

REV.  
B

AS4233

FEDERAL SUPPLY CLASS  
4730

RATIONALE

TO CORRECT THE DEFINED LEG DIAMETER DIM G.

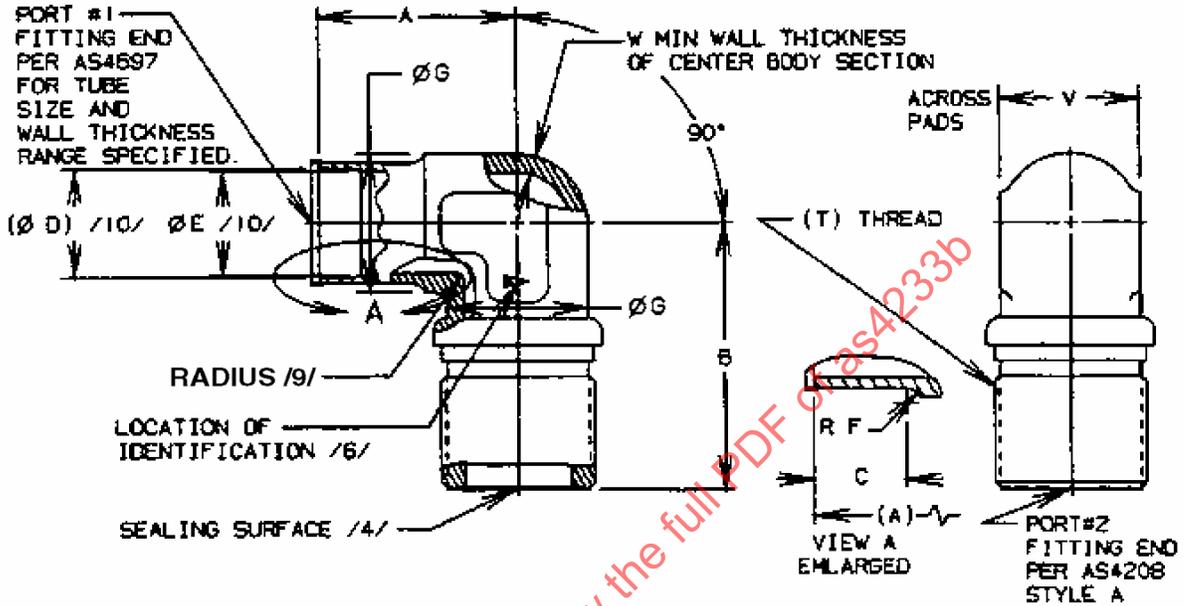
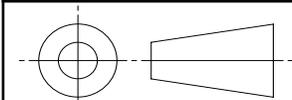


FIGURE 1 - FITTING, ELBOW, 90°, BULKHEAD

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS4510

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

FITTING, ELBOW, 90°, BULKHEAD, EXTERNAL  
THREAD, BEAM SEAL TO INTEGRAL WELD RING

**AS4233**  
SHEET 1 OF 4

**REV.  
B**

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 reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

SAENORM.COM: Click to view the full PDF of AS4233b

Copyright 2007 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: 724-776-4970 (outside USA)

Email: CustomerService@sae.org

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

ISSUED 1996-05 RREAFFIRMED 2001-12 REVISED 2007-02

REV.  
B

AS4233

TABLE 1A - DIMENSIONS

BASIC NO. AS4233 /16/ SIZE AND TUBE WALL CODES	RANGE OF NOMINAL TUBE WALL FOR PORT #2 /7/ /16/	(NOMINAL TUBE SIZE)	PORT #1 STYLE /10/	T THREAD PER AS8879 CLASS 3A	A	B	C	D /10/
03-018	.016-.018	.188	A	.3750-28 UNJS	.832	1.143	.450	.146
03-022	.019-.022	.188	A	.3750-28 UNJS	.832	1.143	.450	.138
04-022	.019-.022	.250	B	.4375-24 UNJS	.832	1.225	.420	.200
05-022	.019-.022	.312	B	.5000-24 UNJS	.887	1.261	.460	.262
05-028	.023-.028	.312	B	.5000-24 UNJS	.887	1.261	.460	.250
06-022	.019-.022	.375	B	.5625-20 UNJS	1.005	1.353	.520	.325
06-028	.023-.028	.375	B	.5625-20 UNJS	1.005	1.353	.520	.313
06-032	.029-.032	.375	B	.5625-20 UNJS	1.005	1.353	.520	.305
08-022	.019-.022	.500	B	.7188-20 UNJS	1.180	1.542	.620	.450
08-043	.033-.043	.500	B	.7188-20 UNJS	1.180	1.542	.620	.408
10-028	.023-.028	.625	B	.8438-18 UNJS	1.243	1.769	.580	.563
10-043	.033-.043	.625	B	.8438-18 UNJS	1.243	1.769	.580	.533
10-055	.044-.055	.625	A	.8438-18 UNJS	1.243	1.769	.580	.509
12-028	.023-.028	.750	B	1.0000-16 UNJ	1.392	1.953	.740	.688
12-055	.044-.055	.750	A	1.0000-16 UNJ	1.392	1.953	.740	.634
12-065	.056-.065	.750	A	1.0000-16 UNJ	1.392	1.953	.740	.614
14-032	.029-.032	.875	B	1.1250-16 UNJ	1.562	2.188	.700	.805
14-065	.056-.065	.875	A	1.1250-16 UNJ	1.562	2.188	.700	.739
16-043	.033-.043	1.000	B	1.2500-14 UNJS	1.617	2.188	.750	.908
16-078	.066-.078	1.000	A	1.2500-14 UNJS	1.617	2.188	.750	.838
16-089	.079-.089	1.000	A	1.2500-14 UNJS	1.617	2.188	.750	.816
20-055	.044-.055	1.250	B	1.5781-14 UNJS	1.750	2.326	.670	1.134
20-089	.079-.089	1.250	A	1.5781-14 UNJS	1.750	2.236	.670	1.066
24-055	.044-.055	1.500	B	1.8438-14 UNJS	1.900	2.712	.680	1.384

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS4233 /16/ SIZE AND TUBE WALL CODES	E /10/	F ±.005	G MIN	V	W	RECOMMENDED MAXIMUM PRESSURE PSI /7/	LB/EA MAX CRES	LB/EA MAX TI
03-018	--	.080	.285	.360- .377	.055	5000	.0578	.0331
03-022	--	.080	.285	.360- .377	.055	5000	.0578	.0331
04-022	.184- .194	.080	.329	.360- .377	.060	5000	.0689	.0394
05-022	.232- .242	.080	.391	.423- .440	.060	4000	.0910	.0520
05-028	.232- .242	.080	.391	.423- .440	.060	5000	.0910	.0520
06-022	.297- .307	.090	.454	.485- .502	.060	3000	.118	.0673
06-028	.297- .307	.090	.454	.485- .502	.060	4000	.118	.0673
06-032	.297- .307	.090	.454	.485- .502	.060	5000	.118	.0673
08-022	.398- .408	.090	.575	.547- .565	.065	2000	.176	.100
08-043	.398- .408	.090	.575	.547- .565	.065	5000	.176	.100
10-028	.512- .523	.125	.673	.673- .691	.070	2000	.253	.145
10-043	.512- .523	.125	.673	.673- .691	.070	4000	.253	.145
10-055	--	.125	.673	.673- .691	.070	5000	.253	.145
12-028	.649- .660	.125	.880	.860- .878	.095	2000	.389	.222
12-055	--	.125	.880	.860- .878	.095	4000	.389	.222
12-065	--	.125	.880	.860- .878	.095	5000	.389	.222
14-032	.769- .780	.125	1.135	1.110-1.128	.105	2000	.676	.374
14-065	--	.125	1.135	1.110-1.128	.105	4000	.676	.374
16-043	.862- .874	.125	1.135	1.110-1.128	.110	2000	.654	.374
16-078	--	.125	1.135	1.110-1.128	.110	4000	.654	.374
16-089	--	.125	1.135	1.110-1.128	.110	5000	.654	.374
20-055	1.115-1.128	.180	1.405	1.355-1.380	.110	2000	.953	.544
20-089	--	.180	1.405	1.355-1.380	.110	4000	.953	.544
24-055	1.324-1.337	.180	1.665	1.605-1.630	.130	2000	1.44	.820

## NOTES:

## /1/ MATERIAL:

- a. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS 4965.
- b. CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5643.
- c. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5659.

## 2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER T - NONE.
- b. MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H 1075 PER AMS 2759/3.

## 3. FINISH:

- a. MATERIAL CODE LETTER T - NONE.
- b. MATERIAL CODE LETTER P AND V - PASSIVATE PER AMS 2700.