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REV.  
C

AS85049™/120

FEDERAL SUPPLY CLASS  
5935

#### RATIONALE

REVISION IS REQUIRED TO CHANGE THE FIGURE 1 DRAIN HOLE REQUIREMENT TO A MINIMUM.

#### NOTICE

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

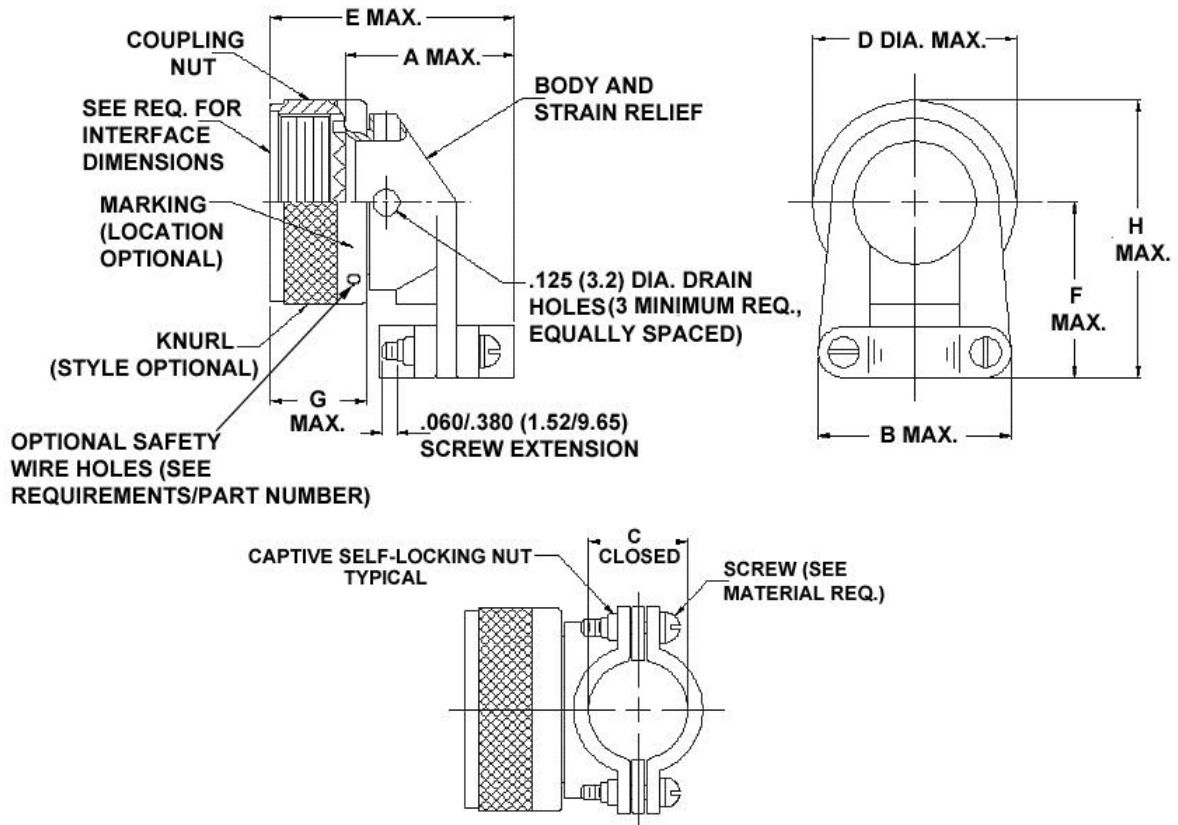
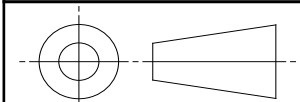


FIGURE 1 - ACCESSORY DIMENSIONS AND CONFIGURATION

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS85049/120C>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



#### AEROSPACE STANDARD

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

AS85049™/120  
SHEET 1 OF 3

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Documents

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**TABLE 1 - DASH NUMBERS AND DIMENSIONS**

| DASH NO. | CONNECTOR SHELL SIZE             |                              |                        |                                  | A<br>MAX<br>LENGTH<br>2/ | B<br>DIM<br>MAX | C<br>±.031<br>DIM<br>1/ | D<br>MAX<br>DIA | E<br>MAX<br>OVERALL<br>LENGTH | F<br>MAX       | G<br>MAX        | H<br>MAX        | SCREW<br>SIZE<br>(REF) |
|----------|----------------------------------|------------------------------|------------------------|----------------------------------|--------------------------|-----------------|-------------------------|-----------------|-------------------------------|----------------|-----------------|-----------------|------------------------|
|          | MIL-DTL-<br>83723<br>SERIES<br>3 | AS50151<br>CRIMP,<br>AS95234 | AS81703<br>SERIES<br>3 | MIL-DTL-<br>26482<br>SERIES<br>2 |                          |                 |                         |                 |                               |                |                 |                 |                        |
| -03      | --                               | --                           | 3                      | --                               | .93<br>(23.6)            | .88<br>(22.4)   | .219<br>(5.6)           | .95<br>(24.1)   | 1.29<br>(32.8)                | .84<br>(21.3)  | .710<br>(18.03) | 1.32<br>(33.5)  | 4-40                   |
| -08      | 8                                | 8S                           | --                     | 8                                | .93<br>(23.6)            | .88<br>(22.4)   | .219<br>(5.6)           | .89<br>(22.6)   | 1.29<br>(32.8)                | .81<br>(20.6)  | .710<br>(18.03) | 1.26<br>(32.0)  | 4-40                   |
| -10      | 10                               | 10S,10SL                     | --                     | 10                               | 1.02<br>(25.9)           | .94<br>(23.9)   | .264<br>(6.7)           | 1.01<br>(25.7)  | 1.38<br>(35.1)                | .87<br>(22.1)  | .710<br>(18.03) | 1.38<br>(35.1)  | 4-40                   |
| -12      | 12                               | 12,12S                       | 7                      | 12                               | 1.21<br>(30.7)           | 1.12<br>(28.4)  | .344<br>(8.7)           | 1.14<br>(29.0)  | 1.57<br>(39.9)                | .93<br>(23.6)  | .710<br>(18.03) | 1.50<br>(38.1)  | 4-40                   |
| -14      | 14                               | 14,14S                       | 12                     | 14                               | 1.27<br>(32.3)           | 1.19<br>(30.2)  | .460<br>(11.7)          | 1.26<br>(32.0)  | 1.63<br>(41.4)                | 1.00<br>(25.4) | .710<br>(18.03) | 1.63<br>(41.4)  | 4-40                   |
| -16      | 16                               | 16,16S                       | 19                     | 16                               | 1.42<br>(36.1)           | 1.44<br>(36.6)  | .545<br>(13.8)          | 1.39<br>(35.3)  | 1.78<br>(45.2)                | 1.06<br>(26.9) | .710<br>(18.03) | 1.75<br>(44.5)  | 4-40                   |
| -18      | 18                               | 18                           | 27                     | 18                               | 1.53<br>(38.9)           | 1.56<br>(39.6)  | .615<br>(15.7)          | 1.51<br>(38.4)  | 1.89<br>(48.0)                | 1.23<br>(31.2) | .710<br>(18.03) | 1.99<br>(50.6)  | 6-32                   |
| -20      | 20                               | 20                           | 37                     | 20                               | 1.65<br>(41.9)           | 1.69<br>(42.9)  | .698<br>(17.7)          | 1.64<br>(41.7)  | 2.01<br>(51.1)                | 1.30<br>(33.0) | .710<br>(18.03) | 2.07<br>(52.6)  | 6-32                   |
| -22      | 22                               | 22                           | --                     | 22                               | 1.78<br>(45.2)           | 1.75<br>(44.5)  | .780<br>(19.8)          | 1.76<br>(44.7)  | 2.14<br>(54.4)                | 1.36<br>(34.5) | .710<br>(18.03) | 2.25<br>(57.2)  | 6-32                   |
| -24      | 24                               | 24                           | --                     | 24                               | 1.90<br>(48.3)           | 1.88<br>(47.8)  | .850<br>(21.6)          | 1.89<br>(48.0)  | 2.26<br>(57.4)                | 1.42<br>(36.1) | .710<br>(18.03) | 2.37<br>(60.2)  | 8-32                   |
| -28      | --                               | 28                           | --                     | --                               | 2.20<br>(55.9)           | 2.12<br>(53.8)  | .950<br>(24.1)          | 2.14<br>(54.4)  | 2.72<br>(69.1)                | 1.63<br>(41.4) | .890<br>(22.6)  | 2.70<br>(68.6)  | 8-32                   |
| -32      | --                               | 32                           | --                     | --                               | 2.27<br>(57.7)           | 2.50<br>(63.5)  | 1.015<br>(25.8)         | 2.40<br>(61.0)  | 2.79<br>(70.9)                | 1.86<br>(47.2) | .890<br>(22.6)  | 3.05<br>(77.5)  | 8-32                   |
| -36      | --                               | 36                           | --                     | --                               | 2.39<br>(60.7)           | 2.62<br>(66.5)  | 1.187<br>(30.1)         | 2.64<br>(67.1)  | 2.91<br>(73.9)                | 1.98<br>(50.3) | .890<br>(22.6)  | 3.30<br>(83.8)  | 8-32                   |
| -40      | --                               | 40                           | --                     | --                               | 2.52<br>(64.0)           | 2.68<br>(68.1)  | 1.220<br>(31.0)         | 2.89<br>(73.4)  | 3.04<br>(77.2)                | 2.10<br>(53.3) | .890<br>(22.6)  | 3.55<br>(90.2)  | 8-32                   |
| -44      | --                               | 44                           | --                     | --                               | 2.77<br>(70.4)           | 3.00<br>(76.2)  | 1.500<br>(38.1)         | 3.14<br>(79.8)  | 3.29<br>(83.6)                | 2.36<br>(59.9) | .890<br>(22.6)  | 3.93<br>(99.8)  | 8-32                   |
| -48      | --                               | 48                           | --                     | --                               | 2.89<br>(73.4)           | 3.50<br>(88.9)  | 1.625<br>(41.3)         | 3.39<br>(86.1)  | 3.41<br>(86.6)                | 2.48<br>(63.0) | .890<br>(22.6)  | 4.18<br>(106.2) | 8-32                   |
| -61      | --                               | --                           | 61                     | --                               | 1.90<br>(48.3)           | 1.88<br>(47.8)  | .850<br>(21.6)          | 1.95<br>(49.5)  | 2.26<br>(57.4)                | 1.45<br>(36.8) | .710<br>(18.03) | 2.43<br>(61.7)  | 8-32                   |

1/ CABLE ENTRY IS MEASURED WITH SADDLE BARS CLOSED AND BOTTOMED ON CLAMP BARS.

2/ THE "A" DIMENSION IS MEASURED FROM THE BOTTOM OF THE ACCESSORY TEETH TO THE END OF THE STRAIN RELIEF.

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 = ±.03 AND .XXX = ±.015 ANGULAR TOLERANCES X = ±2. METRIC EQUIVALENTS ARE IN PARENTHESES, ARE GIVEN FOR GENERAL INFORMATION ONLY, AND ARE BASED UPON 1 INCH = 25.4 MM.

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

ACCESSORY: CONSISTS OF A COUPLING NUT, BODY, AND STRAIN RELIEF. THE COUPLING NUT SHALL BE CAPTIVATED TO AND FREE TO ROTATE ON THE BODY.

FOR THE NON-SELF-LOCKING COUPLING NUT CONFIGURATION (DASH "-"), THREE (3) EQUALLY SPACED HOLES SHALL BE PROVIDED WITH OPTION "H" AND SHALL ACCOMMODATE .020 MAXIMUM SAFETY WIRE.

**2. STRAIN RELIEF ACCOMMODATES AS85049/127 BUSHING STRIP.**

**3. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION "N" IS A FREE SPINNING SELF-LOCKING COUPLING.**

**4. CLAMPS SHALL HAVE NO PROTRUSIONS OR SHARP EDGES WHICH MAY PINCH CABLE.**

|                                                                                     |                                                                                                                                                                                                                               |                                     |               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------|
|  | <b>AEROSPACE STANDARD</b>                                                                                                                                                                                                     | <b>AS85049™/120</b><br>SHEET 2 OF 3 | <b>REV. C</b> |
|                                                                                     | CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF,<br>90° SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4B<br>(FOR AS50151 CRIMP, AS95234, MIL-DTL-26482 SERIES 2, AS81703<br>SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS) |                                     |               |