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REV.  
D

AS85049™/55

FEDERAL SUPPLY CLASS  
5935

## 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 1ST PAGE, CLARIFY RESTRICTIONS, ADD METRIC EQUIVALENTS TO FIGURE 1 AND ADD NOTE TO FIGURE 1 "KNURL (STYLE OPTIONAL).

## 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.

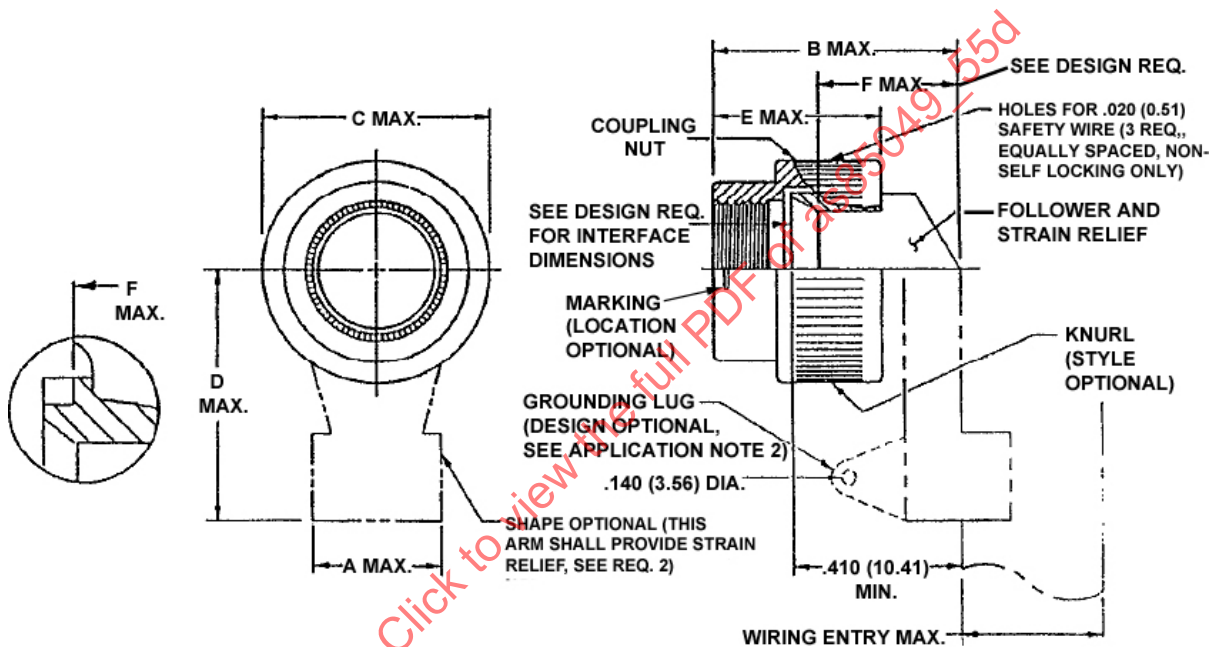
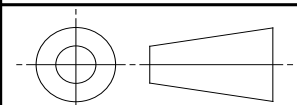


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit

<https://www.sae.org/standards/content/AS85049/55D/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



## AEROSPACE STANDARD

(R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, NON-ENVIRONMENTAL, 90°, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (FOR AS50151 CRIMP, AS95234, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

AS85049™/55  
SHEET 1 OF 4

REV.  
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ISSUED 2001-07 REVISED 2016-09 REAFFIRMED 2021-04

**TABLE 1 - FIGURE 1 DASH NUMBERS AND DIMENSIONS**

| DASH<br>NUMBER | FOR CONNECTOR SHELL SIZE (REF) |                               |                             |                                    | NON-SELF-LOCKING |                  |                   |                 | SELF-LOCKING    |                  |                   |                |
|----------------|--------------------------------|-------------------------------|-----------------------------|------------------------------------|------------------|------------------|-------------------|-----------------|-----------------|------------------|-------------------|----------------|
|                | AS81703<br>SERIES 3            | MIL-DTL-<br>26482<br>SERIES 2 | AS50151<br>CRIMP<br>AS95234 | MIL-DTL-<br>83723<br>SERIES<br>III | B<br>MAX.        | C<br>MAX.        | E<br>DIA.<br>MAX. | F<br>MAX.       | B<br>MAX.       | C<br>MAX.        | E<br>DIA.<br>MAX. | F<br>MAX.      |
| 03             | 3                              | --                            | --                          | --                                 | .751<br>(19.08)  | .782<br>(19.86)  | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | 1.010<br>(25.65) | .710<br>(18.03)   | .73<br>(18.54) |
| 08             | --                             | 8                             | 8S                          | 8                                  | .751<br>(19.08)  | .657<br>(16.69)  | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | .885<br>(22.48)  | .710<br>(18.03)   | .73<br>(18.54) |
| 10             | --                             | 10                            | 10S,10SL                    | 10                                 | .751<br>(19.08)  | .782<br>(19.86)  | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | 1.010<br>(25.65) | .710<br>(18.03)   | .73<br>(18.54) |
| 12             | 7                              | 12                            | 12,12S                      | 12                                 | .751<br>(19.08)  | .937<br>(23.80)  | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | 1.135<br>(28.83) | .710<br>(18.03)   | .73<br>(18.54) |
| 14             | 12                             | 14                            | 14,14S                      | 14                                 | .751<br>(19.08)  | 1.050<br>(26.67) | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | 1.260<br>(32.00) | .710<br>(18.03)   | .73<br>(18.54) |
| 16             | 19                             | 16                            | 16,16S                      | 16                                 | .751<br>(19.08)  | 1.239<br>(31.47) | .540<br>(13.72)   | .431<br>(10.95) | 1.05<br>(26.67) | 1.385<br>(35.18) | .710<br>(18.03)   | .73<br>(18.54) |
| 18             | 27                             | 18                            | 18                          | 18                                 | .776<br>(19.71)  | 1.378<br>(35.00) | .540<br>(13.72)   | .456<br>(11.58) | 1.05<br>(26.67) | 1.510<br>(38.35) | .710<br>(18.03)   | .73<br>(18.54) |
| 20             | 37                             | 20                            | 20                          | 20                                 | .776<br>(19.71)  | 1.500<br>(38.10) | .540<br>(13.72)   | .456<br>(11.58) | 1.07<br>(27.18) | 1.635<br>(41.53) | .710<br>(18.03)   | .75<br>(19.05) |
| 22             | --                             | 22                            | 22                          | 22                                 | .776<br>(19.71)  | 1.631<br>(41.43) | .540<br>(13.72)   | .456<br>(11.58) | 1.07<br>(27.18) | 1.760<br>(44.70) | .710<br>(18.03)   | .75<br>(19.05) |
| 24             | --                             | 24                            | 24                          | 24                                 | .776<br>(19.71)  | 1.750<br>(44.45) | .540<br>(13.72)   | .456<br>(11.58) | 1.07<br>(27.18) | 1.885<br>(47.88) | .710<br>(18.03)   | .75<br>(19.05) |
| 28             | --                             | --                            | 28                          | --                                 | .938<br>(23.83)  | 1.970<br>(50.04) | .702<br>(17.83)   | .448<br>(11.38) | 1.24<br>(31.50) | 2.135<br>(54.23) | .890<br>(22.61)   | .75<br>(19.05) |

**TABLE 1 - FIGURE 1 DASH NUMBERS AND DIMENSIONS (CONTINUED)**

| DASH<br>NUMBER | A<br>MAX     | D<br>MAX     | WIRING<br>ENTRY<br>MAX |
|----------------|--------------|--------------|------------------------|
| 03             | .500 (12.70) | 1.29 (32.77) | .260 (6.60)            |
| 08             | .463 (11.76) | 1.22 (30.99) | .260 (6.60)            |
| 10             | .551 (14.00) | 1.29 (32.77) | .365 (9.27)            |
| 12             | .644 (16.36) | 1.62 (41.15) | .501 (12.73)           |
| 14             | .738 (18.75) | 1.66 (42.16) | .575 (14.61)           |
| 16             | .834 (21.18) | 1.72 (43.69) | .700 (17.78)           |
| 18             | .914 (23.22) | 1.72 (43.69) | .779 (19.79)           |
| 20             | 1.00 (25.40) | 1.79 (45.47) | .904 (22.96)           |
| 22             | 1.10 (27.94) | 1.85 (46.99) | 1.029 (26.14)          |
| 24             | 1.20 (30.48) | 1.91 (48.51) | 1.144 (29.06)          |
| 28             | 1.48 (37.59) | 2.06 (52.32) | 1.379 (35.03)          |

|                                                                                     |                                                                                                                                                                                                                                              |                                    |                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>                                                                                                                                                                                                                    | <b>AS85049™/55</b><br>SHEET 2 OF 4 | <b>REV.</b><br><b>D</b> |
|                                                                                     | (R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, NON-ENVIRONMENTAL, 90°, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (FOR AS50151 CRIMP, AS95234, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS) |                                    |                         |

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. DIMENSION F IS MEASURED FROM THE ROOT OF THE TOOTH TO THE REAR OF THE ACCESSORY BODY.

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

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 AS33671-1-X PLASTIC STRAP (SEE APPLICATION NOTE 1) QUALIFIED IN ACCORDANCE WITH AS23190, AA-52080-AA-52084 LACING TAPE OR EQUIVALENT, NOT SUPPLIED WITH THE CONNECTOR ACCESSORY.
3. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION "N" IS A FREE SPINNING SELF-LOCKING COUPLING.
4. THIS CLAMP WILL NOT ACCOMMODATE CONNECTORS USING SIZE 8, 4, AND 0 CONTACTS.
5. MATERIAL AND FINISH: SEE TABLE 2.

TABLE 2 - MATERIAL AND FINISH

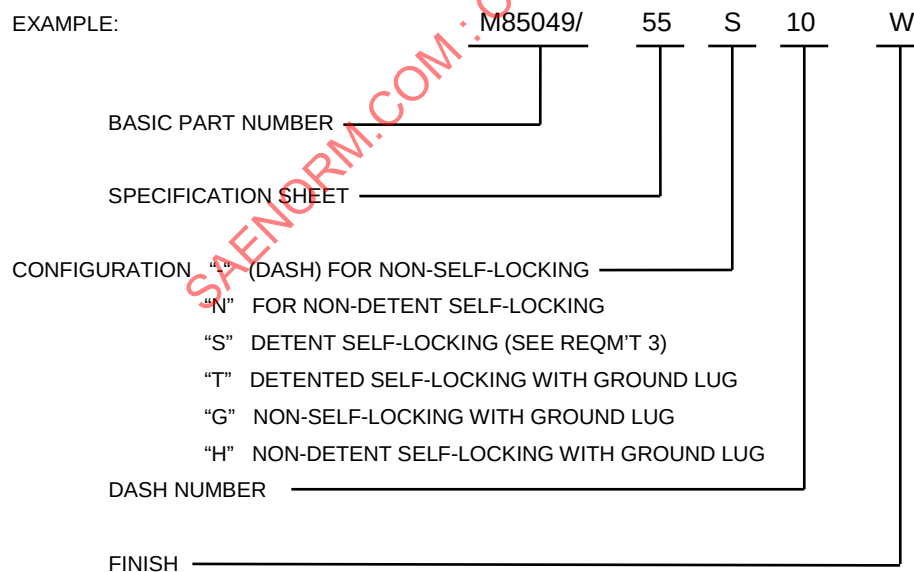
| FIGURE                    | MATERIAL                                  | FINISH                          |
|---------------------------|-------------------------------------------|---------------------------------|
| COUPLING NUT AND FOLLOWER | ALUMINUM ALLOY IN ACCORDANCE WITH AS85049 | 3/ A, 1/ N, 2/ W, X, 3/ Y, 2/ Z |
| TIE MOUNT                 | POLYAMIDE (OPTIONAL)                      | NONE                            |
| FASTENER                  | STAINLESS STEEL (OPTIONAL)                | NONE                            |
| SELF-LOCKING DEVICE       | CORROSION RESISTANT MATERIAL              | NONE                            |

- 1/ N FINISH NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO SALT WATER CORROSION.
- 2/ W AND Z FINISH NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO OUT GASSING (ALSO SEE SPECIFICATION NOTES).
- 3/ NOT AVAILABLE WITH CONFIGURATION "G," "H," or "T."

6. QUALIFICATION: SEE AS85049, CATEGORY 4C.

7. PART NUMBER: SEE EXAMPLE BELOW:

EXAMPLE:



|                                                                                     |                                                                                                                                                                                                                                              |                                    |                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>                                                                                                                                                                                                                    | <b>AS85049™/55</b><br>SHEET 3 OF 4 | <b>REV.</b><br><b>D</b> |
|                                                                                     | (R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, NON-ENVIRONMENTAL, 90°, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (FOR AS50151 CRIMP, AS95234, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS) |                                    |                         |