FEDERAL SUPPLY CLASS
4730

RATIONALE

REVISED NOTE 13 FOR DEFINITION CORRECTION OF DIMENSIONS A1 AND B1 (FITTING BODY LENGTH), REVISED NOTES 7 AND 14. ADDED LETTER CODE "B" FOR FITTING ASSEMBLIES WITH BLUE ANODIZED RINGS AND NOTE 15 AS AN OPTION FOR FUTURE REPLACEMENT OF CURRENT BLUE COLOR CODING. ADDED AS6449 AS A NEW LUBRICANT TYPE. ADDED SIZE -20, DIMENSION U, TOLERANCES TO DIMENIONS L, N, AND S. UPDATED WEIGHTS OF 1210 AND 1616.

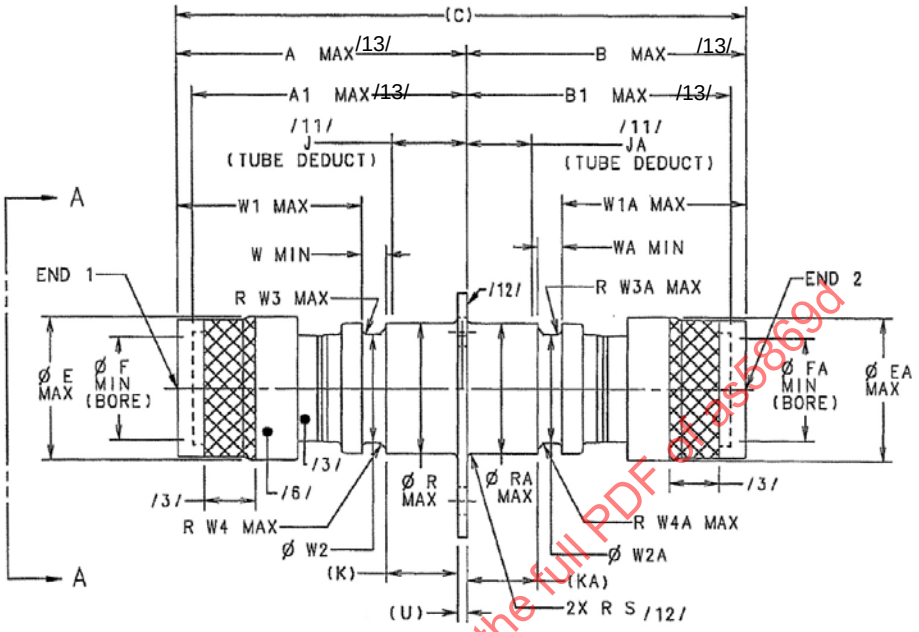
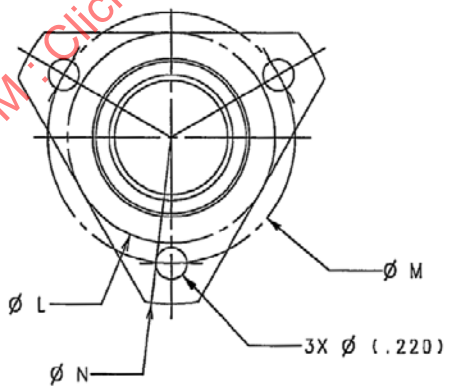


FIGURE 1 - ADAPTER, AXIAL SWAGE

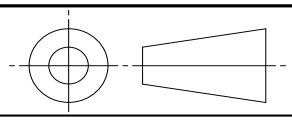
(SEE TABLES 1A, 1B, AND 1C FOR DIMENSIONAL INFORMATION)



VIEW A-A

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS5869D

THIRD ANGLE PROJECTION



ISSUED 2006-02 REVISED 2014-10

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/

SAE INTERNATIONAL

AEROSPACE STANDARD

(R) FITTING ASSEMBLY, UNION, 3 HOLE FLANGE
AXIALLY SWAGED, HYDRAULIC
5080 PSI

AS5869
SHEET 1 OF 4

REV. D

TABLE 1A - DIMENSIONS A THROUGH FA

BASIC NO. AS5869 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A MAX	A1 MAX	B MAX	B1 MAX	(C)	E MAX	EA MAX	F MIN	FA MIN
0404	.2500	.2500	1.333	1.246	1.148	1.061	2.421	.466	.466	.253	.253
0604	.3750	.2500	1.550	1.434	1.148	1.061	2.638	.609	.466	.378	.253
0606	.3750	.3750	1.550	1.434	1.365	1.249	2.855	.609	.609	.378	.378
0806	.5000	.3750	1.758	1.612	1.365	1.249	3.063	.783	.609	.504	.378
0808	.5000	.5000	1.758	1.612	1.573	1.427	3.271	.783	.783	.504	.504
1008	.6250	.5000	2.052	1.848	1.573	1.427	3.565	.939	.783	.629	.504
1010	.6250	.6250	2.052	1.848	1.867	1.663	3.859	.939	.939	.629	.629
1210	.7500	.6250	2.203	1.998	1.867	1.663	4.010	1.122	.939	.754	.629
1212	.7500	.7500	2.203	1.998	2.018	1.813	4.161	1.122	1.122	.754	.754
1612	1.0000	.7500	2.501	2.287	2.018	1.813	4.459	1.495	1.122	1.004	.754
1616	1.0000	1.0000	2.501	2.287	2.316	2.102	4.757	1.495	1.495	1.004	1.004
1616E	1.0000	1.0000	2.799	2.585	2.316	2.102	5.055	1.495	1.495	1.004	1.004
2016	1.2500	1.0000	3.390	3.166	2.316	2.102	5.646	1.758	1.495	1.255	1.004
2020	1.2500	1.2500	3.390	3.166	3.180	2.956	6.510	1.758	1.758	1.255	1.255

TABLE 1B - DIMENSIONS J THROUGH U

BASIC NO. AS5869 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 1	J /11/ TUBE DEDUCT	JA /11/ TUBE DEDUCT	(K)	(KA)	L ±.010	M	N ±.010	R MAX	RA MAX	S ±.010	(U)
0404	.2500	.2500	.751 ± .150	.566 ± .150	.512	.512	1.496	1.496	2.200	.426	.426	.090	.185
0604	.3750	.2500	.751 ± .150	.566 ± .150	.512	.512	1.496	1.575	2.280	.573	.426	.090	.185
0606	.3750	.3750	.751 ± .150	.566 ± .150	.512	.512	1.496	1.575	2.280	.573	.573	.090	.185
0806	.5000	.3750	.759 ± .175	.566 ± .150	.512	.512	1.575	1.811	2.560	.848	.573	.090	.185
0808	.5000	.5000	.759 ± .175	.574 ± .175	.512	.512	1.575	1.811	2.560	.848	.848	.090	.185
1008	.6250	.5000	.759 ± .175	.574 ± .175	.493	.512	1.693	1.811	2.560	.888	.848	.090	.185
1010	.6250	.6250	.759 ± .175	.574 ± .175	.493	.493	1.693	1.811	2.560	.888	.888	.090	.185
1210	.7500	.6250	.766 ± .175	.574 ± .175	.505	.493	1.772	1.929	2.560	1.064	.888	.090	.185
1212	.7500	.7500	.766 ± .175	.581 ± .175	.505	.505	1.772	1.929	2.560	1.064	1.064	.090	.185
1612	1.0000	.7500	.773 ± .200	.581 ± .175	.513	.505	2.047	2.283	2.910	1.366	1.064	.090	.185
1616	1.0000	1.0000	.773 ± .200	.588 ± .200	.512	.512	2.047	2.283	2.910	1.366	1.366	.090	.185
1616E	1.0000	1.0000	1.071 ± .200	.588 ± .200	.810	.512	2.047	2.283	2.910	1.301	1.301	.090	.185
2016	1.2500	1.0000	1.379 ± .200	.588 ± .200	1.084	.512	2.205	2.800	3.465	1.564	1.301	.125	.210
2020	1.2500	1.2500	1.379 ± .200	1.169 ± .200	1.084	1.084	2.205	2.800	3.465	1.564	1.564	.125	.210

TABLE 1C - DIMENSIONS W THROUGH W4A AND WEIGHTS

BASIC NO. AS5869 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 1	W MIN	WA MIN	W1 MAX	W1A MAX	W2 ±.0015	W2A ±.0015	W3 MAX	W3A MAX	W4 MAX	W4A MAX	WEIGHT LB/EA APPROX. REF
0404	.2500	.2500	.123	.123	.488	.488	.3005	.3005	.018	.018	.065	.065	.108
0604	.3750	.2500	.153	.123	.675	.488	.4475	.3005	.033	.018	.065	.065	.127
0606	.3750	.3750	.153	.153	.675	.675	.4475	.4475	.033	.033	.065	.065	.142
0806	.5000	.3750	.165	.153	.871	.675	.5945	.4475	.033	.033	.129	.065	.182
0808	.5000	.5000	.165	.165	.871	.871	.5945	.5945	.033	.033	.129	.129	.214
1008	.6250	.5000	.140	.165	1.190	.871	.7365	.5945	.021	.033	.078	.129	.237
1010	.6250	.6250	.140	.140	1.190	1.190	.7365	.7365	.021	.021	.078	.078	.256
1210	.7500	.6250	.154	.140	1.327	1.190	.8805	.7365	.024	.021	.089	.078	.315
1212	.7500	.7500	.154	.154	1.327	1.327	.8805	.8805	.024	.024	.089	.089	.329
1612	1.0000	.7500	.167	.154	1.612	1.327	1.1725	.8805	.027	.024	.099	.089	.456
1616	1.0000	1.0000	.167	.167	1.612	1.612	1.1725	1.1725	.027	.027	.099	.099	.600
1616E	1.0000	1.0000	.167	.167	1.612	1.612	1.1725	1.1725	.027	.027	.099	.099	.610
2016	1.2500	1.0000	.185	.167	1.886	1.612	1.4345	1.1725	.030	.027	.113	.099	.815
2020	1.2500	1.2500	.185	.185	1.886	1.886	1.4345	1.4345	.030	.030	.113	.113	1.020

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.

FLANGE - OPTIONAL MATERIAL AMS4911 TITANIUM ALLOY, 6.0Al-4.0V ANNEALED.

2. FINISH:

TITANIUM - NONE.

/3/ COATINGS/LUBRICANTS /15/:

a. NO SUFFIX CODE LETTER

(1) RING: 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 SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

b. SUFFIX CODE LETTER “A”

(1) RING: NO BLUE PTFE COATING OR PAINT. THE WORD “BLUE” SHALL BE MARKED ON THE RING 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 SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

c. SUFFIX CODE LETTER “B”

(1) RING: PARTIALLY (.125 INCH MINIMUM WIDTH) 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 SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

/4/ PROCUREMENT SPECIFICATION: AS5958 EXCEPT AS SPECIFIED ON THIS STANDARD. ALL PRODUCTS SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) 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 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, MACHINED SURFACES TO BE 125 MICROINCHES Ra. FORGED SURFACES TO BE 250 MICROINCHES Ra.