

SAE Executive Standards 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.
E

AS1654™

FEDERAL SUPPLY CLASS
4730

RATIONALE

THIS TECHNICAL REPORT IS BEING STABILIZED BECAUSE IT COVERS TECHNOLOGY, PRODUCTS, OR PROCESSES WHICH ARE MATURE AND NOT LIKELY TO CHANGE IN THE FORESEEABLE FUTURE.

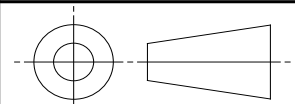
STABILIZED NOTICE

THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY SAE G-3, AEROSPACE COUPLINGS, FITTINGS, HOSE, TUBING ASSEMBLIES COMMITTEE AND WILL NO LONGER BE SUBJECTED TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

SAENORM.COM : Click to view the full PDF of as1654e

For more information on this standard, visit
<https://www.sae.org/standards/content/AS1654E/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3A

PROCUREMENT SPECIFICATION: AS1650 /4/



AEROSPACE STANDARD

SLEEVE, THREADLESS - FLEXIBLE, FIXED CAVITY,
SELF-BONDING

AS1654™

REV.
E

Copyright © 2024 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or used for text and data mining, AI training, or similar technologies, 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 1992-03 REVISED 2007-07 STABILIZED 2024-06

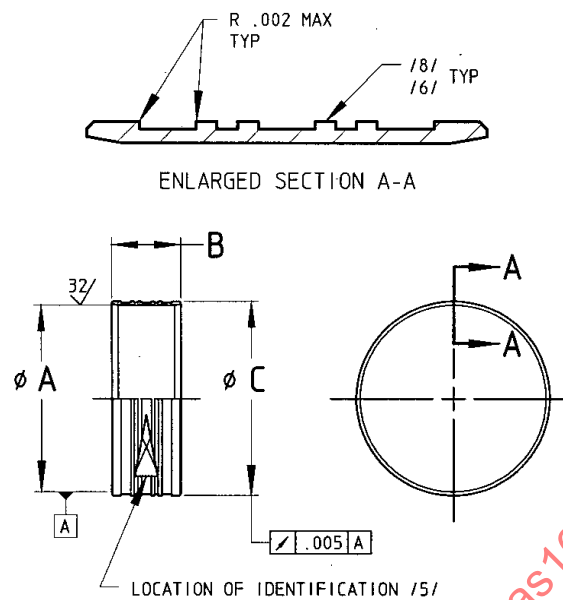


FIGURE 1 - SLEEVE

TABLE 1 - DIMENSIONS AND WEIGHTS /6/

BASIC NO. AS1654 /15/ SIZE CODE	NOM TUBE SIZE REF	A ±.002	B	C ±.004	LB/EA NOM REF ALUM	LB/EA NOM REF CRES	LB/EA NOM REF TI
08	.500	.692	.590	.762	.004	.010	.006
10	.625	.817	.590	.887	.004	.012	.007
12	.750	.997	.670	1.067	.006	.017	.010
16	1.000	1.273	.750	1.343	.008	.022	.013
20	1.250	1.523	.750	1.593	.009	.027	.015
24	1.500	1.793	.750	1.863	.011	.031	.018
28	1.750	2.044	.750	2.114	.012	.035	.020
32	2.000	2.317	.780	2.387	.015	.042	.024
36	2.250	2.567	.780	2.636	.016	.046	.026
40	2.500	2.817	.780	2.887	.018	.051	.029
48	3.000	3.317	.780	3.387	.021	.060	.034
56	3.500	3.831	.780	3.901	.025	.070	.040
64	4.000	4.337	.780	4.407	.028	.079	.045

NOTES:

1 MATERIAL:

a. CODE LETTER A - TYPE 2024-T351, T6, T851, T8510 OR T8511 ALUMINUM ALLOY PER AMS-QQ-A-225/6, AMS 4120, AMS 4339, AMS-QQ-A-200/3, WW-T-700/3, ASTM B 211 OR ASTM B 241. THE FINAL CONDITION SHALL BE IN THE AGED CONDITION OF T6 OR HIGHER.

b. CODE LETTER C -

1. TYPE 17-4PH, CONDITION H1075 STA, CORROSION RESISTANT STEEL PER AMS 5643.

2. TYPE 15-5PH, CONDITION H1150 STA, CORROSION RESISTANT STEEL PER AMS 5659.

3. TYPE 303 SERIES, CONDITION A, CORROSION RESISTANT STEEL PER AMS 5638, AMS 5640 OR ASTM A 582.

4. TYPE 304, CONDITION A, CORROSION RESISTANT STEEL PER AMS 5560, AMS 5639, AMS- QQ-S-763 OR ASTM A 376.

c. CODE LETTER T -

1. TYPE 6AL-4V, CONDITION A, TITANIUM ALLOY PER AMS 4911, AMS 4928, AMS 4967 OR AMS-T-9047.

2. TYPE CP-70, CONDITION A, COMMERCIAL PURE TITANIUM PER AMS 4901, AMS 4921 OR AMS-T-9047.

2. HEAT TREATMENT:

a. MATERIAL CODE LETTER A - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO THE FINAL CONDITION PER AMS-H-6088 OR AMS 2770.

b. MATERIAL CODE LETTER C -

1. TYPE 17-4PH - AGE TO CONDITION H1075 PER AMS-H-6875 OR AMS 2759/3.

2. TYPE 15-5PH - AGE TO CONDITION H1150 PER AMS-H-6875 OR AMS 2759/3.

3. TYPE 303 SERIES AND TYPE 304 - NONE.

c. MATERIAL CODE LETTER T - NONE.

3. FINISH:

a. MATERIAL CODE LETTER A - ANODIZE PER AMS 2472, CLASS 2, DYE MAGENTA SIMILAR IN COLOR TO FED-STD-595 NO. 17142 OR MIL-A-8625, TYPE I OR II, CLASS 1, DICHROMATE SEALED OR CLASS 2, DYE MAGENTA SIMILAR IN COLOR TO FED-STD-595 NO. 17142, DUPLEX SEALED.

b. MATERIAL CODE LETTER C -

1. TYPE 17-4PH OR 15-5PH - PASSIVATE PER AMS 2700, METHOD I, TYPE 2 OR TYPE 8.

2. TYPE 303 SERIES - PASSIVATE PER AMS 2700, METHOD I, TYPE 2.

3. TYPE 304 - PASSIVATE PER AMS 2700, METHOD I, TYPE 6 OR TYPE 7.

c. MATERIAL CODE LETTER T - NONE.

	AEROSPACE STANDARD	AS1654™ SHEET 2 OF 3	REV. E
	SLEEVE, THREADLESS - FLEXIBLE, FIXED CAVITY, SELF-BONDING		