

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.

REV.  
A

AS5202

FEDERAL SUPPLY CLASS  
4730

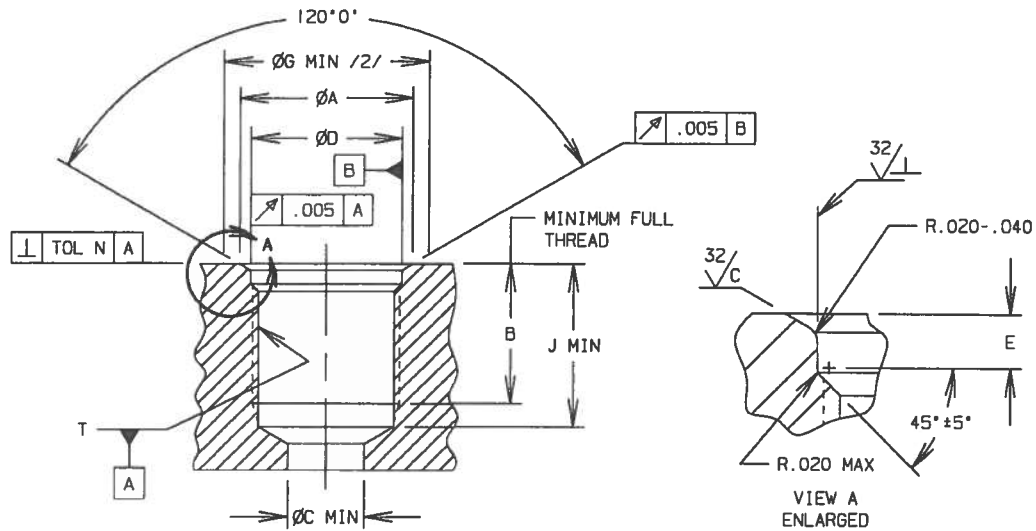
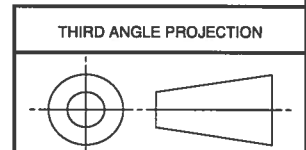


FIGURE 1 - FITTING END



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: NONE /1/

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

PORT OR FITTING END, INTERNAL  
STRAIGHT THREAD,  
DESIGN STANDARD

**AS5202**  
SHEET 1 OF 3

**REV.  
A**

Copyright 2005 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.

Copyright SAE International  
Provided by IHS under license with SAE  
No reproduction or networking permitted without license from IHS

PLACE A DOCUMENT ORDER:

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

Sold to: MERRILL TOOL & MACHINE, W1379078 (USA)  
Not for Resale, 2012/11/12 22:32:10 GMT.org

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

ISSUED 2001-08 REVISED 2005-05

REV.  
A

AS5202

TABLE 1A - DIMENSIONS

BASIC NO. AS5202 /9/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3B	A -.000/+.015	B	C	D -.000/+.005
01	--	.2500-28-UNJF	.359	.330	.062	.264
02	.125	.3125-24-UNJF	.438	.482	.062	.328
03	.188	.3750-24-UNJF	.500	.538	.125	.390
04	.250	.4375-20-UNJF	.562	.568	.172	.454
05	.312	.5000-20-UNJF	.625	.568	.234	.517
06	.375	.5625-18-UNJF	.688	.598	.297	.580
07	.438	.6250-18-UNJF	.750	.614	.360	.643
08	.500	.7500-16-UNJF	.875	.714	.391	.769
09	.562	.8125-16-UNJ	.938	.730	.438	.832
10	.625	.8750-14-UNJF	1.000	.802	.484	.896
11	.688	1.0000-12-UNJF	1.156	.877	.547	1.023
12	.750	1.0625-12-UNJ	1.234	.877	.609	1.086
14	.875	1.1875-12-UNJ	1.362	.877	.734	1.211
16	1.000	1.3125-12-UNJ	1.487	.877	.844	1.336
18	1.125	1.5000-12-UNJF	1.675	.877	.953	1.524
20	1.250	1.6250-12-UNJ	1.800	.877	1.078	1.648
24	1.500	1.8750-12-UNJ	2.050	.877	1.312	1.898
28	1.750	2.2500-12-UNJ	2.425	.877	1.547	2.273
32	2.000	2.5000-12-UNJ	2.675	.907	1.781	2.524

TABLE 1B - DIMENSIONS

BASIC NO. AS5202 /9/ SIZE CODE	E -.000/+.015	G	J	N
01	.063	.478	.402	.002
02	.063	.602	.577	.003
03	.063	.665	.583	.003
04	.075	.728	.656	.003
05	.075	.790	.656	.003
06	.083	.852	.709	.004
07	.094	.915	.725	.004
08	.094	1.040	.834	.004
09	.107	1.102	.850	.004
10	.107	1.165	.930	.004
11	.125	1.352	1.064	.004
12	.125	1.415	1.064	.004
14	.125	1.540	1.064	.004
16	.125	1.665	1.064	.004
18	.125	1.790	1.116	.004
20	.125	1.978	1.116	.004
24	.125	2.228	1.127	.006
28	.125	2.602	1.243	.006
32	.125	2.852	1.368	.006

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

PORT OR FITTING END, INTERNAL  
STRAIGHT THREAD,  
DESIGN STANDARD

**AS5202**  
SHEET 2 OF 3

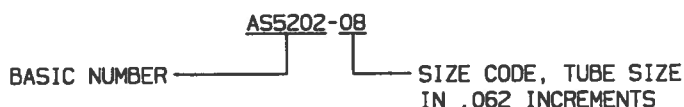
**REV.**  
**A**

REV.  
A

AS5202

NOTES:

- /1/ THIS FITTING END IS DESIGNED FOR USE WITH FITTINGS PER AS4875. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF MS33649 AND IS INTENDED TO BE A SUITABLE REPLACEMENT STANDARD.
- /2/ MINIMUM DIAMETER FLAT SURFACE CLEARANCE PROVISIONS FOR FITTING, WRENCH, FITTING INSTALLATIONS AND TOOL FILLET RADII MUST BE ADDED AS REQUIRED. THE PERPENDICULARITY N TO THE THREADS APPLIES ONLY TO THE ØG MINIMUM. G DIAMETER MAY BE REDUCED BY .040 WHEN IT DEFINES THE LIMITS OF A RAISED SURFACE AND WHEN STRENGTH REQUIREMENTS PERMIT.
3. B DIMENSION IS THE FULL THREAD DEPTH REQUIREMENT FOR BLIND TAP DESIGN.
4. INTERPRETATION OF DRAWING PER ARP4296.
5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra.
6. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
7. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.
8. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.005, ANGULAR DIMENSIONS ±0°30'.
- /9/ EXAMPLE OF DRAWING CALLOUT:
  - a. TABULATED PART DRAWING: FITTING END PER AS5202
  - b. INDIVIDUAL PART DRAWING:



10. NOTE: "THIS STANDARD IS USED TO IMPLEMENT INTERNATIONAL STANDARDIZATION AGREEMENTS: NATO STANAG 3510 AND ASCC AIR STD 25/6. PLEASE NOTIFY THE FOLLOWING OFFICES WHEN CHANGES ARE MADE OR CONTACT THESE OFFICES FOR INQUIRIES PERTAINING TO THESE AGREEMENTS. NORTH ATLANTIC TREATY ORGANIZATION (NATO) STANDARDIZATION AGENCY, "NSA@HQ.NATO.INT", TEL - 0032-2-707-5576, FAX - 0032-2-707-5718, 1110 BRUSSELS, BELGIUM, AND AIR STANDARDIZATION COORDINATING COMMITTEE, "ASCCMCAS@PENTAGON.AF.MIL", TEL - 1 703 696 8452, 1815 N. FORT MYER DRIVE, SUITE 400, ARLINGTON VA 22209-1809, USA.
11. THE CHANGE BAR ( I ) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT.

**SAE**Aerospace  
An SAE International Group

**AEROSPACE STANDARD**

PORT OR FITTING END, INTERNAL  
STRAIGHT THREAD,  
DESIGN STANDARD

**AS5202**  
SHEET 3 OF 3

**REV.**  
**A**