

# RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWINGS, MOVE NOTES TO DESIGN PARAGRAPH TO FOLLOW C1 AS STANDARD FORMAT, REMOVE IMAGES, ADD PLASTIC TIE WRAP RESTRICTION TO NOTICE ON FIRST PAGE, CLARIFY RESTRICTIONS, AND ADD AS95234 TO THE DOCUMENT TITLE AND TABLE 1.

# NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049. SEE APPLICATION NOTE 1.

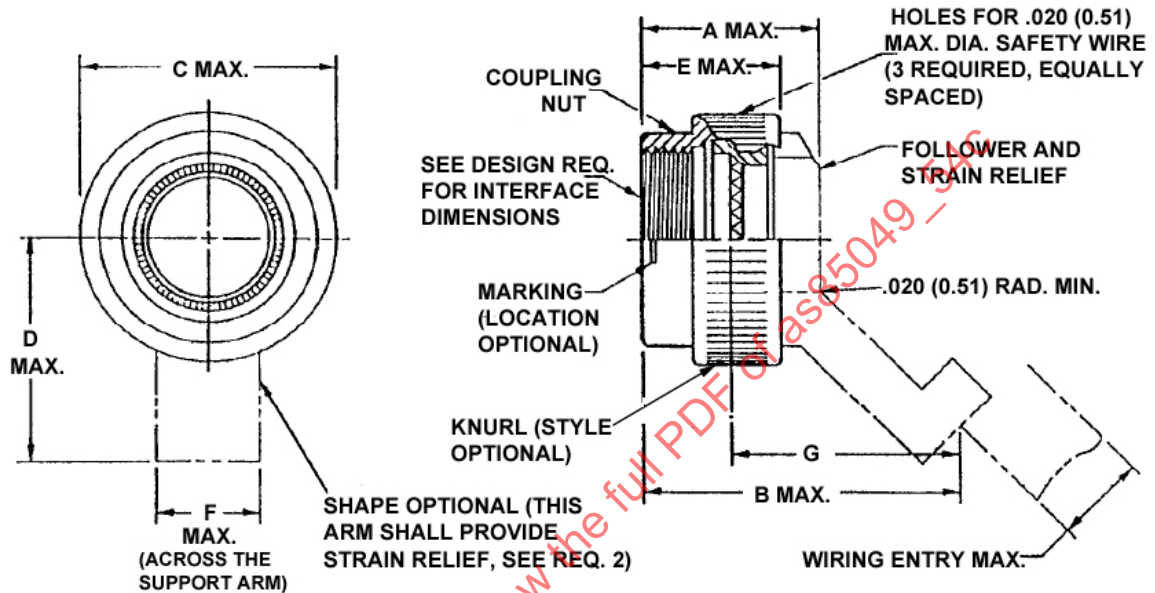
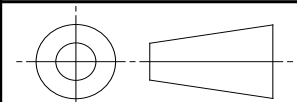


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit

<https://www.sae.org/standards/content/AS85049/54C>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



## AEROSPACE STANDARD

(R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, NONENVIRONMENTAL, 45°, CATEGORY 4C (FOR AS50151 CRIMP, AS9524, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

AS85049™/54  
SHEET 1 OF 3

REV.  
C

**TABLE 1 – FIGURE 1 DIMENSIONS**

| DASH<br>NUMBER | FOR CONNECTOR SHELL SIZE (REF) |                               |                             |                                    | A<br>MAX.       | B<br>MAX.        | C<br>DIA.<br>MAX. | D<br>MAX.        | E<br>MAX.       | F<br>MAX.<br>1/ | G<br>MAX.        | WIRING<br>ENTRY<br>MAX. |
|----------------|--------------------------------|-------------------------------|-----------------------------|------------------------------------|-----------------|------------------|-------------------|------------------|-----------------|-----------------|------------------|-------------------------|
|                | AS81703<br>SERIES 3            | MIL-DTL-<br>26482<br>SERIES 2 | AS50151<br>CRIMP<br>AS95234 | MIL-DTL-<br>83723<br>SERIES<br>III |                 |                  |                   |                  |                 |                 |                  |                         |
| 03             | 3                              | --                            | --                          | --                                 | .790<br>(20.07) | 1.562<br>(39.67) | .782<br>(19.86)   | 1.110<br>(28.19) | .540<br>(13.72) | .500<br>(12.70) | 1.232<br>(31.29) | .260<br>(6.60)          |
| 08             | --                             | 8                             | 8S                          | 8                                  | .790<br>(20.07) | 1.562<br>(39.67) | .657<br>(16.69)   | 1.110<br>(28.19) | .540<br>(13.72) | .463<br>(11.76) | 1.232<br>(31.29) | .260<br>(6.60)          |
| 10             | --                             | 10                            | 10S,10SL                    | 10                                 | .790<br>(20.07) | 1.562<br>(39.67) | .782<br>(19.86)   | 1.110<br>(28.19) | .540<br>(13.72) | .551<br>(14.00) | 1.232<br>(31.29) | .365<br>(9.27)          |
| 12             | 7                              | 12                            | 12,12S                      | 12                                 | .790<br>(20.07) | 1.562<br>(39.67) | .937<br>(23.80)   | 1.110<br>(28.19) | .540<br>(13.72) | .644<br>(16.36) | 1.232<br>(31.29) | .501<br>(12.73)         |
| 14             | 12                             | 14                            | 14,14S                      | 14                                 | .790<br>(20.07) | 1.562<br>(39.67) | 1.050<br>(26.67)  | 1.200<br>(30.48) | .540<br>(13.72) | .738<br>(18.75) | 1.232<br>(31.29) | .575<br>(14.61)         |
| 16             | 19                             | 16                            | 16,16S                      | 16                                 | .790<br>(20.07) | 1.562<br>(39.67) | 1.239<br>(31.47)  | 1.200<br>(30.48) | .540<br>(13.72) | .834<br>(21.18) | 1.232<br>(31.29) | .700<br>(17.78)         |
| 18             | 27                             | 18                            | 18                          | 18                                 | .790<br>(20.07) | 1.562<br>(39.67) | 1.378<br>(35.00)  | 1.300<br>(33.02) | .540<br>(13.72) | .914<br>(23.22) | 1.232<br>(31.29) | .779<br>(19.79)         |
| 20             | 37                             | 20                            | 20                          | 20                                 | .790<br>(20.07) | 1.812<br>(46.02) | 1.500<br>(38.10)  | 1.300<br>(33.02) | .540<br>(13.72) | 1.00<br>(25.40) | 1.482<br>(37.64) | .904<br>(22.96)         |
| 22             | --                             | 22                            | 22                          | 22                                 | .790<br>(20.07) | 1.812<br>(46.02) | 1.631<br>(41.43)  | 1.400<br>(35.56) | .540<br>(13.72) | 1.10<br>(27.94) | 1.482<br>(37.64) | 1.029<br>(26.14)        |
| 24             | --                             | 24                            | 24                          | 24                                 | .790<br>(20.07) | 1.812<br>(46.02) | 1.750<br>(44.45)  | 1.400<br>(35.56) | .540<br>(13.72) | 1.20<br>(30.48) | 1.482<br>(37.64) | 1.144<br>(29.06)        |
| 28             | --                             | --                            | 28                          | --                                 | .952<br>(24.18) | 1.969<br>(50.01) | 1.970<br>(50.04)  | 1.500<br>(38.10) | .702<br>(17.83) | 1.48<br>(37.59) | 1.469<br>(37.31) | 1.379<br>(35.03)        |

1/ DIMENSION F IS THE WIDTH ACROSS THE WIRE SUPPORT.

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 AND APPLY AFTER PLATING. UNLESS OTHERWISE SPECIFIED TOLERANCES SHALL BE: XX =  $\pm .03$  AND XXX =  $\pm .015$  ANGULAR TOLERANCES X =  $\pm 2$ . METRIC EQUIVALENTS ARE IN PARENTHESES. ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM.

INTERFACE DIMENSIONS SHALL BE IN ACCORDANCE WITH AS85049, FIGURE 4, OR 4A.

A COMPLETE STRAIN RELIEF UNIT CONSISTS OF COUPLING NUT AND A FOLLOWER WITH STRAIN RELIEF ARM. THE COUPLING NUT SHALL BE CAPTIVATED TO THE FOLLOWER AND SHALL BE FREE TO ROTATE.

2. STRAIN RELIEF UNIT IS USED WITH MS3367-1-X PLASTIC STRAP (SEE APPLICATION NOTE 1) QUALIFIED IN ACCORDANCE WITH AS23190, OR A-A-52080 THROUGH 52084 LACING TAPE, OR EQUIVALENT, NOT SUPPLIED WITH THE CONNECTOR ACCESSORY.

3. THIS CLAMP WILL NOT ACCOMMODATE CONNECTORS USING SIZE 8, 4, AND 0 CONTACTS.

|   |  |                                    |                         |
|---|--|------------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>  | <b>AS85049™/54</b><br>SHEET 2 OF 3 | <b>REV.</b><br><b>C</b> |
|   | (R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF,<br>NONENVIRONMENTAL, 45°, CATEGORY 4C (FOR AS50151<br>CRIMP, AS9524, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3,<br>AND MIL-DTL-83723 SERIES III CONNECTORS) |                                    |                         |