

METRIC

MIL-DTL-38999/32E
4 October 2013
SUPERSEDING
MIL-DTL-38999/32D
30 May 2008

DETAIL SPECIFICATION SHEET

CONNECTOR, ELECTRICAL CIRCULAR, COVER, PROTECTIVE, PLUG, SERIES III, METRIC

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein
shall consist of this specification sheet and MIL-DTL-38999.

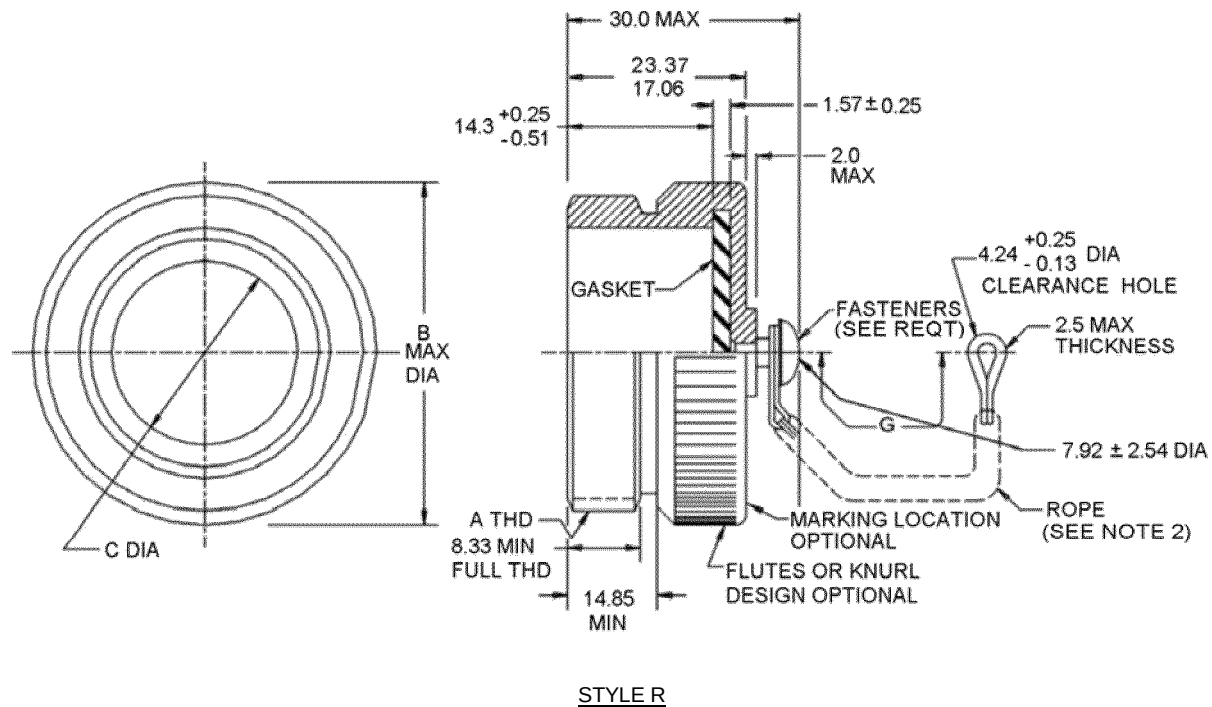
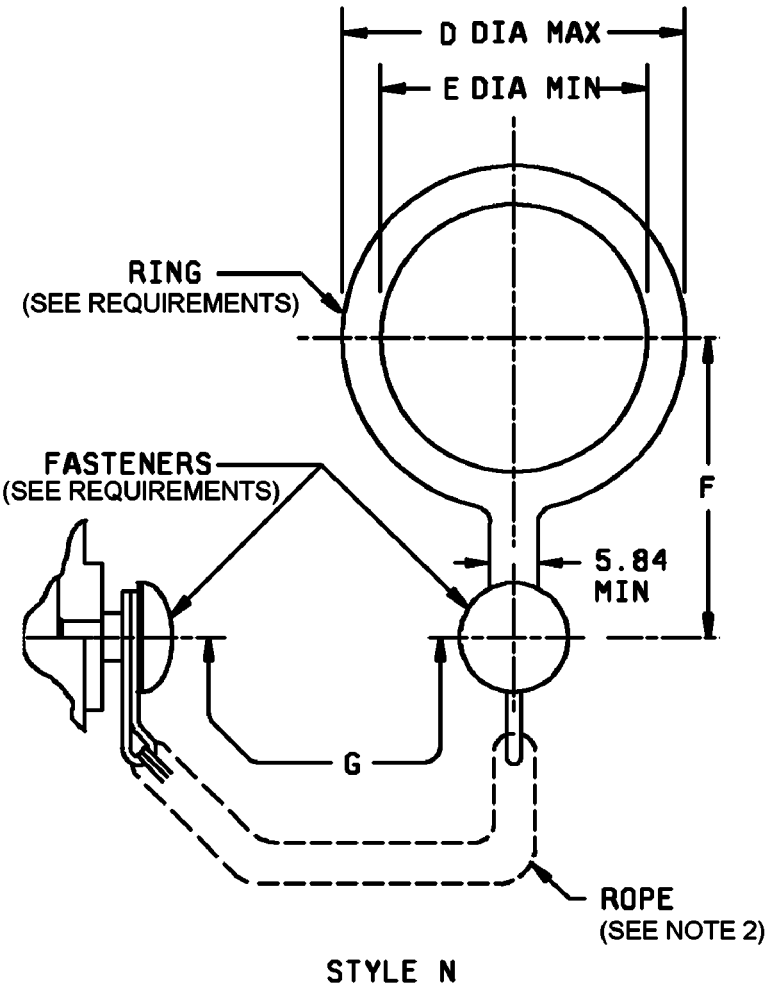


FIGURE 1. Protective cover, plug, all classes.



mm	Inches	mm	Inches
0.13	.005	4.24	.17
0.25	.01	5.84	.23
0.51	.02	7.72	.30
1.57	.06	7.92	.31
2.00	.08	9.55	.38
2.50	.098	12.20	.48
2.54	.100	15.70	.62

FIGURE 1. Protective cover, plug, all classes - Continued.

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Dimensions							
Shell size	A THD-2A	B dia max	C dia + .00 - .15	D dia max	E dia min	F	G + 13.0 - 7.0
9	.6250-0.1P-0.3L-TS	23.0	12.50	24.0	13.0	24.00 14.50	127.00
11	.7500-0.1P-0.3L-TS	26.0	15.75	27.0	18.0	20.50 18.00	127.00
13	.8750-0.1P-0.3L-TS	31.0	19.53	30.0	20.0	27.00 20.00	127.00
15	1.0000-0.1P-0.3L-TS	33.0	22.71	31.0	23.0	22.50 18.00	127.00
17	1.1875-0.1P-0.3L-TS	37.0	25.88	37.0	26.0	30.50 23.50	127.00
19	1.2500-0.1P-0.3L-TS	40.0	28.55	40.0	29.0	31.50 25.00	127.00
21	1.3750-0.1P-0.3L-TS	44.0	31.72	44.0	32.0	33.00 26.50	127.00
23	1.5000-0.1P-0.3L-TS	46.0	34.90	46.0	34.0	34.00 27.50	127.00
25	1.6250-0.1P-0.3L-TS	50.0	38.07	49.0	39.0	38.00 30.00	127.00

NOTES:

1. Dimensions are in millimeters, except "A threads" which are in inches.
2. Method of attachment to cover and or ring is optional.

FIGURE 1. Protective cover, plug, all classes - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Materials:

- Cover - Classes C, F, G, R, W, and X: Impact extruded or machined aluminum alloy.
Classes P, T and Z: Impact extruded or machined aluminum alloy.
Classes H, K, N, S and Y: Corrosion resistant steel.
Classes J and M: High performance resin in accordance with MIL-DTL-38999.
Class F: Impact extruded or machined aluminum alloy.
(Cover base material only. For finishes or surface treatments, see MIL-DTL-38999.)
- Gasket - Silicone elastomer.
- Ring - Corrosion resistant steel, passivated, 1.020 mm (0.04 inches) maximum thickness.
- Rope - Insulated stainless steel, passivated. Insulation shall withstand 200°C environment.
- Fastener - Stainless steel, passivated. Option: Aluminum integral to cover.

Mating connectors: See MIL-DTL-38999, series III.

Gasket shall be bonded to cover, or mechanically retained.

Rope shall rotate freely on fastener.

Fastener tensile strength: The protective cover and rope assembly shall withstand a dead weight tensile load of 25 pounds applied to both axial and longitudinal directions. The load shall be applied at the end of the rope assembly and held for 5 minutes. There shall be no separation of the rope assembly from the protective cover or damage to the rope assembly. Both axial and longitudinal directions shall be 25 pounds. The load shall be applied to the end of the rope.

Air Leakage: Testing shall be in accordance with EIA-364-02, except the minimum period of measurement shall be 10 seconds. The air leakage rate shall be no greater than 1 atmospheric cubic inch per hour ($4.55 \times 10^{-3} \text{ cm}^3/\text{s}$). Protective covers shall be mated to connectors having either contacts or inserts removed so that a pressure of 10 lbft/in² (.703 Kg/cm²) can be applied against the insides of the protective covers or stowage receptacles.

Qualification (all classes). Qualification shall be in accordance with MIL-DTL-38999 except only the following sequence of tests shall be required:

- Examination of product
- Coupling torque
- Humidity
- Salt spray (corrosion)
- Fastener tensile strength (see requirement)
- Air Leakage

Qualification (classes J and M only): Qualification shall be in accordance with MIL-DTL-38999, except that in addition to the test sequence specified for all classes above, the following tests shall be required:

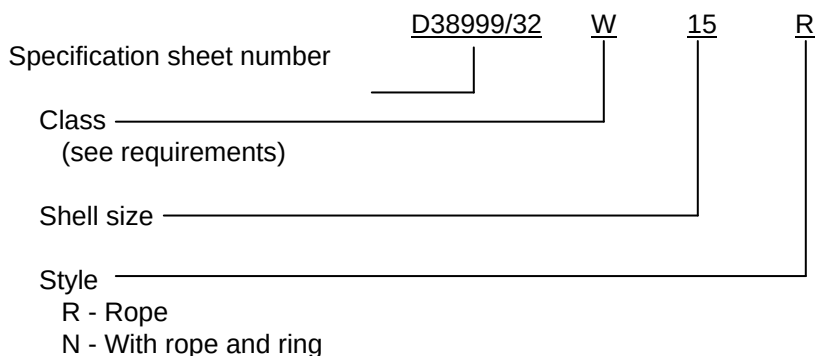
- Temperature cycling
- Hydrolytic stability

Group A sampling inspection. Sample sizes for group A inspection shall be as specified in table I.

TABLE I. Group A sampling plan.

Lot size	Sampling size
1 to 13	100 percent
14 to 150	13 units
151 to 280	20 units
281 to 500	29 units
501 to 1,200	34 units
1,201 to 3,200	42 units
3,201 and up	54 units

Part or Identifying Number (PIN) example:



Class F is not for Navy use and is inactive for use in Air Force new design.

Change effectivity. Unless otherwise specified by the preparing activity and/or the qualifying activity, all changes from the previous revision of this specification sheet shall become effective within 90 days of the date of publication of the latest revision. If unable to implement changes within the 90 day time period, the manufacturer or value added distributor shall notify the qualifying activity. The qualifying activity shall determine if an extension may be granted.

Disposition of stock. Unless otherwise specified by the qualifying activity and coordinated with the preparing activity, qualified manufacturers and their selling agents or distributors may continue to ship protective covers which were manufactured in accordance with the previous revision of this specification sheet for a period of 18 months from the date of the latest revision, provided that form, fit and function are not affected.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Referenced documents. In addition to MIL-DTL-38999, this document references the following:

EIA-364-02

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-2012-017)

Review activities:

Army - MI
Navy - EC, MC, OS
Air Force - 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.