

REV. B

SAE AS85049/38

RATIONALE

FEDERAL SUPPLY CLASS  
5935

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.

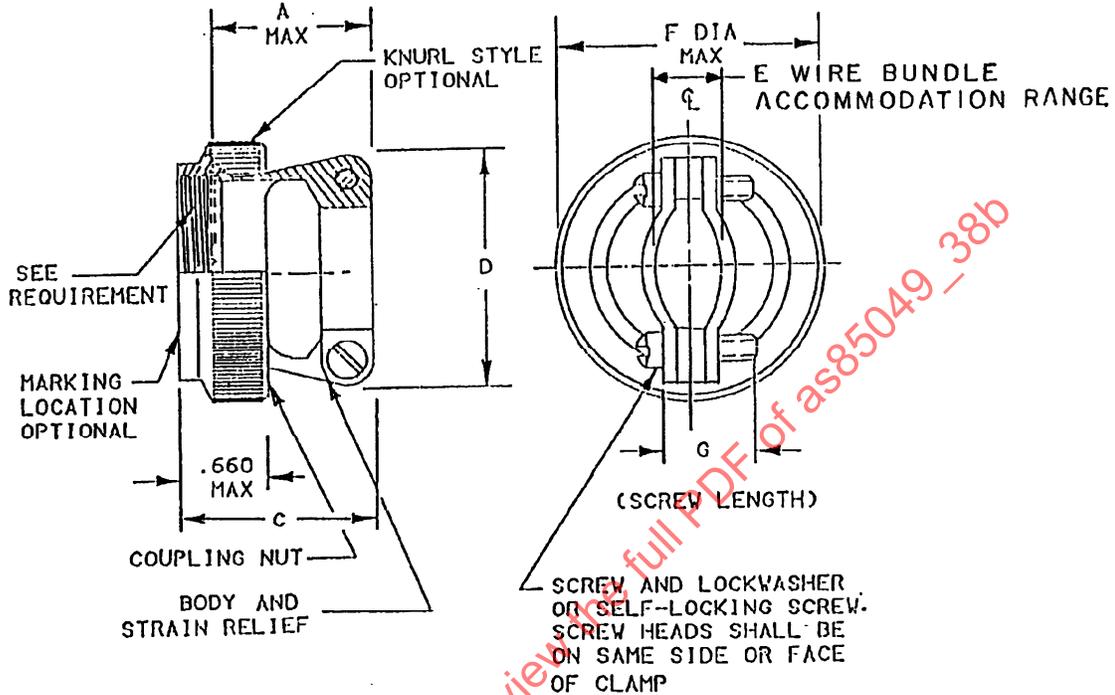
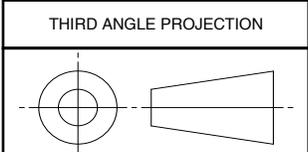


FIGURE 1 - DIMENSION AND CONFIGURATION (SELF-LOCKING ONLY)

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

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

**SAE AS85049/38**  
SHEET 1 OF 5

**REV. B**

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ISSUED 2000-05 REVISED 2009-08

TABLE 1A - SHELL SIZES AND DIMENSIONS (SELF LOCKING ONLY)

CONNECTOR SHELL SIZE	SHELL SIZE CODE (REF)	C MAX OVERALL LENGTH	D MAX	E WIRE BUNDLE ACCOMMODATE RANGE SEE NOTE 5		F MAX DIA	G SCREW LENGTH	SCREW THREADS	A MAX (SEE NOTE 6)
				MIN	MAX				
9	A	1.21 (30.7)	.85 (21.6)	.098 (2.49)	.234 (5.94)	.858 (21.79)	.500 (12.70)	6-32	.91 (23.1)
11	B	1.21 (30.7)	.90 (22.9)	.153 (3.89)	.234 (5.94)	.984 (24.99)	.500 (12.70)	6-32	.91 (23.1)
13	C	1.31 (33.3)	1.10 (27.9)	.190 (4.83)	.328 (8.33)	1.157 (29.39)	.625 (15.88)	6-32	1.01 (25.70)
15	D	1.35 (34.3)	1.15 (29.2)	.260 (6.60)	.457 (11.61)	1.279 (32.49)	.750 (19.05)	6-32	1.06 (26.9)
17	E	1.45 (36.8)	1.30 (33.0)	.283 (7.19)	.614 (15.60)	1.406 (35.71)	.750 (19.05)	6-32	1.16 (29.5)
19	F	1.71 (43.4)	1.50 (38.1)	.325 (8.26)	.634 (16.10)	1.516 (38.51)	.750 (19.05)	8-32	1.41 (35.8)
21	G	1.81 (46.0)	1.60 (40.6)	.343 (8.71)	.698 (17.73)	1.642 (41.71)	.875 (22.23)	8-32	1.51 (38.4)
23	H	1.95 (49.5)	1.70 (43.2)	.381 (9.68)	.823 (20.90)	1.768 (44.91)	1.000 (25.40)	8-32	1.66 (42.2)
25	J	2.05 (52.1)	1.80 (45.7)	.418 (10.62)	.853 (21.67)	1.889 (47.98)	1.125 (28.58)	8-32	1.76 (44.7)

NOTES:

- DIMENSIONS ARE IN INCHES.
- DIMENSIONS APPLY AFTER PLATING.
- METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY.
- MILLIMETERS ARE IN PARENTHESES.
- 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.
- THE "A" DIMENSION IS MEASURED FROM THE BOTTOM OF THE ACCESSORY TEETH TO THE END OF THE CLAMP.

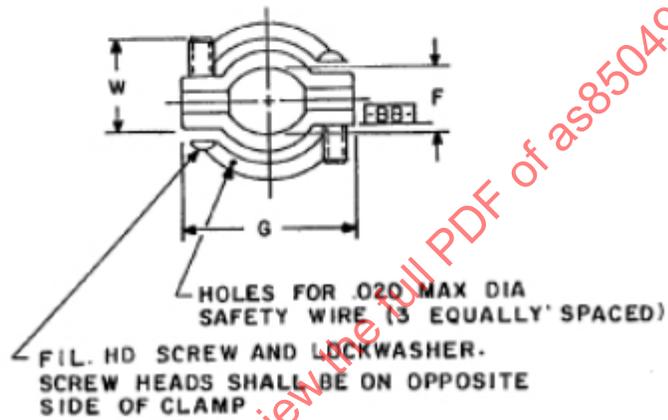
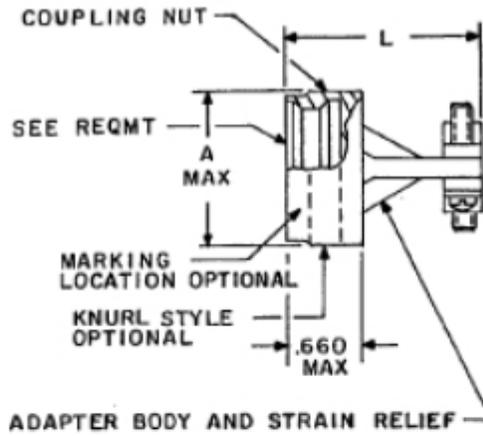


FIGURE 2 - DIMENSIONS AND CONFIGURATIONS (NON-SELF-LOCKING ONLY)

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TABLE 1B - SHELL SIZES AND DIMENSIONS (NON-SELF-LOCKING ONLY)

CONNECTOR SHELL SIZE	SHELL SIZE CODE (REF)	A MAX	F WIRE BUNDLE ACCOMMODATION RANGE (SEE NOTE 5)		G MAX DIA	L MAX	W +.000 -.062 SCREW LENGTH	SCREW SIZE
			MIN	MAX				
9	A	.75 (19.1)	.098 (2.49)	.234 (5.94)	.85 (21.6)	1.10 (27.9)	.500 (12.70)	6-32
11	B	.85 (21.6)	.153 (3.89)	.234 (5.94)	.90 (22.9)	1.10 (27.9)	.500 (12.70)	6-32
13	C	1.00 (25.4)	.190 (4.83)	.328 (8.33)	1.10 (27.9)	1.20 (30.5)	.625 (15.88)	6-32
15	D	1.10 (27.9)	.260 (6.60)	.457 (11.61)	1.15 (29.2)	1.25 (31.8)	.750 (19.05)	6-32
17	E	1.25 (31.8)	.283 (7.19)	.614 (15.60)	1.30 (33.0)	1.35 (34.3)	.750 (19.05)	6-32
19	F	1.40 (35.6)	.325 (8.26)	.634 (16.10)	1.50 (38.1)	1.60 (40.6)	.750 (19.05)	8-32
21	G	1.50 (38.1)	.343 (8.71)	.698 (17.73)	1.60 (40.6)	1.70 (43.2)	.875 (22.23)	8-32
23	H	1.65 (41.9)	.381 (9.68)	.823 (20.90)	1.70 (43.2)	1.85 (47.0)	1.000 (25.40)	8-32
25	J	1.75 (44.5)	.418 (10.62)	.853 (21.67)	1.80 (45.7)	1.95 (49.5)	1.125 (28.58)	8-32

NOTES:

1. DIMENSIONS ARE IN INCHES.
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4. MILLIMETERS ARE IN PARENTHESES.
5. 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.

REQUIREMENTS

1. DESIGN AND CONSTRUCTION:  
DIMENSIONS AND CONFIGURATION: SEE FIGURES 1 AND 2.
2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH SAE AS85049, FIGURE 3.
3. ACCESSORY: CONSISTS OF A COUPLING NUT AND FOLLOWER. THE COUPLING NUT SHALL BE CAPTIVATED TO AND SHALL BE ROTATEABLE. FIGURE 2 DIMENSION F MAX IS APPLICABLE WHEN END OF SCREW IS FLUSH WITH BB OR A MAXIMUM OF TWO SCREW THREADS PROTRUDE.
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.

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS85049/38</b> SHEET 4 OF 5	<b>REV. B</b>
	CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, STRAIGHT, SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)		