

SAE Executive Standard Committee 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

AS5165™

RATIONALE

FEDERAL SUPPLY CLASS
4730

USAGE RESTRICTION NOTE ADD TO SHEET 1. CADMIUM WARNING NOTE ADDED. OPTIONAL MATERIALS ADDED TO NOTE 1. QML STATEMENT REVISED. INTENDED USE NOTE REVISED, NOTE 9 REVISED TO REFLECT CURRENT SPECIFICATION CALLOUT. REVISION INDICATOR NOTE UPDATED. NOTE 16 ADDED. GENERAL NON-TECHNICAL UPDATES INCORPORATED.

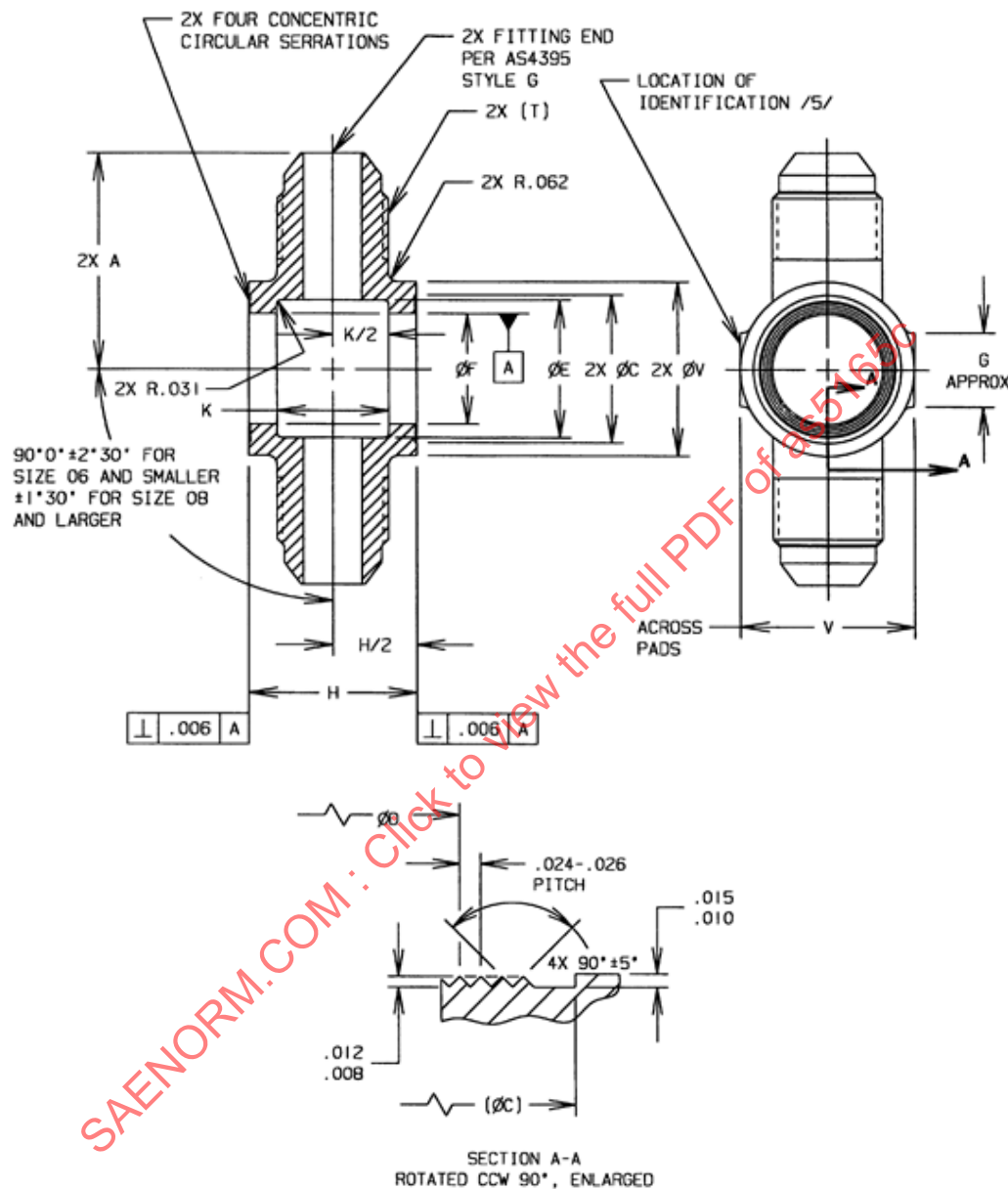
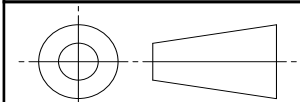


FIGURE 1 - FITTING, CONNECTOR, TEE

NOT RECOMMENDED IN PART /16/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5165C>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4875/1 /4/



AEROSPACE STANDARD

FITTING, CONNECTOR, MULTIPLE
FLUID PRESSURE LINE, TEE

AS5165™
SHEET 1 OF 4

REV.
C

Copyright © 2021 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 2000-07 REAFFIRMED 2015-04 STABILIZED 2017-05 REVISED 2021-05

TABLE 1A - DIMENSIONS A-F

BASIC NO. AS5165 /14/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A	A ±.023	C ±.005	D ±.005	E	F ±.001
04	.250	.4375-20 UNJF	1.148	.692	.474	.562	.439
05	.312	.5000-20 UNJF	1.148	.755	.536	.625	.501
06	.375	.5625-18 UNJF	1.273	.817	.599	.750	.564
08	.500	.7500-16 UNJF	1.460	1.005	.786	.937	.751
10	.625	.8750-14 UNJF	1.680	1.130	.911	1.125	.876
12	.750	1.0625-12 UNJ	2.023	1.318	1.099	1.375	1.063
16	1.000	1.3125-12 UNJ	2.398	1.568	1.349	1.687	1.313

TABLE 1B - DIMENSIONS G-V AND WEIGHTS

BASIC NO. AS5165 /14/ SIZE CODE	G	H ±.010	K	V	LB/EA APPROX REF AL	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
04	.437	.750	.375	.797-.815	.0334	.0958	.0528
05	.437	.750	.500	.797-.815	.0301	.0863	.0476
06	.500	.875	.500	.985-1.003	.0492	.141	.0779
08	.500	1.125	.750	1.173-1.191	.0822	.236	.130
10	.625	1.375	.812	1.355-1.380	.130	.374	.206
12	.625	1.625	1.000	1.668-1.693	.224	.642	.354
16	.812	2.125	1.500	2.042-2.072	.366	1.05	.580

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

- DASH AS CODE LETTER: TYPE 4130 CARBON STEEL FORGING OR BAR PER AMS-S-6758 OR AMS6370; OR TYPE 4140 PER AMS6349 OR AMS6382.
- CODE LETTER D: TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4133; OR TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.
- CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5639.
- CODE LETTER K: TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5648.
- CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5645.
- CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4141; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

	AEROSPACE STANDARD		AS5165™ SHEET 2 OF 4	REV. C
	FITTING, CONNECTOR, MULTIPLE FLUID PRESSURE LINE, TEE			

/2/ HEAT TREATMENT:

- a. DASH AS MATERIAL CODE LETTER: REFER TO HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTERS D AND W: REFER TO ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- c. OTHER MATERIAL CODE LETTERS: NONE.

3. FINISH:

- a. DASH AS MATERIAL CODE LETTER: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTER D: ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
- c. MATERIAL CODE LETTERS J, K, AND R: PASSIVATE PER AMS2700, TYPE 6 OR 7.
- d. MATERIAL CODE LETTER T: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.
- e. MATERIAL CODE LETTER W: ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: AS4875/1 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE NADCAP QUALIFIED MANUFACTURER LIST (QML) FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT www.eAuditNet.com.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZE 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS," AND MATERIAL CODE LETTER.
- b. FOR SIZE 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, AND MATERIAL CODE LETTER.

6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION.

7. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF AN779 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.

8. WHEN MACHINED FROM BAR OR OVERSIZED FORGINGS, THE CENTER BODY SECTION SHALL CONFORM TO AS1376, TABLE 8.

9. INTERPRETATION OF DRAWING PER AS4296

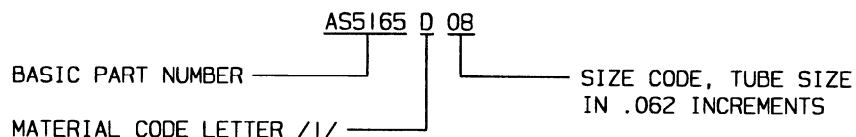
10. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra. FORGED SURFACES MAY BE 250 MICROINCHES Ra.

11. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

12. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

13. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ± 0.016 , ANGULAR DIMENSIONS $\pm 0^{\circ}30'$.

/14/ EXAMPLE OF PART NUMBER:



	AEROSPACE STANDARD	AS5165™ SHEET 3 OF 4	REV. C
	FITTING, CONNECTOR, MULTIPLE FLUID PRESSURE LINE, TEE		