FEDERAL SUPPLY CLASS
5970

RATIONALE

REVISION REQUIRED TO INCREASE THE "B" TOLERANCE TO ACCOMMODATE I.D. CORE DRAFT ON MOLDED PART CONFIGURATIONS AND TO CORRECT THE COUPLING NUT FINISH DESIGNATION.

NOTICE

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

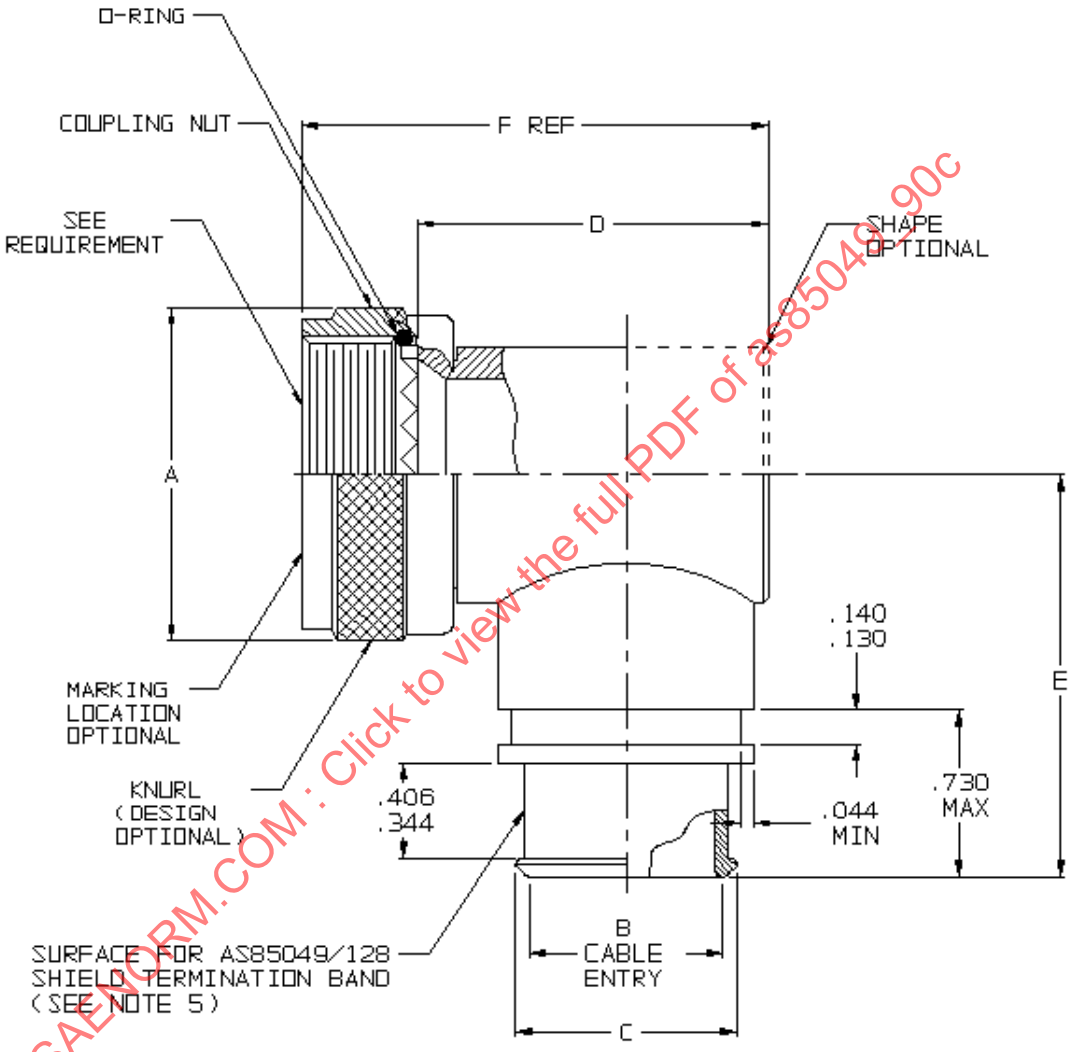
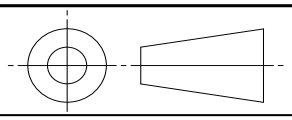


FIGURE 1 - CONFIGURATION AND DIMENSIONS

THIRD ANGLE PROJECTION



ISSUED 2000-06 REVISED 2012-08

CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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)

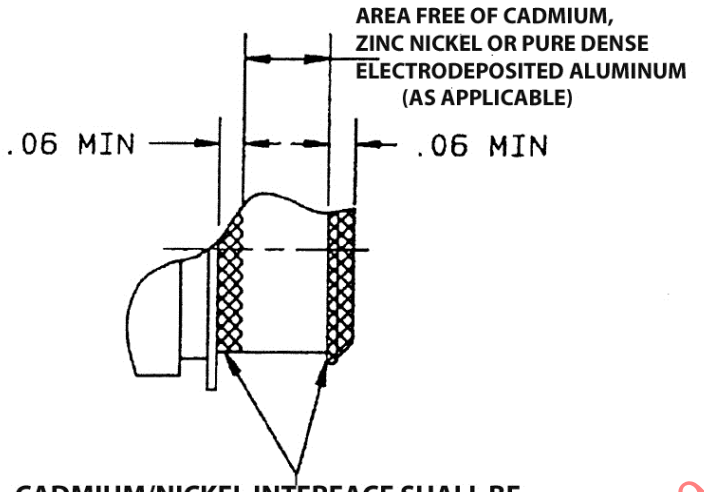


FIGURE 2 - SELECTIVE PLATING

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		

TABLE 1 - SHELL SIZE AND DIMENSIONS

ACCESSORY SHELL SIZE	SHELL SIZE CODE	A MAX DIA	B DIA +.025 / -.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: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS85049.

DESIGN AND CONSTRUCTION:

1. DIMENSIONS AND CONFIGURATION: SEE FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1.00 INCH (25.4 MM). PART SUPPLIED WITH STANDARD DETENTED SELF-LOCKING WHICH PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION 'N' IS A FREE SPINNING SELF-LOCKING COUPLING. CADMIUM, ZINC NICKEL OR PURE DENSE ELECTRODEPOSITED ALUMINUM/NICKEL INTERFACE SHALL BE COATED WITH POLYSULFIDE SEALANT. (NOT APPLICABLE FOR FINISH 'L'.)

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

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

4. MATERIAL AND FINISH: IN ACCORDANCE WITH AS85049 AND TABLE 2. RIBBED, INTERNAL KNURL OR SURFACE ROUGHNESS RA 125-250 IN ACCORDANCE WITH ANSI B46.1. SEE FIGURE 2 FOR SELECTIVE PLATING DETAILS.

TABLE 2 - MATERIAL AND FINISH

FINISH	MATERIAL
G – ELECTROLESS NICKEL 1/ (SPACE GRADE) N – ELECTROLESS NICKEL 1/ P – CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL, (SELECTIVE PLATING, SEE FIGURE 2) 2/ W – CADMIUM OLIVE DRAB 2/ X – NICKEL FLUOROCARBON POLYMER Z – ZINC NICKEL 2/ YP – PURE DENSE ELECTRODEPOSITED ALUMINUM OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2) ZP – ZINC NICKEL OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2) 2/	ALUMINUM ALLOY IN ACCORDANCE WITH AS85049
J – CADMIUM OLIVE DRAB 2/ L – CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL, (SELECTIVE PLATING, SEE FIGURE 2) 2/ 3/ M – ELECTROLESS NICKEL XC – NICKEL FLUOROCARBON POLYMER YL – PURE DENSE ELECTRODEPOSITED ALUMINUM, SELECTIVE PLATING, SEE FIGURE 2) 3/ ZC – ZINC NICKEL 2/ ZL – ZINC NICKEL (SELECTIVE PLATING, SEE FIGURE 2) 2/ 3/	COMPOSITE IN ACCORDANCE WITH AS85049 (COUPLING NUT, NON-CONDUCTIVE, NO FINISH)

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.