

REV.
B

SAE AS85049/90

FEDERAL SUPPLY CLASS
5970

RATIONALE

THIS REVISION IS REQUIRED TO INCORPORATE THE OUTSTANDING AMENDMENT, REVIEW FOR KNOWN TECHNICAL ISSUES AND UPDATE TO MEET SAE FORMAT GUIDELINES.

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

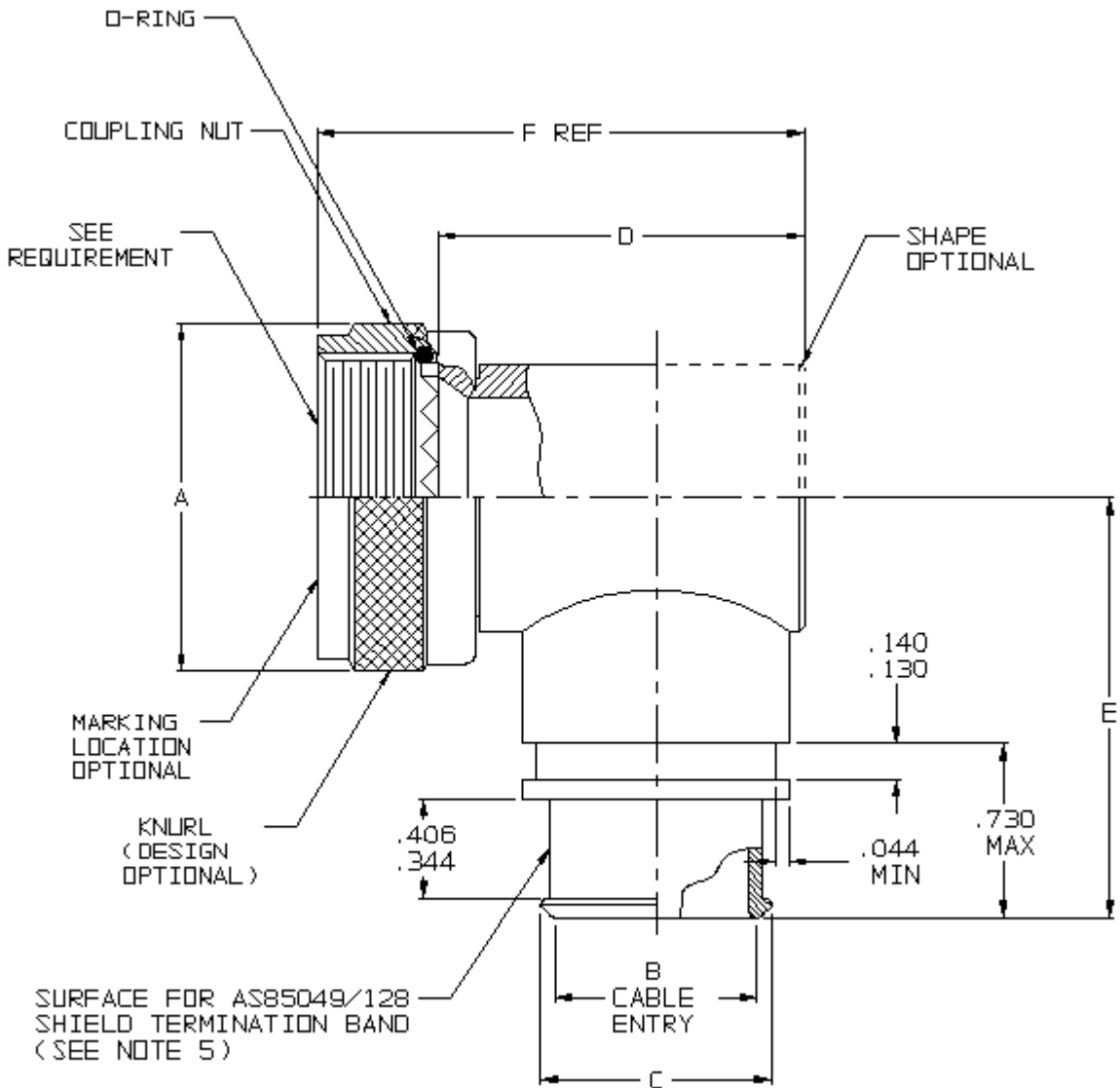
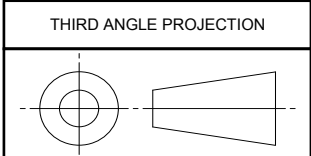


FIGURE 1 - CONFIGURATION AND DIMENSIONS

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, 90°, SELF-LOCKING, SHIELD BAND TERMINATION, (RFI/EMI), SHRINK SLEEVE ACCOMMODATION, CATEGORY 3B (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)

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SHEET 1 OF 4

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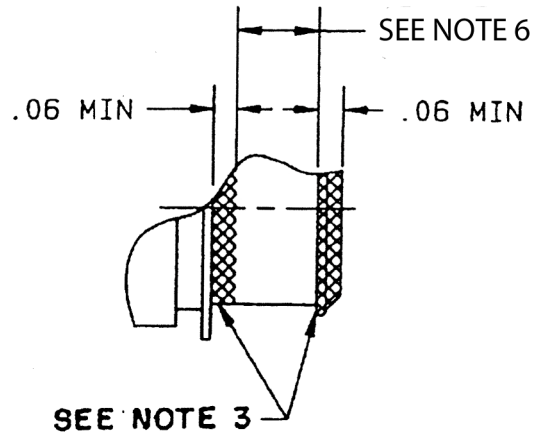


FIGURE 2 - SELECTIVE PLATING

| INCH | MM | INCH | MM | INCH | MM | INCH | MM |
|------|-------|------|-------|-------|-------|-------|-------|
| .044 | 1.12 | .562 | 14.27 | .829 | 21.06 | 1.157 | 29.39 |
| .130 | 3.30 | .583 | 14.81 | .858 | 21.79 | 1.279 | 32.49 |
| .140 | 3.56 | .625 | 15.88 | .895 | 22.73 | 1.350 | 34.29 |
| .250 | 6.35 | .684 | 17.37 | .938 | 23.83 | 1.406 | 35.71 |
| .312 | 7.92 | .707 | 17.96 | .957 | 24.31 | 1.516 | 38.51 |
| .395 | 10.03 | .730 | 18.54 | .984 | 24.99 | 1.642 | 41.71 |
| .438 | 11.13 | .750 | 19.05 | 1.000 | 25.40 | 1.768 | 44.91 |
| .457 | 11.61 | .770 | 19.56 | 1.083 | 27.51 | 1.889 | 47.98 |
| .500 | 12.70 | .812 | 20.62 | 1.145 | 29.08 | | |

NOTES:

1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING.
2. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1.00 (25.4 mm).
3. CADMIUM, ZINC NICKEL OR PURE DENSE ELECTRODEPOSITED ALUMINUM/NICKEL INTERFACE SHALL BE COATED WITH POLYSULFIDE SEALANT. NOT APPLICABLE FOR FINISH 'L'.
4. PART SUPPLIED WITH STANDARD DETENTED SELF-LOCKING, WHICH PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION 'N' IS A FREE SPINNING SELF-LOCKING COUPLING.
5. RIBBED, INTERNAL KNURL OR SURFACE ROUGHNESS Ra 125-250 IN ACCORDANCE WITH ANSI B46.1. SEE FIGURE 2 FOR SELECTIVE PLATING DETAILS.
6. AREA FREE OF CADMIUM, ZINC NICKEL OR PURE DENSE ELECTRODEPOSITED ALUMINUM, AS APPLICABLE.

TABLE 1 - SHELL SIZE AND DIMENSIONS

| ACCESSORY SHELL SIZE | SHELL SIZE CODE | A MAX DIA | B DIA ±.010 ENTRY SIZE | | C DIA REF | | D MAX DIA | E MAX DIA | F (REF) |
|----------------------|-----------------|------------------|------------------------|------------------|-----------------|------------------|---------------|---------------|---------------|
| | | | 02 | 03 | 02 | 03 | | | |
| 9 | A | .858 (21.79) | N/A | .250 (6.35) | N/A | .395 (10.03) | 1.375 (34.93) | 1.417 (35.99) | 1.623 (41.22) |
| 11 | B | .984 (24.99) | N/A | .312 (7.92) | N/A | .457 (11.61) | 1.437 (36.50) | 1.480 (37.59) | 1.685 (42.80) |
| 13 | C | 1.157 (29.39) | .312 (7.92) | .438 (11.13) | .457 (11.61) | .583 (14.81) | 1.562 (39.67) | 1.553 (39.45) | 1.810 (45.97) |
| 15 | D | 1.279 (32.49) | .438 (11.13) | .562 (14.27) | .583 (14.81) | .707 (17.96) | 1.687 (42.85) | 1.614 (41.00) | 1.935 (49.15) |
| 17 | E | 1.406 (35.71) | .500 (12.70) | .625 (15.88) | .645 (16.38) | .770 (19.56) | 1.750 (44.45) | 1.678 (42.62) | 1.998 (50.75) |
| 19 | F | 1.516 (38.51) | .625 (15.88) | .750 (19.05) | .770 (19.56) | .895 (22.73) | 1.875 (47.63) | 1.773 (45.03) | 2.123 (53.92) |
| 21 | G | 1.642 (41.71) | .625 (15.88) | .812 (20.62) | .770 (19.56) | .957 (24.31) | 1.938 (49.23) | 1.796 (45.62) | 2.186 (55.52) |
| 23 | H | 1.768 (44.91) | .688 (17.48) | .938 (23.83) | .829 (21.06) | 1.083 (27.51) | 2.062 (52.37) | 1.859 (47.22) | 2.310 (58.67) |
| 25 | J | 1.889 (47.98) | .750 (19.05) | 1.000 (25.40) | .895 (22.73) | 1.145 (29.08) | 2.125 (53.98) | 1.919 (48.74) | 2.373 (60.27) |

REQUIREMENTS:

DESIGN AND CONSTRUCTION:

DIMENSIONS AND CONFIGURATION: SEE FIGURE 1 AND TABLE 1.

INTERFACE DIMENSIONS: SHALL CONFORM TO SAE AS85049, FIGURE 3.

COUPLING NUT: SHALL BE CAPTIVATED TO THE ADAPTER BODY AND ROTATABLE.

MATERIAL AND FINISH: IN ACCORDANCE WITH SAE AS85049 AND TABLE 2.

TABLE 2 - MATERIAL AND FINISH

| FINISH | MATERIAL |
|--|---|
| G – ELECTROLESS NICKEL <u>1/</u> (SPACE GRADE) N – ELECTROLESS NICKEL <u>1/</u> P – CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL, (SELECTIVE PLATING, SEE FIGURE 2) <u>2/</u> W – CADMIUM OLIVE DRAB <u>2/</u> X – NICKEL FLUOROCARBON POLYMER Z – ZINC NICKEL <u>2/</u> YP – PURE DENSE ELECTRODEPOSITED ALUMINUM OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2) ZP – ZINC NICKEL OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2) <u>2/</u> | ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049 |
| J – CADMIUM OLIVE DRAB <u>2/</u> L – CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL, (SELECTIVE PLATING, SEE FIGURE 2) <u>2/ 3/</u> M – ELECTROLESS NICKEL XC – NICKEL FLUOROCARBON POLYMER YL – PURE DENSE ELECTRODEPOSITED ALUMINUM, SELECTIVE PLATING, SEE FIGURE 2) <u>3/</u> ZC – ZINC NICKEL <u>2/</u> ZL – ZINC NICKEL (SELECTIVE PLATING, SEE FIGURE 2) <u>2/ 3/</u> | COMPOSITE IN ACCORDANCE WITH SAE AS85049 |

1/ G AND N FINISH NOT FOR NAVY USE, RESTRICTED TO AIR FORCE SPACE APPLICATIONS ONLY.

2/ P, W, Z, ZP, J, L, ZC AND ZL FINISHES ARE NOT FOR USE IN SPACE APPLICATIONS. ALSO SEE SPECIFICATION NOTE

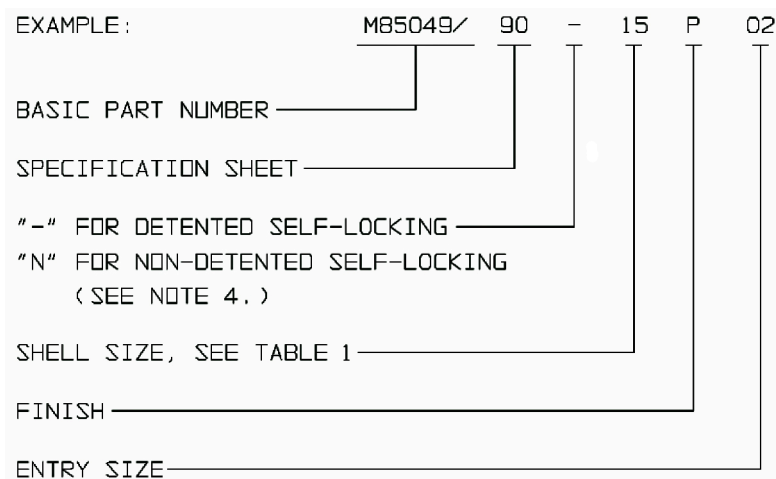
3/ MUST MEET THE REQUIREMENTS AND PASS TESTS FOR FINISH J.

| | | | |
|---|--|---------------------------------------|-------------------|
|  An SAE International Group | AEROSPACE STANDARD | SAE AS85049/90 SHEET 3 OF 4 | REV. B |
| | (R) CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, 90°, SELF-LOCKING, SHIELD BAND TERMINATION, (RF/EMI), SHRINK SLEEVE ACCOMMODATION, CATEGORY 3B (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS) | | |

TABLE 3 - TEST FLUIDS

| SAMPLE NUMBER | TEST FLUID (EIA 364-10) |
|---------------|-------------------------|
| 1 | A |
| 2 | B |
| 3 | C |
| 4 | D |
| 5 | E |
| 6 | F |
| 7 | G |
| 8 | H |
| 9 | I |
| 10 | K |

PART NUMBER: SEE EXAMPLE BELOW:



QUALIFICATION: SEE SAE AS85049, CATEGORY 3B.

SPECIFICATION NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

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