

INCH-POUND

MS27511L  
 2 February 2010  
 SUPERSEDING  
 MS27511K  
 12 July 2002

## DETAIL SPECIFICATION SHEET

COVERS, PROTECTIVE, ELECTRICAL, CONNECTOR  
 RECEPTACLE, BAYONET COUPLING, SERIES II

Reactivated after 10 June 2005 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-38999.

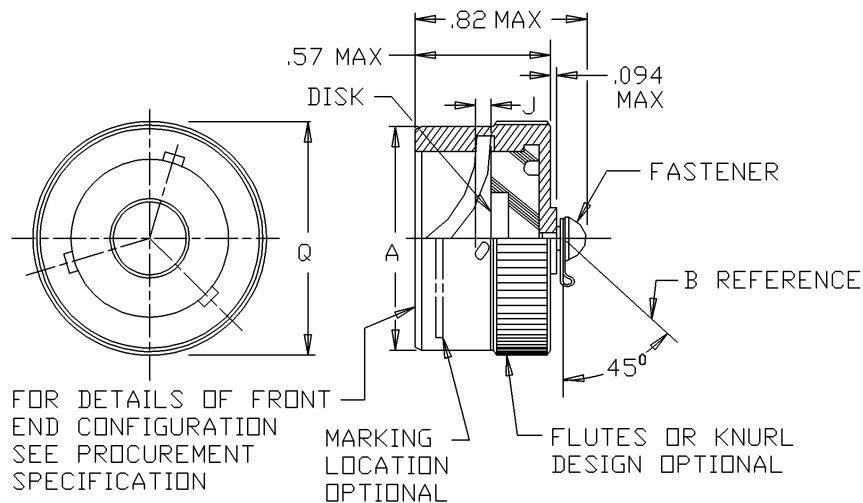


FIGURE 1. Cover.

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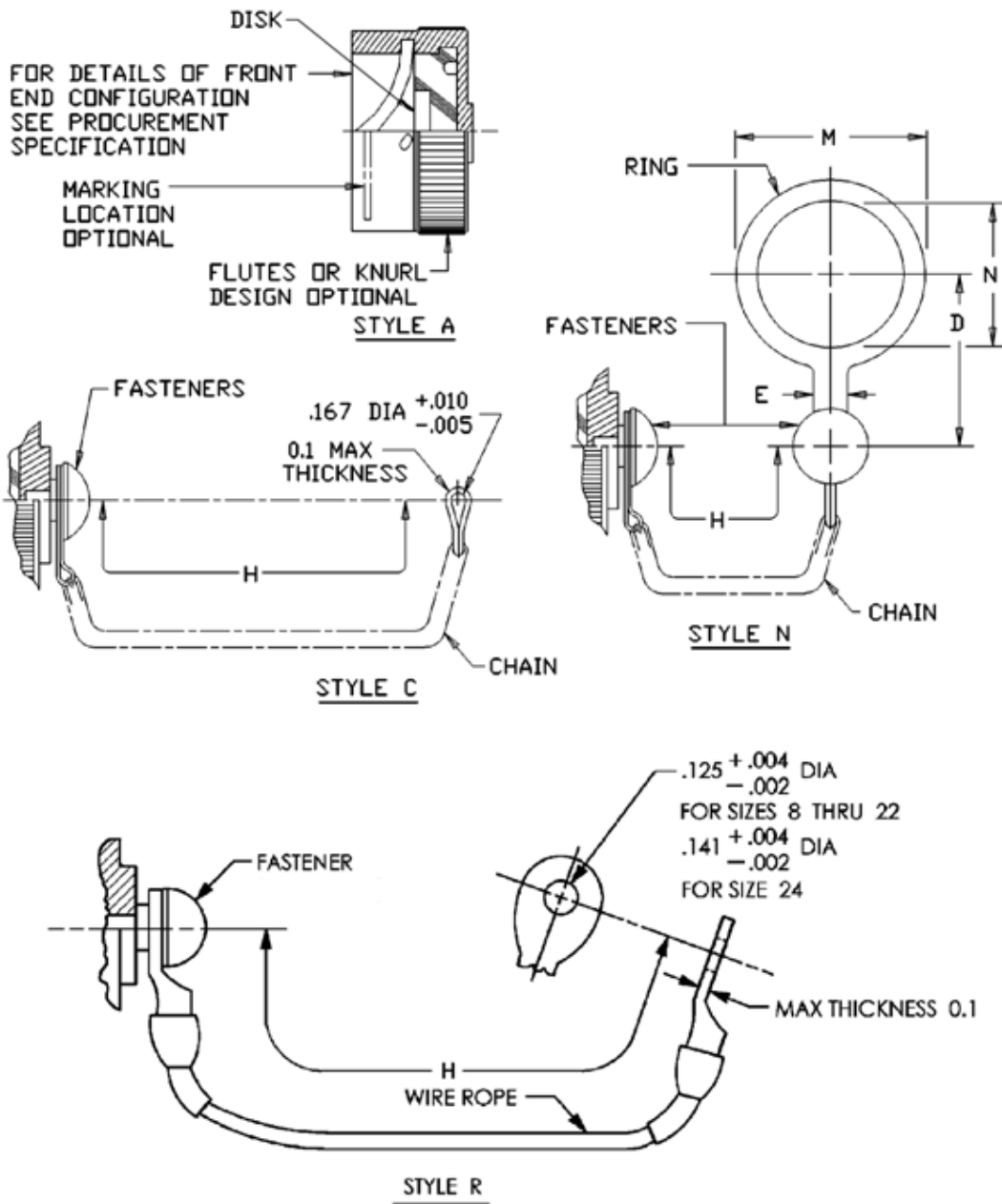


FIGURE 1. Cover – Continued.

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Shell size	A dia max	D		E min ring throat	H +.500 -.250 standard chain or rope length	J $\pm$ .015	M max dia	N min dia	Q max dia
		max	min						
8	.630	1.13	.80	.23	3.0	.082	1.22	.89	.750
10	.761	1.23	.93				1.42	1.01	.859
12	.936	1.29	.99		3.50		1.55	1.14	1.031
14	1.074	1.35	1.05				1.68	1.26	1.156
16	1.172	1.41	1.11		1.80		1.39	1.281	
18	1.304	1.47	1.18		1.92		1.51	1.406	
20	1.435	1.54	1.24		4.0		2.05	1.64	1.531
22	1.560	1.60	1.30				2.18	1.76	1.641
24	1.688	1.66	1.36				.107	2.30	1.89

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	.05	.57	14.5	1.11	28.2	1.36	34.5	1.66	42.2
.004	.10	.630	16.00	1.13	28.7	1.39	35.3	1.68	42.7
.005	.13	.750	19.05	1.14	29.0	1.406	35.71	1.688	42.87
.010	.25	.761	19.33	1.156	29.36	1.41	35.8	1.76	44.7
.015	.38	.80	20.3	1.172	29.77	1.42	36.1	1.766	44.86
.030	.76	.82	20.8	1.18	30.0	1.435	36.45	1.80	45.7
.094	2.39	.859	21.82	1.22	31.0	1.47	37.3	1.89	48.0
.107	2.72	.89	22.6	1.23	31.2	1.51	38.4	1.92	48.8
.1	3.0	.93	23.6	1.24	31.5	1.531	38.90	2.05	52.1
.125	3.18	.936	23.77	1.26	32.0	1.54	39.1	2.18	55.4
.141	3.58	.99	25.1	1.281	32.54	1.55	39.4	2.30	58.4
.167	4.24	1.01	25.7	1.29	32.8	1.560	39.62	3.00	76.2
.23	5.8	1.031	26.19	1.30	33.0	1.60	40.6	3.50	88.9
.25	6.4	1.05	26.7	1.304	33.12	1.64	41.65	4.00	101.6
.50	12.7	1.074	27.28	1.35	34.3	1.641	41.68		

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Finish: See MIL-DTL-38999.
4. Not for space born applications.

FIGURE 1. Cover – Continued.

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## REQUIREMENTS:

Dimensions and configuration: See figure 1.  
Interface dimensions shall conform to MIL-DTL-38999.

## Material:

Ring - Passivated stainless steel, .030 maximum thickness.  
Cover - Impact extruded or machined aluminum alloy.  
Disk - Silicone or fluorosilicone elastomer.  
Chain - Passivated stainless steel, conforming to RR-C-271, type II, class 3.  
Wire rope - Insulated, braided steel wire.  
Fastener - Passivated stainless steel.

Eyelets shall be crimped over wire rope as to ensure a breaking strength equal to or greater than that of the wire rope.

Mating connectors: MIL-DTL-38999 Series II receptacles and MIL-DTL-27599 Series II receptacles.

Disk shall be bonded to cover, or mechanically retained.

The chain or rope assembly shall rotate freely on the cover fastener.

The protective cover and rope assembly shall withstand a static tensile load of 35 pounds applied along the B reference line for 5 minutes.

Fastener tensile strength: Both axial and longitudinal directions shall be 25 pounds. The load shall be applied to the end of the chain or wire rope.

## Qualification:

Examination of product.  
Mating and unmating forces.  
Humidity.  
Salt spray (corrosion).  
Fastener tensile strength (see requirement).  
Altitude immersion.

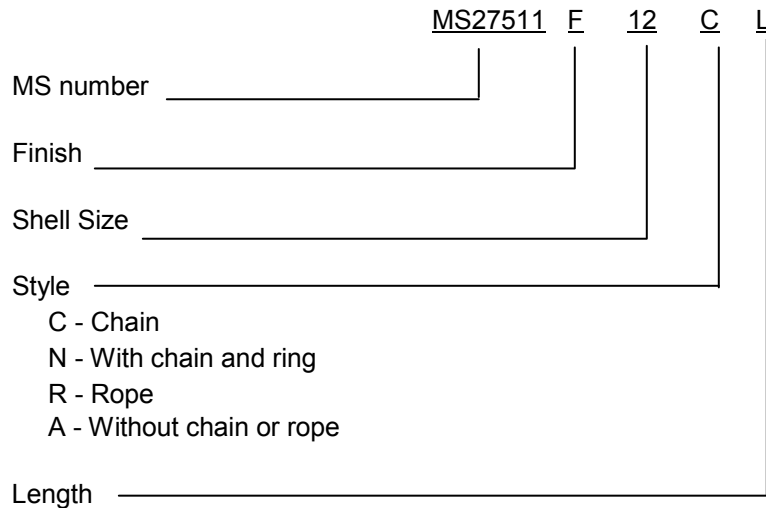
Group A sampling inspection. 100% inspection is not applicable. Sampling inspection shall be as specified in table I:

TABLE I. Group A sampling plan.

Lot size	Sample 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

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Part or Identifying Number (PIN) example:



- C - Chain
- N - With chain and ring
- R - Rope
- A - Without chain or rope

- L- 5-inch chain in lieu of standard length.
- Leave blank for standard length.
- Applicable to chain only. Not applicable to style R.

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-38999, this document references the following:

MIL-DTL-27599  
RR-C-271

## CONCLUDING MATERIAL

## Custodians:

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

## Preparing activity:

DLA – CC

(Project 5935–2009-155)

## Review activities:

Army – AR, 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.daps.dla.mil>.