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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. SEE APPLICATION NOTE 1.

SAE AS85049/78

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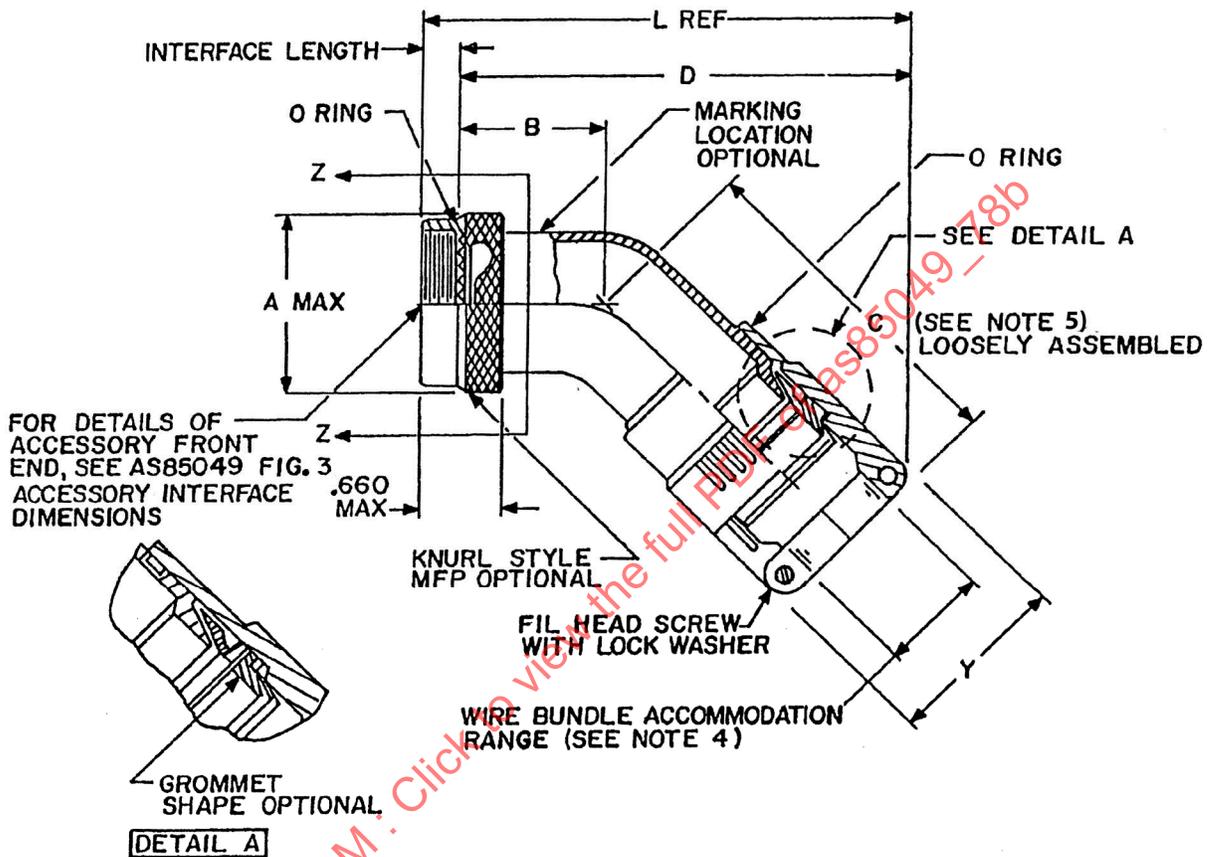


FIGURE 1 - CONFIGURATION AND DIMENSIONS

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

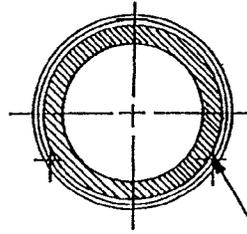
SAE Aerospace
An SAE International Group

AEROSPACE STANDARD
(R) CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, ENVIRONMENTAL, 45°, SHIELD TERMINATION, CATEGORY 2B, NONSELF-LOCKING (MIL-DTL-38999 SERIES III AND IV CONNECTORS)

SAE AS85049/78
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ISSUED 2000-06 REVISED 2011-03



3 EQUALLY SPACED
HOLES FOR .020 SAFETY WIRE

VIEW Z-Z

FIGURE 2 - SAFETY WIRE HOLES

NOTES:

1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING.
2. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY.
3. METRIC EQUIVALENTS ARE IN PARENTHESES.
4. SEE TABLE 1 FOR THE CLAMP SIZE AVAILABLE WITH EACH ACCESSORY SHELL SIZE. SEE TABLE 2 FOR WIRE BUNDLE ACCOMMODATION RANGE FOR EACH CLAMP SIZE. WIRE BUNDLE ACCOMMODATION RANGE IS NOT A CLAMP MEASUREMENT, BUT INDICATES THE ACTUAL RANGE THE CLAMP AND SEALING MEMBER MUST ACCOMMODATE. THE GROMMET SEALING DIMENSION SHALL MEET THE MAXIMUM WIRE BUNDLE ACCOMMODATION RANGE DIMENSION OF THE DESIGNATED CLAMP.
5. LOOSELY ASSEMBLED IS DEFINED AS THE CLAMP TIGHTENED TO THE AS85049/78 CONNECTOR ACCESSORY BODY TWO FULL THREAD LENGTHS.

TABLE 1 - CONNECTOR SHELL SIZE AND CLAMP SIZE

ACCESSORY SHELL SIZE	CLAMP SIZE (SEE TABLE 2) <u>1/</u>	A MAX DIA OF COUPLING RING	B ±.062	C ±.062	D MAX	L REF
09	01 THROUGH 02	.75 (19.1)	.398 (10.1)	3.088 (78.4)	3.06 (77.72)	3.31 (84.07)
11	01 THROUGH 03	.85 (21.6)	.458 (11.6)	3.148 (80.0)	3.20 (81.28)	3.45 (87.63)
13	02 THROUGH 04	1.00 (25.4)	.518 (13.2)	3.208 (81.5)	3.34 (84.84)	3.59 (91.19)
15	02 THROUGH 05	1.15 (29.2)	.588 (14.9)	3.298 (83.8)	3.49 (88.65)	3.74 (95.00)
17	02 THROUGH 06	1.25 (31.8)	.678 (17.2)	3.408 (86.6)	3.71 (94.23)	3.96 (100.58)
19	03 THROUGH 07	1.40 (35.6)	.868 (22.0)	3.598 (91.4)	4.01 (101.85)	4.32 (109.73)
21	03 THROUGH 08	1.55 (39.4)	.868 (22.0)	3.598 (91.4)	4.13 (104.90)	4.38 (111.25)
23	03 THROUGH 09	1.65 (41.9)	.958 (24.3)	3.748 (95.2)	4.36 (110.74)	4.61 (117.09)
25	04 THROUGH 10	1.85 (47.0)	.958 (24.3)	3.748 (95.2)	4.41 (112.01)	4.66 (118.36)

1/ SEE NOTE 4 OF FIGURE 1.

TABLE 2 - CLAMP SIZE AND DIMENSIONS

CLAMP SIZE	WIRE BUNDLE ACCOMMODATION RANGE		Y DIM MAX
	MIN ^{1/}	MAX ^{1/}	
01	.062 (1.57)	.125 (3.18)	.80 (20.3)
02	.125 (3.18)	.250 (6.35)	1.00 (25.4)
03	.250 (6.35)	.375 (9.53)	1.10 (27.9)
04	.375 (9.53)	.500 (12.70)	1.20 (30.5)
05	.500 (12.70)	.625 (15.88)	1.25 (31.8)
06	.625 (15.88)	.750 (19.05)	1.40 (35.6)
07	.750 (19.05)	.875 (22.23)	1.50 (38.1)
08	.875 (22.23)	1.000 (25.40)	1.65 (41.9)
09	1.000 (25.40)	1.125 (28.58)	1.75 (44.5)
10	1.125 (28.58)	1.250 (31.75)	1.90 (48.3)

^{1/} SEE NOTE 4 OF FIGURE 1.

REQUIREMENTS:

DESIGN AND CONSTRUCTION:

CONFIGURATION AND DIMENSIONS: SEE FIGURE 1 AND TABLES 1 AND 2.

INTERFACE DIMENSIONS: IN ACCORDANCE WITH SAE AS85049 FIGURE 3.

COUPLING NUT SHALL BE CAPTIVATED TO THE ADAPTER BODY AND FREE TO ROTATE.

TERMINATION METHOD: SINGLE SHIELD, SINGLE CONE.

SIMPLIFIED ASSEMBLY INSTRUCTIONS SHALL BE SHIPPED WITH THE UNIT PACKAGE.

MATERIAL:

ADAPTER BODY AND COUPLING NUT: ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049.

CLAMP SCREWS AND LOCKWASHERS: CORROSION-RESISTING STEEL, PASSIVATE.

GROMMET AND O-RINGS: SILICONE OR FLUOROSILICONE ELASTOMER IN ACCORDANCE WITH SAE AS85049.

FINISH: IN ACCORDANCE WITH SAE AS85049.

^{1/} N-ELECTROLESS NICKEL

^{2/} W-CADMIUM, OLIVE DRAB

X-NICKEL FLUOROCARBON POLYMER

^{2/} Z-ZINC NICKEL

^{1/} N FINISH NOT FOR NAVY USE, RESTRICTED TO AIR FORCE SPACE APPLICATIONS ONLY.

^{2/} W AND Z FINISH ARE NOT FOR USE IN SPACE APPLICATIONS. ALSO SEE SPECIFICATION NOTES.

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