

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.

AS85049/64

FEDERAL SUPPLY CLASS  
5935

# NOTICE

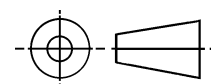
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MIL-C-85049/64B, AMENDMENT 1 AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MIL-C-85049/64B, AMENDMENT 1. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED.

THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT.

UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS SAE TECHNICAL DOCUMENT.

SAENORM.COM : Click to view the full PDF of as85049 - 01

THIRD ANGLE PROJECTION



PREPARED BY SAE SUBCOMMITTEE AE-8C1

**SAE Aerospace**  
An SAE International Group

## AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL,  
STRAIN RELIEF, SPLIT, STRAIGHT, CATEGORY 4C  
(MIL-C-38999 SERIES I AND II CONNECTORS)

**AS85049/64**  
SHEET 1 OF 5

ISSUED 2000-05 REAFFIRMED 2006-01

Copyright 2006 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: [custsvc@sae.org](mailto:custsvc@sae.org)

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

THE REQUIREMENTS FOR ACQUIRING THE ACCESSORIES DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF MIL-C-85049.

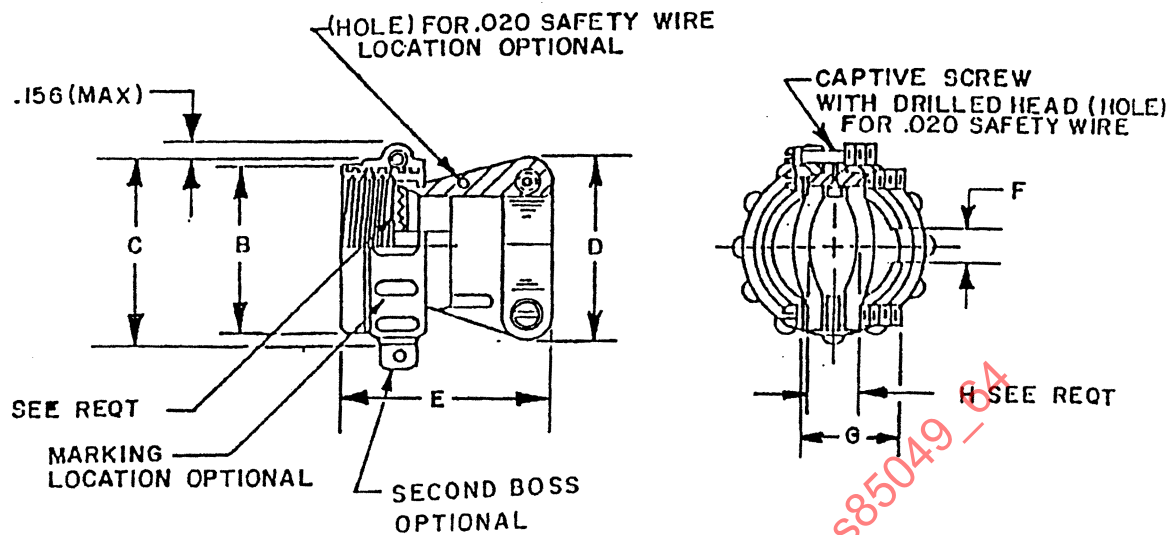


FIGURE 1. DIMENSIONS AND CONFIGURATION.

Accessory shell size	Fits connector shell size		B +.000 -.062 dia	C max dia	D max dia	E max dia	F min slot	G +.032 screw length	Screw size	H wire bundle accommodation	
	Series II	Series I								Min	Max
8	8	9	.562 (14.3)	.75 (19.1)	.85 (21.6)	1.10 (27.9)	.125 (3.18)	.625 (15.9)	6-32	.098 (2.49)	.234 (5.94)
10	10	11	.688 (17.5)	.85 (21.6)	.90 (22.9)	1.10 (27.9)	.125 (3.18)	.625 (15.9)	6-32	.153 (3.87)	.234 (5.94)
12	12	13	.812 (20.6)	1.00 (25.4)	1.10 (27.9)	1.20 (30.4)	.188 (4.78)	.625 (15.9)	6-32	.190 (4.83)	.328 (8.33)
14	14	15	.938 (23.8)	1.10 (27.9)	1.15 (29.2)	1.25 (31.8)	.188 (4.78)	.750 (19.1)	6-32	.260 (6.60)	.457 (11.61)
16	16	17	1.062 (27.0)	1.25 (31.8)	1.30 (33.0)	1.35 (34.2)	.188 (4.78)	.750 (19.1)	6-32	.283 (7.19)	.634 (15.60)
18	18	19	1.188 (30.2)	1.40 (35.6)	1.50 (38.1)	1.60 (40.6)	.250 (6.35)	.750 (19.1)	8-32	.325 (8.26)	.614 (15.10)
20	20	21	1.312 (33.3)	1.50 (38.1)	1.60 (40.6)	1.70 (43.1)	.250 (6.35)	.875 (22.2)	8-32	.343 (8.71)	.698 (17.73)
22	22	23	1.438 (36.5)	1.65 (41.9)	1.70 (43.2)	1.85 (47.0)	.312 (7.92)	1.000 (25.4)	8-32	.381 (9.68)	.823 (20.99)
24	24	25	1.562 (39.7)	1.75 (44.4)	1.80 (45.7)	1.95 (49.5)	.312 (7.92)	1.125 (28.5)	8-32	.418 (10.62)	.853 (21.66)

FIGURE 1. DIMENSIONS AND CONFIGURATION - CONTINUED.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.032	0.81	.343	8.71	.85	21.6	1.30	33.02
.062	1.57	.381	9.67	.853	21.66	1.312	33.32
.125	3.18	.418	10.62	.875	22.22	1.35	34.29
.150	3.81	.457	11.61	.90	22.9	1.40	35.56
.187	4.75	.562	14.27	.938	23.83	1.438	36.53
.188	4.78	.614	15.59	1.000	25.40	1.50	38.10
.234	5.94	.625	15.88	1.062	26.97	1.562	39.67
.250	6.35	.634	16.10	1.040	27.94	1.60	40.64
.260	6.60	.688	17.48	1.125	28.58	1.65	41.91
.283	7.18	.688	17.73	1.15	29.2	1.70	43.18
.312	7.92	.75	19.1	1.188	30.18	1.75	44.45
.325	8.25	.812	20.62	1.20	30.48	1.80	45.72
.328	8.33	.823	20.90	1.25	31.75	1.85	46.99
						1.95	49.53

**NOTES:**

1. Dimensions are in inches.
2. Dimensions apply after plating.
3. Metric equivalents are given for general information only.
4. This accessory will not accommodate connectors using 8, 4, and 0 contacts.

FIGURE 1. DIMENSIONS AND CONFIGURATION - CONTINUED.

**REQUIREMENTS:**

Design and construction:

Dimensions and configuration: See figure 1 and table I.

Interface dimensions shall conform to MIL-C-38999, series I and II.

Clamps shall have no protrusion or sharp edges which may pinch cable.

In the assembled mode, the coupling nut shall be captivated to the adapter body and free to rotate.

Figure 1 dimension H<sub>MAX</sub> is applicable when the end of the screw is flush with -BB- or a maximum of two screws threads protrude.

Material:

Coupling nut, ring, clamp, saddle bars: Aluminum alloy in accordance with MIL-C-85049.

Fasteners: 300 series corrosion resistant steel, passivated.

Finish: In accordance with MIL-C-85049.

Aluminum components: 1/ N, 2/ W.

1/ N Not for Navy use. Air Force: For space applications only.

2/ W is not for use in space application.