

RATIONALE

AS5791 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

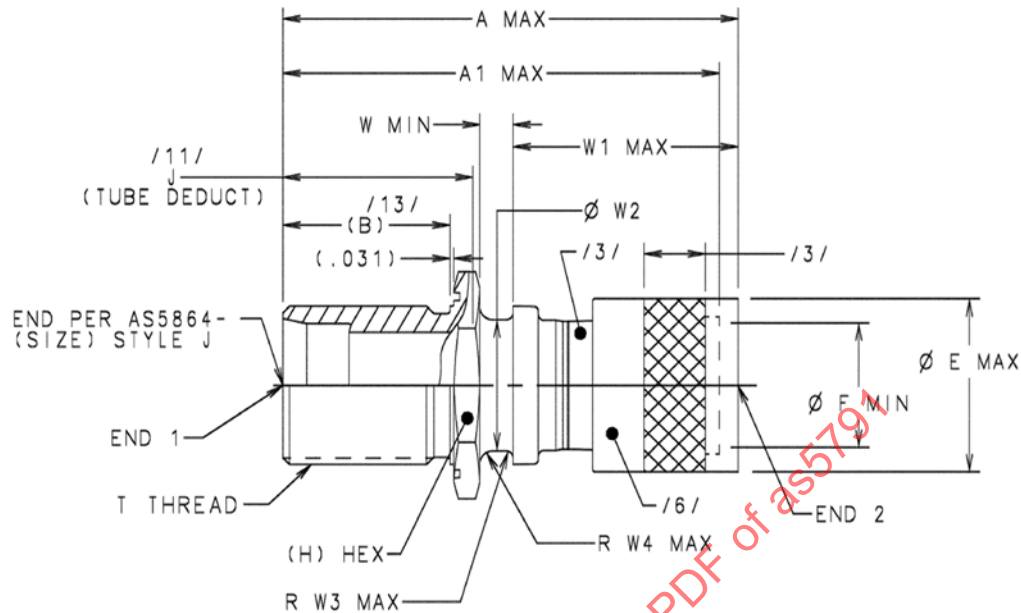
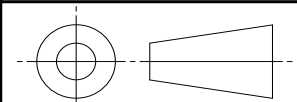
SAE AS5791FIGURE 1 - ADAPTER, SWAGE
(SEE TABLE 1A AND 1B FOR DIMENSIONAL INFORMATION)

TABLE 1A - DIMENSIONS A THROUGH J

BASIC NO. AS5791 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A	A1	A	A1	(B) /13/		E	F	(H)	J /11/	
			STANDARD LENGTH	EXTENDED LENGTH	STANDARD LENGTH	EXTENDED LENGTH	STANDARD LENGTH	EXTENDED LENGTH				TUBE DEDUCT	STANDARD LENGTH
0404	.2500	.2500	1.857	1.770	2.857	2.770	.938	1.938	.466	.253	.875	1.275	± .150
0604	.3750	.2500	1.923	1.836	2.923	2.836	.984	1.984	.466	.253	1.000	1.341	± .150
0406	.2500	.3750	2.094	1.978	3.094	2.978	.938	1.938	.609	.378	.875	1.295	± .150
0606	.3750	.3750	2.140	2.024	3.140	3.024	.984	1.984	.609	.378	1.000	1.341	± .150
0806	.5000	.3750	2.296	2.180	3.296	3.180	1.125	2.125	.609	.378	1.188	1.497	± .150
0608	.3750	.5000	2.363	2.217	3.363	3.217	.984	1.984	.783	.504	1.000	1.364	± .175
0808	.5000	.5000	2.504	2.358	3.504	3.358	1.125	2.125	.783	.504	1.188	1.505	± .175
1008	.6250	.5000	2.660	2.514	3.660	3.514	1.266	2.266	.783	.504	1.312	1.661	± .175
0810	.5000	.6250	2.813	2.609	3.813	3.609	1.125	2.125	.939	.629	1.188	1.520	± .175
1010	.6250	.6250	2.954	2.750	3.954	3.750	1.266	2.266	.939	.629	1.312	1.661	± .175
1210	.7500	.6250	3.083	2.879	4.083	3.879	1.375	2.375	.939	.629	1.500	1.790	± .175
1012	.6250	.7500	3.125	2.920	4.125	3.920	1.266	2.266	1.122	.754	1.312	1.688	± .175
1212	.7500	.7500	3.234	3.029	4.234	4.029	1.375	2.375	1.122	.754	1.500	1.797	± .175
1612	1.0000	.7500	3.234	3.029	4.234	4.029	1.375	2.375	1.122	.754	1.875	1.797	± .175
1216	.7500	1.0000	2.552	3.338	4.552	4.338	1.375	2.375	1.495	1.004	1.500	1.824	± .200
1616	1.0000	1.0000	2.552	3.338	4.552	4.338	1.375	2.375	1.495	1.004	1.875	1.824	± .200

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS5791>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING ASSEMBLY, ADAPTER,
BULKHEAD FLARELESS,
AXIALLY SWAGED, HYDRAULIC

SAE AS5791
SHEET 1 OF 3

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SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

ISSUED 2006-08 REAFFIRMED 2013-01

TABLE 1B - DIMENSIONS W THROUGH W4 AND WEIGHTS

BASIC NO. AS5791 / 13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	T THREAD PER AS8879	J / 11/ TUBE DEDUCT EXTENDED LENGTH	W	W1	W2 ± .0015	W3	W4
0404	.2500	.2500	.4375-20UNJF-3A	2.275 ± .150	.123	.488	.3005	.018	.065
0604	.3750	.2500	.5625-18UNJF-3A	2.341 ± .150	.123	.488	.3005	.018	.065
0406	.2500	.3750	.4375-20UNJF-3A	2.295 ± .150	.153	.675	.4475	.033	.065
0606	.3750	.3750	.5625-18UNJF-3A	2.341 ± .150	.153	.675	.4475	.033	.065
0806	.5000	.3750	.7500-16UNJF-3A	2.497 ± .150	.153	.675	.4475	.033	.065
0608	.3750	.5000	.5625-18UNJF-3A	2.364 ± .175	.165	.871	.5945	.033	.129
0808	.5000	.5000	.7500-16UNJF-3A	2.505 ± .175	.165	.871	.5945	.033	.129
1008	.6250	.5000	.8750-14UNJF-3A	2.661 ± .175	.165	.871	.5945	.033	.129
0810	.5000	.6250	.7500-16UNJF-3A	2.520 ± .175	.140	1.190	.7365	.021	.078
1010	.6250	.6250	.8750-14UNJF-3A	2.661 ± .175	.140	1.190	.7365	.021	.078
1210	.7500	.6250	1.0625-12UNJ-3A	2.790 ± .175	.140	1.190	.7365	.021	.078
1012	.6250	.7500	.8750-14UNJF-3A	2.688 ± .175	.154	1.327	.8805	.024	.089
1212	.7500	.7500	1.0625-12UNJ-3A	2.797 ± .175	.154	1.327	.8805	.024	.089
1612	1.0000	.7500	1.3125-12UNJ-3A	2.797 ± .175	.154	1.327	.8805	.024	.089
1216	.7500	1.0000	1.0625-12UNJ-3A	2.824 ± .200	.167	1.612	1.1725	.027	.099
1616	1.0000	1.0000	1.3125-12UNJ-3A	2.824 ± .200	.167	1.612	1.1725	.027	.099

TABLE 1B - O-RING SIZE AND WEIGHTS

BASIC NO. AS5791 / 13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	AS568 O'RING / 12 /	WEIGHT LBS/EA APPROX. REF STANDARD LENGTH	WEIGHT LBS/EA APPROX. REF STANDARD LENGTH
0404	.2500	.2500	-15	.047	.067
0604	.3750	.2500	-17	.056	.084
0406	.2500	.3750	-17	.056	.076
0606	.3750	.3750	-17	.064	.093
0806	.5000	.3750	-20	.070	.120
0608	.3750	.5000	-20	.080	.109
0808	.5000	.5000	-20	.086	.136
1008	.6250	.5000	-22	.102	.168
0810	.5000	.6250	-22	.107	.157
1010	.6250	.6250	-22	.123	.189
1210	.7500	.6250	-25	.126	.216
1012	.6250	.7500	-25	.154	.220
1212	.7500	.7500	-25	.157	.247
1612	1.0000	.7500	-30	.197	.320
1216	.7500	1.0000	-30	.254	.344
1616	1.0000	1.0000	-30	.324	.447

NOTES:

/1/ MATERIALS:

CODE LETTER "T"

a. RING - AMS 4965 TITANIUM ALLOY 6.0AL 4.0V SOLUTION HEAT TREATED AND AGED OR AMS 4928 TITANIUM ALLOY 6.0AL 4.0V ANNEALED WITH HIGH STRENGTH CARBON FIBER/EPOXY RESIN COMPOSITE REINFORCEMENT.

b. BODY - AMS 4928 TITANIUM ALLOY, 6.0AL 4.0V ANNEALED.

2. FINISH:

TITANIUM - NONE REQUIRED.

 An SAE International Group	AEROSPACE STANDARD		SAE AS5791 SHEET 2 OF 3
	FITTING ASSEMBLY, ADAPTER, BULKHEAD FLARELESS, AXIALLY SWAGED, HYDRAULIC		

/3/ COATINGS/LUBRICANTS:

- a. RING - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE COLORED RING OR COMPLETELY COLORED BLUE. AN AS2141 FLUID RESISTANT PTFE COATING OR PAINT MUST BE USED.
- b. SOLID FILM LUBRICANT PER AS5272, TYPE I OR II, 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/ ALL PRODUCTS SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST FOR PRI-QPL-AS5958 FOR THIS STANDARD. SEE <http://www.pri.sae.org/qpl/as5958.pdf> FOR CURRENT QPL ONLINE.

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.

8. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μ in Ra. FORGED SURFACES TO BE 250 μ in Ra.

9. DIMENSIONS AND TOLERANCES SHALL BE IN ACCORDANCE WITH AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ASME Y14.5M-1994.

- a. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
- b. DIMENSIONAL TOLERANCES SHALL BE ± 0.005 INCHES UNLESS OTHERWISE SPECIFIED.
- c. ANGULAR TOLERANCES SHALL BE ± 0.50 DEGREES UNLESS OTHERWISE SPECIFIED.
- d. BREAK ALL EDGES .003 TO .010 INCHES UNLESS OTHERWISE SPECIFIED.

10. INTERPRETATION OF DRAWING PER AS4296.

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

/12/ SIZE ONLY. REF - THE ORING IS NOT PART OF THE ASSEMBLY AND CANNOT BE PART OF THE ASSEMBLY BECAUSE MATERIAL SELECTION IS BASED ON FLUID APPLICATION.

/13/ EXAMPLE OF PART NUMBER:

AS5791T0806E

/1/ BASIC PART NUMBER _____

MATERIAL CODE _____

TUBE SIZE IN .0625 INCHES _____

(END 1 & END 2)

INCREMENTS (08 = .500 IN) _____

LENGTH CODE _____

NO CODE LETTER

STANDARD LENGTH

CODE LETTER "E"

EXTENDED LENGTH

SAE Aerospace An SAE International Group	AEROSPACE STANDARD	SAE AS5791 SHEET 3 OF 3	
	FITTING ASSEMBLY, ADAPTER, BULKHEAD FLARELESS, AXIALLY SWAGED, HYDRAULIC		