

METRIC

MIL-DTL-38999/33D

30 May 2008

SUPERSEDING

MIL-DTL-38999/33C

11 June 2001

## DETAIL SPECIFICATION SHEET

### CONNECTOR, ELECTRICAL CIRCULAR, COVER, PROTECTIVE, RECEPTACLE, 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.

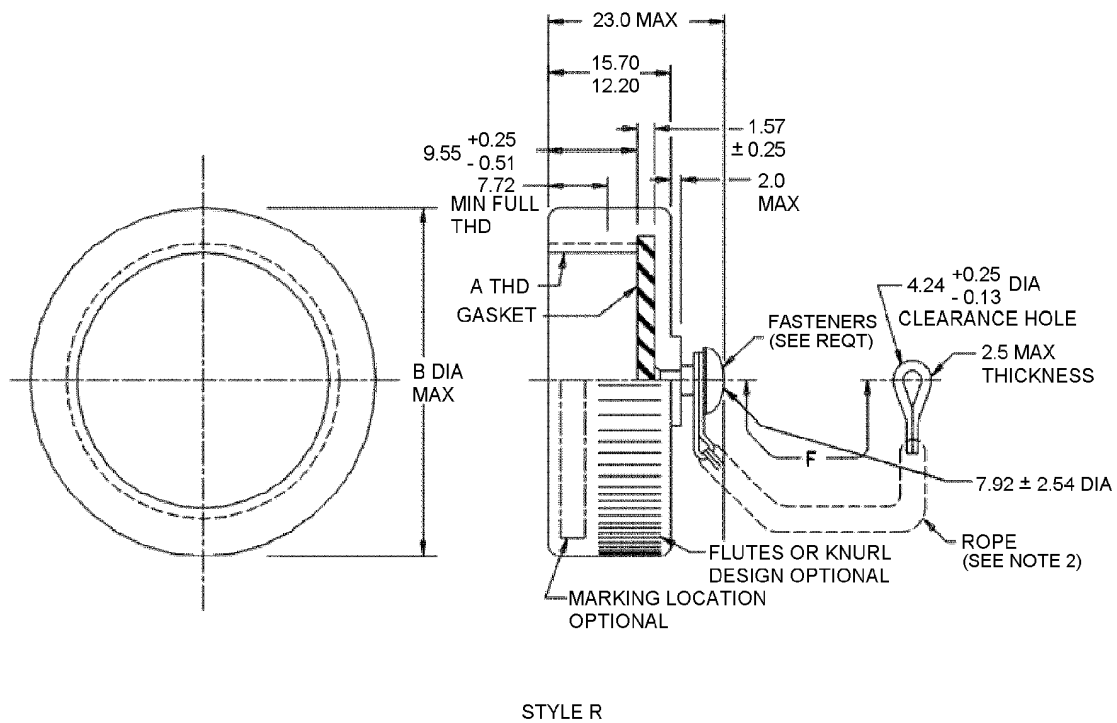


FIGURE 1. Protective cover, receptacle, all classes.

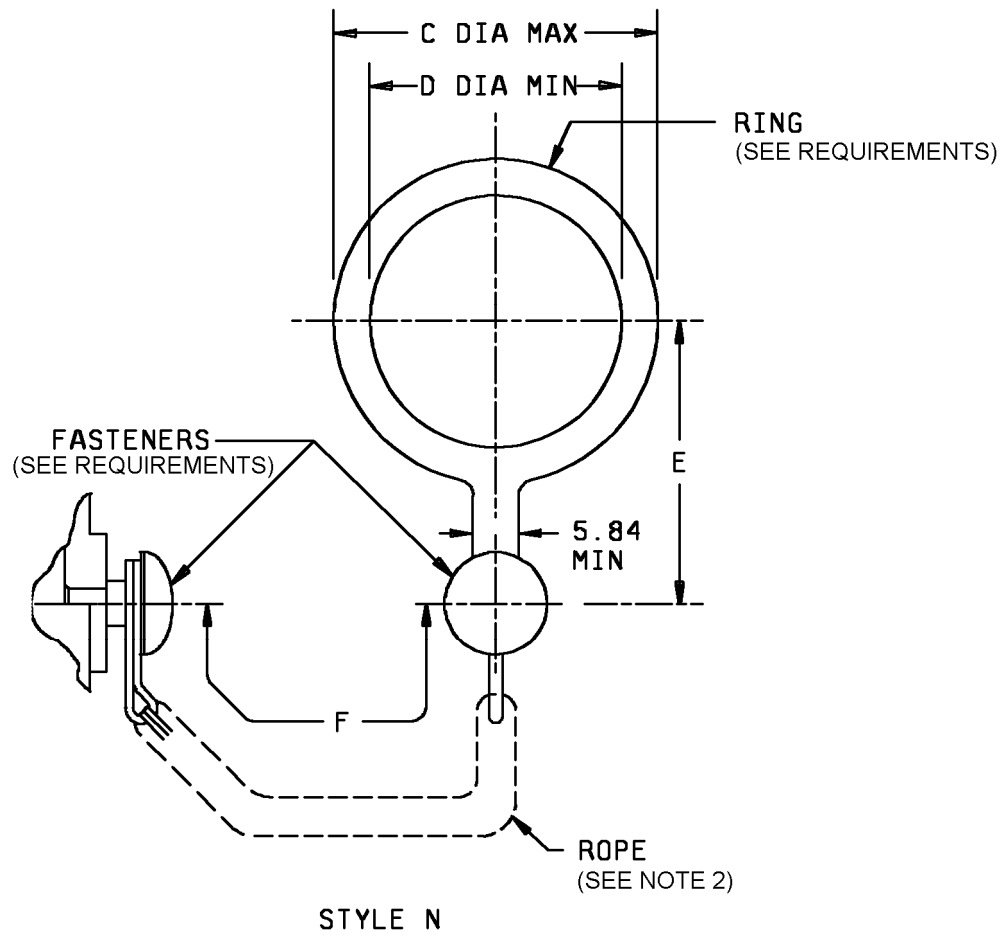


FIGURE 1. Protective cover, plug, all classes - Continued

| Dimensions |                     |              |                 |              |                |                      |
|------------|---------------------|--------------|-----------------|--------------|----------------|----------------------|
| Shell size | A THD-2B            | B<br>max dia | C<br>dia<br>max | D<br>min dia | E              | F<br>+ 13.0<br>- 7.0 |
| 9          | .6250-0.1P-0.3L-TS  | 23.0         | 27.0            | 17.64        | 21.00<br>18.00 | 127.00               |
| 11         | .7500-0.1P-0.3L-TS  | 28.0         | 32.0            | 21.97        | 22.50<br>18.50 | 127.00               |
| 13         | .8750-0.1P-0.3L-TS  | 31.0         | 37.0            | 25.12        | 25.00<br>23.50 | 127.00               |
| 15         | 1.0000-0.1P-0.3L-TS | 32.0         | 40.0            | 29.92        | 31.00<br>25.00 | 127.00               |
| 17         | 1.1875-0.1P-0.3L-TS | 37.0         | 44.0            | 32.00        | 32.50<br>26.50 | 127.00               |
| 19         | 1.2500-0.1P-0.3L-TS | 39.0         | 46.0            | 36.27        | 34.00<br>28.00 | 127.00               |
| 21         | 1.3750-0.1P-0.3L-TS | 42.0         | 49.0            | 38.25        | 35.50<br>30.00 | 127.00               |
| 23         | 1.5000-0.1P-0.3L-TS | 45.0         | 54.0            | 42.62        | 37.50<br>31.50 | 127.00               |
| 25         | 1.6250-0.1P-0.3L-TS | 49.0         | 56.0            | 44.45        | 39.00<br>33.00 | 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 configuration: 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 is inactive for new design.)

Gasket - Silicone elastomer.

Ring - Corrosion resistant steel, passivated, 1.020 maximum thickness.

Rope - Insulated stainless steel, passivated.  
Insulation shall withstand 200°C environment.

Fastener - Stainless steel, passivated.  
Option: Aluminum integral to cover.

Mating connectors: 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.

Qualifications. Qualifications 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)

Altitude immersion.

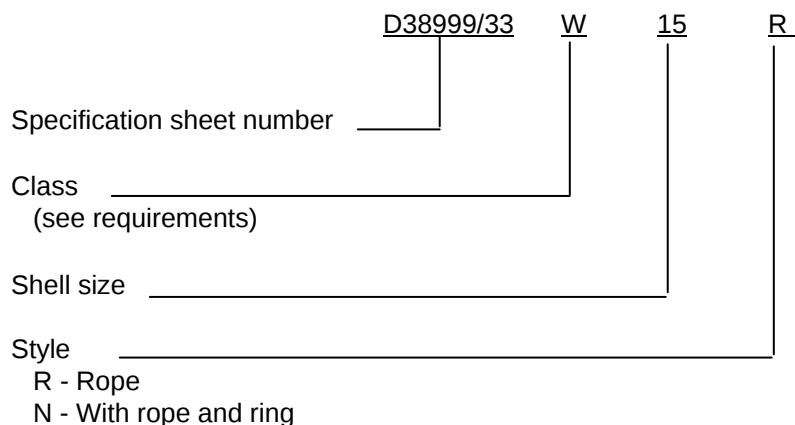
For classes J and M only, temperature cycling and hydrolytic stability shall also be required.

Group A sampling inspection. Sampling 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:



Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

Referenced documents. This document references MIL-DTL-38999.

#### CONCLUDING MATERIAL

##### Custodians:

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

##### Preparing activity:

DLA - CC

(Project 5935-2007-139)

##### 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 <http://assist.daps.dla.mil>.