

REV.
C

AS85049™/104

RATIONALE

REVISION IS REQUIRED TO ADD DETAILED INFORMATION PERTAINING TO BRAID RETENTION, TO IMPROVE DRAWING QUALITY, AND TO UPDATE DOCUMENT FORMAT TO LATEST SAE GUIDELINES.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049.

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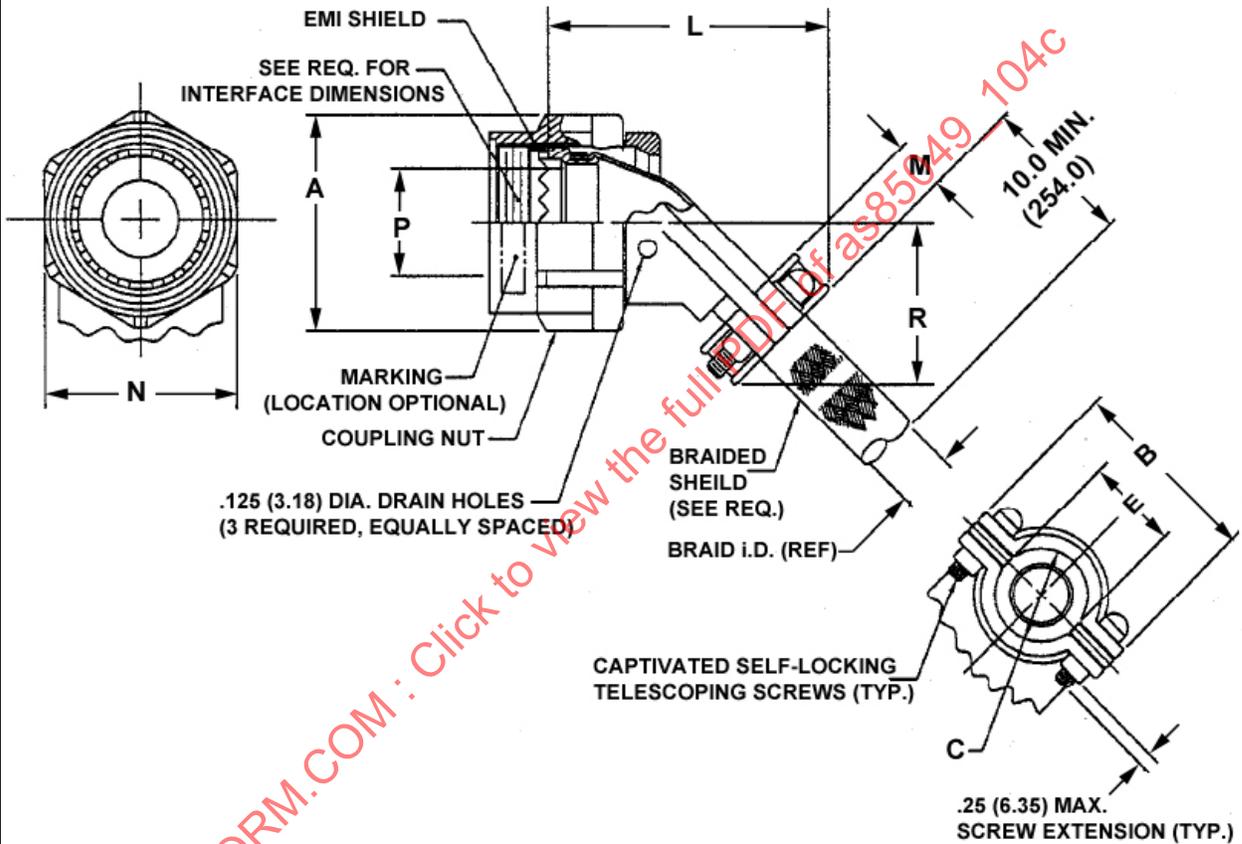
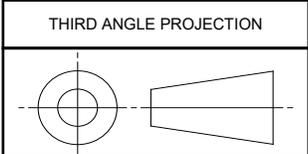


FIGURE 1 – ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS85049/104C/>



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS85049



AEROSPACE STANDARD

(R) CONNECTORS, ACCESSORIES, COMPOSITE, RFI/EMI, ELECTRICAL, STRAIN RELIEF, 45°, SELF-LOCKING, CATEGORY 3C (FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)

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ISSUED 2002-06 REVISED 2016-06 REAFFIRMED 2021-01

TABLE 1 - SHELL SIZES AND DIMENSIONS

SHELL SIZE	A MAX. DIA.	B MAX.	C DIA. (CABLE ENTRY) ±.031 (SEE DESIGN REQ)	E MIN.	L MAX.	M ±.03	N HEX	P MIN.	R MAX.	BRAID ID REF.	SCREW SIZE
09	.858 (21.79)	.98 (24.89)	.265 (6.73)	.229 (5.82)	1.388 (35.26)	.375 (9.53)	.750/.736 (19.05/18.69)	.264 (6.71)	.901 (22.88)	.375 (9.53)	4-40
11	.984 (24.99)	1.05 (26.67)	.310 (7.87)	.274 (6.96)	1.428 (36.27)	.375 (9.53)	.875/.860 (22.23/21.84)	.390 (9.91)	.964 (24.49)	.375 (9.53)	4-40
13	1.157 (29.39)	1.20 (30.48)	.390 (9.91)	.354 (8.99)	1.498 (38.05)	.406 (10.31)	1.000/.980 (25.40/24.89)	.504 (12.80)	1.050 (26.67)	.500 (12.70)	6-32
15	1.280 (32.51)	1.30 (33.02)	.506 (12.85)	.470 (11.94)	1.548 (39.32)	.406 (10.31)	1.125/1.100 (28.58/27.94)	.630 (16.00)	1.112 (28.24)	.500 (12.70)	6-32
17	1.406 (35.71)	1.44 (36.58)	.591 (15.01)	.555 (14.10)	1.648 (41.86)	.406 (10.31)	1.250/1.224 (31.75/31.09)	.756 (19.20)	1.175 (29.85)	.781 (19.84)	6-32
19	1.516 (38.51)	1.56 (39.62)	.661 (16.79)	.625 (15.88)	1.768 (44.91)	.406 (10.31)	1.375/1.348 (34.93/34.24)	.843 (21.41)	1.230 (31.24)	.781 (19.84)	6-32
21	1.642 (41.71)	1.69 (42.92)	.744 (18.90)	.708 (17.98)	1.808 (45.92)	.406 (10.31)	1.500/1.469 (38.10/37.31)	.969 (24.61)	1.293 (32.84)	1.000 (25.40)	6-32
23	1.768 (44.91)	1.77 (44.96)	.826 (20.98)	.790 (20.07)	1.858 (47.19)	.406 (10.31)	1.625/1.581 (41.28/40.16)	1.091 (27.71)	1.365 (34.67)	1.000 (25.40)	6-32
25	1.890 (48.01)	1.89 (48.01)	.896 (22.76)	.860 (21.84)	1.898 (48.21)	.406 (10.31)	1.750/1.690 (44.45/42.93)	1.217 (30.91)	1.417 (35.99)	1.250 (31.75)	6-32

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS85049.

1. DESIGN AND CONSTRUCTION:

ACCESSORIES SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE IN PARENTHESIS, ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MILLIMETERS. UNLESS OTHERWISE SPECIFIED, TOLERANCES SHALL BE: .XX = ±.03 AND .XXX = ±.015 ANGULAR TOLERANCES X = ±2. CABLE ENTRY IS MEASURED WITH SADDLE BARS CLOSED AND BOTTOMED ON CLAMP EARS.

2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH AS85049, FIGURE 3 OR FIGURE 3A.

3. ACCESSORIES: CONSIST OF A COUPLING NUT, 45° CLAMP STRAIN RELIEF, BRAIDED SHIELD AND SADDLE BARS. THE COUPLING NUT SHALL BE CAPTIVATED TO THE CLAMP AND FREE TO ROTATE.

4. FOR SHIELD SPLICE/TERMINATION USE M85049/93 SPLIT SUPPORT RING.

5. DETENTED SELF-LOCKING HAS A POSITIVE AUDIBLE, DETENTED COUPLING. OPTION "N" IS A FREE SPINNING SELF-LOCKING COUPLING.

6. CLAMP SHALL HAVE NO PROTRUSIONS OR SHARP EDGES WHICH MAY PINCH CABLE.

7. MATERIAL AND FINISH: IN ACCORDANCE WITH AS85049.

CLAMP BODY, COUPLING AND SADDLE CLAMPS: COMPOSITE (NON-CONDUCTIVE NO FINISH)

SELF-LOCKING TELESCOPING SCREWS AND WASHERS: 300 SERIES CORROSION-RESISTANT STEEL/ PASSIVATED SILVER PLATE OPTIONAL

BRAID: 34 GAUGE WIRE, COPPER, NICKEL PLATED, 50 MICROINCHES MINIMUM THICKNESS

BRAID CONSTRUCTION: SIMILAR TO AA59569 34 AWG CARRIERS AND ENDS MAY VARY TO OBTAIN 90% MINIMUM COVERAGE

INTERFACE AND SHROUD: BRASS, NICKEL PLATED

BRAID RETENTION DEVICE: ALUMINUM/IRIDITE PER MIL-DTL-5541 OR 300 SERIES CORROSION RESISTANT STEEL/PASSIVATED OR COPPER/TIN PLATED

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	(FOR MIL-DTL-38999 SERIES III AND IV CONNECTORS)		