



**THE DATASHEET OF
MS3181-22CA**



INCH-POUND

MS3180G
25 July 2012
SUPERSEDING
MS3180F
8 July 1980

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL CIRCULAR, COVER, PROTECTIVE, PLUG,
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.

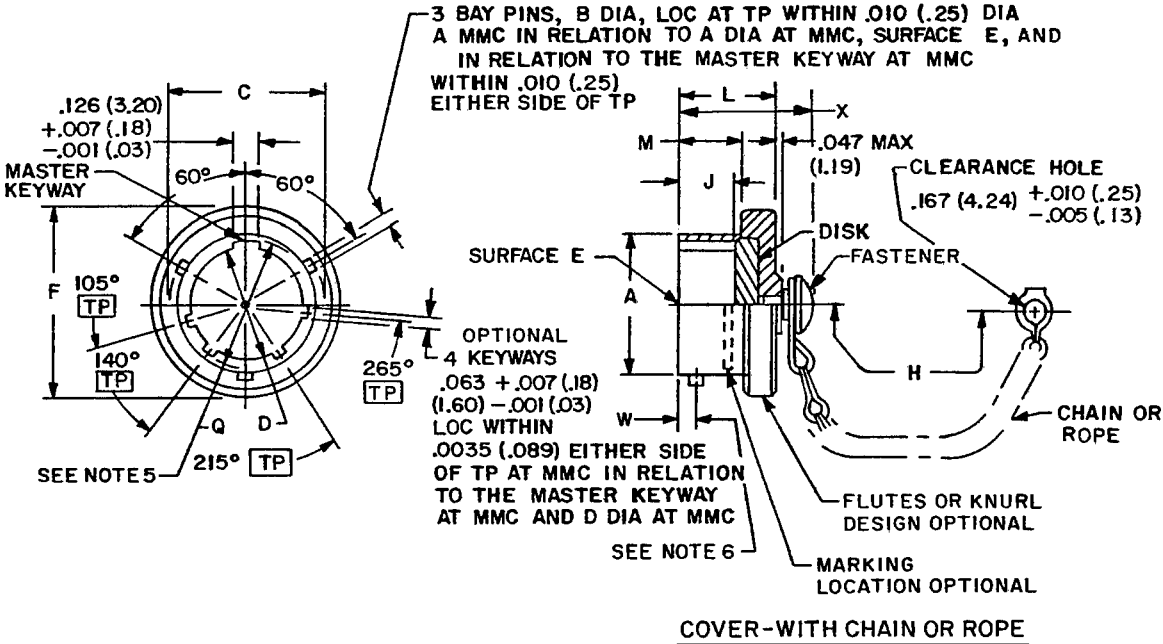


FIGURE 1. Protective cover, plug, all classes.

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Shell size	A dia	B dia bay pin	C dia over bay pins	D dia	F dia max overall	H std chain/ rope length
	+0.001 -0.005 (+0.03 - 0.13)	+0.006 -0.002 (+0.15 - 0.05)	+0.000 -0.016 (+0.00 - 0.41)	+0.005 -0.001 (+0.13 - 0.03)		+0.500 -0.250 (+12.70 - 6.35)
8	.473 (12.01)	.078 (1.98)	.563 (14.30)	.362 (9.19)	.719 (18.26)	3.000 (76.20)
10	.590 (14.99)		.680 (17.27)	.490 (12.45)	.844 (21.44)	
12	.750 (19.05)		.859 (21.82)	.607 (15.42)	1.000 (25.40)	3.500 (88.90)
14	.875 (22.22)		.984 (24.99)	.732 (18.59)	1.125 (28.58)	
16	1.000 (25.40)		1.108 (28.14)	.857 (21.77)	1.250 (31.75)	
18	1.125 (28.58)		1.233 (31.32)	.962 (24.43)	1.375 (34.92)	
20	1.250 (31.75)		1.358 (34.49)	1.087 (27.61)	1.500 (38.10)	4.000 (101.60)
22	1.375 (34.92)		1.483 (37.67)	1.212 (30.78)	1.625 (41.28)	
24	1.500 (38.10)	.125 (3.18)	1.610 (40.89)	1.337 (33.96)	1.750 (44.45)	

Inches	mm
.005	0.13
.010	0.25
.015	0.38
.016	0.41
.020	0.51
.031	0.79

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

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Shell size	J disk (gasket) loc. +.010 -.020 (+0.25 - 0.51)	L max length	M shldr loc. +.031 -.000 (+0.25 - 0.00)	Q dia over kwys +.005 -.006 (+0.13 - 0.15)	W bay pin loc.	X max length overall
8	.328 (8.33)	.562 (14.27)	.368 (9.35)	.412 (10.46)	.100 (2.54)	.781 (19.84)
10				.540 (13.72)		
12				.689 (17.50)		
14				.814 (20.68)		
16				.939 (23.85)		
18				1.039 (26.39)		
20	.390 (9.91)	.625 (15.88)	.430 (10.92)	1.164 (29.57)	.109 (2.77)	.844 (21.44)
22				1.289 (32.74)		
24				1.414 (35.92)		
		.658 (16.71)	.463 (11.76)	1.414 (35.92)		.875 (22.22)

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.
5. Values applied to "W" dimension are true position.

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

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

The chain or rope shall rotate freely on the fastener.

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

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. Rope - 7 strand stainless steel, passivated.

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

- A - series 2, hard anodic, non-conductive, black, non-reflective, 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, non-reflective, in accordance with MIL-DTL-26482.
- T - series 1 and 2, nickel fluorocarbon polymer, conductive, non-reflective, in accordance with MIL-DTL-26482.
- W - series 1 and 2, cadmium, conductive (500 hr dynamic salt spray in accordance with MIL-DTL-26482; olive drab).
- K - series 1 and 2, zinc-nickel, conductive, black, nonreflective, in accordance with MIL-DTL-26482.

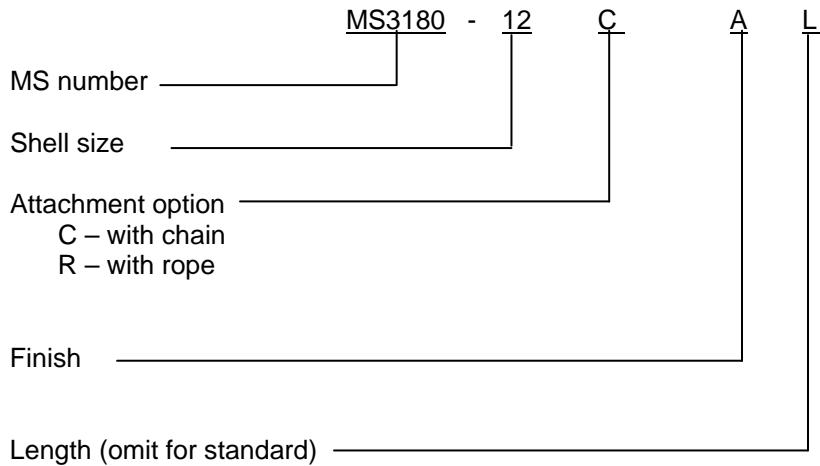
QUALIFICATION: Qualification and requalification requirements shall be in accordance with MIL-DTL-26482, series 1 and 2 connectors.

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

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

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Part or Identifying Number (PIN) example:



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

Custodians:

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

Preparing activity:

DLA – CC

(Project 5935-2011-025)



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>.

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