invites your written comments and suggestions

stabilized, or cancelled. SAE i

reaffirmed,

SAE reviews each technical report at least every five years at which time it may be revised,

## **RATIONALE**

NEW SPECIFICATION REQUIREMENT FOR A STRAIN RELIEF TO ACCOMMODATE CONNECTORS UTILIZING EXTENDED CONTACT SEAL BOOTS.

## NOTICE

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

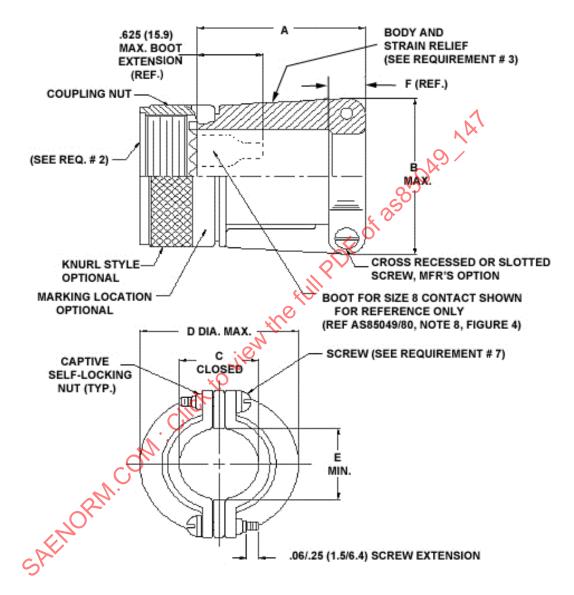
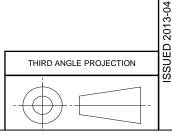


FIGURE 1 - DIMENSION AND CONFIGURATION

SAE values your input. To provide feedback on this Technical Report, please visit http://www.sae.org/technical/standards/AS85049/147



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



## **AEROSPACE STANDARD**

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, EXTENDED, STRAIGHT SELF-LOCKING, CATEGORY 4C (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)

SAE AS85049/147 SHEET 1 OF 3

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TABLE 1 - SHELL SIZES AND DIMENSIONS

	SHELL			С	_			
CONNECTOR	SIZE	Α	_	±.031	D	_	_	SCREW
SHELL	CODE	LENGTH	В	DIM	MAX	Е	F	SIZE
SIZE	(REF)	<u>1</u> /	MAX	<u>2</u> /	DIA	MIN	REF	(REF)
09	Α	1.35/1.41	.92	.219	.858	.22	.25	4-40
		(34.3/35.8)	(23.4)	(5.56)	(21.79)	(5.6)	(6.4)	
11	В	1.47/1.53	.97	.264	.984	.27	.25	4-40
		(37.3/38.9)	(24.6)	(6.71)	(24.99)	(6.9)	(6.4)	
13	С	1.60/1.66	1.19	.344	1.157	.35	.25	4-40
		(40.6/42.2)	(30.2)	(8.74)	(29.39)	(8.9)	(6.4)	
15	D	1.60/1.66	1.31	.460	1.279	.47	.25	4-40
		(40.6/42.2)	(33.3)	(11.68)	(32.49)	(11.9)	(6.4)	
17	Е	1.72/1.78	1.44	.545	1.406	.55	.25	4-40
		(43.7/45.2)	(36.6)	(13.84)	(35.71)	(14.0)	(6.4)	
19	F	1.97/2.03	1.56	.615	1.516	.62	.38	6-32
		(50.0/51.6)	(39.6)	(15.62)	(34.50)	(15.7)	(9.5)	
21	G	2.09/2.15	1.69	.698	1.642	.70	.38	6-32
		(53.1/54.6)	(42.9)	(17.73)	(41.70)	(17.8)	(9.5	
23	Н	2.22/2.28	1.75	.780	1.768	.78	.38	6-32
		(56.4/57.9)	(44.5)	(19.81)	(44.91)	(19.8)	(9.5)	
25	J	2.35/2.41	1.88	.850	1.869	.85	.38	6-32
		(59.7/61.2)	(47.8)	(21.59)	(47.98)	(21.6)	(9.5)	

- 1/ THE "A" DIMENSION IS MEASURED FROM THE BOTTOM OF THE ACCESSORY TEETH TO THE END OF THE STRAIN RELIEF.
- 2/ CABLE ENTRY IS MEASURED WITH SADDLE BARS CLOSED AND BOTTOMED ON CLAMP EARS.

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS85049.

## **DESIGN AND CONSTRUCTION:**

- CONNECTOR ACCESSORIES SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES
  AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON
  25.4 MM = 1 INCH.
- 2. INTERFACE DIMENSIONS SHALL CONFORM TO AS85049, FIGURE 3A.
- 3. ACCESSORIES CONSIST OF A COUPLING NUT AND STRAIN RELIEF. THE COUPLING NUT SHALL BE CAPTIVATED TO, AND ROTATABLE ON THE BODY.
- 4. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING.
- 5. CLAMPS SHALL HAVE NO PROTRUSIONS OR SHARP EDGES WHICH MAY PINCH CABLE.
- 6. MATERIAL AND FINISH: SEE TABLE 2. ACCESSORIES SHALL BE AS SHOWN IN TABLE 2.
- 7. LOCKNUTS AND SCREWS: 300 SERIES CORROSION-RESISTANT STEEL, PASSIVATE. SILVER PLATE OPTIONAL.
- 8. SELF-LOCKING DEVICE: CORROSION RESISTANT MATERIAL.
- 9. CONTACT SUPPORT: THIS STRAIN RELIEF MUST BE USED WITH THE FOLLOWING MILITARY INSERT ARRANGEMENTS; 17-2, 19-18, 21-75, 25-7, 25-8, 25-20, 25-46 AND 25-90 TO PREVENT SPLAYING OF THE CONTACTS AND ELIMINATE DAMAGE TO THE CONTACT AND CONNECTOR DURING MATING. IN ORDER TO SEAL THE CONTACT SIZE #8 CAVITY OF THESE INSERTS, AN ADDITIONAL BOOT IS REQUIRED AND IS SUPPLIED BY THE CONNECTOR MANUFACTURER.

