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REV.  
D

AS85049™/115

FEDERAL SUPPLY CLASS  
5935

## RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWINGS, MOVE NOTES TO DESIGN PARAGRAPH TO FOLLOW C1 AS STANDARD FORMAT, REMOVE IMAGES, TO CORRECT SUBSTITUTION INFORMATION, TO CORRECT REQUIREMENTS 1 AND 5, ADD "OR FIGURE 3A" TO REQUIREMENT 4, AND CLARIFY FINISH AND APPLICATION RESTRICTIONS.

## NOTICE

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

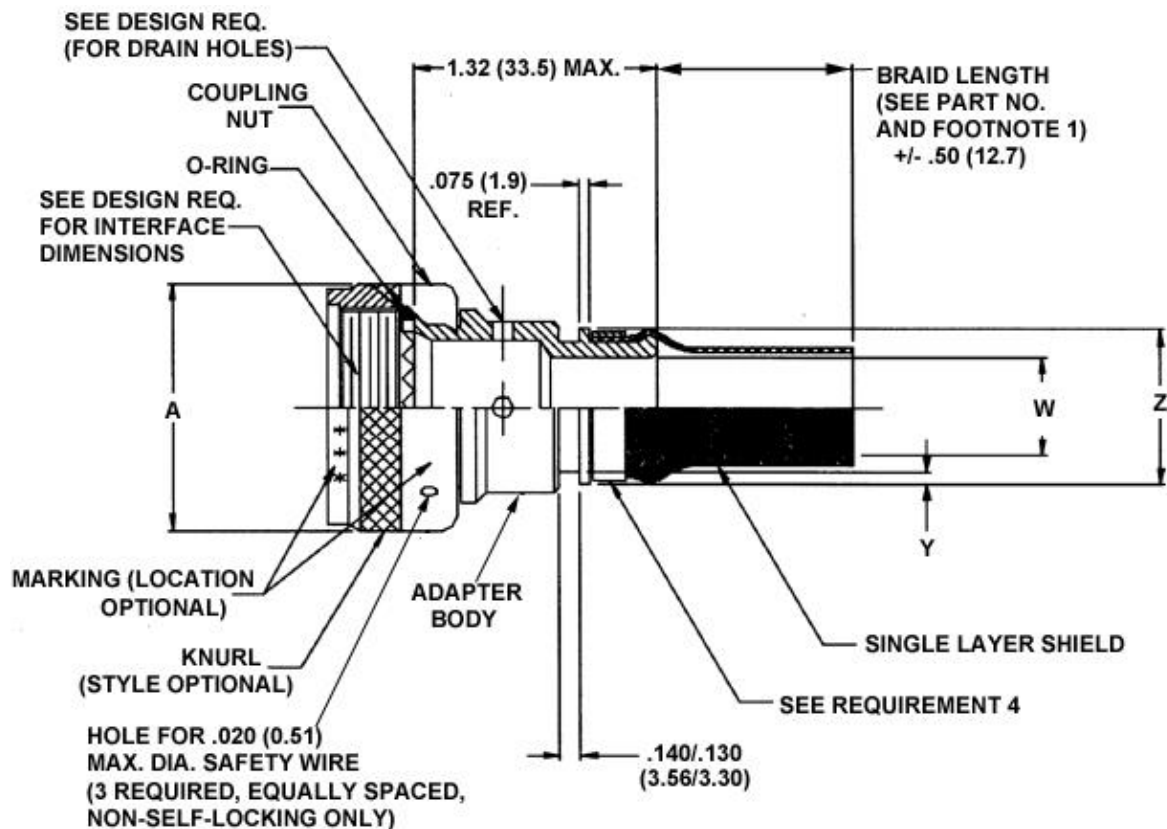
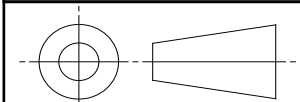


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS85049/115D>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



## AEROSPACE STANDARD

(R) CONNECTOR ACCESSORIES, ELECTRICAL BACKSHELL, STRAIGHT, SELF LOCKING AND NON-SELF LOCKING, PRE-ATTACHED SHIELD TERMINATION (RFI/EMI), BOOT ACCOMMODATION, CATEGORY 3B (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)

AS85049™/115  
SHEET 1 OF 4

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Documents

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**TABLE 1 - ACCESSORY SHELL SIZE AND DIMENSION**

| ACCESSORY SHELL SIZE | SERIES III SHELL CODE (REF.) | SERIES IV SHELL CODE (REF.) | ALLOWABLE CABLE ENTRY SIZE TABLE 2 | A MAX. DIAMETER |
|----------------------|------------------------------|-----------------------------|------------------------------------|-----------------|
| 09                   | A                            | -                           | 01                                 | .858 (21.79)    |
| 11                   | B                            | B                           | 01-03                              | .984 (24.99)    |
| 13                   | C                            | C                           | 01-05                              | 1.157 (29.39)   |
| 15                   | D                            | D                           | 03-07                              | 1.279 (32.49)   |
| 17                   | E                            | E                           | 05-09                              | 1.406 (35.71)   |
| 19                   | F                            | F                           | 06-10                              | 1.516 (38.51)   |
| 21                   | G                            | G                           | 08-12                              | 1.642 (41.71)   |
| 23                   | H                            | H                           | 09-13                              | 1.768 (44.91)   |
| 25                   | J                            | J                           | 10-14                              | 1.889 (47.98)   |

**TABLE 2 - CABLE ENTRY DIMENSIONS**

| ENTRY SIZE | W<br>±.020 (0.51) | Y<br>+.008 (0.20)<br>-.000 | Z<br>MAX.     |
|------------|-------------------|----------------------------|---------------|
| 01         | .250 (6.35)       | .044 (1.12)                | .560 (14.22)  |
| 02         | .312 (7.92)       | .044 (1.12)                | .630 (16.00)  |
| 03         | .375 (9.53)       | .044 (1.12)                | .690 (17.53)  |
| 04         | .438 (11.13)      | .044 (1.12)                | .750 (19.05)  |
| 05         | .500 (12.70)      | .044 (1.12)                | .820 (20.83)  |
| 06         | .562 (14.27)      | .044 (1.12)                | .890 (22.61)  |
| 07         | .625 (15.88)      | .044 (1.12)                | .950 (24.13)  |
| 08         | .688 (17.48)      | .044 (1.12)                | 1.020 (25.91) |
| 09         | .750 (19.05)      | .069 (1.75)                | 1.070 (27.18) |
| 10         | .812 (20.62)      | .069 (1.75)                | 1.130 (28.70) |
| 11         | .875 (22.23)      | .069 (1.75)                | 1.190 (30.23) |
| 12         | .938 (23.83)      | .069 (1.75)                | 1.260 (32.00) |
| 13         | 1.000 (25.40)     | .069 (1.75)                | 1.320 (33.53) |
| 14         | 1.125 (28.58)     | .069 (1.75)                | 1.470 (37.34) |

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 TABLES 1 AND 2. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE IN PARENTHESES, ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM (SEE TABLE 1). ACCESSORY CONFIGURATION IS OPTIONAL WITHIN THE DIMENSION ENVELOPE SPECIFIED IN FIGURE 1.

INTERFACE DIMENSIONS: SHALL CONFORM TO AS85049, FIGURE 3 OR FIGURE 3A.

COUPLING NUT: SHALL BE CAPTIVATED TO THE ADAPTER BODY AND SHALL BE FREE TO ROTATE, FOR SELF LOCKING OR NON-SELF LOCKING.

DRAIN HOLES WILL BE PROVIDED WITH A .125 INCH (3.2 MM) DIAMETER, 4 PLACES EQUALLY SPACED (OPTIONAL, SEE PART NUMBER DEVELOPMENT). O-RING NOT REQUIRED WHEN DRAIN HOLE OPTION IS SPECIFIED.

- ADAPTER LENGTH IS MEASURED FROM THE BOTTOM OF THE ACCESSORY TEETH TO THE END OF THE ADAPTER BODY. THE ADAPTER SURFACE UNDER THE BRAID SHALL BE RIBBED, KNURLED, OR HAVE A SURFACE ROUGHNESS OF 125 Ra MINIMUM IN ACCORDANCE WITH ANSI B46.1.
- PIG TAIL TERMINATED BRAID MATERIAL SHALL BE IN ACCORDANCE WITH TABLE 3. BRAID LENGTH IS DEFINED BY FOOTNOTE 1 AS SHOWN IN THE PART NUMBER.
- TERMINATION BAND CONFIGURATION IS NOT CONTROLLED. BAND WITH BUCKLE MAY EXCEED THE "Z" DIMENSION (SEE TABLE 2) PROVIDED THE BAND DOES NOT INTERFERE WITH BOOT ATTACHMENT. BAND MATERIAL SHALL BE AS SPECIFIED IN TABLE 3.

|                                                                                     |                                                                                                                                                                                                                                    |                                     |                         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>                                                                                                                                                                                                          | <b>AS85049™/115</b><br>SHEET 2 OF 4 | <b>REV.</b><br><b>D</b> |
|                                                                                     | (R) CONNECTOR ACCESSORIES, ELECTRICAL BACKSHELL,<br>STRAIGHT, SELF LOCKING AND NON-SELF LOCKING, PRE-ATTACHED<br>SHIELD TERMINATION (RFI/EMI), BOOT ACCOMMODATION,<br>CATEGORY 3B (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS) |                                     |                         |



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