

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

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.

REV.
C

AS5868™

FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECTED 0404 "A", 0604 "A1", 2016 "A", "A1" AND "J". UPDATED FIGURE, TITLE, NOTES 3, 4, 14 AND 15.
CORRECTED O-RING SIZES AND UPDATED WEIGHTS.

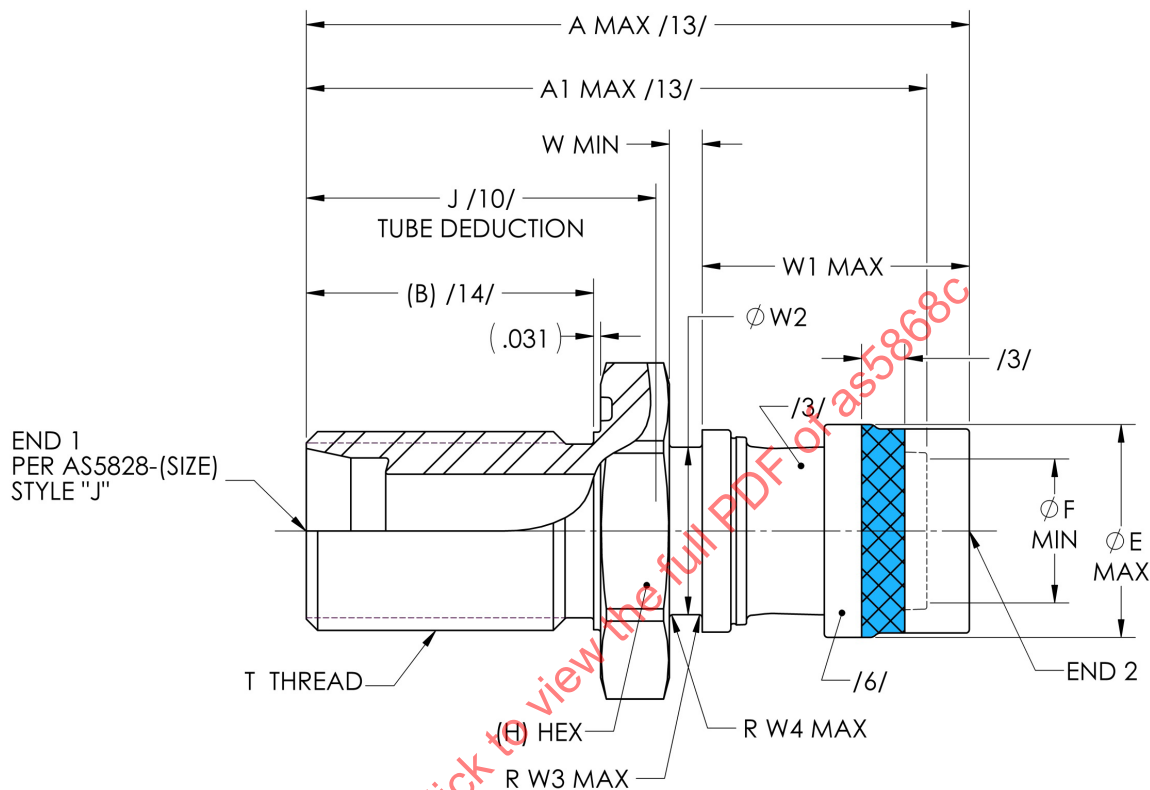
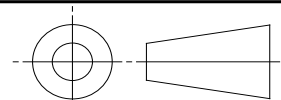


FIGURE 1 - STRAIGHT, BULKHEAD FLARELESS, AXIAL SWAGE

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

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS5868C>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/



AEROSPACE STANDARD

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

AS5868™
SHEET 1 OF 4

REV.
C

Copyright 2015 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER:

Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: +1 724-776-4970 (outside USA)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

ISSUED 2006-01 REAFFIRMED 2013-01 REVISED 2015-12

TABLE 1A - DIMENSIONS A THROUGH J

BASIC NO. AS5868/14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A MAX. STANDARD LENGTH	A1 MAX. STANDARD LENGTH	A MAX. EXTENDED LENGTH	A1 MAX. EXTENDED LENGTH	(B)		E MAX.	F MIN.	(H)	J /10/ TUBE DEDUCT STANDARD LENGTH	
							STANDARD LENGTH	EXTENDED 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	3.254	3.049	4.254	4.049	1.375	2.375	1.122	.754	1.875	1.817	±.175
1216	.7500	1.0000	3.552	3.338	4.552	4.338	1.375	2.375	1.495	1.004	1.500	1.824	±.200
1616	1.0000	1.0000	3.552	3.338	4.552	4.338	1.375	2.375	1.495	1.004	1.875	1.824	±.200
2016	1.2500	1.0000	3.617	3.403	4.617	4.403	1.375	2.375	1.495	1.004	2.188	1.889	±.200
1620	1.0000	1.2500	3.919	3.695	4.919	4.695	1.375	2.375	1.758	1.255	1.875	1.908	±.200
2020	1.2500	1.2500	3.919	3.695	4.919	4.695	1.375	2.375	1.758	1.255	2.188	1.908	±.200

TABLE 1B - DIMENSIONS J THROUGH W4

BASIC NO. AS5868 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	J /10/ TUBE DEDUCT EXTENDED LENGTH		T THREAD PER AS8879	W MIN.	W1 MAX.	W2 ±.0015	W3 MAX.	W4 MAX.
0404	.2500	.2500	2.275	±.150	.4375-28 UNJEF-3A	.123	.488	.3005	.018	.065
0604	.3750	.2500	2.341	±.150	.5625-24 UNJEF-3A	.123	.488	.3005	.018	.065
0406	.2500	.3750	2.295	±.150	.4375-28 UNJEF-3A	.153	.675	.4475	.033	.065
0606	.3750	.3750	2.341	±.150	.5625-24 UNJEF-3A	.153	.675	.4475	.033	.065
0806	.5000	.3750	2.497	±.150	.7500-20 UNJEF-3A	.153	.675	.4475	.033	.065
0608	.3750	.5000	2.364	±.175	.5625-24 UNJEF-3A	.165	.871	.5945	.033	.129
0808	.5000	.5000	2.505	±.175	.7500-20 UNJEF-3A	.165	.871	.5945	.033	.129
1008	.6250	.5000	2.661	±.175	.8750-20 UNJEF-3A	.165	.871	.5945	.033	.129
0810	.5000	.6250	2.520	±.175	.7500-20 UNJEF-3A	.140	1.190	.7365	.021	.078
1010	.6250	.6250	2.661	±.175	.8750-20 UNJEF-3A	.140	1.190	.7365	.021	.078
1210	.7500	.6250	2.790	±.175	1.0625-18 UNJEF-3A	.140	1.190	.7365	.021	.078
1012	.6250	.7500	2.688	±.175	.8750-20 UNJEF-3A	.154	1.327	.8805	.024	.089
1212	.7500	.7500	2.797	±.175	1.0625-18 UNJEF-3A	.154	1.327	.8805	.024	.089
1612	1.0000	.7500	2.817	±.175	1.3125-16 UNJ-3A	.154	1.327	.8805	.024	.089
1216	.7500	1.0000	2.824	±.200	1.0625-18 UNJEF-3A	.167	1.612	1.1725	.027	.099
1616	1.0000	1.0000	2.824	±.200	1.3125-16 UNJ-3A	.167	1.612	1.1725	.027	.099
2016	1.2500	1.0000	2.889	±.200	1.6250-16 UNJ-3A	.167	1.612	1.1725	.027	.099
1620	1.0000	1.2500	2.908	±.200	1.3125-16 UNJ-3A	.185	1.886	1.4345	.030	.113
2020	1.2500	1.2500	2.908	±.200	1.6250-16 UNJ-3A	.185	1.886	1.4345	.030	.113



AEROSPACE STANDARD

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

AS5868™
SHEET 2 OF 4

REV.
C

TABLE 1C - O-RING SIZE AND WEIGHTS

BASIC NO. AS5868 /14/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	AS568 O-RING /12/	WEIGHT LB/EA APPROX. REF. STANDARD LENGTH	WEIGHT LB/EA APPROX. REF. EXTENDED LENGTH
0404	.2500	.2500	-15	.047	.067
0604	.3750	.2500	-17	.067	.095
0406	.2500	.3750	-15	.056	.076
0606	.3750	.3750	-17	.075	.103
0806	.5000	.3750	-20	.115	.163
0608	.3750	.5000	-17	.090	.118
0808	.5000	.5000	-20	.126	.175
1008	.6250	.5000	-22	.165	.228
0810	.5000	.6250	-20	.147	.195
1010	.6250	.6250	-22	.181	.246
1210	.7500	.6250	-25	.241	.329
1012	.6250	.7500	-22	.210	.274
1212	.7500	.7500	-25	.270	.358
1612	1.0000	.7500	-30	.364	.485
1216	.7500	1.0000	-25	.357	.450
1616	1.0000	1.0000	-30	.448	.570
2016	1.2500	1.0000	-32	.610	.791
1620	1.0000	1.2500	-30	.535	.650
2020	1.2500	1.2500	-32	.665	.847

NOTES:

/1/ MATERIALS:

CODE LETTER "T"

RING - 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 REQUIRED.

/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 "B"

- (1) RING - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE ANODIZED RING OR SHALL BE 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.

	AEROSPACE STANDARD	AS5868™ SHEET 3 OF 4	REV. C
	(R) FITTING ASSEMBLY, STRAIGHT, BULKHEAD FLARELESS, AXIALLY SWAGED, HYDRAULIC, 5080 PSI		