

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.

AS85049™/132

FEDERAL SUPPLY CLASS
5935

RATIONALE

AS85049/132 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS85049.

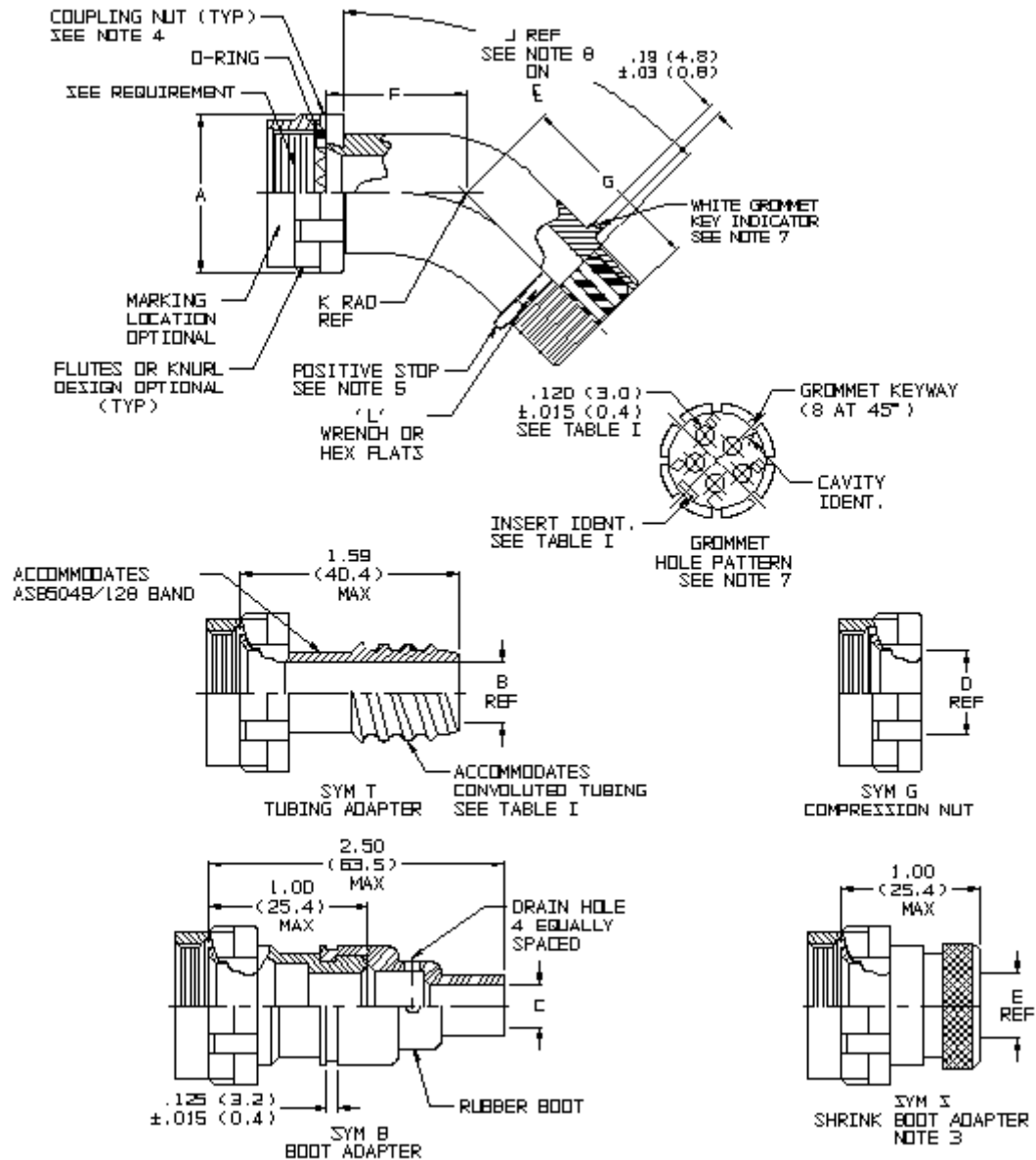
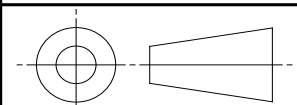


FIGURE 1 – CONFIGURATION AND DIMENSIONS

For more information on this standard, visit

<https://www.sae.org/standards/content/AS85049/132>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1



AEROSPACE STANDARD

CONNECTOR ACCESSORIES, FIBER OPTIC
BACKSHELL, 45°, SELF-LOCKING CATEGORY 3B FOR
MIL-DTL-38999 SERIES III & SAE AS5590/1 CONNECTORS

AS85049™/132

SHEET 1 OF 4

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>

TABLE 1 – SHELL SIZE AND DIMENSIONS

SHELL SIZE	SHELL SIZE CODE (REF)	A MAX DIA	B REF DIA	C ± .040 (1.0)	D REF	E ± .031 (0.8)
09	A	.86 (21.8)	.186 (4.7)	.13 (3.3)	.32 (8.1)	.188 (4.8)
11	B	.98 (24.9)	.272 (6.9)	.27 (6.8)	.32 (8.1)	.281 (7.1)
13	C	1.16 (29.4)	.334 (8.5)	.30 (7.6)	.58 (14.7)	.375 (9.5)
15	D	1.28 (32.5)	.394 (10.0)	.35 (8.8)	.58 (14.7)	.438 (11.1)
17	E	1.41 (35.7)	.519 (13.2)	.38 (9.8)	.76 (19.3)	.500 (12.7)
19	F	1.52 (38.5)	.644 (16.4)	.44 (11.2)	.76 (19.3)	.625 (15.9)
21	G	1.64 (41.7)	.644 (16.4)	.58 (14.8)	.96 (24.4)	.750 (19.1)
23	H	1.77 (44.9)	.772 (19.6)	.62 (15.7)	.96 (24.4)	.875 (22.2)
25	J	1.89 (48.0)	.894 (22.7)	.69 (17.6)	1.27 (32.3)	1.000 (25.4)

TABLE 1 – SHELL SIZE AND DIMENSIONS (CONTINUED)

SHELL SIZE	INSERT IDENT	CONVOLUTED TUBE SAE AS81914 SIZE	NO. GROMMET HOLES	F MAX	G MAX	J APPROX	K REF	L FLAT ± .015 (0.4)
09	9-1	**02	1	1.27 (32.3)	1.50 (38.1)	2.00 (50.8)	1.15 (29.2)	.688 (17.5)
11	11-2	**04	2	1.33 (33.8)	1.56 (39.6)	2.09 (53.1)	1.20 (30.5)	.938 (23.8)
13	13-4	**05	4	1.39 (35.3)	1.62 (41.1)	2.21 (56.1)	1.26 (32.0)	.938 (23.8)
15	15-5	**06	5	1.45 (36.8)	1.68 (42.7)	2.33 (59.2)	1.32 (33.5)	.938 (23.8)
17	17-8	**07	8	1.51 (38.4)	1.74 (44.2)	2.44 (62.0)	1.38 (35.1)	1.250 (31.8)
19	19-11	**08	11	1.54 (39.1)	1.77 (45.0)	2.50 (63.5)	1.43 (36.3)	1.250 (31.8)
21	21-16	**08	16	1.61 (40.9)	1.84 (47.7)	2.64 (67.1)	1.49 (37.8)	1.500 (38.1)
23	23-21	**09	21	1.67 (42.4)	1.89 (48.0)	2.75 (69.9)	1.55 (39.4)	1.500 (38.1)
25	25-29	**10	29	1.73 (43.9)	1.96 (49.8)	2.87 (72.9)	1.62 (41.1)	1.812 (46.0)

NOTES:

- DIMENSIONS ARE IN INCHES, METRIC EQUIVALENTS IN PARENTHESIS ARE FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1.000 INCH (25.40 MM).
- DIMENSIONS APPLY AFTER PLATING. ACCESSORY CONFIGURATION IS OPTIONAL WITHIN THE DIMENSION ENVELOPE SPECIFIED IN FIGURE 1 AND TABLE 1.
- SHRINK BOOT (WHEN REQUIRED) SHALL BE AS SPECIFIED IN SAE AS85049/140.
- PART SUPPLIED WITH STANDARD DETENTED SELF-LOCKING WHICH PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION 'N' IS A NON-DETENTED SELF-LOCKING COUPLING.
- MATING COUPLING MUST BOTTOM ON SHOULDER STOP.
- NUMBER OF SEALING PLUGS SUPPLIED: SHELL SIZE 09 & 11 = 0; 13, 15, 17 = 1; 19 & 21 = 2; 23 & 25 = 3. FOR ADDITIONAL SEALING PLUGS SEE SAE AS85049/134.
- INTERNAL GROMMET KEY TO BE ALIGNED WITH THE CONNECTOR INTERFACE TOOTH ROOT ON VERTICAL CENTERLINE AT 12 O'CLOCK.
- J REFERENCE DIMENSION PROVIDED TO ASSIST IN FIBER CUT LENGTH.

	AEROSPACE STANDARD	AS85049™/132 SHEET 2 OF 4 
	CONNECTOR ACCESSORIES, FIBER OPTIC BACKSHELL, 45°, SELF-LOCKING CATEGORY 3B FOR MIL-DTL-38999 SERIES III & SAE AS5590/1 CONNECTORS	

