

INCH-POUND

MS27510H  
 15 June 2012  
 SUPERSEDING  
 MS27510G  
 12 July 2002

## DETAIL SPECIFICATION SHEET

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

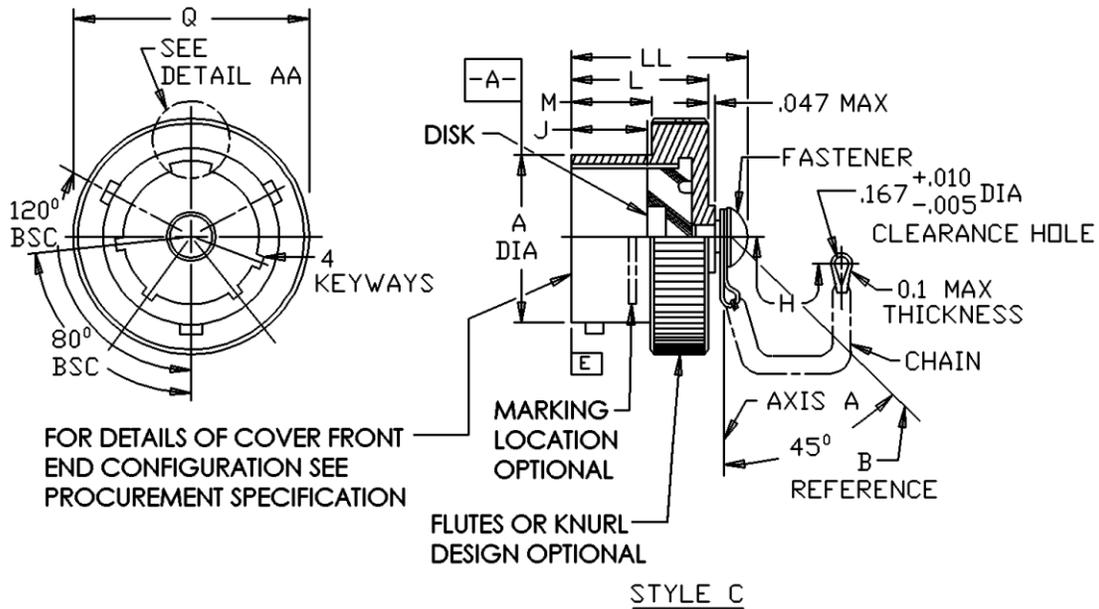
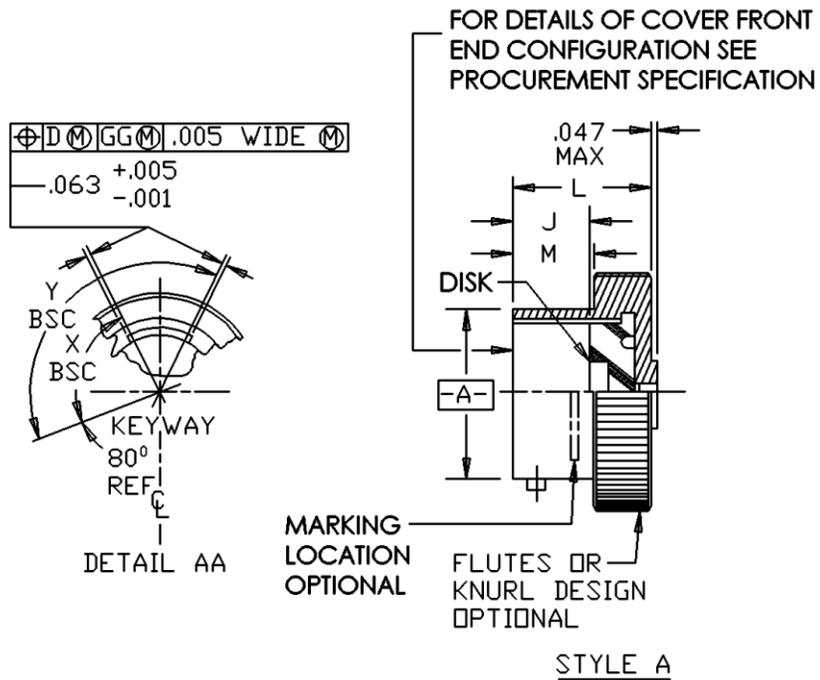


FIGURE 1. Cover.

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Shell size	A dia +.001 -.005	H +.500 / -.250 standard chain length	J +.010 -.015	L max	M min	Q dia max	X BSC degree	Y BSC degree	LL max
8	.473	3.0	.222	.57	.31	.72	82°	118°	.82
10	.590					.85	72°	128°	
12	.750	3.50				1.00	68°	132°	
14	.875					1.13	66°	134°	
16	1.000					1.25	70°	130°	
18	1.125	1.38							
20	1.250	4.0				1.50	74°	126°	
22	1.375					1.63			
24	1.500		1.75						

FIGURE 1. Cover – Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.473	12.01	1.00	25.4	1.75	44.4
.005	0.13	.500	12.70	1.125	28.58	3.0	76.2
.010	0.25	.57	14.5	1.13	28.7	3.5	88.9
.015	0.38	.59	15.0	1.25	31.8	4.0	101.6
.047	1.19	.72	18.3	1.375	34.92	5.0	127.0
.063	1.60	.75	19.0	1.38	35.1	6.0	152.4
.167	4.24	.82	20.8	1.50	38.1	7.0	177.8
.222	5.64	.85	21.6	1.63	41.4		
.250	6.35	.875	22.22				
.31	7.90						

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Finish: See MIL-DTL-38999.
4. BSC dimensions apply at maximum material condition (MMC).
5. The gauge features for GG shall be .004 inch (0.10 mm) smaller than MMC size at basic location.
6. Not for space born applications.

FIGURE 1. Cover – Continued.

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## REQUIREMENTS:

Dimensions and configuration: See figure 1.

Interface dimensions shall be in accordance with MIL-DTL-38999.

## Material:

Cap - Impact extruded or machined aluminum alloy.

Disk - Silicone or fluorosilicone elastomer.

Chain - Stainless steel, passivated, conforming to RR-C-271, type II, class 3.

Fastener - Stainless steel, passivated.

Mating connectors: MIL-DTL-38999, series II plugs and MIL-DTL-27599, series II plugs.

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.

## Qualification:

Examination of product.

Mating and unmating forces.

Humidity.

Salt spray (corrosion).

Fastener tensile strength (see requirement).

Altitude immersion.

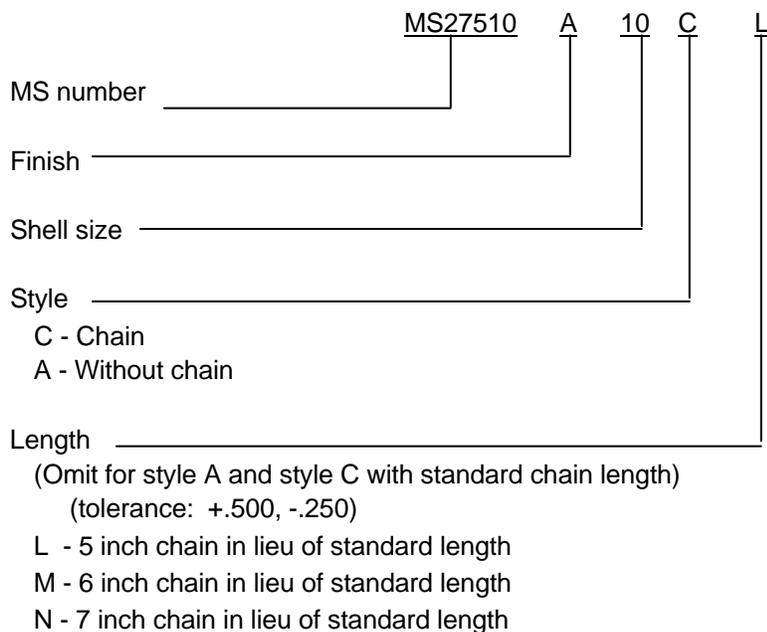
Group A sampling inspection. 100% inspection is not applicable. Sampling inspection shall be in accordance with table I:

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

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Part or Identifying Number (PIN) example:



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 5935-2012-043)

Review activities:  
Army – AR, MI  
Navy – EC, MC, OS  
Air Force – 19, 99  
DLA – IS

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>.