INCH-POUND
MS3181G
W/AMENDMENT 1
30 August 2013
SUPERSEDING
MS3181G
25 July 2012

## 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.

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COVER WITH CHAIN AND RING (STYLE N)
ANGLED RING


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

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

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

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| Shell size | $\begin{gathered} \mathrm{H} \\ +.500 \\ -.250 \\ (+12.70 \\ -6.35) \end{gathered}$ <br> std chain / rope length | $\begin{gathered} \mathrm{J} \\ +.010 \\ -.015 \\ (+0.25 \\ -0.38) \\ \text { disk } \\ \text { (gasket) } \\ \text { loc. } \end{gathered}$ | L <br> max length | Q <br> dia <br> max overall | X <br> max length overall |  | E <br> min <br> ring throat | N <br> inside dia (ID) min ring |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | $\begin{gathered} 3.000 \\ (76.20) \end{gathered}$ | $\begin{gathered} .115 \\ (2.92) \end{gathered}$ | $\begin{gathered} .562 \\ (14.27) \end{gathered}$ | $\begin{gathered} \hline .734 \\ (18.64) \\ \hline \end{gathered}$ | $\begin{gathered} .844 \\ (21.44) \end{gathered}$ | $\begin{gathered} .812 \\ (22.62) \\ \hline \end{gathered}$ | $\begin{gathered} .234 \\ (5.94) \end{gathered}$ | $\begin{gathered} \hline .578 \\ (14.68) \\ \hline \end{gathered}$ |
| 10 |  |  |  | $\begin{gathered} .859 \\ (21.82) \\ \hline \end{gathered}$ |  | $\begin{gathered} 1.000 \\ (25.40) \end{gathered}$ |  | $\begin{gathered} .703 \\ (17.86) \\ \hline \end{gathered}$ |
| 12 | $\begin{gathered} 3.500 \\ (88.90) \end{gathered}$ |  |  | $\begin{gathered} 1.000 \\ (25.40) \\ \hline \end{gathered}$ |  | $\begin{array}{r} 1.188 \\ (30.18) \\ \hline \end{array}$ |  | $\begin{gathered} .891 \\ (22.63) \end{gathered}$ |
| 14 |  |  |  | $\begin{gathered} 1.125 \\ (28.58 \\ \hline \end{gathered}$ |  | $\begin{gathered} 1.438 \\ (36.53) \end{gathered}$ |  | $\begin{gathered} 1.016 \\ (25.81) \\ \hline \end{gathered}$ |
| 16 |  |  |  | $\begin{gathered} 1.250 \\ (31.75) \\ \hline \end{gathered}$ |  | $\begin{gathered} 1.562 \\ (39.67) \\ \hline \end{gathered}$ |  | $\begin{gathered} 1.141 \\ (28.98) \\ \hline \end{gathered}$ |
| 18 |  |  |  | $\begin{gathered} 1.375 \\ (34.92) \end{gathered}$ |  | $\begin{gathered} 1.688 \\ (42.88) \end{gathered}$ |  | $\begin{gathered} 1.266 \\ (32.16) \end{gathered}$ |
| 20 | $\begin{gathered} 4.000 \\ (101.60) \end{gathered}$ |  |  | $\begin{gathered} 1.500 \\ (38.10) \\ \hline \end{gathered}$ |  | $\begin{gathered} 1.872 \\ (47.55) \end{gathered}$ |  | $\begin{gathered} 1.391 \\ (35.33) \end{gathered}$ |
| 22 |  |  |  | $\begin{gathered} 1.625 \\ (41.28) \end{gathered}$ |  | $\begin{gathered} 1.938 \\ (49.23) \end{gathered}$ |  | $\begin{gathered} 1.516 \\ (38.51) \\ \hline \end{gathered}$ |
| 24 |  | $\begin{gathered} .147 \\ (3.73) \\ \hline \end{gathered}$ | $\begin{gathered} .602 \\ (15.29) \\ \hline \end{gathered}$ | $\begin{gathered} 1.750 \\ (44.45) \\ \hline \end{gathered}$ | $\begin{gathered} .875 \\ (22.22) \\ \hline \end{gathered}$ | $\begin{array}{r} 2.062 \\ (52.37) \\ \hline \end{array}$ |  | $\begin{gathered} 1.641 \\ (41.68) \\ \hline \end{gathered}$ |

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,
d. Disk (gasket) - silicone elastomer.
e. Fasteners - stainless steel, passivated.
f. Ring - stainless steel, passivated, .030 inches $(0.76 \mathrm{~mm})$ 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:


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

Change effectivity. Unless otherwise specified by 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 many continue to ship protective covers that include flat rings for style N (in lieu of angled rings) in accordance with the previous revision of the specification for a period of 6 months from the date of the latest revision. DLA storage stocks may continue to issue product manufactured in accordance with the previoius revision until DLA storage stocks are depleted of protective covers that include flat rings.

Amendment Notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. 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.

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

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MIL-A-8625
RR-C-271
ASME Y14.5
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## CONCLUDING MATERIAL

| Custodians: | Preparing activity: |
| :--- | :---: |
| Army - CR | DLA - CC |
| Navy - AS | (Project 5935-2013-163) |
| 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.

