

REV.
B

SAE AS85049/57

RATIONALE

REVISED TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY, REMOVE GOVERNMENT JARGON, INCORPORATE AMENDMENTS, AND UP-DATE SPECIFICATION REFERENCES.

THE REQUIREMENTS FOR ACQUIRING THE ACCESSORIES DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS85049.

STABILIZED

THIS SPECIFICATION HAS BEEN DECLARED STABILIZED BY THE AEROSPACE AE8C1 COMMITTEE AS OF THE DATE OF THIS REVISION. NOT FOR USE ON PLATFORMS UNDER THE JURISDICTION OF AS50881.

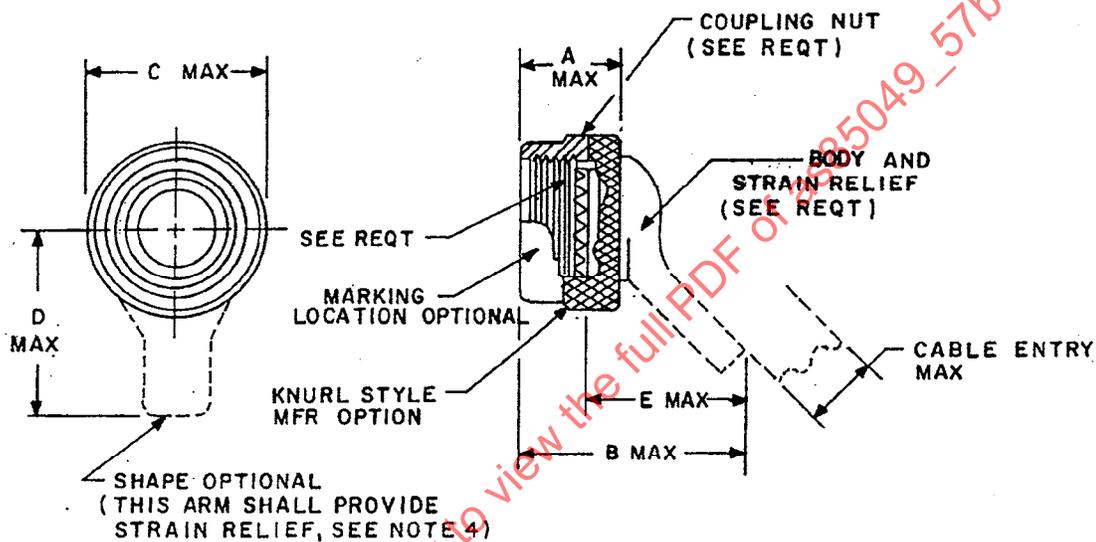
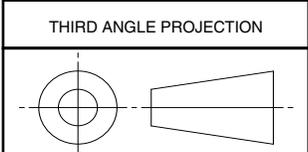


FIGURE 1 - DIMENSIONS AND CONFIGURATIONS (SELF-LOCKING AND NON-SELF-LOCKING)

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD
CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, 45°, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (MIL-DTL-38999 SERIES I AND II CONNECTORS)

SAE AS85049/57
SHEET 1 OF 6

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ISSUED 2000-05 REVISED 2009-09

TABLE 1 - DIMENSIONS

| DASH NUMBER | CONNECTOR SHELL SIZE | | A MAX | | B MAX | C MAX | | D MAX | E MAX | CABLE ENTRY MAX |
|-------------|----------------------|----------|------------------|--------------|-------------|------------------|--------------|-------------|-------------|-----------------|
| | SERIES II | SERIES I | NON-SELF LOCKING | SELF-LOCKING | | NON-SELF LOCKING | SELF-LOCKING | | | |
| 8 | 8 | 9 | .540 (13.7) | .590 (15.0) | 1.25 (31.8) | .75 (19.1) | .86 (21.8) | .88 (22.4) | 1.03 (26.2) | .264 (6.7) |
| 10 | 10 | 11 | .540 (13.7) | .590 (15.0) | 1.25 (31.8) | .85 (21.6) | .98 (24.9) | .88 (22.4) | 1.03 (26.2) | .392 (10.0) |
| 12 | 12 | 13 | .540 (13.7) | .590 (15.0) | 1.25 (31.8) | 1.00 (25.4) | 1.16 (29.5) | .94 (23.9) | 1.03 (26.2) | .506 (12.9) |
| 14 | 14 | 15 | .540 (13.7) | .590 (15.0) | 1.31 (33.3) | 1.10 (27.9) | 1.28 (32.5) | 1.25 (31.8) | 1.09 (27.7) | .631 (16.0) |
| 16 | 16 | 17 | .540 (13.7) | .590 (15.0) | 1.33 (33.8) | 1.25 (31.8) | 1.41 (35.8) | 1.31 (33.3) | 1.11 (28.2) | .756 (19.2) |
| 18 | 18 | 19 | .540 (13.7) | .590 (15.0) | 1.43 (36.3) | 1.40 (35.6) | 1.52 (38.6) | 1.38 (35.1) | 1.21 (30.7) | .845 (21.5) |
| 20 | 20 | 21 | .540 (13.7) | .590 (15.0) | 1.48 (37.6) | 1.50 (38.1) | 1.64 (41.7) | 1.50 (38.1) | 1.26 (32.0) | .970 (24.6) |
| 22 | 22 | 23 | .540 (13.7) | .590 (15.0) | 1.52 (38.6) | 1.65 (41.9) | 1.77 (45.0) | 1.69 (42.9) | 1.30 (33.0) | 1.095 (27.8) |
| 24 | 24 | 25 | .540 (13.7) | .590 (15.0) | 1.56 (39.6) | 1.75 (44.5) | 1.89 (48.0) | 1.75 (44.5) | 1.34 (34.0) | 1.220 (31.0) |

NOTES:

- DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS ARE IN PARENTHESES AND ARE GIVEN FOR GENERAL INFORMATION ONLY.
- TOLERANCES SHALL BE: .XX = $\pm .03$ AND .XXX = ± 0.15 ANGULAR TOLERANCES X = ± 2 .
- STRAIN RELIEF UNIT IS USED WITH SAE AS33671-1-X PLASTIC STRAP, MIL-T-713 LACING TWINE OR AA-52080-AA-52084 LACING TAPE OR EQUIVALENT, NOT SUPPLIED WITH THE BACKSHELL.
- ACCESSORIES ARE NOT RECOMMENDED FOR CONNECTORS USING CO-AX, DATA BUS NO. 8 CONDUCTORS. WHEN USED WITH MAXIMUM DENSITY ARRANGEMENTS, CLAMP MAY OPEN OUTER WIRE SEALS.
- NOT FOR NAVY USE. NOT FOR NEW DESIGN FOR AIR FORCE.

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|---|--|---------------------------------------|-------------------------|
|  An SAE International Group | AEROSPACE STANDARD | SAE AS85049/57 SHEET 2 OF 6 | REV. B |
| | CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, 45°, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (MIL-DTL-38999 SERIES I AND II CONNECTORS) | | |

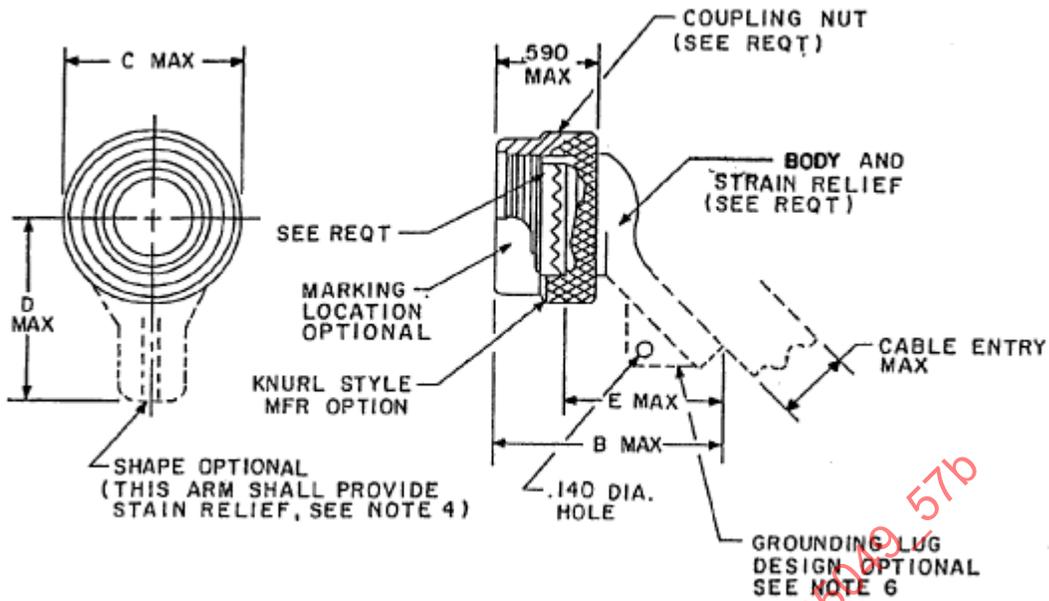


FIGURE 2 - DIMENSIONS AND CONFIGURATIONS (SELF-LOCKING ONLY WITH GROUNDING LUG)

| DASH NUMBER | CONNECTOR SHELL | | B MAX | C MAX | D MAX | E MAX | CABLE ENTRY MAX |
|-------------|-----------------|----------|-------------|-------------|-------------|-------------|-----------------|
| | SERIES II | SERIES I | | | | | |
| 8 | 8 | 9 | 1.40 (35.6) | .86 (21.8) | .88 (22.4) | 1.21 (30.7) | .264 (6.7) |
| 10 | 10 | 11 | 1.40 (35.6) | .98 (24.9) | .88 (22.4) | 1.21 (30.7) | .392 (10.0) |
| 12 | 12 | 13 | 1.58 (40.1) | 1.16 (29.5) | .94 (23.9) | 1.39 (35.3) | .506 (12.9) |
| 14 | 14 | 15 | 1.58 (40.1) | 1.28 (32.5) | 1.25 (31.8) | 1.39 (35.3) | .631 (16.0) |
| 16 | 16 | 17 | 1.58 (40.1) | 1.41 (35.8) | 1.31 (33.3) | 1.39 (35.3) | .756 (19.2) |
| 18 | 18 | 19 | 1.58 (40.1) | 1.52 (38.6) | 1.38 (35.1) | 1.39 (35.3) | .845 (21.5) |
| 20 | 20 | 21 | 1.58 (40.1) | 1.64 (41.7) | 1.50 (38.1) | 1.39 (35.3) | .970 (24.6) |
| 22 | 22 | 23 | 1.58 (40.1) | 1.77 (45.0) | 1.69 (42.9) | 1.39 (35.3) | 1.095 (27.8) |
| 24 | 24 | 25 | 1.58 (40.1) | 1.89 (48.0) | 1.75 (44.5) | 1.39 (35.3) | 1.220 (31.0) |

NOTES:

1. DIMENSIONS ARE IN INCHES.
2. METRIC EQUIVALENTS ARE IN PARENTHESES AND ARE GIVEN FOR GENERAL INFORMATION ONLY.
3. TOLERANCES SHALL BE: .XX = ± .03 AND .XXX = ±0.15 ANGULAR TOLERANCES X = ± 2.
4. STRAIN RELIEF UNIT IS USED WITH SAE AS33671-1-X PLASTIC STRAP, MIL-T-713 LACING TWINE OR AA-52080-AA-52084 LACING TAPE OR EQUIVALENT, NOT SUPPLIED WITH THE BACKSHELL.
5. ACCESSORIES ARE NOT RECOMMENDED FOR CONNECTORS USING CO-AX, DATA BUS NO. 8 CONDUCTORS. WHEN USED WITH MAXIMUM DENSITY ARRANGEMENTS, CLAMP MAY OPEN OUTER WIRE SEALS.
6. NOT FOR NAVY USE. NOT FOR NEW DESIGN FOR AIR FORCE.

REQUIREMENTS:

1. DESIGN AND CONSTRUCTION
 - DIMENSIONS AND CONFIGURATION: SEE FIGURES 1 AND 2.
2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH AS85049, FIGURE 2.
3. ACCESSORY: CONSISTS OF A COUPLING NUT AND BODY WITH STRAIN RELIEF ARM. THE COUPLING NUT SHALL BE CAPTIVATED TO THE BODY AND SHALL BE ROTATEABLE.
4. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING.
5. MATERIAL:
 - a. COUPLING NUT AND FOLLOWER: ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049.
 - b. TIE MOUNT: POLYAMIDE (OPTIONAL).
 - c. FASTENER: STAINLESS STEEL (OPTIONAL).
 - d. SELF-LOCKING DEVICE: CORROSION RESISTANT MATERIAL.
6. FINISH: SEE TABLE 2.

TABLE 2 - FINISH

| FIGURE | MATERIAL | FINISH |
|--------|---|--|
| 1 | ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049 | A <u>3</u> /N <u>1</u> / W <u>2</u> / X, Y Z <u>2</u> |

1/ NOT FOR NAVY USE. AIR FORCE USE IS FOR SPACE APPLICATIONS ONLY. W IS THE PREFERRED FINISH.
2/ W & Z ARE NOT FOR USE IN SPACE APPLICATION. ALSO SEE SPECIFICATION NOTE

3/ NOT AVAILABLE WITH CONFIGURATIONS "G" OR "H".