FEDERAL SUPPLY CLASS
5935

RATIONALE

REVISION IS REQUIRED TO MODIFY COMPONENT DRAWING TO INCLUDE .125 DRAIN HOLES AND INDICATE LOCATION OF DRAIN HOLES.

NOTICE

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

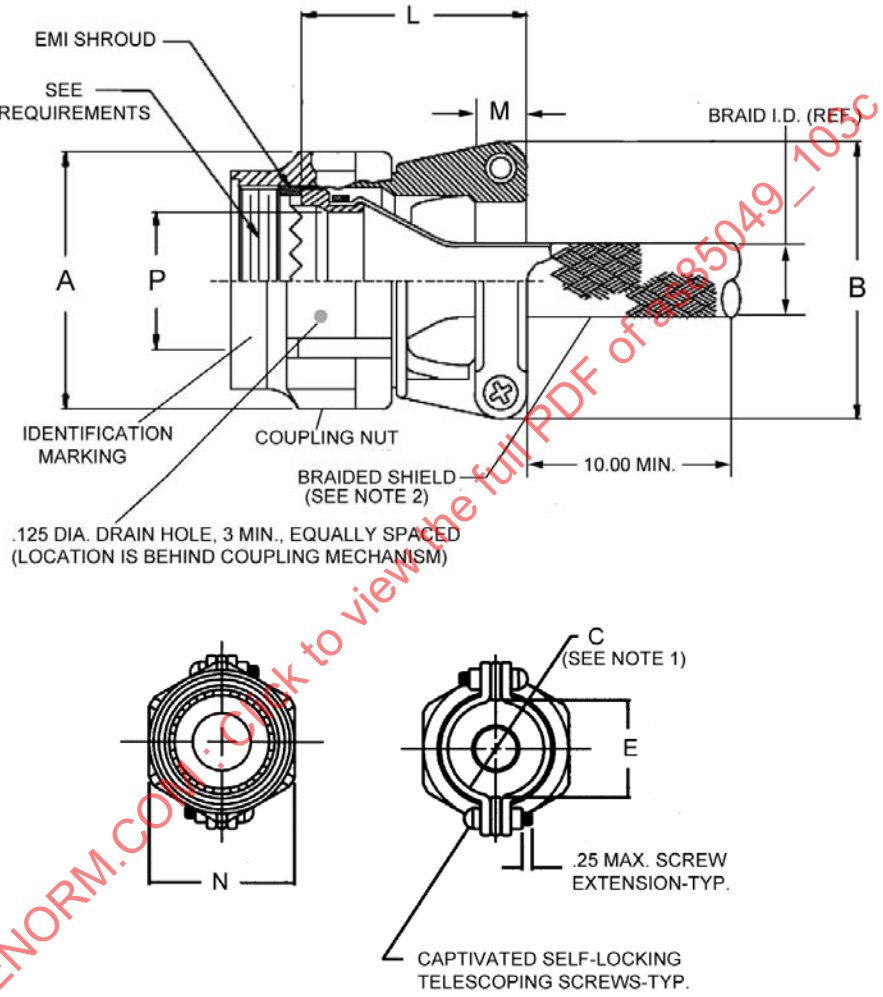
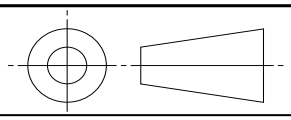


FIGURE 1 - CONFIGURATION AND DIMENSIONS

THIRD ANGLE PROJECTION



ISSUED 2002-08 REVISED 2013-07

CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

TABLE 1 - SHELL SIZES AND DIMENSIONS

SHELL SIZE	A MAX DIA.	B MAX.	C ±.031 DIA. SEE NOTE 1	E MIN.	L	M ±.03	N HEX	P MIN.	BRAID I.D. REF.	SCREW SIZE
09	.858 (21.79)	.98 (24.89)	.265 (6.73)	.229 (5.82)	.780/.939 (19.81/23.85)	.375 (9.53)	.750/.736 (19.05/18.69)	.264 (6.71)	.375 (9.53)	4-40
11	.984 (24.99)	1.05 (26.67)	.310 (7.87)	.274 (6.96)	.860/1.059 (21.84/26.90)	.375 (9.53)	.875/.860 (22.23/21.84)	.390 (9.91)	.375 (9.53)	4-40
13	1.157 (29.39)	1.20 (30.48)	.390 (9.91)	.354 (8.99)	.950/1.199 (24.10/30.45)	.406 (10.31)	1.000/.980 (25.40/24.89)	.504 (12.80)	.500 (1.27)	6-32
15	1.280 (32.51)	1.30 (33.02)	.506 (12.85)	.470 (11.94)	.950/1.199 (24.13/30.45)	.406 (10.31)	1.125/1.100 (28.58/27.94)	.630 (16.00)	.500 (1.27)	6-32
17	1.406 (35.71)	1.44 (36.58)	.591 (15.01)	.555 (14.10)	1.080/1.329 (27.43/33.75)	.406 (10.31)	1.250/1.224 (31.75/31.09)	.756 (19.20)	.781 (19.84)	6-32
19	1.516 (38.51)	1.56 (39.62)	.661 (16.79)	.625 (15.88)	1.140/1.509 (28.9/38.33)	.406 (10.31)	1.375/1.348 (34.93/34.24)	.843 (21.41)	.781 (19.84)	6-32
21	1.642 (41.51)	1.69 (42.92)	.744 (18.90)	.708 (17.98)	1.200/1.609 (30.5/40.87)	.406 (10.31)	1.500/1.469 (38.10/37.31)	.969 (24.61)	1.000 (25.40)	6-32
23	1.768 (44.91)	1.77 (44.96)	.826 (20.98)	.790 (20.07)	1.330/1.759 (33.8/44.68)	.406 (10.31)	1.625/1.581 (41.28/40.16)	1.091 (27.71)	1.000 (25.40)	6-32
25	1.890 (48.01)	1.89 (48.01)	.896 (22.76)	.860 (21.84)	1.450/1.859 (36.8/47.22)	.406 (10.31)	1.750/1.690 (44.45/42.93)	1.217 (30.91)	1.250 (31.75)	6-32

NOTES:

1. CABLE ENTRY IS MEASURED WITH SADDLE BARS CLOSED AND BOTTOMED ON CLAMP EARS.

2. FOR SHIELD SPLICE/TERMINATION, USE AS85049/93 SPLIT SUPPORT RING.

3. DETENTED SELF-LOCKING HAS A POSITIVE AUDIBLE, DETENTED COUPLING. OPTION “N” IS A FREE SPINNING SELF-LOCKING COUPLING.

REQUIREMENTS:

1. CONNECTOR ACCESSORY DESIGN AND CONSTRUCTION:

   DIMENSIONS AND CONFIGURATIONS SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. MILLIMETER EQUIVALENTS ARE IN PARENTHESES AND ARE GIVEN FOR GENERAL INFORMATION ONLY. MILLIMETER EQUIVALENTS ARE BASED UPON 1 INCH = 25.4 MM. UNLESS OTHERWISE SPECIFIED, TOLERANCES SHALL BE: .XX = ±.03 AND .XXX = ± .015 ANGULAR TOLERANCES X = ±2 DEGREES.

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

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

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

5. 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 MICRO-INCHES MINIMUM THICKNESS

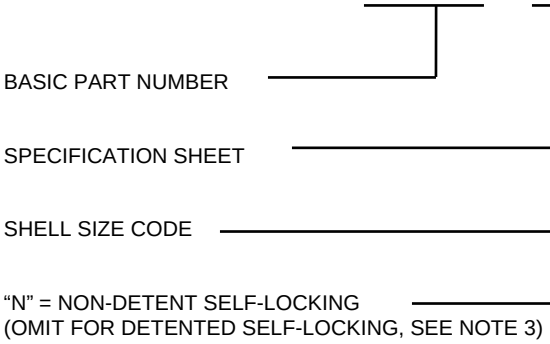
   BRAID CONSTRUCTION: SIMILAR TO A-A-59569 34 AWG CARRIERS AND ENDS MAY VARY TO OBTAIN 90% MINIMUM COVERAGE

   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

PART OR IDENTIFYING NUMBER (PIN):

EXAMPLE: M85049 /103 - 11 N



QUALIFICATION: SEE AS85049 CATEGORY 3C AND AS STATED HEREIN.

1. TEMPERATURE CYCLING: IN ACCORDANCE WITH AS85049, FINISH M.

2. FLUID IMMERSION: ACCESSORIES SHALL BE TESTED IN ACCORDANCE WITH AS85049. AFTER IMMERSION THE ACCESSORIES SHALL MEET THE COUPLING THREAD STRENGTH REQUIREMENTS OF AS85049.

3. ELECTRICAL CONDUCTIVITY: FOLLOWING QUALIFICATION TEST SEQUENCE FOR CATEGORY 3C AND ABOVE ADDITIONAL TESTS, BACKSHELL SHALL BE TESTED IN ACCORDANCE WITH AS85049 SHELL CONDUCTIVITY REQUIREMENTS, EXCEPT ELECTRICAL RESISTANCE SHALL NOT EXCEED .0025 OHM.

4. BRAID RETENTION: BACKSHELL SHALL BE TESTED FOR BRAID RETENTION TO VALUES SPECIFIED IN TABLE 2. WHEN TESTED THE BRAID SHALL NOT PULL OUT NOR SHALL SLIPPAGE EXCEED .025 INCHES. BREAKAGE OF BRAID SHALL NOT BE CONSIDERED A FAILURE.

TABLE 2 - BRAID RETENTION

SHELL SIZE	TENSILE LOAD INCH/POUNDS, MIN.
09, 11, 13, 15	50
17, 19, 21, 23, 25	100