

REV.
G

AS5969™

RATIONALE

UPDATE PROCUREMENT NOTE AND FINISH NOTE TO LATEST VERBIAGE FOR AXIAL SWAGE PART STANDARD (REFER TO AS5972H FOR REFERENCE).

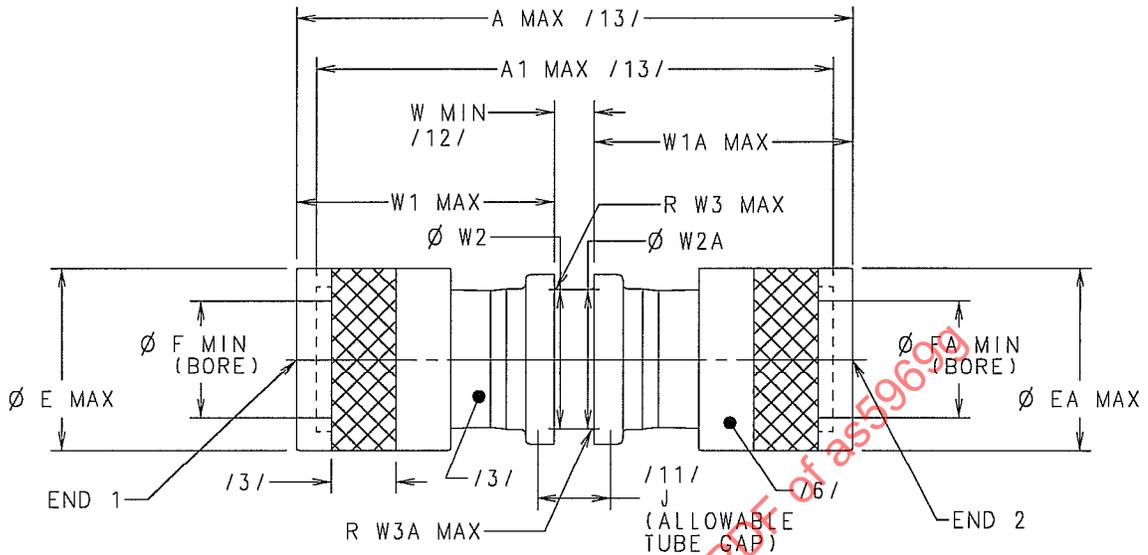


FIGURE 1 - UNION, BEFORE SWAGE

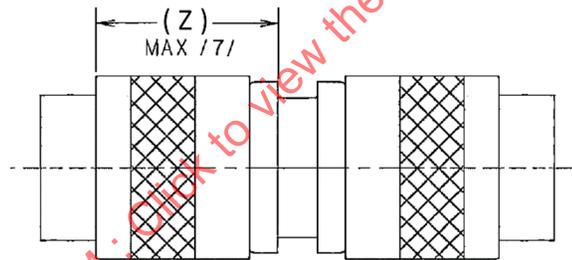
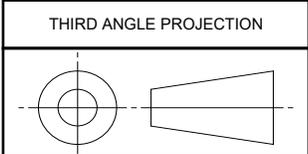


FIGURE 2 - UNION, AFTER SWAGE

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5969G>



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/



AEROSPACE STANDARD

FITTING ASSEMBLY, UNION,
AXIALLY SWAGED, HYDRAULIC
5080 PSI

AS5969™
SHEET 1 OF 4

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TABLE 1A - DIMENSIONS A THROUGH J

BASIC NO. AS5969 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A	A1	E	EA	F	FA	J/11/ ALLOWABLE TUBE GAP
0404	.2500	.2500	1.134	.975	.466	.466	.253	.253	.150 ± .150
0604	.3750	.2500	1.621	1.448	.609	.466	.378	.253	.300 ± .300
0606	.3750	.3750	1.568	1.351	.609	.609	.378	.378	.150 ± .150
0806	.5000	.3750	2.032	1.785	.783	.609	.504	.378	.300 ± .300
0808	.5000	.5000	1.942	1.665	.783	.783	.504	.504	.175 ± .175
1008	.6250	.5000	2.582	2.262	.939	.783	.629	.504	.350 ± .350
1010	.6250	.6250	2.555	2.162	.939	.939	.629	.629	.175 ± .175
1210	.7500	.6250	3.003	2.609	1.122	.939	.754	.629	.325 ± .325
1212	.7500	.7500	2.843	2.448	1.122	1.122	.754	.754	.175 ± .175
1612	1.0000	.7500	3.521	3.117	1.495	1.122	1.004	.754	.375 ± .375
1616	1.0000	1.0000	3.426	3.013	1.495	1.495	1.004	1.004	.200 ± .200
2016	1.2500	1.0000	4.079	3.656	1.758	1.495	1.255	1.004	.375 ± .375
2020	1.2500	1.2500	3.992	3.559	1.758	1.758	1.255	1.255	.200 ± .200

TABLE 1B - DIMENSIONS W THROUGH W3 AND WEIGHTS

BASIC NO. AS5969 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	W	W1	W1A	W2 ±.0015	W2A ±.0015	W3	W3A	WEIGHT LB/EA APPROX REF
0404	.2500	.2500	.123	.488	.488	.3005	.3005	.018	.018	.012
0604	.3750	.2500	.443	.675	.488	.4475	.3005	.033	.018	.023
0606	.3750	.3750	.173	.675	.675	.4475	.4475	.033	.033	.031
0806	.5000	.3750	.451	.871	.675	.5945	.4475	.033	.033	.050
0808	.5000	.5000	.165	.871	.871	.5945	.5945	.033	.033	.062
1008	.6250	.5000	.506	1.190	.871	.7365	.5945	.021	.033	.099
1010	.6250	.6250	.140	1.190	1.190	.7365	.7365	.021	.021	.103
1210	.7500	.6250	.451	1.327	1.190	.8805	.7365	.024	.021	.140
1212	.7500	.7500	.154	1.327	1.327	.8805	.8805	.024	.024	.165
1612	1.0000	.7500	.547	1.612	1.327	1.1725	.8805	.027	.024	.281
1616	1.0000	1.0000	.167	1.612	1.612	1.1725	1.1725	.027	.027	.359
2016	1.2500	1.0000	.546	1.886	1.612	1.4345	1.1725	.030	.027	.430
2020	1.2500	1.2500	.185	1.886	1.886	1.4345	1.4345	.030	.030	.510

NOTES:

1/1/ MATERIALS:

CODE LETTER "T"

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

BODY - AMS4928 TITANIUM ALLOY, 6.0AI-4.0V ANNEALED.

2. FINISH:

TITANIUM - NONE.

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	FITTING ASSEMBLY, UNION, AXIALLY SWAGED, HYDRAULIC 5080 PSI		

/3/ COATINGS/LUBRICANTS /16/:

a. NO SUFFIX CODE LETTER:

- (1) RINGS - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE BAND OR COMPLETELY COLORED BLUE PER AS5958. MARKING AND COLOR METHODS SHALL BE IN ACCORDANCE WITH AS5958. BLUE COLOR MARKING SHALL EXHIBIT CHEMICAL RESISTANCE PER AS5958. BLUE COLOR ON RING CORRESPONDS TO TOOLING COLOR SPECIFIED IN THE AS5959 INSTALLATION PROCEDURE AND DENOTES 5080 PSI CAPABILITY ON SWAGED END.
- (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 MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

b. SUFFIX CODE LETTER A:

- (1) RINGS - NO BLUE PTFE COATING OR PAINT ALLOWED. BARE (NO FINISH) OR ANODIZED RINGS ARE ACCEPTABLE. THE WORD "BLUE" SHALL BE MARKED ON BARE RINGS ONLY. MARKING AND COLOR METHODS SHALL BE IN ACCORDANCE WITH AS5958. BLUE COLOR MARKING SHALL EXHIBIT CHEMICAL RESISTANCE PER AS5958. THE WORD "BLUE" AND BLUE COLOR ON RING CORRESPONDS TO TOOLING COLOR SPECIFIED IN THE AS5959 INSTALLATION PROCEDURE AND DENOTES 5080 PSI CAPABILITY ON SWAGED END.
- (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 MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

c. SUFFIX CODE LETTER B:

- (1) RINGS - PARTIALLY (.125 INCH MINIMUM WIDTH) OR COMPLETELY ANODIZED BLUE PER AS5958. MARKING AND COLOR METHODS SHALL BE IN ACCORDANCE WITH AS5958. BLUE COLOR MARKING SHALL EXHIBIT CHEMICAL RESISTANCE PER AS5958. BLUE COLOR ON RING CORRESPONDS TO TOOLING COLOR SPECIFIED IN THE AS5959 INSTALLATION PROCEDURE AND DENOTES 5080 PSI CAPABILITY ON SWAGED END.
- (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, MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

/4/ PROCUREMENT SPECIFICATION: AS5958 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-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 ENSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.

/6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS5958 AND SHALL BE IDENTIFIED 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, THE MAXIMUM MACHINED SURFACES SHALL BE 125 MICRONS Ra.

9. DIMENSIONING AND TOLERANCING: 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.

10. INTERPRETATION OF DRAWING PER AS4296.

/11/ THIS DIMENSION IS THE ALLOWABLE TUBE END POSITIONING FOR SYSTEM LAYOUT DESIGN.

/12/ FOR JUMP SIZE FITTINGS, A TRANSITION DIAMETER WILL OCCUR IN THIS AREA.

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	FITTING ASSEMBLY, UNION, AXIALLY SWAGED, HYDRAULIC 5080 PSI		