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**AS85049/55**

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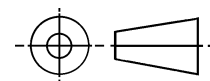
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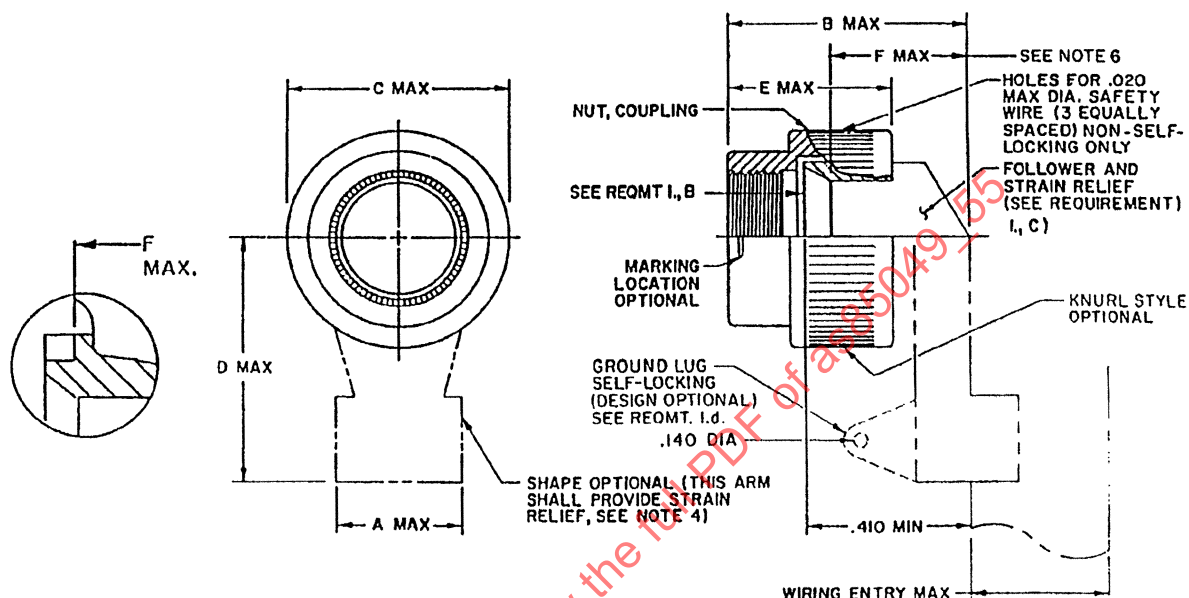
## AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF,  
NONENVIRONMENTAL, 90°, SELF-LOCKING AND NON-SELF-LOCKING,  
CATEGORY 4C (FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES 2,  
MIL-C-81703 SERIES 3, AND MIL-C-83723 SERIES III CONNECTORS)

**AS85049/55**  
SHEET 1 OF 5

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION: MIL-C-85049.

INACTIVE FOR NEW DESIGN AFTER 30 NOVEMBER 1990.  
FOR NEW DESIGN USE MIL-C-85049/51.



NON-SELF-LOCKING OR SELF-LOCKING

FIGURE 1. CONFIGURATION AND DIMENSIONS.

TABLE I. DASH NUMBERS, SHELL SIZE AND DIMENSIONS.

| Dash No. | For Connector Shell, Size (Ref) |                      |                  |                        | Non-Self-Locking |           |       |       | Self-Locking |           |       |       |
|----------|---------------------------------|----------------------|------------------|------------------------|------------------|-----------|-------|-------|--------------|-----------|-------|-------|
|          | MIL-C-81703 Series 3            | MIL-C-26482 Series 2 | MIL-C-5015 Crimp | MIL-C-83723 Series III | B Max            | C Max Dia | E Max | F Max | B Max        | C Max Dia | E Max | F Max |
| 03       | 3                               |                      |                  |                        | .751             | .782      | .540  | .431  | 1.05         | 1.010     | .710  | .73   |
| 08       |                                 | 8                    | 8S               | 8                      | .751             | .657      | .540  | .431  | 1.05         | .885      | .710  | .73   |
| 10       |                                 | 10                   | 10S, 10SL        | 10                     | .751             | .782      | .540  | .431  | 1.05         | 1.010     | .710  | .73   |
| 12       | 7                               | 12                   | 12, 12S          | 12                     | .751             | .937      | .540  | .431  | 1.05         | 1.135     | .710  | .73   |
| 14       | 12                              | 14                   | 14, 14S          | 14                     | .751             | 1.050     | .540  | .431  | 1.05         | 1.260     | .710  | .73   |
| 16       | 19                              | 16                   | 16, 16S          | 16                     | .751             | 1.239     | .540  | .431  | 1.05         | 1.385     | .710  | .73   |
| 18       | 27                              | 18                   | 18               | 18                     | .776             | 1.378     | .540  | .456  | 1.05         | 1.510     | .710  | .73   |
| 20       | 37                              | 20                   | 20               | 20                     | .776             | 1.500     | .540  | .456  | 1.07         | 1.635     | .710  | .75   |
| 22       |                                 | 22                   | 22               | 22                     | .776             | 1.631     | .540  | .456  | 1.07         | 1.760     | .710  | .75   |
| 24       |                                 | 24                   | 24               | 24                     | .776             | 1.750     | .540  | .456  | 1.07         | 1.885     | .710  | .75   |
| 28       |                                 |                      | 28               |                        | .938             | 1.970     | .702  | .448  | 1.24         | 2.135     | .890  | .75   |

TABLE I. DIMENSIONS (CONTINUED).

| Non-Self-Locking and Self-Locking |       |       |                  |
|-----------------------------------|-------|-------|------------------|
| Dash No.                          | A Max | B Max | Wiring Entry Max |
| 03                                | .500  | 1.29  | .260             |
| 08                                | .463  | 1.22  | .260             |
| 10                                | .551  | 1.29  | .365             |
| 12                                | .644  | 1.62  | .501             |
| 14                                | .738  | 1.66  | .575             |
| 16                                | .834  | 1.72  | .700             |
| 18                                | .914  | 1.72  | .779             |
| 20                                | 1.00  | 1.79  | .904             |
| 22                                | 1.10  | 1.85  | 1.029            |
| 24                                | 1.20  | 1.91  | 1.144            |
| 28                                | 1.48  | 2.06  | 1.379            |

| INCH  | mm     | INCH  | mm     | INCH  | mm     | INCH  | mm     |
|-------|--------|-------|--------|-------|--------|-------|--------|
| 0.015 | 0.380  | 0.702 | 17.830 | 1.010 | 25.650 | 1.480 | 37.590 |
| 0.030 | 0.760  | 0.710 | 18.030 | 1.029 | 26.130 | 1.500 | 38.100 |
| 0.140 | 3.550  | 0.730 | 18.540 | 1.050 | 26.670 | 1.510 | 38.350 |
| 0.260 | 6.600  | 0.738 | 18.740 | 1.070 | 27.170 | 1.620 | 41.140 |
| 0.365 | 9.270  | 0.750 | 19.050 | 1.100 | 27.940 | 1.631 | 41.420 |
| 0.431 | 10.940 | 0.751 | 19.070 | 1.135 | 28.820 | 1.635 | 41.520 |
| 0.448 | 11.370 | 0.776 | 19.710 | 1.144 | 29.050 | 1.660 | 42.160 |
| 0.456 | 11.580 | 0.779 | 19.780 | 1.200 | 30.480 | 1.720 | 43.680 |
| 0.463 | 11.760 | 0.782 | 19.860 | 1.220 | 30.980 | 1.750 | 44.450 |
| 0.500 | 12.700 | 0.834 | 21.180 | 1.239 | 31.470 | 1.760 | 44.700 |
| 0.501 | 12.720 | 0.885 | 22.470 | 1.240 | 31.490 | 1.796 | 45.610 |
| 0.540 | 13.710 | 0.890 | 22.600 | 1.260 | 32.000 | 1.858 | 46.990 |
| 0.551 | 13.990 | 0.904 | 22.960 | 1.290 | 32.760 | 1.885 | 47.870 |
| 0.575 | 14.600 | 0.914 | 23.210 | 1.378 | 35.000 | 1.910 | 48.510 |
| 0.644 | 16.350 | 0.937 | 23.790 | 1.379 | 35.020 | 2.060 | 52.320 |
| 0.657 | 16.680 | 0.938 | 23.820 | 1.385 | 35.170 | 2.135 | 54.220 |
| 0.700 | 17.780 | 1.000 | 25.400 |       |        |       |        |

## REQUIREMENTS:

1. Design and construction:
  - a. Dimensions and configuration: See figure 1 and table I.
  - b. Interface dimensions shall be in accordance with MIL-C-85049, figure 4.
  - c. Complete strain relief unit consists of coupling nut and a follower with strain relief arm. The coupling shall be captivated to the follower and free to rotate.
  - d. Grounding lug is not for Navy use, not for new design for Air Force.
2. Material and finish: see table II.

TABLE II. MATERIAL AND FINISH.

|                           | Material                                      | Finish    |
|---------------------------|-----------------------------------------------|-----------|
| Coupling nut and follower | Aluminum alloy in accordance with MIL-C-85049 | 1/ W<br>A |
| Tie mount                 | Polyamid (optional)                           | None      |
| Fastener                  | Stainless steel (optional)                    | None      |

1/ W finish is not for use in space application.

## 3. Qualification:

Non-self-locking and self-locking: See MIL-C-85049, category 4C.

Information pertaining to qualification of products may be obtained from the Commanding Officer, Naval Avionics Center, Attention: Code B/444, 6000 East 21st Street, Indianapolis, IN 46219-2189.