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AS5974™

FEDERAL SUPPLY CLASS
4730

RATIONALE

REVISED NOTE 13 FOR DEFINITION CORRECTION OF DIMENSION "A1" (FITTING BODY LENGTH). ADDED LETTER CODE "B" FOR FITTING ASSEMBLIES WITH BLUE ANODIZED RINGS AND NUTS AND NOTE 15 AS AN OPTION FOR FUTURE REPLACEMENT OF "NO CODE" BLUE COATING OR PAINT. CORRECTED 1210 "A1" AND "J", 2016 "J", AND "K" FOR 1008, 1010, 1012, 1612, 1616, AND 1620. REVISED NOTES 1, 7, 8, AND 11. ADDED NOTES 12, 16, AND AS6449 AS A NEW LUBRICANT TYPE. UPDATED FIGURE AND WEIGHTS.

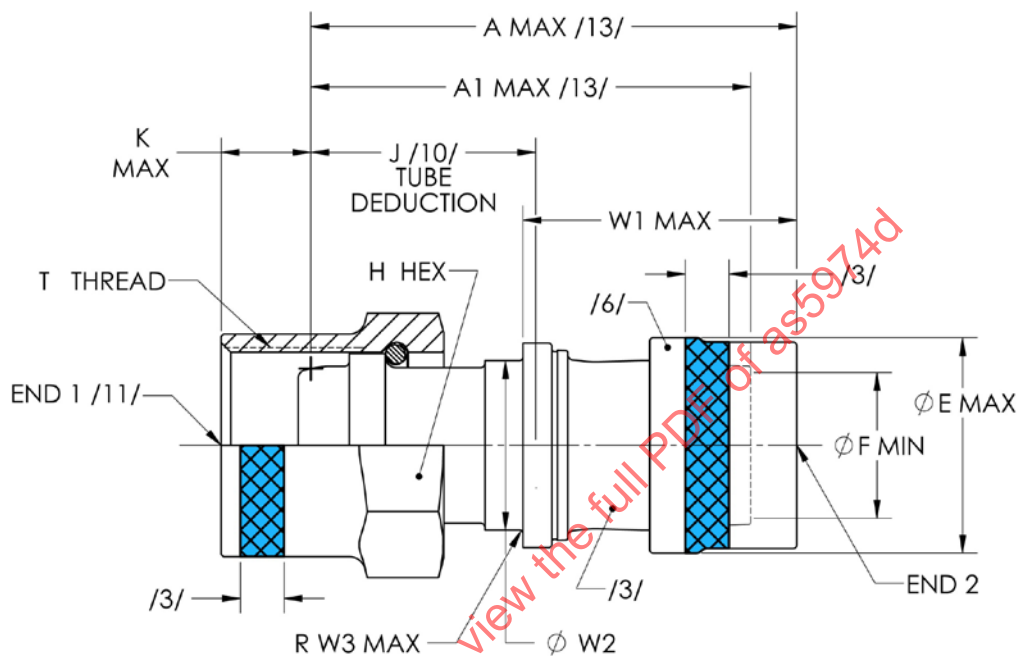
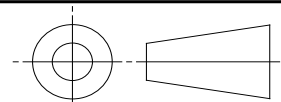


FIGURE 1 - STRAIGHT, FEMALE FLARELESS, AXIAL SWAGE

(SEE TABLES 1A AND 1B FOR DIMENSIONAL INFORMATION)

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/



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(R) FITTING ASSEMBLY, STRAIGHT, FEMALE
FLARELESS, AXIALLY SWAGED,
HYDRAULIC, 5080 PSI

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ISSUED 2006-01 REAFFIRMED 2015-04 REVISED 2015-08

TABLE 1A - DIMENSIONS A THROUGH K

BASIC NO. AS5974 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A MAX.	A1 MAX.	E MAX.	F MIN.	(H)	J /10/ TUBE DEDUCT	K MAX.
0404	.2500	.2500	1.131	1.044	.466	.253	.563	.669 ±.030	.325
0604	.3750	.2500	1.316	1.229	.466	.253	.688	.734 ±.150	.337
0406	.2500	.3750	1.325	1.209	.609	.378	.563	.646 ±.030	.325
0606	.3750	.3750	1.373	1.257	.609	.378	.688	.694 ±.030	.337
0806	.5000	.3750	1.711	1.595	.609	.378	.875	.912 ±.150	.380
0608	.3750	.5000	1.624	1.478	.783	.504	.688	.770 ±.030	.337
0808	.5000	.5000	1.664	1.518	.783	.504	.875	.810 ±.030	.380
1008	.6250	.5000	2.044	1.898	.783	.504	1.000	1.045 ±.175	.418
0810	.5000	.6250	2.129	1.925	.939	.629	.875	.981 ±.030	.380
1010	.6250	.6250	2.127	1.923	.939	.629	1.000	.979 ±.030	.418
1210	.7500	.6250	2.305	2.101	.939	.629	1.250	1.012 ±.175	.433
1012	.6250	.7500	2.330	2.125	1.122	.754	1.000	1.038 ±.030	.418
1212	.7500	.7500	2.295	2.090	1.122	.754	1.250	1.003 ±.030	.433
1612	1.0000	.7500	2.567	2.362	1.122	.754	1.500	1.130 ±.175	.447
1216	.7500	1.0000	2.662	2.448	1.495	1.004	1.250	1.104 ±.030	.433
1616	1.0000	1.0000	2.692	2.478	1.495	1.004	1.500	1.134 ±.030	.447
2016	1.2500	1.0000	2.904	2.690	1.495	1.004	2.000	1.176 ±.200	.460
1620	1.0000	1.2500	3.156	2.932	1.758	1.255	1.500	1.315 ±.030	.447
2020	1.2500	1.2500	3.006	2.782	1.758	1.255	2.000	1.165 ±.030	.460

TABLE 1B - DIMENSIONS N THROUGH W3 AND WEIGHTS

BASIC NO. AS5974 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	N GAGE	T THREAD PER AS8879	W1 MAX.	W2 ±.0015	W3 MAX.	WEIGHT LB/EA APPROX REF
0404	.2500	.2500	.2930	.4375-28 UNJEF-3B	.488	.3005	.018	.024
0604	.3750	.2500	.4160	.5625-24 UNJEF-3B	.488	.3005	.018	.038
0406	.2500	.3750	.2930	.4375-28 UNJEF-3B	.675	.4475	.033	.035
0606	.3750	.3750	.4160	.5625-24 UNJEF-3B	.675	.4475	.033	.043
0806	.5000	.3750	.5600	.7500-20 UNJEF-3B	.675	.4475	.033	.065
0608	.3750	.5000	.4160	.5625-24 UNJEF-3B	.871	.5945	.033	.060
0808	.5000	.5000	.5600	.7500-20 UNJEF-3B	.871	.5945	.033	.076
1008	.6250	.5000	.6860	.8750-20 UNJEF-3B	.871	.5945	.033	.107
0810	.5000	.6250	.5600	.7500-20 UNJEF-3B	1.190	.7365	.021	.106
1010	.6250	.6250	.6860	.8750-20 UNJEF-3B	1.190	.7365	.021	.116
1210	.7500	.6250	.8100	1.0625-18 UNJEF-3B	1.190	.7365	.021	.165
1012	.6250	.7500	.6860	.8750-20 UNJEF-3B	1.327	.8805	.024	.163
1212	.7500	.7500	.8100	1.0625-18 UNJEF-3B	1.327	.8805	.024	.185
1612	1.0000	.7500	1.0620	1.3125-16 UNJ-3B	1.327	.8805	.024	.247
1216	.7500	1.0000	.8100	1.0625-18 UNJEF-3B	1.612	1.1725	.027	.297
1616	1.0000	1.0000	1.0620	1.3125-16 UNJ-3B	1.612	1.1725	.027	.328
2016	1.2500	1.0000	1.3160	1.6250-16 UNJ-3B	1.612	1.1725	.027	.527
1620	1.0000	1.2500	1.0620	1.3125-16 UNJ-3B	1.886	1.4345	.030	.440
2020	1.2500	1.2500	1.3160	1.6250-16 UNJ-3B	1.886	1.4345	.030	.580



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FLARELESS, AXIALLY SWAGED,
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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.

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

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

/3/ COATINGS/LUBRICANTS /15/:

a. NO SUFFIX CODE LETTER

- (1) RINGS - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE COLORED RING OR COMPLETELY COLORED BLUE TO INDICATE 5080 PSI MAXIMUM OPERATING PRESSURE. 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 AS6449 TYPE III OR IV. THE NUT OUTSIDE DIAMETER SHALL BE COLORED BLUE IN THIS AREA TO INDICATE EXTRA FINE THREADS AND 5080 PSI OPERATING PRESSURE. PTFE COATING OR PAINT SHALL BE RESISTANT TO AS1241 FLUID WHEN USED.
- (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) RINGS - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE ANODIZED RING OR COMPLETELY ANODIZED BLUE TO INDICATE 5080 PSI MAXIMUM OPERATING PRESSURE. 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 AS6449 TYPE III OR IV. THE NUT SHALL BE PARTIALLY (.125 INCH MINIMUM WIDTH RING) OR COMPLETELY ANODIZED BLUE TO INDICATE EXTRA FINE THREADS AND 5080 PSI MAXIMUM OPERATING PRESSURE.
- (4) WIRE - LUBRICATE THE WIRE WITH LEAD FREE SOLID FILM LUBRICANT PER AS5272 TYPE I OR II OR PER AS6449 TYPE III OR IV.

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