

REV. B

SAE AS85049/83

FEDERAL SUPPLY CLASS
5935

RATIONALE

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

NOTICE

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

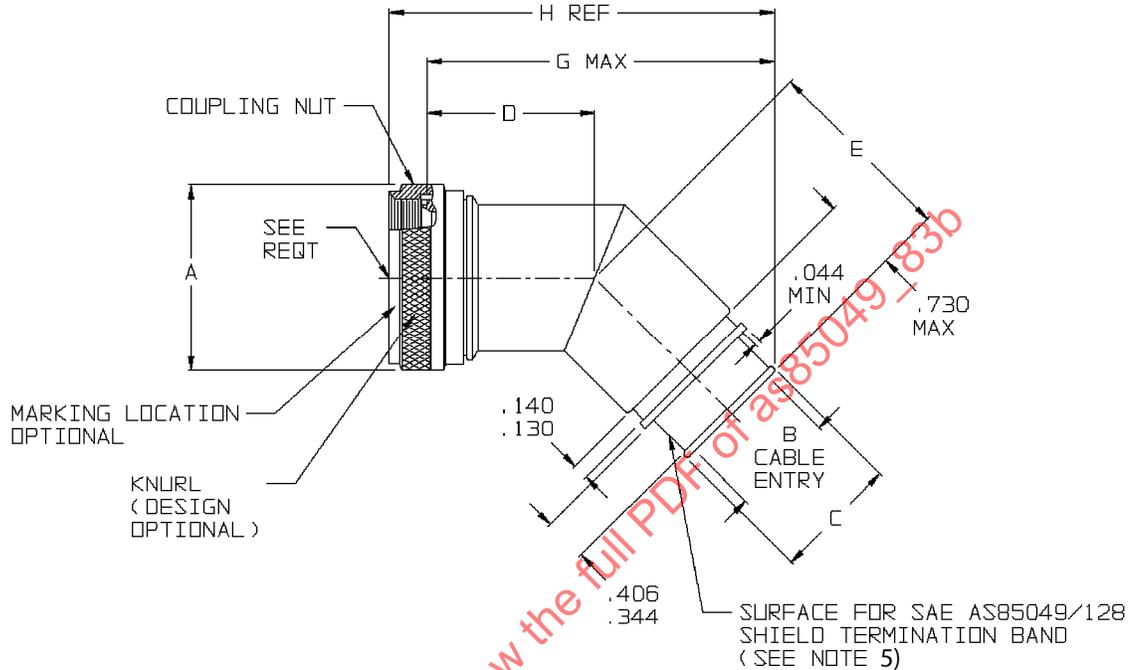


FIGURE 1 - CONFIGURATION AND DIMENSIONS

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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, 45°, SELF-LOCKING, SHIELD, BAND TERMINATION, (RFI/EMI), SHRINK SLEEVE ACCOMMODATION, CATEGORY 3B (FOR AS50151 CRIMP, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3 AND MIL-DTL-83723 SERIES III CONNECTORS)

SAE AS85049/83
SHEET 1 OF 4

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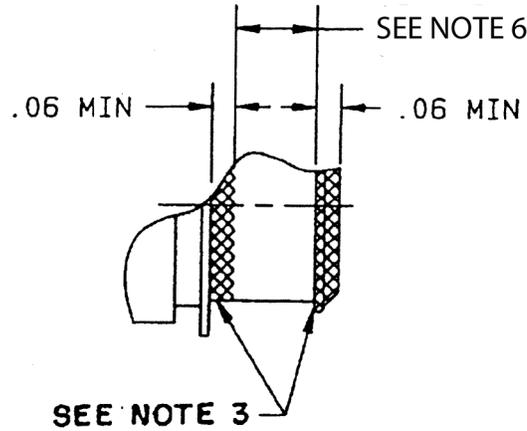
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ISSUED 2000-06 REVISED 2011-03



INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
.044	1.12	.500	12.70	.750	19.05	.957	24.30	1.190	30.23
.130	3.30	.562	14.27	.770	19.56	1.000	25.40	1.260	32.00
.140	3.56	.583	14.81	.812	20.62	1.010	25.65	1.270	32.26
.250	6.35	.625	15.88	.829	21.06	1.020	25.91	1.385	35.18
.312	7.92	.660	16.76	.875	22.22	1.083	27.51	1.510	38.35
.395	10.03	.684	17.37	.885	22.48	1.125	28.58	1.635	41.53
.438	11.13	.707	17.96	.895	22.73	1.135	28.83	1.750	44.45
.457	11.61	.730	18.54	.938	23.83	1.145	29.08	1.885	47.88
								2.135	54.23

FIGURE 2 - SELECTIVE PLATING

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.
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	FOR CONNECTOR SHELL SIZE (REF)				A MAX DIA	B DIA ±.010 ENTRY SIZE		C DIA REF	
	AS81703 SERIES 3	MIL-DTL-26482 SERIES 2	AS50151 CRIMP	MIL-DTL-83723 SERIES III		02	03	02	03
	08	---	8	8S		8	.885 (22.48)	N/A	.250 (6.35)
10	---	10	10S, 10SL	10	1.010 (25.65)	N/A	.312 (7.92)	N/A	.457 (11.61)
12	7	12	12S, 12	12	1.135 (28.83)	.312 (7.92)	.438 (11.13)	.457 (11.61)	.583 (14.81)
14	12	14	14S, 14	14	1.260 (32.00)	.438 (11.13)	.562 (14.27)	.583 (14.81)	.707 (17.96)
16	19	16	16S, 16	16	1.385 (35.18)	.500 (12.70)	.625 (15.88)	.645 (16.38)	.770 (19.56)
18	27	18	18	18	1.510 (38.35)	.625 (15.88)	.750 (19.05)	.770 (19.56)	.895 (22.73)
20	37	20	20	20	1.635 (41.53)	.625 (15.88)	.812 (20.62)	.770 (19.56)	.957 (24.31)
22	---	22	22	22	1.760 (44.70)	.688 (17.48)	.938 (23.83)	.829 (21.06)	1.083 (27.51)
24	---	24	24	24	1.885 (47.88)	.750 (19.05)	1.000 (25.40)	.895 (22.73)	1.145 (29.08)
28	---	---	28	---	2.135 (54.23)	.875 (22.23)	1.125 (28.58)	1.020 (25.91)	1.270 (32.26)

TABLE 1 - SHELL SIZE AND DIMENSIONS (CONTINUED)

ACCESSORY SHELL SIZE	FOR CONNECTOR SHELL SIZE (REF)				D MAX DIA	E MAX DIA	G MAX WITH C		H (REF) WITH C	
	AS81703 SERIES 3	MIL-DTL-26482 SERIES 2	AS50151 CRIMP	MIL-DTL-83723 SERIES III			02	03	02	03
08	---	8	8S	8	0.87 (22.10)	1.16 (29.46)	N/A	1.830 (46.48)	N/A	2.135 (54.23)
10	---	10	10S,10SL	10	0.89 (22.61)	1.18 (29.97)	N/A	1.886 (47.90)	N/A	2.191 (55.65)
12	7	12	12S, 12	12	0.92 (23.37)	1.20 (30.48)	1.930 (49.02)	1.975 (50.17)	2.235 (56.77)	2.280 (57.91)
14	12	14	14S, 14	14	0.94 (23.88)	1.22 (30.99)	2.009 (51.03)	2.053 (52.15)	2.314 (58.78)	2.358 (59.89)
16	19	16	16S, 16	16	0.96 (24.38)	1.25 (31.75)	2.072 (52.63)	2.116 (53.75)	2.377 (60.38)	2.421 (61.49)
18	27	18	18	18	0.98 (24.89)	1.26 (32.00)	2.143 (54.43)	2.187 (55.55)	2.448 (62.18)	2.492 (63.30)
20	37	20	20	20	1.00 (25.40)	1.29 (32.77)	2.184 (55.47)	2.251 (57.18)	2.489 (63.22)	2.556 (64.92)
22	---	22	22	22	1.03 (26.16)	1.31 (33.27)	2.249 (57.12)	2.339 (59.41)	2.554 (64.87)	2.644 (67.16)
24	---	24	24	24	1.05 (26.67)	1.34 (34.04)	2.314 (58.78)	2.402 (61.01)	2.619 (66.52)	2.707 (68.76)
28	---	---	28	---	1.10 (27.94)	1.38 (35.05)	2.594 (65.89)	2.683 (68.15)	3.061 (77.75)	3.150 (80.01)

REQUIREMENTS:

DESIGN AND CONSTRUCTION:

DIMENSIONS AND CONFIGURATION: SEE FIGURE 1 AND TABLE 1.

INTERFACE DIMENSIONS: SHALL CONFORM TO SAE AS85049, FIGURE 4 OR 4A.

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

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

TABLE 2 - MATERIAL AND FINISH

FINISH	MATERIAL
1/ N-ELECTROLESS NICKEL	ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049
2/ P-CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2)	
YP-PURE DENSE ELECTRODEPOSITED ALUMINUM OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2)	
2/ W-CADMIUM OLIVE DRAB	
X-NICKEL FLUOROCARBON POLYMER	
2/ Z-ZINC NICKEL	
2/ ZP- ZINC NICKEL OVER ELECTROLESS NICKEL (SELECTIVE PLATING, SEE FIGURE 2)	

1/ NOT FOR NAVY USE, RESTRICTED TO AIR FORCE SPACE APPLICATIONS ONLY.

2/ P, W, Z AND ZP FINISH NOT FOR USE IN SPACE APPLICATIONS. ALSO SEE SPECIFICATION NOTES.