

INCH-POUND

MS27502J  
 12 July 2002  
 SUPERSEDING  
 MS27502H  
 31 March 1988

## DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, COVER,  
PROTECTIVE, RECEPTACLE, BAYONET COUPLING, SERIES I

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 and MIL-DTL-38999.

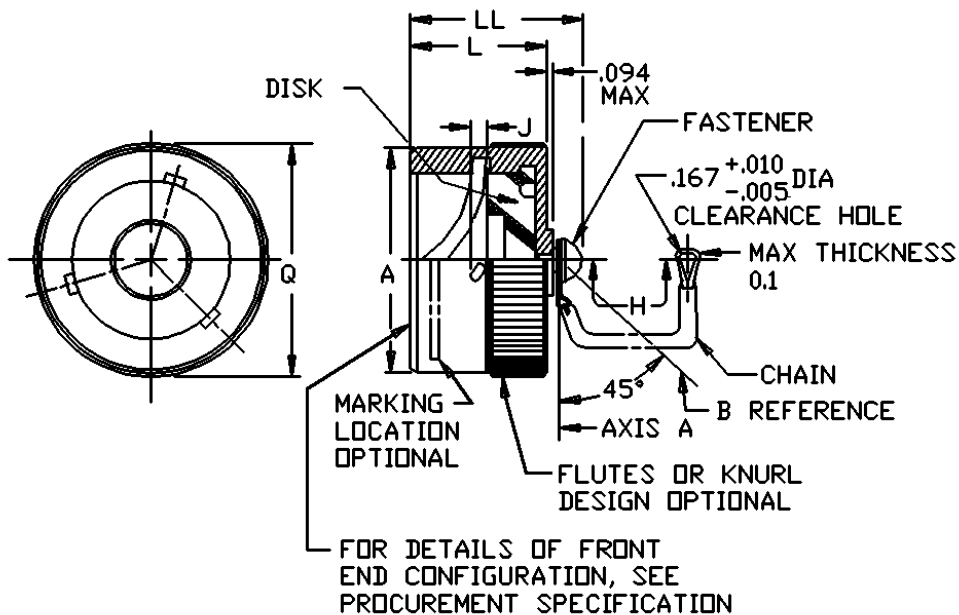
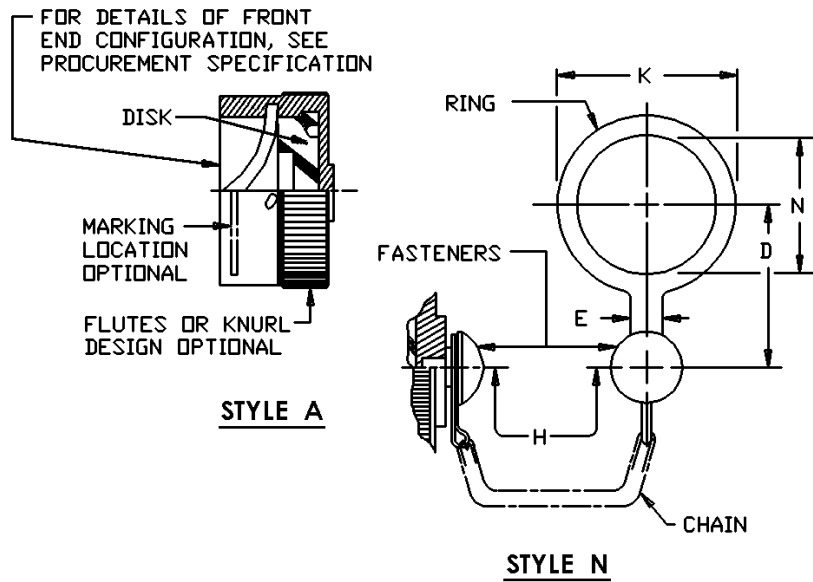
STYLE C

FIGURE 1. Cover.

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Shell size	A max dia	D		E min ring throat	H +.50, -.25 Standard chain length	J ±.015	K max dia	L max	LL max	N min dia	Q max dia
		min	max								
9	.82	.71	1.03	.23	3.0	.105	1.03	.82	1.1	.70	.86
11	.94	.74	1.13				1.21			.84	.98
13	1.10	.93	1.23				1.40			1.01	1.16
15	1.22	.99	1.29		3.5		1.60			1.14	1.28
17	1.34	1.05	1.35				1.70			1.26	1.41
19	1.46	1.11	1.41				1.80			1.39	1.52
21	1.58	1.18	1.47		4.0		1.92			1.51	1.65
23	1.70	1.24	1.54				2.10			1.64	1.77
25	1.83	1.30	1.60				.138			2.20	1.76

FIGURE 1. Cover - Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	0.13	.74	18.8	1.13	28.7	1.39	35.3	1.77	45.0
.010	0.25	.82	20.8	1.14	29.0	1.40	35.6	1.80	45.7
.015	0.38	.84	21.3	1.16	29.5	1.41	35.8	1.83	46.5
.030	0.76	.86	21.8	1.18	30.0	1.46	37.1	1.89	48.0
.094	2.39	.93	23.6	1.21	30.7	1.47	37.3	1.92	48.7
.1	2.5	.94	23.9	1.22	31.0	1.51	38.4	2.10	53.3
.105	2.67	.98	24.9	1.23	31.2	1.52	38.6	2.20	55.9
.138	3.51	.99	25.1	1.24	31.5	1.54	39.1	3.0	76.2
.167	4.24	1.01	25.7	1.26	32.0	1.58	40.1	3.5	88.9
.23	5.8	1.03	26.2	1.28	32.5	1.60	40.6	4.0	101.6
.25	6.4	1.05	26.7	1.29	32.8	1.64	41.7		
.50	12.7	1.10	27.9	1.30	33.0	1.65	41.9		
.70	17.8	1.1	28.0	1.34	34.0	1.70	43.2		
.71	18.0	1.11	28.2	1.35	34.3	1.76	44.7		

## 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.

## REQUIREMENTS:

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

## Material:

Cover – Impact extruded or machined aluminum alloy.

Disk – Silicone or fluorosilicone elastomer.

Ring – Stainless steel passivated, .030 max thickness.

Chain – Stainless steel, passivated.

Fastener – Stainless steel, passivated.

Mating connectors: MIL-DTL-38999 Series I, and MIL-C-27599 Series I.

Disk shall be bonded, or mechanically retained.

Chain shall rotate freely on cover fastener.

The protective cover and chain 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.

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## Qualification:

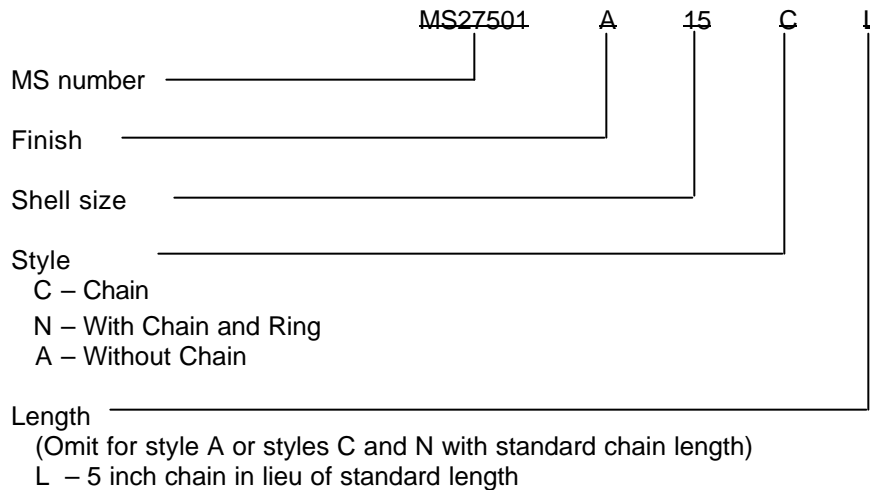
Examination of product.  
 Mating and unmating forces.  
 Humidity.  
 Salt spray (corrosion).  
 Fastener tensile strength (see requirement).  
 Altitude immersion.

Group A sampling inspection. 100% inspection is not applicable. Sampling inspection shall be in accordance with 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

Part or Identifying Number (PIN) example:



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CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - AS  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4401)

Review activities:

Army - AR, MI  
Navy - EC, MC, OS  
Air Force - 19, 99  
DLA - IS