

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.
C

AS85049™/1

FEDERAL SUPPLY CLASS
5935

RATIONALE

AS858049/1C IS BEING STABILIZED BECAUSE THE PROCESSES/PRODUCT IS CONSIDERED MATURE AND THE COMMITTEE DOES NOT ANTICIPATE FUTURE TECHNICAL CHANGES. STABILIZATION DOES NOT IMPLY THE PROCESS OR PRODUCT IS UNACCEPTABLE FOR APPLICATIONS FOR WHICH IT IS DESIGNED. ANY TECHNICAL CHANGES NOTED BY A SUPPLIER OR USER WHICH RESULTS IN A PRODUCT OR REQUIREMENT CHANGE WILL BE ADDRESSED BY A NEW REVISION. A QUALIFIED SUPPLIER IS STILL MAINTAINED.

STABILIZED NOTICE

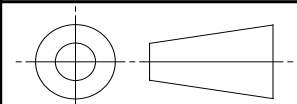
THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY SAE AE-8C1 CONNECTORS COMMITTEE AND WILL NO LONGER BE SUBJECTED TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

SAENORM.COM : Click to view the full PDF of as85049_1c

For more information on this standard, visit

<https://www.sae.org/standards/content/AS85049/1C/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS85049



AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL,
ENVIRONMENTAL, CABLE SEALING, STRAIGHT, GROUNDING
(WITHOUT STRAIN RELIEF), CATEGORY 1C (FOR AS50151 SOLDER
TYPE, V THREAD OF AS310XX CLASSES A, B, C, OR K CONNECTORS,
AS95234 CONNECTORS)

AS85049™/1

REV.
C

Copyright © 2025 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 2001-07 REVISED 2014-10 REAFFIRMED 2019-12 STABILIZED 2025-03

NOTICE

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

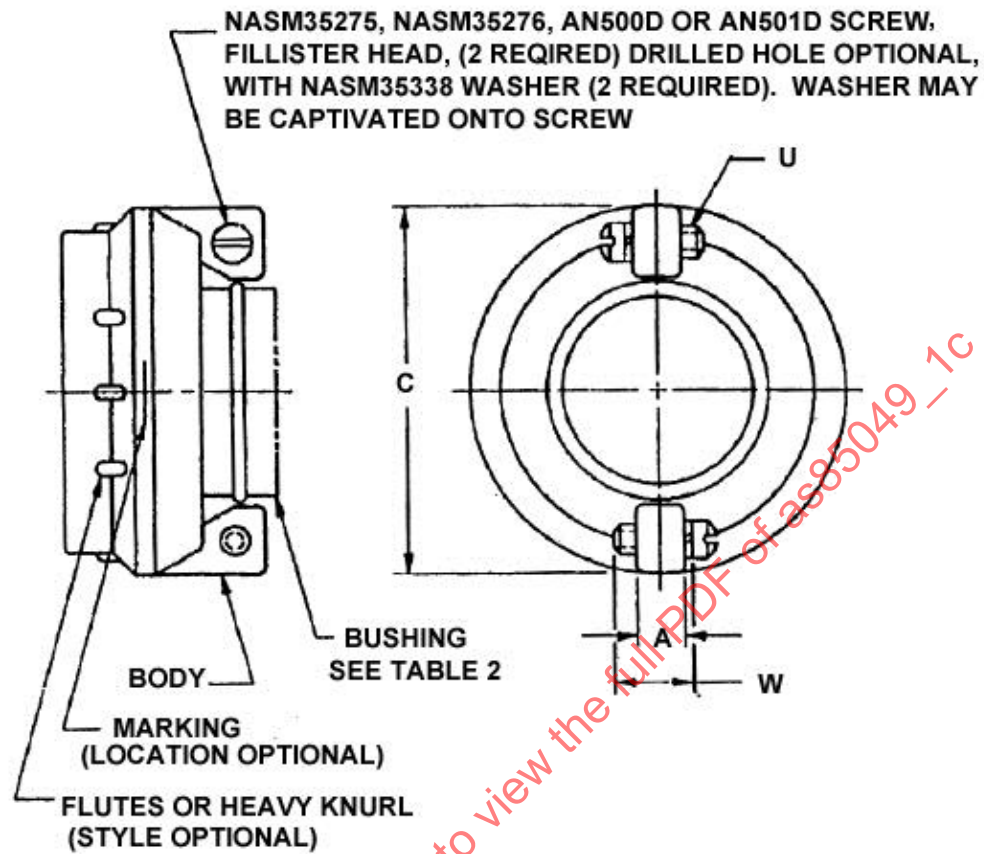
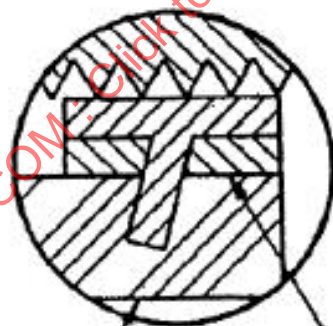
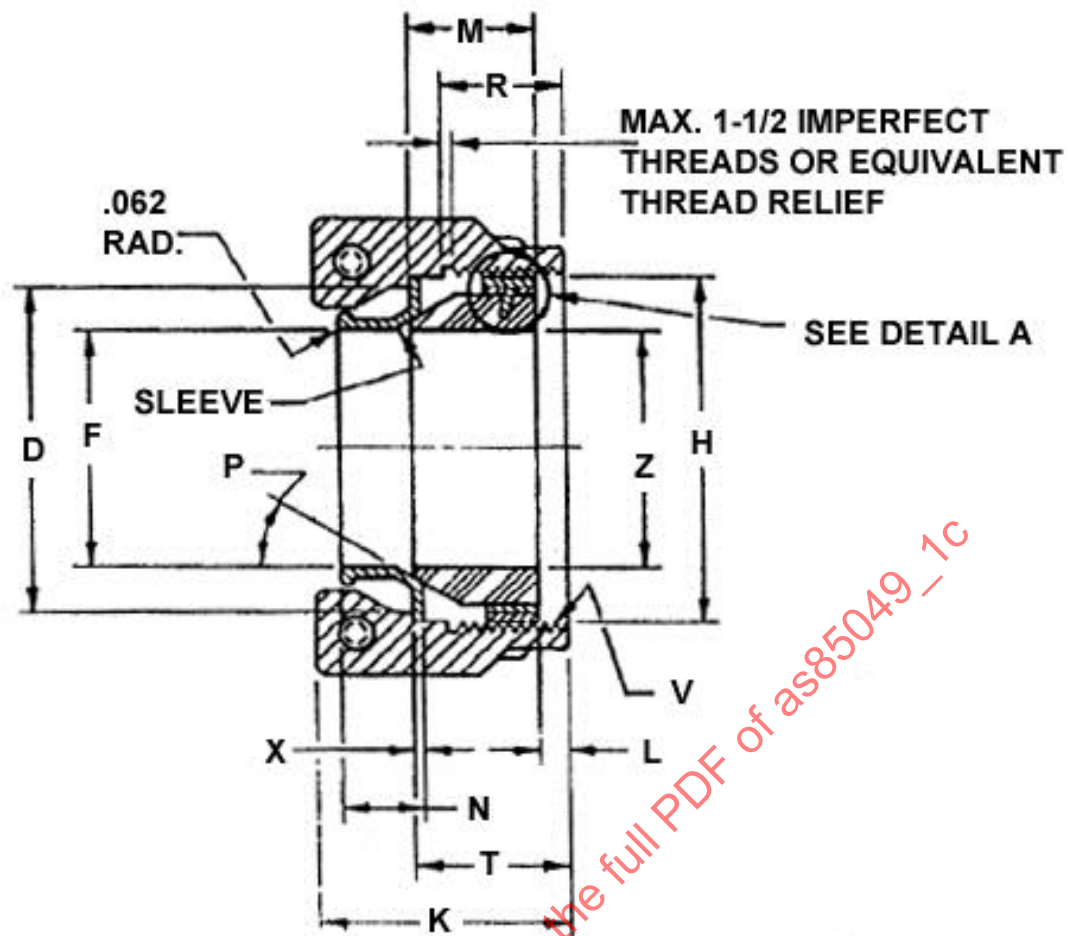


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

	AEROSPACE STANDARD	AS85049™/1 SHEET 1 OF 5	REV. C
	CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, ENVIRONMENTAL, CABLE SEALING, STRAIGHT, GROUNDING (WITHOUT STRAIN RELIEF), CATEGORY 1C (FOR AS50151 SOLDER TYPE, V THREAD OF AS310XX CLASSES A, B, C, OR K CONNECTORS, AS95234 CONNECTORS).		



GLAND
RETAINING RING
OPTIONAL

DETAIL A

FIGURE 1A - ACCESSORY CONFIGURATION AND DIMENSIONS

	AEROSPACE STANDARD		AS85049™/1 SHEET 2 OF 5	REV. C
	CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, ENVIRONMENTAL, CABLE SEALING, STRAIGHT, GROUNDING (WITHOUT STRAIN RELIEF), CATEGORY 1C (FOR AS50151 SOLDER TYPE, V THREAD OF AS310XX CLASSES A, B, C, OR K CONNECTORS, AS95234 CONNECTORS).			

TABLE 1 - FIGURE 1 & 1A DIMENSIONS

DASH NO.	CONNECTOR SHELL SIZE (REF.) 1/	A +.031 -.016	C MAX.	D +.000 -.020 DIA. GLAND	F +.020 -.000 DIA.	H +.000 -.020 DIA. 2/	K MAX.	L MIN.	M ±.031	N
-3B	8S & 10S	.188 (4.78)	.812 (20.62)	.389 (9.88)	.231 (5.87)	.441 (11.20)	1.031 (26.19)	.156 (3.96)	.473 (12.01)	.254 (6.45)
-4B	10SL, 12S & 12		.937 (23.80)	.510 (12.95)	.315 (8.00)	.560 (14.22)				
-6B	14S & 14		1.062 (26.97)	.627 (15.93)	.440 (11.18)	.676 (17.17)				
-8B	16S & 16		1.188 (30.18)	.744 (18.90)	.515 (13.08)	.800 (20.32)				
-10B	18	.250 (6.35)	1.312 (33.32)	.870 (22.10)	.614 (15.60)	.926 (23.52)	1.094 (27.79)		.537 (13.64)	.281 (7.14)
-12B	20 & 22		1.562 (39.67)	1.037 (26.34)	.738 (18.75)	1.107 (28.12)	1.219 (30.96)		.625 (15.88)	.320 (8.13)
-16B	24 & 28		1.750 (44.45)	1.286 (32.66)	.926 (23.52)	1.357 (34.47)			.662 (16.81)	.344 (8.74)
-20B	32		.312 (7.92)	2.250 (57.15)	1.590 (40.39)	1.200 (30.48)	1.670 (42.42)		1.344 (34.14)	.940 (23.88)
-24B	36	2.375 (60.33)		1.844 (46.84)	1.363 (34.62)	1.920 (48.77)	1.547 (39.29)			
-28B	40	2.625 (66.68)		2.083 (52.91)	1.611 (40.92)	2.162 (54.91)				
-32B	44	.375 (9.53)		2.812 (71.42)	2.332 (59.23)	1.865 (47.37)	2.412 (61.26)	1.734 (44.04)	.188 (4.78)	
-40B	48		3.312 (84.12)	2.832 (71.93)	2.365 (60.07)	2.912 (73.96)	1.781 (45.24)			

TABLE 1A - FIGURE 1 & 1A DIMENSIONS

DASH NO.	CONNECTOR SHELL SIZE (REF.) <u>1</u>	P ±2°	R MIN.	T	U THREAD	NASM 35338 WASHER, LOCK DASH #	BUSHING (REF)	MAX. CABLE DIA.
-3B	8S & 10S	20°	.531 (13.49)	.641 (16.28)	6-32UNC-2A	-136	AS85049/139-3D	.209 (5.31)
-4B	10SL, 12S & 12						AS85049/139-4D	.302 (7.67)
-6B	14S & 14	AS85049/139-6D					.428 (10.87)	
-8B	16S & 16	AS85049/139-8D		.515 (13.08)				
-10B	18	AS85049/139-10D		.614 (15.60)				
-12B	20 & 22	AS85049/139-12D		.738 (18.75)				
-16B	24 & 28		AS85049/139-16D		.926 (23.52)			
-20B	32	35°	.562 (14.27)	.797 (20.24)	10-32UNF-2A	-138	AS85049/139-20D	1.200 (30.48)
-24B	36		.781 (19.84)	1.016 (25.81)			AS85049/139-24D	1.363 (34.62)
-28B	40			1.611 (40.92)				
-32B	44			1.865 (47.37)				
-40B	48			2.365 (60.07)				

^{1/} CLAMP MATES WITH CONNECTOR SHELL SIZE LISTED IN THE COLUMN.

^{2/} WHEN THE RETAINING RING IS NOT USED, THE DIMENSIONS LISTED IN COLUMN H SHALL BE THE MINIMUM OUTER DIAMETER OF THE GLAND FOR THE ASSOCIATED DASH NUMBER.



AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL,
ENVIRONMENTAL, CABLE SEALING, STRAIGHT, GROUNDING
(WITHOUT STRAIN RELIEF), CATEGORY 1C (FOR AS50151 SOLDER
TYPE, V THREAD OF AS310XX CLASSES A, B, C, OR K CONNECTORS,
AS95234 CONNECTORS)

AS85049™/1
SHEET 3 OF 5

REV.
C