	1.040	1.215	1.099	.998	.911	.609	.466	.378	.253
060606	.3750	.3750	.3750	.5625-18 UNJF-3B	1.040	1.215	1.099	1.215	1.099	.609	.609	.378	.378
080606	.5000	.3750	.3750	.7500-16 UNJF-3B	1.229	1.308	1.192	1.308	1.192	.609	.609	.378	.378
080806	.5000	.5000	.3750	.7500-16 UNJF-3B	1.229	1.516	1.370	1.308	1.192	.783	.609	.504	.378
080808	.5000	.5000	.5000	.7500-16 UNJF-3B	1.229	1.516	1.370	1.516	1.370	.783	.783	.504	.504
100808	.6250	.5000	.5000	.8750-14 UNJF-3B	1.435	1.579	1.433	1.579	1.433	.783	.783	.504	.504
101004	.6250	.6250	.2500	.8750-14 UNJF-3B	1.435	1.873	1.669	1.154	1.067	.939	.466	.629	.253
101006	.6250	.6250	.3750	.8750-14 UNJF-3B	1.435	1.873	1.669	1.371	1.255	.939	.609	.629	.378
101008	.6250	.6250	.5000	.8750-14 UNJF-3B	1.435	1.873	1.669	1.579	1.433	.939	.783	.629	.504
101010	.6250	.6250	.6250	.8750-14 UNJF-3B	1.435	1.873	1.669	1.873	1.669	.939	.939	.629	.629
101212	.6250	.7500	.7500	.8750-14 UNJF-3B	1.560	2.149	1.944	2.149	1.944	1.122	1.122	.754	.754
121210	.7500	.7500	.6250	1.0625-12 UNJ-3B	1.592	2.149	1.944	1.998	1.794	1.122	.939	.754	.629
121212	.7500	.7500	.7500	1.0625-12 UNJ-3B	1.592	2.149	1.944	2.149	1.944	1.122	1.122	.754	.754
161616	1.0000	1.0000	1.0000	1.3125-12 UNJ-3B	1.862	2.606	2.392	2.606	2.392	1.495	1.495	1.004	1.004
202020	1.2500	1.2500	1.2500	1.6250-12 UNJ-3B	2.024	3.020	2.796	3.020	2.796	1.758	1.758	1.255	1.255

TABLE 1B - DIMENSIONS G THROUGH PB

BASIC NO. AS5804 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	G	(H)	JA /10/ TUBE DEDUCT	JB /10/ TUBE DEDUCT	K MAX.	M MIN.	N GAGE	PA MIN.	PB MIN.
040404	.2500	.2500	.2500	.348- .380	.563	.353 ± .150	.353 ± .150	.325	.043	.2930	.198	.198
040606	.2500	.3750	.3750	.477- .509	.563	.416 ± .150	.416 ± .150	.325	.045	.2930	.302	.302
060406	.3750	.2500	.3750	.477- .509	.688	.416 ± .150	.416 ± .150	.337	.045	.4160	.198	.302
060604	.3750	.3750	.2500	.477- .509	.688	.416 ± .150	.416 ± .150	.337	.045	.4160	.302	.198
060606	.3750	.3750	.3750	.477- .509	.688	.416 ± .150	.416 ± .150	.337	.045	.4160	.302	.302
080606	.5000	.3750	.3750	.615- .647	.875	.509 ± .150	.509 ± .150	.380	.052	.5600	.302	.302
080806	.5000	.5000	.3750	.615- .647	.875	.517 ± .175	.509 ± .150	.380	.052	.5600	.401	.302
080808	.5000	.5000	.5000	.615- .647	.875	.517 ± .175	.517 ± .175	.380	.052	.5600	.401	.401
100808	.6250	.5000	.5000	.751- .783	1.000	.580 ± .175	.580 ± .175	.418	.057	.6860	.401	.401
101004	.6250	.6250	.2500	.751- .783	1.000	.580 ± .175	.572 ± .150	.418	.057	.6860	.507	.198
101006	.6250	.6250	.3750	.751- .783	1.000	.580 ± .175	.572 ± .150	.418	.057	.6860	.507	.302
101008	.6250	.6250	.5000	.751- .783	1.000	.580 ± .175	.580 ± .175	.418	.057	.6860	.507	.401
101010	.6250	.6250	.6250	.751- .783	1.000	.580 ± .175	.580 ± .175	.418	.057	.6860	.507	.507
101212	.6250	.7500	.7500	.893- .925	1.000	.712 ± .175	.712 ± .175	.418	.065	.6860	.604	.604
121210	.7500	.7500	.6250	.893- .925	1.250	.712 ± .175	.705 ± .175	.433	.065	.8100	.604	.507
121212	.7500	.7500	.7500	.893- .925	1.250	.712 ± .175	.712 ± .175	.433	.065	.8100	.604	.604
161616	1.0000	1.0000	1.0000	1.181-1.213	1.500	.878 ± .200	.878 ± .200	.447	.084	1.0620	.802	.802
202020	1.2500	1.2500	1.2500	1.609-1.641	2.000	1.009 ± .200	1.009 ± .200	.460	.174	1.3160	1.011	1.011



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SHEET 2 OF 5

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TABLE 1C - DIMENSIONS WA THROUGH W4B AND WEIGHTS

BASIC NO. AS5804 /15/ 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.	W2A ±.0015	W2B ±.0015	W3A MAX.	W3B MAX.	W4A MAX.	W4B MAX.	WEIGHT LBS/EA APPROX. REF
040404	.2500	.2500	.2500	.123	.123	.488	.488	.3005	.3005	.018	.018	.065	.065	.042
040606	.2500	.3750	.3750	.153	.153	.675	.675	.4475	.4475	.033	.033	.065	.065	.069
060406	.3750	.2500	.3750	.123	.153	.488	.675	.3005	.4475	.018	.033	.065	.065	.069
060604	.3750	.3750	.2500	.153	.123	.675	.488	.4475	.3005	.033	.018	.065	.065	.067
060606	.3750	.3750	.3750	.153	.153	.675	.675	.4475	.4475	.033	.033	.065	.065	.069
080606	.5000	.3750	.3750	.153	.153	.675	.675	.4475	.4475	.033	.033	.065	.065	.116
080806	.5000	.5000	.3750	.165	.153	.871	.675	.5945	.4475	.033	.033	.129	.065	.134
080808	.5000	.5000	.5000	.165	.165	.871	.871	.5945	.5945	.033	.033	.129	.129	.135
100808	.6250	.5000	.5000	.165	.165	.871	.871	.5945	.5945	.033	.033	.129	.129	.194
101004	.6250	.6250	.2500	.140	.123	1.190	.488	.7365	.3005	.021	.018	.078	.065	.201
101006	.6250	.6250	.3750	.140	.153	1.190	.675	.7365	.4475	.021	.033	.078	.065	.190
101008	.6250	.6250	.5000	.140	.165	1.190	.871	.7365	.5945	.021	.033	.078	.129	.226
101010	.6250	.6250	.6250	.140	.140	1.190	1.190	.7365	.7365	.021	.021	.078	.078	.218
101212	.6250	.7500	.7500	.154	.154	1.327	1.327	.8805	.8805	.024	.024	.089	.089	.328
121210	.7500	.7500	.6250	.154	.140	1.327	1.190	.8805	.7365	.024	.021	.089	.078	.338
121212	.7500	.7500	.7500	.154	.154	1.327	1.327	.8805	.8805	.024	.024	.089	.089	.343
161616	1.0000	1.0000	1.0000	.167	.167	1.612	1.612	1.1725	1.1725	.027	.027	.099	.099	.676
202020	1.2500	1.2500	1.2500	.185	.185	1.886	1.886	1.4345	1.4345	.030	.030	.113	.113	1.187

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 - 9.0 Ni (SAE 30302) SOLUTION HEAT TREATED, COLD DRAWN AND STRESS RELIEVED, 125 KSI TENSILE STRENGTH.

- AS5685 STEEL, CORROSION RESISTANT, SAFETY WIRE 18Cr - 11.5 Ni (UNS S30500) 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

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/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.

- /4/ PROCUREMENT 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 DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST FOR PRI-QPL-AS5958 FOR THIS STANDARD. SEE www.eAuditNet.com FOR 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 INSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.
- /6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS5958 AND SHALL BE LOCATED ON EITHER RING IN THE AREA SHOWN.
7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS5959. THE AFTER SWAGE ACCEPTABILITY LIMIT DIMENSION "Z" FOR EACH PORT SIZE IS DEFINED IN AS5959.
8. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES SHALL BE 125 MICROINCHES Ra AND THE FORGED SURFACES SHALL BE 250 MICROINCHES Ra.
9. DIMENSIONS AND TOLERANCES: ASME Y14.5M-1994.
- a. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
 - b. DIMENSIONAL TOLERANCES SHALL BE $\pm .005$ INCH UNLESS OTHERWISE SPECIFIED.
 - c. ANGULAR TOLERANCES SHALL BE $\pm 50^\circ$ UNLESS OTHERWISE SPECIFIED.
 - d. BREAK ALL EDGES .003 TO .010 INCH UNLESS OTHERWISE SPECIFIED.

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