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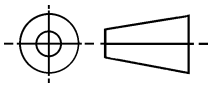

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PREPARED BY SAE SUBCOMMITTEE AE-8C1

SAE The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, 90°, SELF-LOCKING AND NONSELF-LOCKING, CATEGORY 4B
(FOR MIL-C-38999 SERIES I AND II CONNECTORS)

AS85049/47
SHEET 1 OF 5

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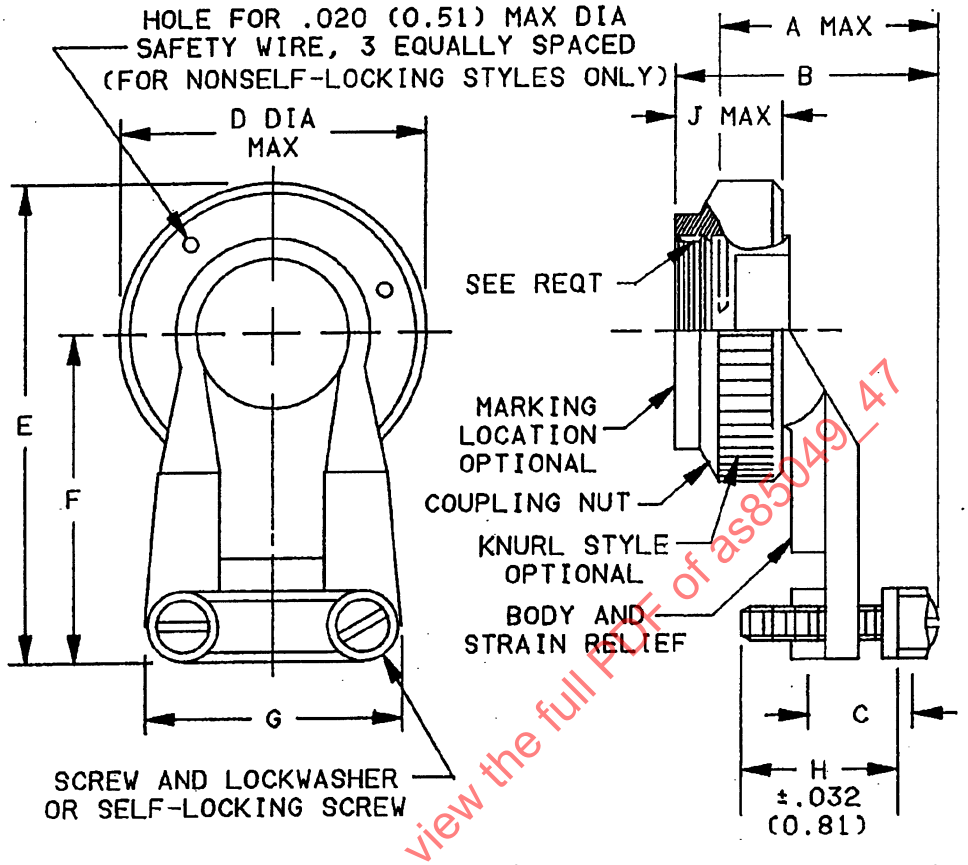

FIGURE 1. DIMENSIONS AND CONFIGURATION (SELF-LOCKING AND NONSELF-LOCKING).

Shell sizes and dimensions

Dash no.	Connector shell size		A max	B max open	C		D max		E max	F max	G max	H Screw length	Screw size	J max	
	Series II	Series I			Max	Min	Self-locking	Non-self-locking						Self-locking	Non-self-locking
8	8	9	1.16 (29.5)	1.38 (35.1)	.234 (5.94)	.098 (2.49)	.86 (21.8)	.75 (19.1)	1.38 (35.1)	1.00 (25.4)	.85 (21.6)	.500 (12.70)	6-32	.590 (14.99)	.540 (13.72)
10	10	11	1.16 (29.5)	1.38 (35.1)	.234 (5.94)	.153 (3.89)	.98 (24.9)	.85 (21.6)	1.53 (38.9)	1.10 (27.9)	.90 (22.9)	.500 (12.70)	6-32	.590 (14.99)	.540 (13.72)
12	12	13	1.24 (31.5)	1.46 (37.1)	.328 (8.33)	.190 (4.83)	1.16 (29.5)	1.00 (25.4)	1.60 (40.6)	1.10 (27.9)	1.10 (27.9)	.625 (15.88)	6-32	.590 (14.99)	.540 (13.72)
14	14	15	1.41 (35.8)	1.63 (41.4)	.457 (11.61)	.260 (6.60)	1.28 (32.5)	1.10 (27.9)	1.80 (45.7)	1.25 (31.8)	1.15 (29.2)	.750 (19.05)	6-32	.590 (14.99)	.540 (13.72)
16	16	17	1.58 (40.1)	1.80 (45.7)	.634 (16.10)	.283 (7.19)	1.41 (35.8)	1.25 (31.8)	1.93 (49.0)	1.30 (33.0)	1.30 (33.0)	.750 (19.05)	6-32	.590 (14.99)	.540 (13.72)
18	18	19	1.60 (40.6)	1.82 (46.2)	.614 (15.60)	.325 (8.26)	1.52 (38.6)	1.40 (35.6)	2.05 (52.1)	1.35 (34.3)	1.50 (38.1)	.750 (19.05)	8-32	.590 (14.99)	.540 (13.72)
20	20	21	1.68 (42.7)	1.90 (48.3)	.698 (17.73)	.343 (8.71)	1.64 (41.7)	1.50 (38.1)	2.35 (59.7)	1.60 (40.6)	1.60 (40.6)	.875 (22.23)	8-32	.590 (14.99)	.540 (13.72)
22	22	23	1.82 (46.2)	2.04 (51.1)	.823 (20.90)	.381 (9.68)	1.77 (45.0)	1.65 (41.9)	2.58 (65.5)	1.75 (44.5)	1.70 (43.2)	1.000 (25.40)	8-32	.590 (14.99)	.540 (13.72)
24	24	25	1.93 (49.0)	2.15 (54.6)	.853 (21.67)	.418 (10.62)	1.89 (48.0)	1.75 (44.5)	2.73 (69.3)	1.85 (47.0)	1.80 (45.7)	1.125 (28.58)	8-32	.590 (14.99)	.540 (13.72)

NOTES:
1. Dimensions are in inches.
2. Millimeters are in parentheses.
3. Metric equivalents are given for general information only.
4. Dimensions apply after plating.
5. Unless otherwise specified, tolerance is ±.005 (0.13 mm).

FIGURE 1. DIMENSIONS AND CONFIGURATION (SELF-LOCKING AND NONSELF-LOCKING) - CONTINUED.

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AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, 90°, SELF-LOCKING AND NONSELF-LOCKING, CATEGORY 4B
(FOR MIL-C-38999 SERIES I AND II CONNECTORS)

REQUIREMENTS:

Self-locking and nonself-locking styles:

Design and construction:

Dimensions and configurations: See figure 1.

Interface dimensions: In accordance with MIL-C-38999, series I and II.

Accessory: Consists of a coupling nut and body. The coupling nut shall be captivated to, and free to rotate on the body. This accessory will not accommodate connectors using size 8, 4, or 0 contacts.

Material and finish: See table I. Accessories shall be as shown in table I.

Clamp screws and lockwashers: 300 series corrosion-resistant steel, passivate.

TABLE I. MATERIAL AND FINISH

Figure	Material	Finish
1	Aluminum alloy in accordance with MIL-C-85049	W N 1/
1	Corrosion-resistant steel, 300 series in accordance with QQ-S-763	S

1/ Not for Navy use. Air Force use for space applications only.

Self-locking styles only:

Self-locking device within the coupling nut shall be corrosion-resistant metal and shall provide a positive detent. Couplings with self-locking devices shall meet all the performance requirements specified herein for its specific category and the following additional tests.

Life cycle: The coupling with the locking device engaged shall be rotated 60 full turns in a clockwise direction and 60 full turns counter clockwise, prior to standard qualification testing. Cycle speed shall not exceed one full turn per second.

Locking: Coupling nut torque shall be 80 percent of coupling thread strength values given for medium and light duty accessories as specified in table III of MIL-C-85049. In table III where N/A appears, the values shall be 80 percent of those values used in qualification testing for coupling thread strength. Tolerance shall be ±5 inch pounds.

Vibration: Backshells shall be subjected to test parameters of applicable connector specifications. The coupling torque shall be within +20, -10 inch-pounds of the initial value.