

REV.
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AS85049/57

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

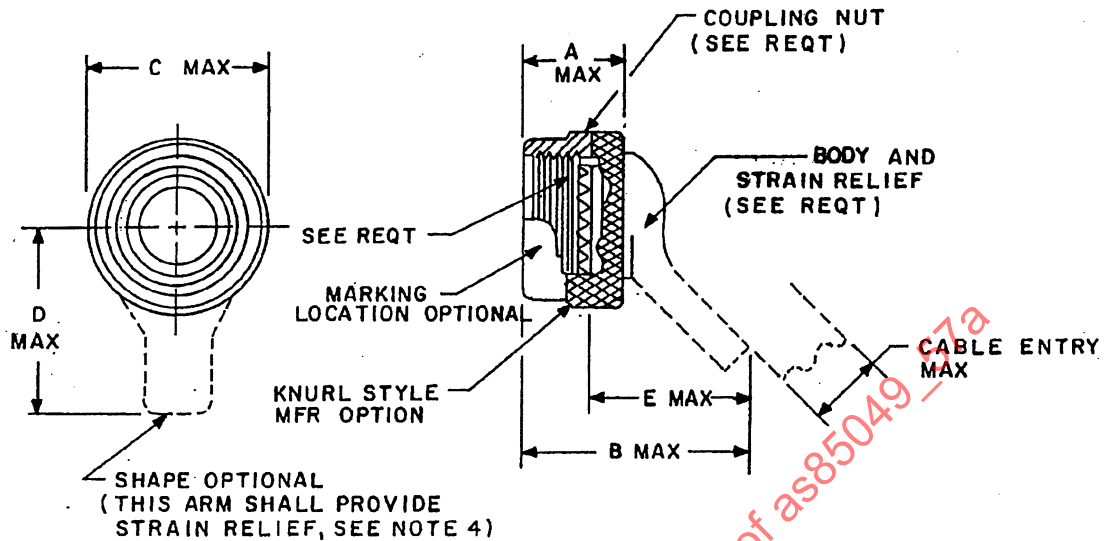
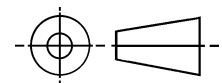


FIGURE 1 - DIMENSIONS AND CONFIGURATIONS (SELF-LOCKING AND NON-SELF-LOCKING)

THIRD ANGLE PROJECTION



CUSTODIAN: SAE AE-8/AE-8C1

SAE Aerospace
An SAE International Group

(R)

AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL,
STRAIN RELIEF, 45°, SELF-LOCKING AND
NON-SELF-LOCKING, CATEGORY 4C
(MIL-DTL-38999 SERIES I AND II CONNECTORS)

AS85049/57
SHEET 1 OF 5

**REV.
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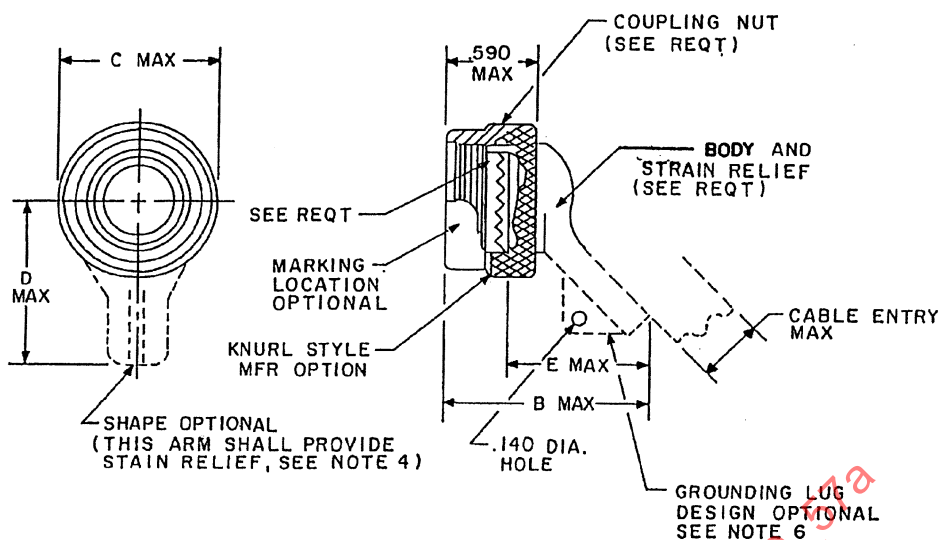
Shell sizes and dimensions

Dash number	Connector shell size		A max		B max	C max		D max	E max	Cable entry max
	Series II	Series I	Non-self-locking	Self-locking		Non-self-locking	Self-locking			
8	8	9	.540 (13.7)	.590 (14.99)	1.25 (31.8)	.75 (19.1)	.86 (21.8)	.88 (22.3)	1.03 (26.2)	.264 (6.71)
10	10	11	.540 (13.7)	.590 (14.99)	1.25 (31.8)	.85 (21.6)	.98 (24.9)	.88 (22.3)	1.03 (26.2)	.392 (9.96)
12	12	13	.540 (13.7)	.590 (14.99)	1.25 (31.8)	1.00 (25.4)	1.16 (29.5)	.94 (23.9)	1.03 (26.2)	.506 (12.9)
14	14	15	.540 (13.7)	.590 (14.99)	1.31 (33.3)	1.10 (27.9)	1.28 (32.5)	1.25 (31.8)	1.09 (27.7)	.631 (16.0)
16	16	17	.540 (13.7)	.590 (14.99)	1.33 (33.8)	1.25 (31.8)	1.41 (35.8)	1.31 (33.3)	1.11 (28.2)	.756 (19.2)
18	18	19	.540 (13.7)	.590 (14.99)	1.43 (36.3)	1.40 (35.6)	1.52 (38.6)	1.38 (35.1)	1.21 (30.7)	.845 (21.5)
20	20	21	.540 (13.7)	.590 (14.99)	1.48 (37.6)	1.50 (38.1)	1.64 (41.7)	1.50 (38.1)	1.26 (32.0)	.970 (24.6)
22	22	23	.540 (13.7)	.590 (14.99)	1.52 (38.6)	1.65 (41.9)	1.77 (45.0)	1.69 (42.9)	1.30 (33.0)	1.095 (27.81)
24	24	25	.540 (13.7)	.590 (14.99)	1.56 (39.6)	1.75 (44.5)	1.89 (48.0)	1.75 (44.5)	1.34 (34.0)	1.220 (30.99)

NOTES:

- Dimensions are in inches.
- Tolerances shall be: .xx = ± 0.03 and .xxx = ± 0.15 angular tolerances
x = $\pm 2^\circ$.
- Metric equivalents are in parentheses and are given for general information only.
- Strain relief unit is used with MS3367-1-X plastic strap, MIL-T-713 lacing twine or AA-52080-AA-52084 lacing tape or equivalent, not supplied with the backshell.
- This accessory will not accommodate connectors using 8, 4 and 0 contacts.
- Not for Navy use. Not for New Design for Air Force.

FIGURE 1 - DIMENSIONS AND CONFIGURATIONS (SELF-LOCKING AND NON-SELF-LOCKING) - CONTINUED



Shell sizes and dimensions

Dash number	Connector Shell size		B max	C dia max	D max	E max	Cable entry	Dash number	Connector Shell size		B max	C dia max	D max	E max	Cable entry max
	Series II	Series I							Series II	Series I					
8	8	9	1.40 (35.6)	.859 (21.82)	.88 (22.3)	1.21 (30.7)	.264 (6.71)	16	16	17	1.58 (40.1)	1.406 (35.71)	1.31 (33.3)	1.39 (35.3)	.756 (19.20)
10	10	11	1.40 (35.6)	.984 (24.99)	.88 (22.3)	1.21 (30.7)	.392 (9.96)	18	18	19	1.58 (40.1)	1.516 (38.51)	1.38 (35.1)	1.39 (35.3)	.845 (21.46)
12	12	13	1.58 (40.1)	1.156 (29.36)	.94 (23.8)	1.39 (35.3)	.506 (12.85)	20	20	21	1.58 (40.1)	1.641 (41.68)	1.50 (38.1)	1.39 (35.3)	.970 (24.64)
14	14	15	1.58 (40.1)	1.281 (32.54)	1.25 (31.8)	1.39 (35.3)	.631 (16.03)	22	22	23	1.58 (40.1)	1.766 (44.86)	1.69 (42.9)	1.39 (35.3)	1.095 (27.81)
								24	24	25	1.58 (40.1)	1.891 (48.03)	1.75 (44.5)	1.39 (35.3)	1.220 (30.99)

NOTES:

- Dimensions are in inches.
- Tolerances shall be: .xx = ± 0.03 and .xxx = ± 0.015 angular tolerances
x = ± 2 .
- Metric equivalents are in parentheses and are given for general information only.
- Strain relief unit is used with MS3367-1-X plastic strap, MIL-T-713 lacing twine or AA-52080-AA-52084 lacing tape or equivalent, not supplied with the backshell.
- This accessory will not accommodate connectors using 8, 4 and 0 contacts.
- Not for Navy use. Not for New Design for Air Force.

FIGURE 2 - DIMENSIONS AND CONFIGURATIONS (SELF-LOCKING ONLY WITH GROUNDING LUG)

REQUIREMENTS:

1. DESIGN AND CONSTRUCTION:

DIMENSIONS AND CONFIGURATION: SEE FIGURES 1 AND 2.

2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH AS85049, FIGURE 2.

3. ACCESSORY: CONSISTS OF A COUPLING NUT AND BODY WITH STRAIN RELIEF ARM. THE COUPLING NUT SHALL BE CAPTIVATED TO THE BODY AND ROTATEABLE.

4. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING.

5. MATERIAL:

- a. COUPLING NUT AND FOLLOWER: ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049.
- b. TIE MOUNT: POLYAMIDE (OPTIONAL).
- c. FASTENER: STAINLESS STEEL (OPTIONAL).
- d. SELF-LOCKING DEVICE: CORROSION RESISTANT MATERIAL.

6. FINISH: IN ACCORDANCE WITH AS85049, N 1/ OR W 2/.

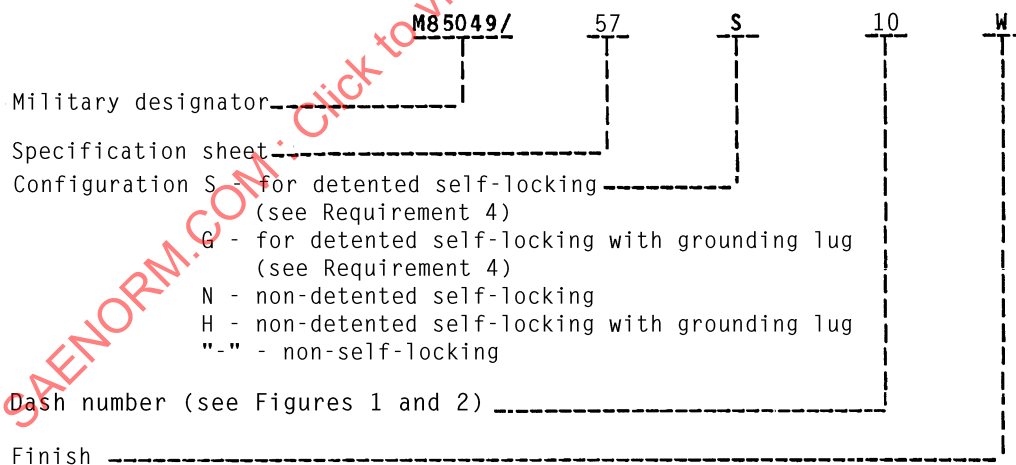
7. SELF-LOCKING DEVICES DESIGN AND CONSTRUCTION: COUPLINGS WITH SELF-LOCKING DEVICES SHALL MEET ALL THE REQUIREMENTS SPECIFIED HEREIN FOR ITS SPECIFIC CATEGORY AND THE FOLLOWING ADDITIONAL TESTS:

- a. LIFE CYCLE: SEE SAE AS85049, PARAGRAPH 4.6.15.
- b. VIBRATION: SEE SAE AS85049, PARAGRAPH 3.5.4.1.

8. QUALIFICATION: SEE SAE AS85049, CATEGORY 4C, CABLE PULLOUT NOT APPLICABLE..

9. QUALIFICATION IS REQUIRED FOR U.S. GOVERNMENT PROCUREMENT. THE QPL EVALUATING ACTIVITY, FOR U.S. DEPARTMENT OF DEFENSE PROCUREMENT PURPOSES, NAVAL AIR SYSTEMS COMMAND (CODE 4.4.4.3), 48142 SHAW ROAD, BLDG. 3197, SUITE E, PATUXENT RIVER, MD 20670.

10. PART NUMBER: SEE EXAMPLE BELOW:



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