

REV.  
A

AS85049/118

FEDERAL SUPPLY CLASS  
5935

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

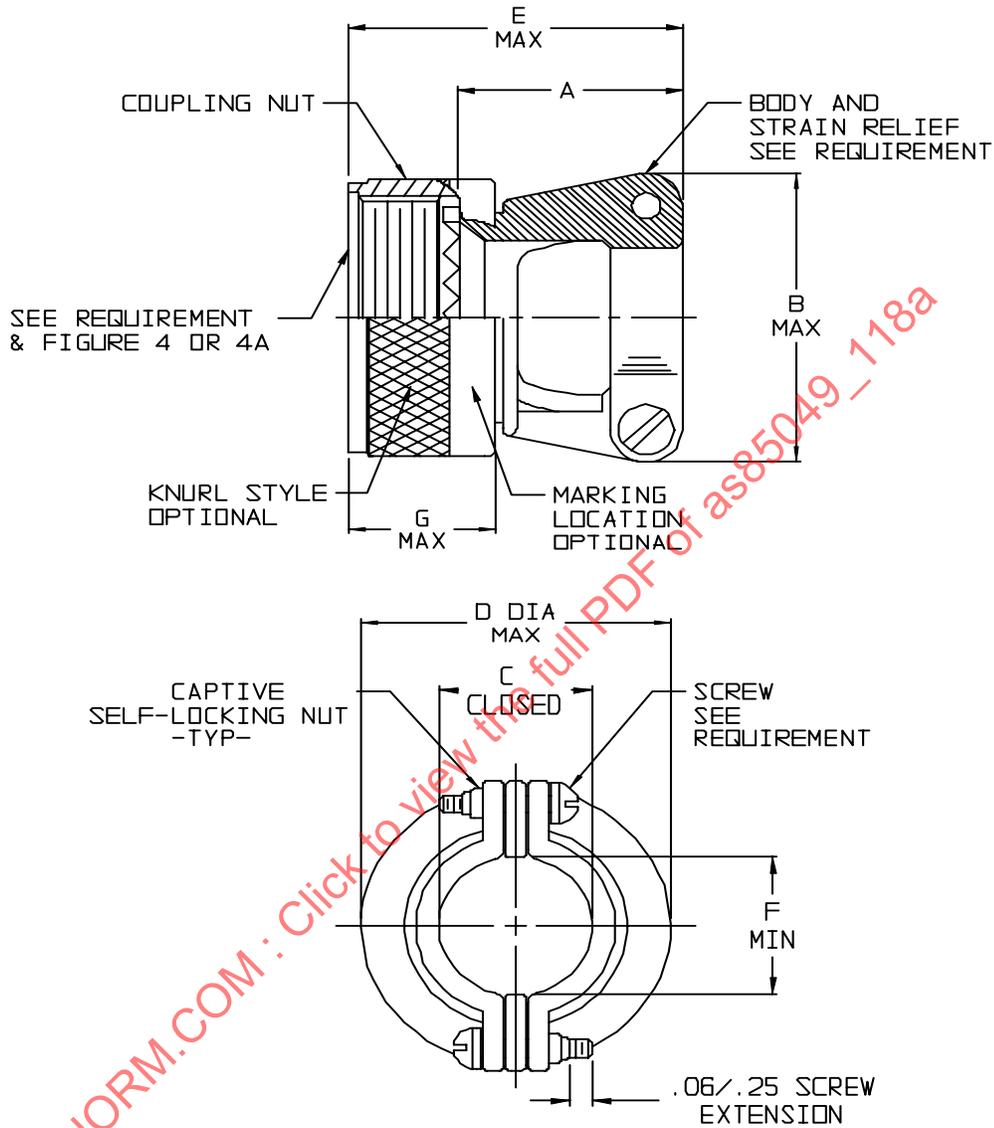
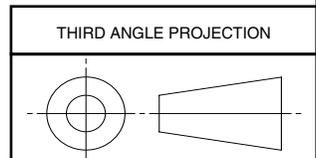


FIGURE 1 - DIMENSION AND CONFIGURATION



CUSTODIAN: SAE AE-8/AE-8C1



**AEROSPACE STANDARD**

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, STRAIGHT SELF-LOCKING, NON-SELF-LOCKING, CATEGORY 4B (FOR MIL-DTL-5015 CRIMP, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

**AS85049/118**  
SHEET 1 OF 4

**REV.**  
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TABLE 1 - SHELL SIZES AND DIMENSIONS

DASH NO.	CONNECTOR SHELL SIZE				A LENGTH 1/	B DIA MAX	C ±.031 DIM 2/	D MAX DIA	E MAX OVERALL LENGTH	F MIN	G MAX	SCREW SIZE (REF)
	MIL-DTL- 83723 SERIES 3	MIL-DTL- 5015 CRIMP	AS81703 SERIES 3	MIL-DTL- 26482 SERIES 2								
-03	N/A	N/A	3	N/A	.77/.51 (19.6/12.9)	.88 (22.4)	.219 (5.6)	.95 (24.1)	1.14 (29.0)	.22 (5.6)	.710 (18.0)	6-32
-08	8	8S	N/A	8	.77/.51 (19.6/12.9)	.88 (22.4)	.219 (5.6)	.89 (22.6)	1.14 (29.0)	.22 (5.6)	.710 (18.0)	6-32
-10	10	10S,10SL	N/A	10	.89/.64 (22.6/16.3)	.94 (23.9)	.264 (6.7)	1.01 (25.7)	1.25 (31.8)	.27 (6.9)	.710 (18.0)	6-32
-12	12	12,12S	7	12	1.01/.76 (25.7/19.3)	1.12 (28.4)	.344 (8.7)	1.14 (29.0)	1.38 (35.1)	.35 (8.9)	.710 (18.0)	6-32
-14	14	14,14S	12	14	1.01/.76 (25.7/19.3)	1.19 (30.2)	.460 (11.7)	1.26 (32.0)	1.38 (35.1)	.47 (11.9)	.710 (18.0)	6-32
-16	16	16,16S	19	16	1.13/.88 (28.7/22.4)	1.44 (36.6)	.545 (13.8)	1.39 (35.3)	1.50 (38.1)	.55 (14.0)	.710 (18.0)	6-32
-18	18	18	27	18	1.38/1.13 (35.1/28.7)	1.56 (39.6)	.615 (15.7)	1.51 (38.4)	1.75 (44.5)	.62 (15.7)	.710 (18.0)	8-32
-20	20	20	37	20	1.51/1.25 (38.4/31.6)	1.69 (42.9)	.698 (17.7)	1.64 (41.7)	1.88 (47.8)	.70 (17.8)	.710 (18.0)	8-32
-22	22	22	N/A	22	1.62/1.38 (41.1/35.1)	1.75 (44.5)	.780 (19.8)	1.76 (44.7)	2.00 (50.8)	.78 (19.8)	.710 (18.0)	8-32
-24	24	24	N/A	24	1.76/1.51 (44.7/38.4)	1.88 (47.8)	.850 (21.6)	1.89 (48.0)	2.13 (54.1)	.85 (21.6)	.710 (18.0)	8-32
-28	N/A	28	N/A	N/A	2.03/1.67 (51.6/42.4)	2.12 (53.8)	.950 (24.1)	2.14 (54.4)	2.56 (65.0)	.95 (24.1)	.890 (22.6)	8-32
-32	N/A	32	N/A	N/A	2.28/1.87 (57.9/46.7)	2.50 (63.5)	1.015 (25.3)	2.40 (61.0)	2.81 (71.4)	1.02 (25.9)	.890 (22.6)	1/4-20
-36	N/A	36	N/A	N/A	2.53/2.22 (64.3/56.4)	2.62 (66.5)	1.187 (30.1)	2.64 (67.1)	3.06 (77.7)	1.19 (30.2)	.890 (22.6)	1/4-20
-40	N/A	40	N/A	N/A	2.63/2.41 (66.8/61.2)	2.68 (68.1)	1.220 (31.0)	2.89 (73.4)	3.16 (80.3)	1.22 (31.0)	.890 (22.6)	1/4-20
-44	N/A	44	N/A	N/A	3.00/2.80 (76.2/71.1)	3.00 (76.2)	1.500 (37.3)	3.14 (79.8)	3.53 (89.7)	1.50 (37.3)	.890 (22.6)	1/4-20
-48	N/A	48	N/A	N/A	3.40/3.20 (86.4/81.3)	3.50 (88.9)	1.625 (41.3)	3.39 (86.1)	3.93 (99.8)	1.63 (41.3)	.890 (22.6)	1/4-20
-61	N/A	N/A	61	N/A	1.76/1.514 (44.7/57.9)	1.88 (47.8)	.850 (21.6)	1.95 (49.5)	2.13 (54.1)	.85 (21.6)	.710 (18.0)	8-32

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.

## NOTES:

- DIMENSIONS ARE IN INCHES.
- DIMENSIONS APPLY AFTER PLATING.
- METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON 25.4 MM = 1 INCH.
- MILLIMETERS ARE IN PARENTHESES.
- IF SCREWS WITH WIRE HOLES ARE REQUIRED PROCURER MAY REPLACE WITH MS35275 SCREWS AND MS35338 LOCKWASHERS.
- STRAIN RELIEF ACCOMMODATES SAE AS85049/127 BUSHING STRIP.

7. THE CHANGE BAR ( I ) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT.

## REQUIREMENTS:

## DESIGN AND CONSTRUCTION:

1. DIMENSIONS AND CONFIGURATION: SEE FIGURE 1 AND TABLE 1.
2. INTERFACE DIMENSIONS SHALL CONFORM TO SAE AS85049, FIGURE 4 OR 4A
3. ACCESSORIES CONSIST OF A COUPLING NUT, BODY 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.

TABLE 2 - MATERIAL AND FINISH

FIGURE	MATERIAL	FINISH
1	ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049	A N <u>1</u> / W <u>2</u> /
	CORROSION RESISTANT STEEL 300 SERIES IN ACCORDANCE WITH SAE AMS 763	S

1/ NOT FOR NAVY USE. AIR FORCE USE IS FOR SPACE APPLICATIONS ONLY. W IS THE PREFERRED FINISH.  
2/ W IS NOT FOR USE IN SPACE APPLICATION.

## SELF-LOCKING DEVICES DESIGN AND CONSTRUCTION:

1. COUPLINGS WITH SELF-LOCKING DEVICES SHALL MEET ALL THE REQUIREMENTS SPECIFIED HEREIN FOR ITS SPECIFIC CATEGORY AND THE FOLLOWING ADDITIONAL TEST:
  - a. LIFE CYCLE: SEE AS85049 PARA 4.6.15
  - b. VIBRATION: SEE AS85049 PARA 3.5.4.1