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SAE AS85049/47

FEDERAL SUPPLY CLASS
5935

RATIONALE

REVISED TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY, REMOVE GOVERNMENT JARGON, INCORPORATE AMENDMENTS, AND UP-DATE SPECIFICATION REFERENCES.

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

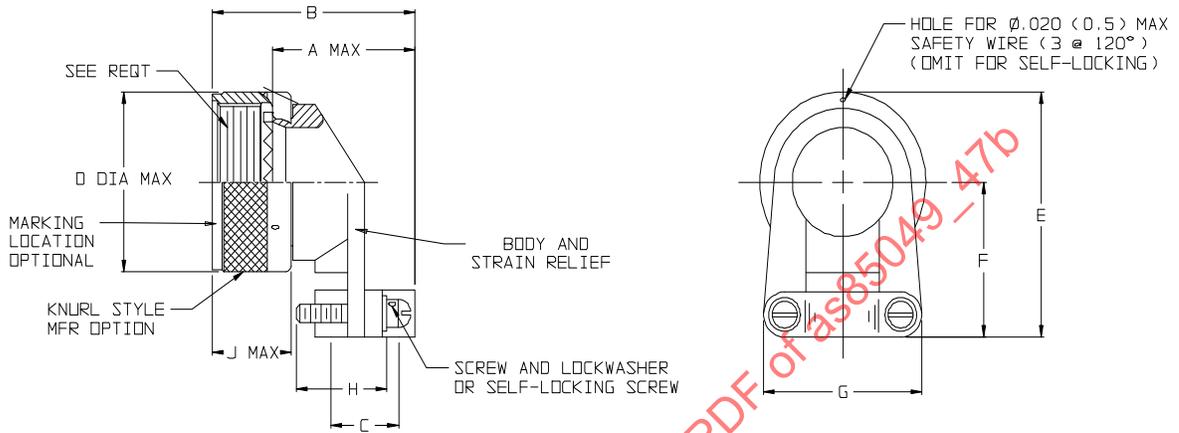
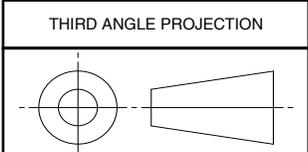


FIGURE 1 - DIMENSIONS AND CONFIGURATION (SELF-LOCKING AND NON-SELF-LOCKING)

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
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AEROSPACE STANDARD

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

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SHEET 1 OF 5

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ISSUED 2000-05 REVISED 2009-08

TABLE 1-DIMENSIONS (SELF-LOCKING AND NON-SELF-LOCKING)

DASH NUMBER	CONNECTOR SHELL SIZE		A MAX (SEE NOTE 7)	B MAX OPEN	C WIRE BUNDLE ACCOMMODATION RANGE SEE NOTE 6		D MAX	
	SERIES II	SERIES I			MAX	MIN	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)
10	10	11	1.16 (29.5)	1.38 (35.1)	.234 (5.94)	.153 (3.89)	.98 (24.9)	.85 (21.6)
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)
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)
16	16	17	1.58 (40.1)	1.80 (45.7)	.614 (15.60)	.283 (7.19)	1.41 (35.8)	1.25 (31.8)
18	18	19	1.60 (40.6)	1.82 (46.2)	.634 (16.10)	.325 (8.26)	1.52 (38.6)	1.40 (35.6)
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)
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)
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)

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TABLE 1 - DIMENSIONS (SELF-LOCKING AND NON-SELF-LOCKING, CONTINUED)

DASH NUMBER	CONNECTOR SHELL SIZE		E MAX	F MAX	G MAX	H SCREW LENGTH +.000 -.062	SCREW SIZE	J MAX	
	SERIES II	SERIES I						SELF-LOCKING	NON-SELF-LOCKING
8	8	9	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	1.53 (38.9)	1.10 (27.9)	.90 (22.9)	.500 (12.70)	6-32	.590 (14.99)	.540 (13.72)
12	12	13	1.60 (40.6)	1.10 (27.9)	1.10 (27.9)	.625 (15.88)	6-32	.590 (14.99)	.540 (13.72)
14	14	15	1.80 (45.7)	1.25 (31.8)	1.15 (29.2)	.750 (19.05)	6-32	.590 (14.99)	.540 (13.72)
16	16	17	1.93 (49.0)	1.30 (33.0)	1.30 (33.0)	.750 (19.05)	6-32	.590 (14.99)	.540 (13.72)
18	18	19	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	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	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	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. DIMENSIONS APPLY AFTER PLATING.
3. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY.
4. MILLIMETERS ARE IN PARENTHESES.
5. UNLESS OTHERWISE SPECIFIED, TOLERANCE IS $\pm .005$ (0.13MM).
6. WIRE BUNDLE ACCOMMODATION RANGE DIMENSION IS DEFINED AS THE ENVELOPE AREA OF THE WIRE BUNDLE. THIS DIMENSION IS NOT MEANT TO DEFINE THE CLAMP HARDWARE LIMITS.
7. THE "A" DIMENSION IS MEASURED FROM THE BOTTOM OF THE ACCESSORY TEETH TO THE REAR OF THE SADDLE CLAMP.

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

REQUIREMENTS

1. DESIGN AND CONSTRUCTION

DIMENSIONS AND CONFIGURATION: SEE FIGURE 1.

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

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

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

5. MATERIAL AND FINISH: SEE TABLE 2. ACCESSORIES SHALL BE AS SHOWN IN TABLE 2.

TABLE 2 - MATERIAL AND FINISH

FIGURE	MATERIAL	FINISH
1	ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049	N ^{1/} W ^{2/}
1	CORROSION RESISTANT STEEL 300 SERIES IN ACCORDANCE WITH SAE AS85049	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. ALSO SEE SPECIFICATION NOTE

6. CLAMP SCREWS AND LOCKWASHERS: 300 SERIES CORROSION-RESISTANT STEEL, PASSIVATE.

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 4B.

9. ACCESSORIES ARE NOT RECOMMENDED FOR CONNECTORS USING CO-AX, DATA BUS, NO. 8 CONDUCTORS. WHEN USED WITH MAXIMUM DENSITY ARRANGEMENTS, CLAMP MAY OPEN OUTER WIRE SEALS.

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