FEDERAL SUPPLY CLASS
5935

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

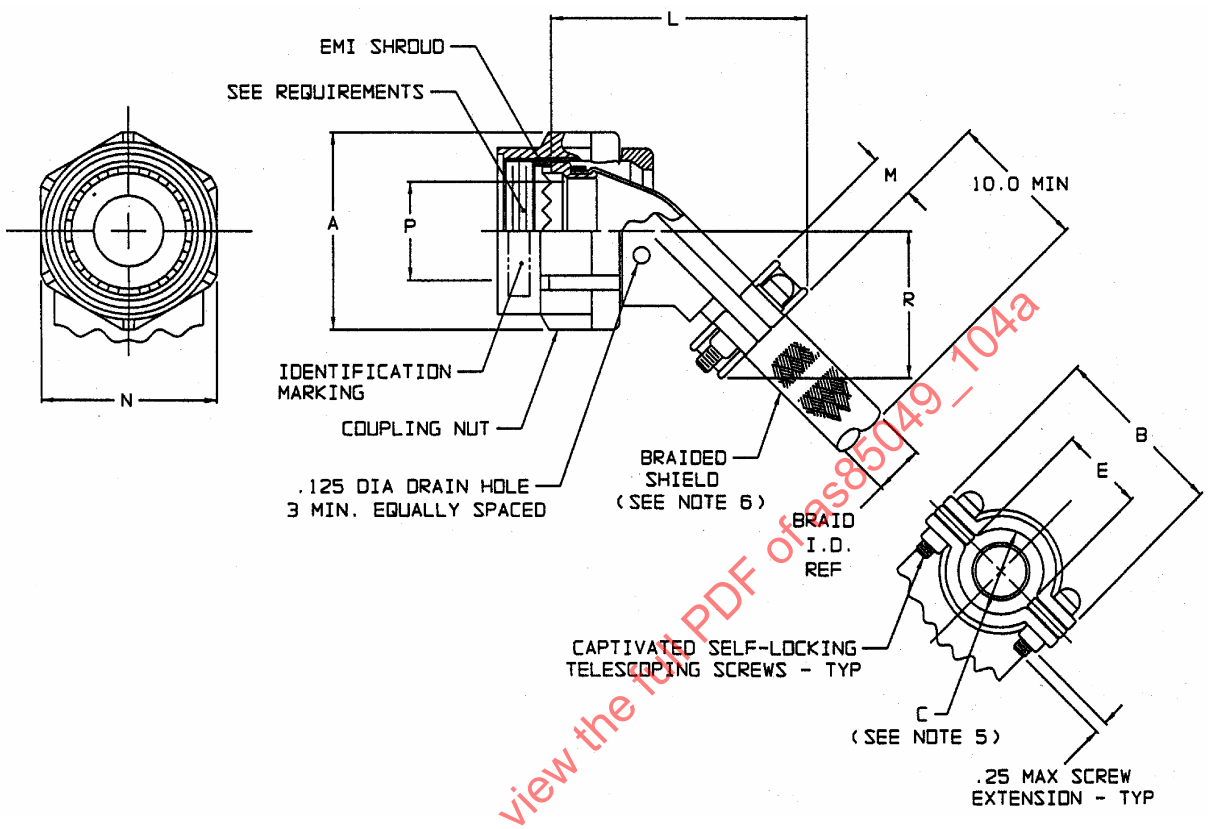
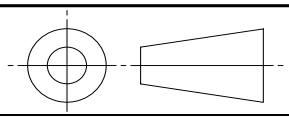


FIGURE 1 - CONFIGURATION AND DIMENSIONS

THIRD ANGLE PROJECTION



ISSUED 2002-06 REVISED 2004-03

CUSTODIAN: SAE AE-8/AE-8C1

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

AS85049/104
SHEET 1 OF 4

REV. A

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: 724-776-4970 (outside USA)**
Fax: 724-776-0790 **Email: custsvc@sae.org** **SAE WEB ADDRESS: http://www.sae.org**

TABLE 1 - SHELL SIZES AND DIMENSIONS

SHELL SIZE	A MAX DIA	B MAX	C ±.031 DIA SEE NOTE 5	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 (1.27)	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 (1.27)	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 (41.51)	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

NOTES:

1. DIMENSIONS ARE IN INCHES.
2. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM.
3. MILLIMETERS ARE IN PARENTHESES.
4. DIMENSIONS APPLY AFTER PLATING.
5. CABLE ENTRY IS MEASURED WITH SADDLE BARS CLOSED AND BOTTOMED ON CLAMP EARS.
6. FOR SHIELD SPLICE/TERMINATION USE M85049/93 SPLIT SUPPORT RING.
7. DETENTED SELF-LOCKING HAS A POSITIVE AUDIBLE, DETENTED COUPLING.

REQUIREMENTS:

1. CONNECTOR ACCESSORY DESIGN AND CONSTRUCTION:

   DIMENSIONS AND CONFIGURATIONS: SEE FIGURE 1.

2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH SAE AS85049, FIGURE 3.
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 IS FREE TO ROTATE.
4. CLAMP SHALL HAVE NO PROTRUSIONS OR SHARP EDGES WHICH MAY PINCH CABLE.

5. MATERIAL AND FINISH: IN ACCORDANCE WITH SAE 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 AA59569 34 AWG CARRIERS AND ENDS MAY VARY TO OBTAIN 90% COVERAGE
INTERFACE AND SHROUD: BRASS, NICKEL PLATED
BRAID RETENTION DEVICE: ALUMINUM/IRIDITE PER AMS-C-5541 OR 300 SERIES CORROSION RESISTANT STEEL/PASSIVATED OR COPPER/TIN PLATED

6. TEMPERATURE CYCLING: IN ACCORDANCE WITH SAE AS85049, FINISH M.

7. 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.

8. OZONE EXPOSURE: ONE BACKSHELL ONLY SHALL BE TESTED IN ACCORDANCE WITH MIL-STD-1344, METHOD 1007.
SAMPLE PREPARATION: N/A.
FAILURES: BLISTERING OR PEELING OF PLATING OR ANY CONDITION THAT ADVERSELY AFFECTS THE FUNCTION OF THE BACKSHELLS.

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

10. ELECTRICAL CONDUCTIVITY: FOLLOWING QUALIFICATION TEST SEQUENCE FOR CATEGORY 3C AND ABOVE ADDITIONAL TESTS, BACKSHELL SHALL BE TESTED IN ACCORDANCE WITH MIL-STD-1344, METHOD 3007 AND SAE AS85049 SHELL CONDUCTIVITY REQUIREMENTS, EXCEPT ELECTRICAL RESISTANCE SHALL NOT EXCEED 0.0025 OHM.

11. 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

SHELL SIZE	TENSILE LOAD IN LB, MIN
09, 11, 13, 15	50
17, 19, 21, 23, 25	100

12. PART OR IDENTIFYING NUMBER (PIN) EXAMPLE:

EXAMPLE: