INCH-POUND

MS3181G <u>25 July 2012</u> SUPERSEDING MS3181F 8 July 1980

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL CIRCULAR, COVER, PROTECTIVE, RECEPTACLE, MIL-DTL-26482 SERIES 1 AND 2, BAYONET COUPLING

Reactivated after 25 July 2012 and may be used for new and existing designs and acquisitions.

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-26482.

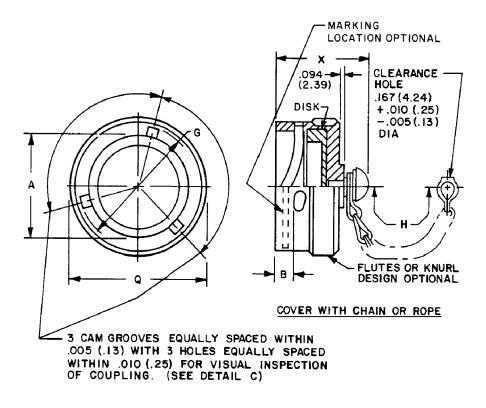
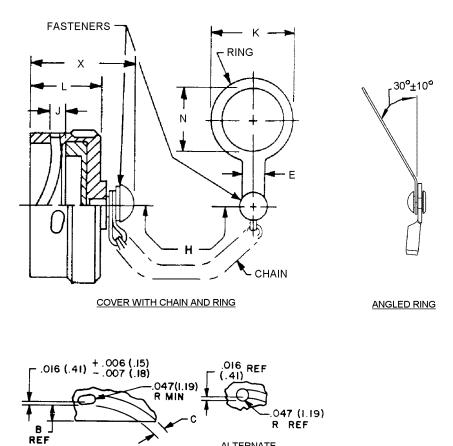


FIGURE 1. Protective cover, receptacle, all classes.

FSC 5935





ALTERNATE HOLE DESIGN

DETAIL C

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

| Shell size | A inside dia (ID) +.005 001 (+0.13 - 0.03) | B max bay lock loc. | C bay groove width +.016 / 001 (+0.41 / -0.03) | G inside dia (ID) slots +.005 006 (+0.13 - 0.15) |
|---------------|---|---------------------------|--|--|
| 8 | .481 (12.22) | | .090 | .576 (14.63) |
| 10 | .602 (15.29) | | | .697 (17.70) |
| 12 | .761 (19.33) | | | .871 (22.12) |
| 14 | .885 (22.48) | .149 (3.78) | (2.29) | .995 (25.27) |
| 16 | 1.010 (25.65) | | | 1.120 (28.45) |
| 18 | 1.136 (28.85) | | | 1.245 (31.62) |
| 20 | 1.260 (32.00) | | .089/.153 | 1.370 (34.80) |
| 22 | 1.385 (35.18) | | (2.26 / 3.89) | 1.495 (37.97) |
| 24 | 1.510 (38.35) | .087 (2.21) | .137 (3.48) | 1.624 (41.25) |

FIGURE 1. Protective cover, receptacle, all classes – Continued.

| Shell size | H +.500 250 (+12.70 - 6.35) std chain / rope length | J +.010 015 (+0.25 - 0.38) disk (gasket) loc. | L max length | Q dia max overall | X max length overall | K outside dia (OD) max ring | E min ring throat | N inside dia (ID) min ring |
|---------------|--|--|--------------------|----------------------------|-------------------------------|--|----------------------------|---|
| 8 | 3.000 | | | .734 (18.64) | | .812 (22.62) | | .578 (14.68) |
| 10 | (76.20) | | | .859 (21.82) | | 1.000 (25.40) | | .703 (17.86) |
| 12 | | | | 1.000 (25.40) | | 1.188 (30.18) | | .891 (22.63) |
| 14 | 3.500 | .115 (2.92) | .562 (14.27) | 1.125 (28.58 | .844 | 1.438 (36.53) | .234 | 1.016 (15.81) |
| 16 | (88.90) | | | 1.250 (31.75) | (21.44) | 1.562 (39.67) | (5.94) | 1.141 (28.98) |
| 18 | | | | 1.375 (34.92) | | 1.688 (42.88) | | 1.266 (32.16) |
| 20 | | | | 1.500 (38.10) | | 1.872 (46.02) | | 1.391 (35.33) |
| 22 | 4.000 (101.60) | | | 1.625 (41.28) | | 1.938 (49.23) | | 1.516 (38.51) |
| 24 | | .147 (3.73) | .602 (15.29) | 1.750 (44.45) | .875 (22.22) | 2.062 (52.37) | | 1.641 (41.68) |

NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents (in parentheses) are given for information only.
- 3 True position (TP) tolerances specified are in accordance with ASME Y14.5.
- 4. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

FIGURE 1. Protective cover, receptacle, all classes – Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1. The chain or rope shall rotate freely on the fastener.

Materials:

| a. | Cover | - aluminum alloy. |
|----|---------------------|--|
| b. | Cover, bayonet pins | - stainless steel, passivated. |
| C. | Chain | - stainless steel, passivated in accordance with RR-C-271, type II, class 3. |
| d. | Disk (gasket) - | silicone elastomer. |
| e. | Fasteners - | stainless steel, passivated. |
| f. | Ring - | stainless steel, passivated, .030 inches (0.76 mm) maximum thickness. |
| g. | Rope - | 7 strand stainless steel, passivated. |

Finish Designators (class E is superseded by class L):

- A series 2, hard anodic, non-conductive in accordance with MIL-A-8625, type III, .0008 inch (0.020 mm) minimum thickness.
- L series 2, electroless nickel, conductive, in accordance with MIL-DTL-26482.
- D series 1 and 2, pure electrodeposited aluminum, conductive, in accordance with MIL-DTL-26482.
- T series 1 and 2, nickel fluorocarbon polymer, conductive, in accordance with MIL-DTL-26482.
- W series 1 and 2, cadmium, conductive (500 hr dynamic salt spray in accordance with MIL-DTL-26482.
- K series 1 and 2, zinc-nickel, conductive, in accordance with MIL-DTL-26482.

QUALIFICATION: Qualification and requalification requirements shall be in accordance with MIL-DTL-26482, series 1 and 2 connectors.

Connector mating: This protective cover mates with all MIL-DTL-26482, series 1 and 2 connector receptacles.

Intermateability dimensions shall be in accordance with MIL-DTL-26482.

Part or Identifying Number (PIN) example:

| | <u>MS3181</u> - <u>12</u> | <u>ç /</u> | 4 L † ⊤ |
|---|---------------------------|------------|------------|
| MS number | | | |
| Shell size | | | |
| Attachment option C – with chain N – with chain and ring R – with rope | | | |
| Finish | | | |
| Length (omit for standard) | | | |

L - Chain or rope with a length of 5.000 +.500/-.250 inches (127 +12.7/-6.35 mm) in lieu of standard (STD) length. For standard length, leave blank (the standard length is the default length).

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. In addition to MIL-DTL-26482, this document references the following:

ASME Y14.5 MIL-A-8625 RR-C-271

CONCLUDING MATERIAL

Preparing activity: DLA – CC

(Project 5935-2011-026)

Custodians: Army – CR Navy – AS Air Force – 85 DLA – CC

Review activities: Army – AV, CR4 Navy – EC, SH Air Force – 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.