

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.
F

AS85049™/41

FEDERAL SUPPLY CLASS
5935

RATIONALE

ADD LIMITED USE OF TIN/ZINC FINISH PER THE COMMITTEE DECISION. REVISE PART NUMBER STRUCTURE TO ALLOW THE USE OF THE NEW FINISH. EDITORIAL CORRECTIONS.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049.

MILITARY AND/OR GOVERNMENT AGENCIES LISTED HEREIN ARE THOSE OF THE UNITED STATES. FOR OTHER LOCATIONS, USERS OF THIS SPECIFICATION ARE ADVISED TO CONSULT THEIR LOCAL REGULATIONS.

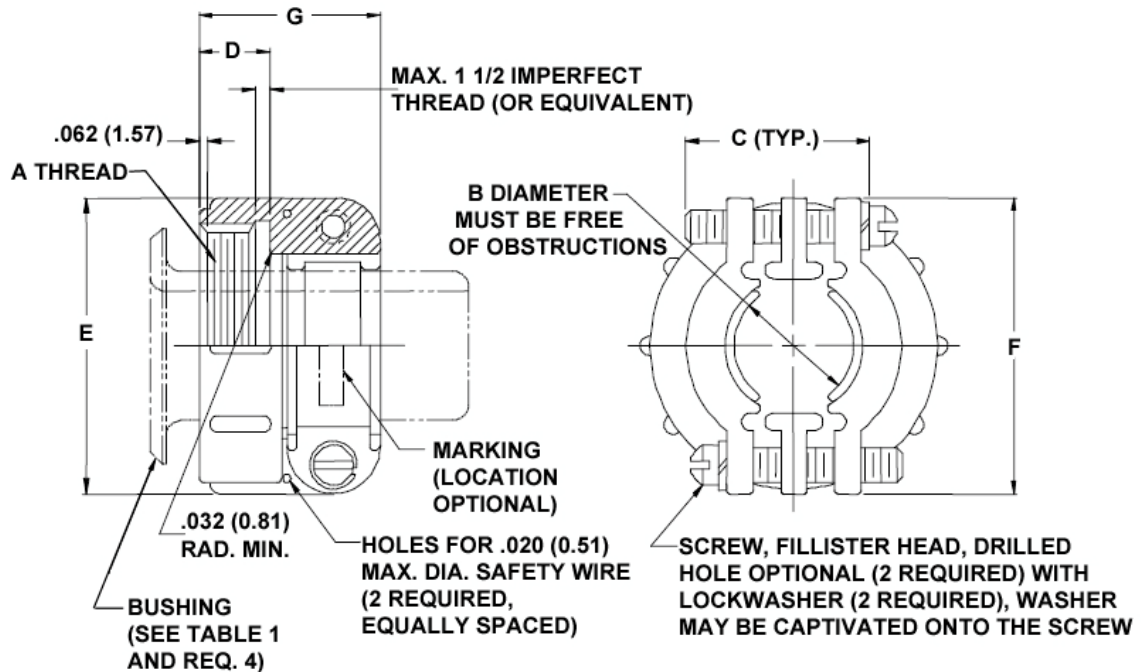
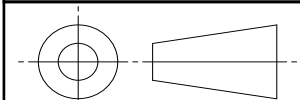


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS85049/41F/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS85049



AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL,
NONENVIRONMENTAL, STRAIN RELIEF, STRAIGHT,
CATEGORY 4C (FOR AS50151 SOLDER TYPE, V THREAD OF MS310X,
CLASSES A, B, C, OR K CONNECTORS AND AS85049 ACCESSORIES)

AS85049™/41
SHEET 1 OF 3

REV.
F

Documents

Copyright © 2026 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: 1-877-606-7323 (U.S. and Canada only)

Fax: 724-776-0790

Tel: 1-724-776-4970 (outside U.S. and Canada)

Email: CustomerService@sae.org

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

TABLE 1 - DIMENSIONS

DASH NO.	CONNECTOR SHELL SIZE (REF) SEE REQ 2	A THREAD	B WIRE BUNDLE ACCOMMODATION MAX	C SCREW LENGTH +.000 -.062 (1.57)	D ±.016 (0.41)	E ±.031 (0.79) DIA
-3A	8S & 10S	.500-28 UNEF-2B	.250 (6.4)	.500 (12.7)	.406 (10.3)	.688 (17.5)
-4A	10SL, 12S & 12	.625-24 UNEF-2B	.312 (7.9)	.625 (15.9)	.406 (10.3)	.812 (20.6)
-6A	14S & 14	.750-20 UNEF-2B	.438 (11.1)	.750 (19.1)	.406 (10.3)	.969 (24.6)
-8A	16S & 16	.875-20 UNEF-2B	.562 (14.3)	.750 (19.1)	.406 (10.3)	1.094 (27.8)
-10A	18	1.000-20 UNEF-2B	.625 (15.9)	.875 (22.2)	.406 (10.3)	1.188 (30.2)
-12A	20 & 22	1.188-18 UNEF-2B	.750 (19.1)	1.000 (25.4)	.406 (10.3)	1.375 (34.9)
-16A	24 & 28	1.438-18 UNEF-2B	.938 (23.8)	1.250 (31.8)	.406 (10.3)	1.656 (42.1)
-20A	32	1.750-18 UNS-2B	1.250 (31.8)	1.500 (38.1)	.469 (11.9)	2.031 (51.6)
-24A	36	2.000-18 UNS-2B	1.375 (34.9)	1.500 (38.1)	.531 (13.5)	2.219 (56.4)
-28A	40	2.250-16 UN-2B	1.625 (41.3)	1.750 (44.5)	.531 (13.5)	2.500 (63.5)
-32A	44	2.500-16 UN-2B	1.875 (47.6)	2.000 (50.8)	.594 (15.1)	2.781 (70.6)
-40A	48	3.000-16 UN-2B	2.375 (60.3)	3.000 (76.2)	.656 (16.7)	3.281 (83.3)

TABLE 1 - DIMENSIONS (CONTINUED)

DASH NO.	F ±.031 (0.79)	G ±.031 (0.79)	BUSHING (REF) SEE REQ 4 M85049/139	SCREW SIZE
-3A	.812 (20.6)	.812 (20.6)	-3*	4-40
-4A	.875 (22.2)	.812 (20.6)	-4*	4-40
-6A	1.062 (27.0)	.875 (22.2)	-6*	6-32
-8A	1.156 (29.4)	.938 (23.8)	-8*	6-32
-10A	1.250 (31.8)	.938 (23.8)	-10*	6-32
-12A	1.469 (37.3)	.938 (23.8)	-12*	8-32
-16A	1.688 (42.9)	1.031 (26.2)	-16*	8-32
-20A	2.031 (51.6)	1.094 (27.8)	-20*	8-32
-24A	2.281 (57.9)	1.156 (29.4)	-24*	10-32
-28A	2.688 (68.3)	1.688 (42.9)	-28*	1/4-20
-32A	2.938 (74.6)	1.750 (44.5)	-32*	1/4-20
-40A	3.500 (88.9)	1.750 (44.5)	-40*	1/4-20

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049.

1. DESIGN AND CONSTRUCTION:

ACCESSORIES SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.016, ANGLES ±2°. METRIC EQUIVALENTS IN PARENTHESES ARE FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM (SEE TABLE 1). DIMENSIONS APPLY AFTER PLATING.

THE B DIAMETER DIMENSION IS MEANT TO DEFINE THE MAXIMUM WIRE BUNDLE OUTSIDE DIAMETER WHICH CAN BE ACCOMMODATED BY THE CLAMP. THIS DIMENSION IS NOT MEANT TO DEFINE THE CLAMP HARDWARE DIMENSIONS.

2. CLAMP MATES WITH AS50151 SOLDER TYPE, GENERAL DUTY "A" ENDBELL, AND AS85049 ACCESSORIES.
3. REMOVE ALL BURRS AND SHARP EDGES.
4. BUSHINGS FOR REFERENCE ONLY AND NOT SUPPLIED AS PART OF CLAMP. FOR ADDITIONAL CLOSE DOWN OF THE B DIMENSION, BUSHING M85049/139-3* THROUGH M85049/139-40* MAY BE USED. ONE BUSHING AS REQUIRED FOR M85049/41-3 THROUGH M85049/41-12, CORRESPONDING TO M85049/139-3* THROUGH M85049/139-12*. TWO BUSHINGS AS REQUIRED FOR M85049/41-16 THROUGH M85049/41-24, ONE EACH CORRESPONDING TO M85049/139-16* THROUGH M85049/139-32* AND M85049/139-12* THROUGH M85049/139-20*. (EXAMPLES: M85049/41-16 REQUIRES ONE M85049/139-16* AND ONE M85049/139-12*.) THREE BUSHINGS AS REQUIRED FOR M85049/41-28 THROUGH M85049/41-40, ONE EACH CORRESPONDING TO M85049/139-28* THROUGH M85049/139-40*, M85049/139-24* THROUGH M85049/139-32* AND M85049/139-20* THROUGH M85049/139-28* (EXAMPLES: M85049/41-40 REQUIRES ONE M85049/139-40*, ONE M85049/139-32*, AND ONE M85049/139-28*.)

	AEROSPACE STANDARD		AS85049™/41 SHEET 2 OF 3	REV. F
	CONNECTOR ACCESSORIES, ELECTRICAL, NONENVIRONMENTAL, STRAIN RELIEF, STRAIGHT, CATEGORY 4C (FOR ASS0151 SOLDER TYPE, V THREAD OF MS310X, CLASSES A, B, C, OR K CONNECTORS AND AS85049 ACCESSORIES)			

