(INCH-POUND)

MIL-C-39012/25E
23 July 1991
SUPERSEDING
MIL-C-39012/25D
6 October 1983

MILITARY SPECIFICATION SHEET

# CONNECTORS, COAXIAL, RADIOFREQUENCY (HARDWARE FOR RADIOFREQUENCY COAXIAL CONNECTORS)

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 the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-C-39012.

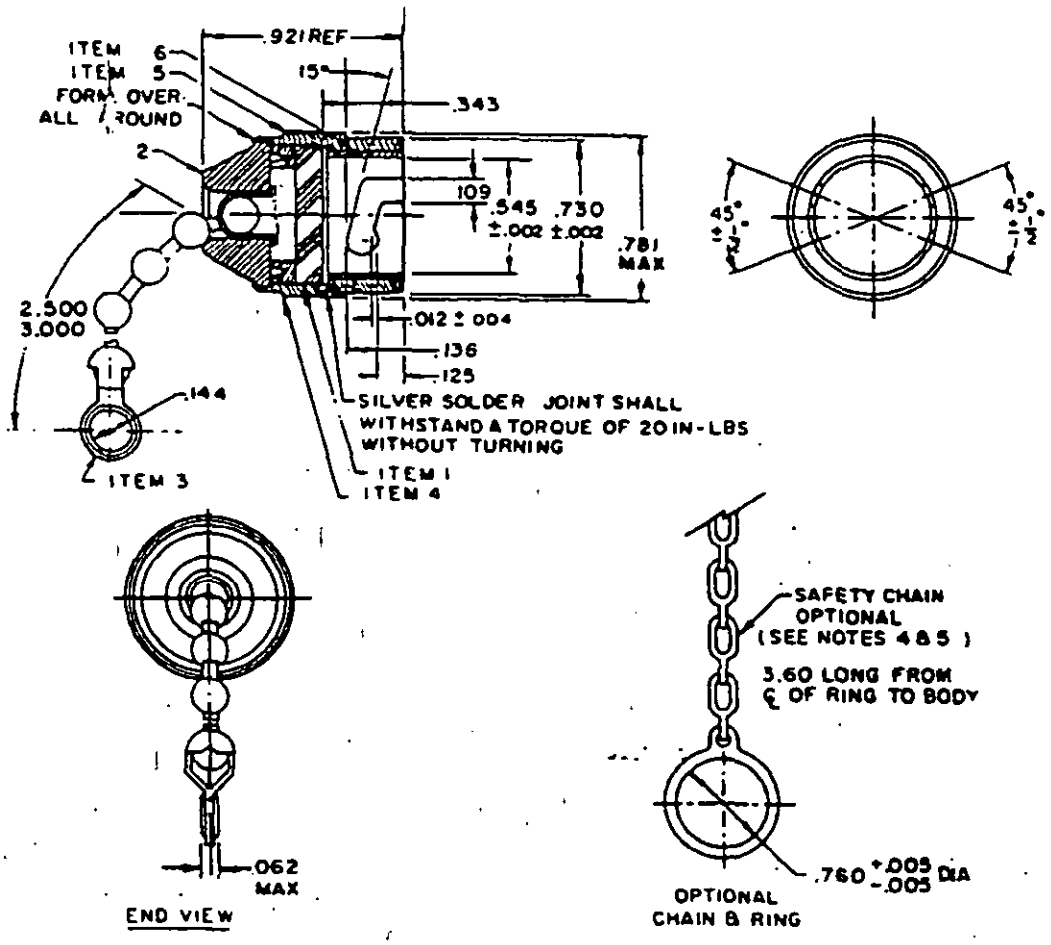
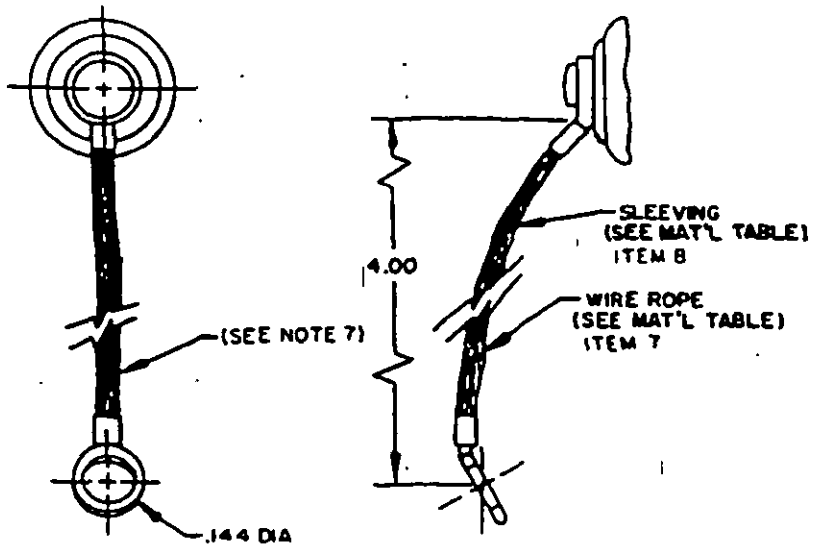



FIGURE 1. M39012/25-0001 cover for series C female connectors with bead chain.
M39012/25-0002 cover for series C female connectors with safety chain.
M39012/25-0101 cover for series C female connectors with wire rope.




| Item | Material | Description |
|---|---|---|
| 1 | Silicon rubber | Gasket |
| 2 | Brass | Disc |
| 3 | Steel | Chain assembly |
| 4 | Silicon rubber | V-groove gasket |
| 5 | Brass | Coupling sleeve |
| 6 | Brass | Bayonet sleeve |
| 7 | SST | Wire rope |
| 8 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .002 | 0.05 | .545 | 13.84 |
| .004 | 0.10 | .730 | 18.54 |
| .005 | 0.13 | .760 | 19.30 |
| .012 | 0.30 | .781 | 19.84 |
| .062 | 1.57 | .921 | 23.39 |
| .109 | 2.77 | 2.5000 | 63.50 |
| .125 | 3.18 | 3.000 | 76.20 |
| .136 | 3.45 | 3.600 | 91.44 |
| .144 | 3.66 | 4.000 | 101.60 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
5. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
6. Bayonets of connector shall lock in bottom slot and shall maintain the connector interface free of dust and moisture.
7. The wire rope shall be specified in MIL-W-83420, type 2, composition B.

FIGURE 1. M39012/25-0001 cover for series C female connectors with bead chain.
M39012/25-0002 cover for series C female connectors with safety chain.
M39012/25-0101 cover for series C female connectors with wire rope - Continued.

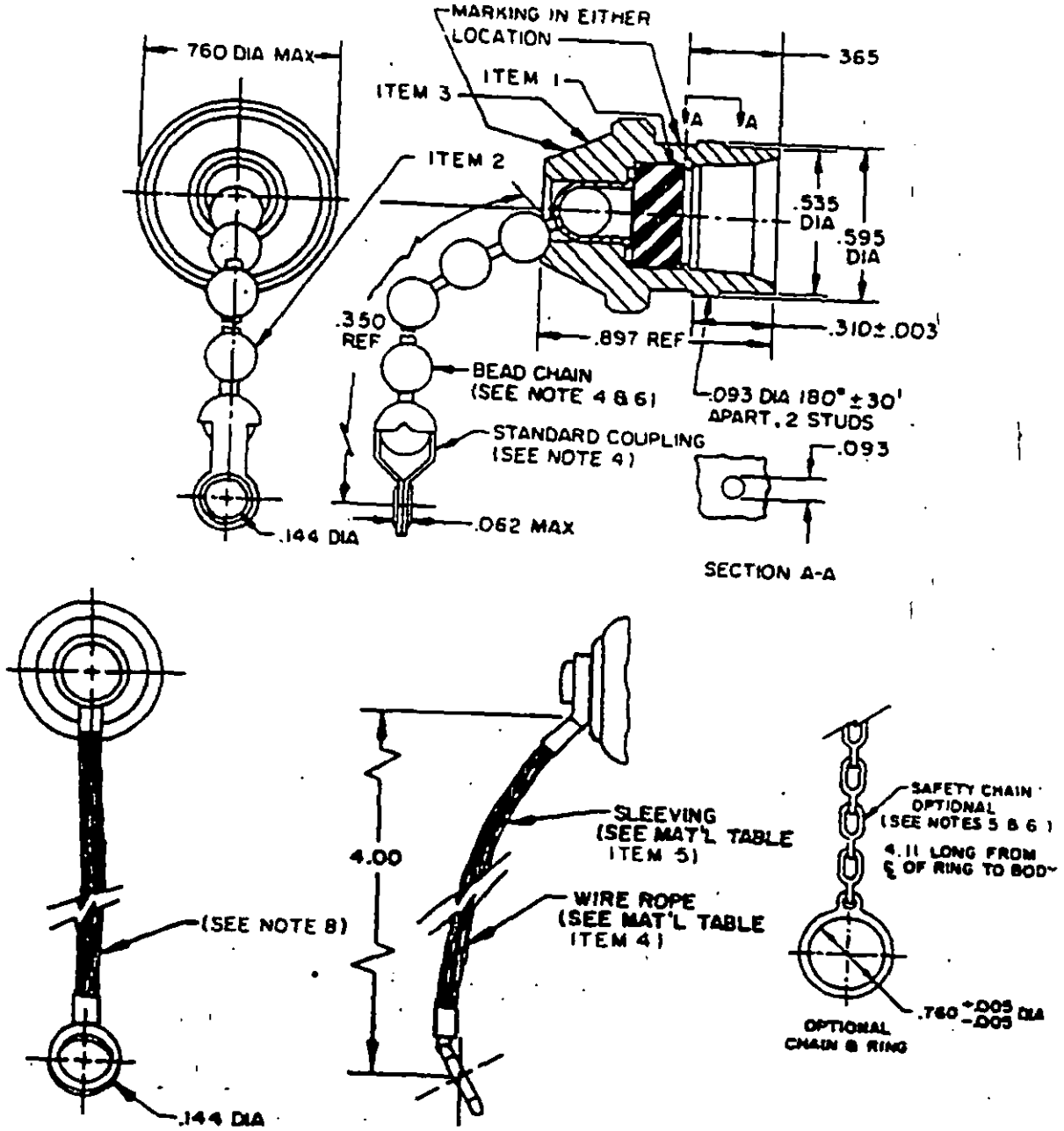


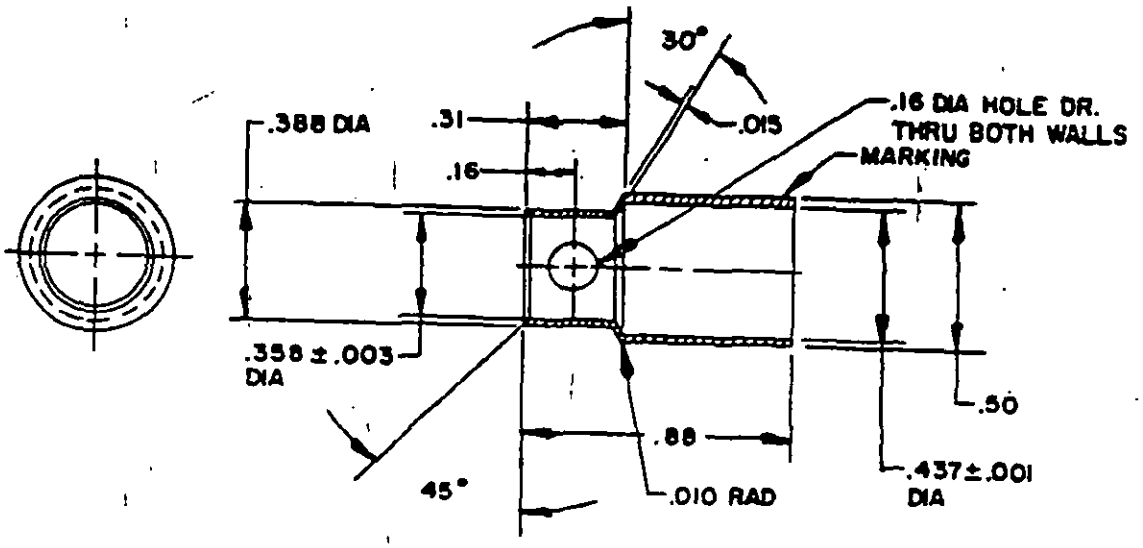

FIGURE 2. M39012/25-0003 cover for series C male with bead chain.
M39012/25-0004 cover for series C male with safety chain.
M39012/25-0103 cover for series C male with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Silicon rubber | Gasket |
| 2 | Steel | Chain assembly |
| 3 | Brass | Body |
| 4 | SST | Wire rope |
| 5 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .003 | 0.08 | .595 | 15.11 |
| .005 | 0.13 | .760 | 19.30 |
| .062 | 1.57 | .897 | 22.78 |
| .093 | 2.36 | 3.500 | 88.90 |
| .144 | 3.66 | 4.000 | 101.60 |
| .310 | 7.87 | 4.110 | 104.39 |
| .535 | 13.59 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Standard coupling number 10-A (brass), bead chain number 6 (monel metal or stainless steel), and sleeve number 10-S1 as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
6. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
7. Bayonets of connector shall lock in bottom slot and shall maintain the connector interface free of dust and moisture.
8. The wire rope shall be specified in MIL-W-83420, type 2, composition B.

FIGURE 2. M39012/25-0003 cover for series C female with bead chain.
M39012/25-0004 cover for series C female with safety chain.
M39012/25-0103 cover for series C female with wire rope - Continued.




| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .358 | 9.09 |
| .003 | 0.08 | .388 | 9.86 |
| .010 | 0.25 | .437 | 11.10 |
| .015 | 0.38 | .50 | 12.7 |
| .16 | 4.1 | .88 | 22.4 |
| .31 | 7.9 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals, ±.005 (0.13 mm) for three place decimals, and ±1/2° on angles.
4. The material shall be brass. Silver plate in accordance with QQ-S-365A, .0001 (0.003 mm) inch thick minimum.

FIGURE 3. M39012/25-0005 shield.

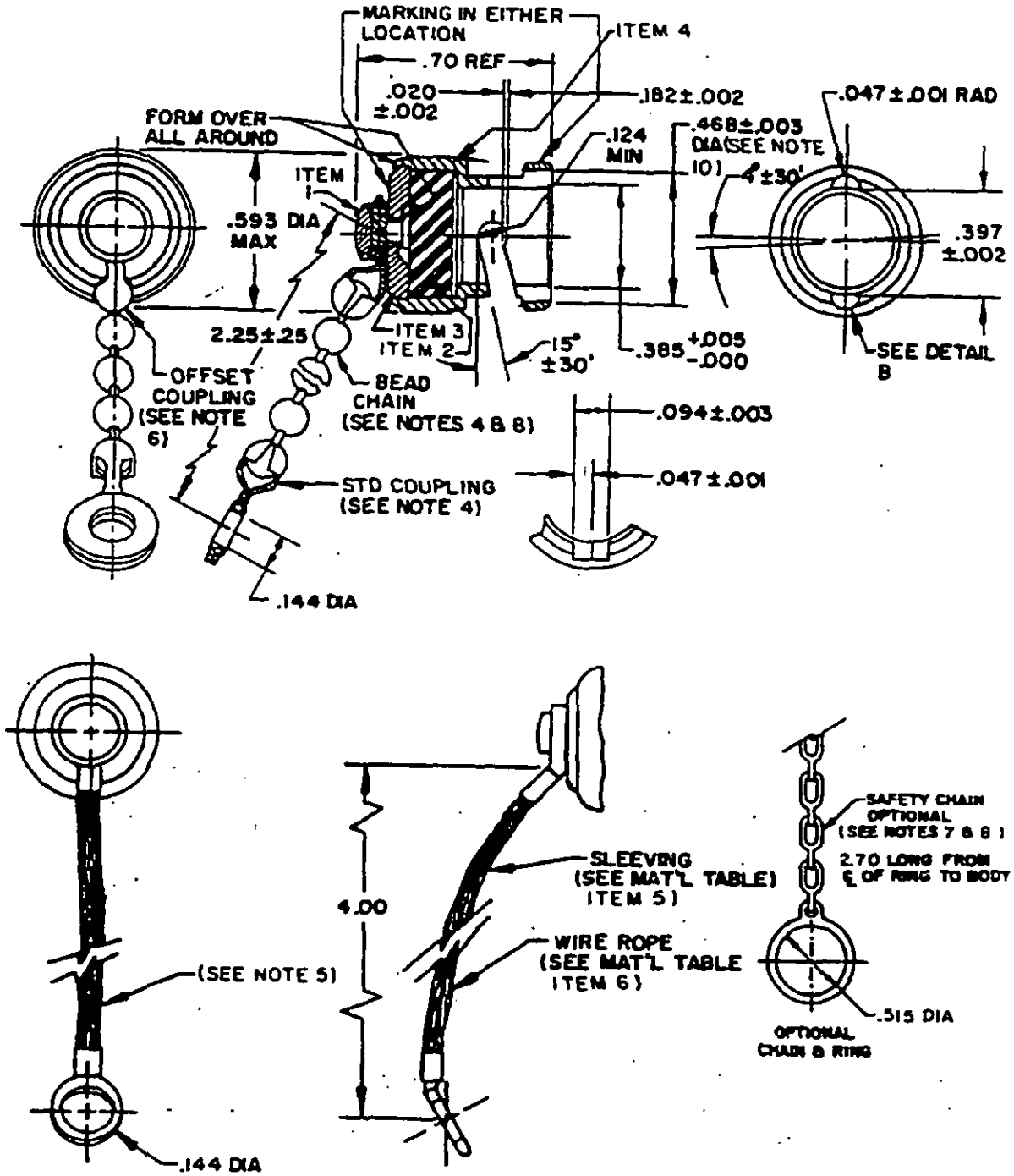



FIGURE 4. M39012/25-0006 cover for series BNC female connectors with bead chain. M39012/25-0007 cover for series BNC female connectors with safety chain. M39012/25-0106 cover for series BNC female connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Rivet |
| 2 | Silicon rubber | Pad |
| 3 | Brass | Disc, body |
| 4 | Brass | Sleeve |
| 5 | SST | Wire rope |
| 6 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .385 | 9.78 |
| .002 | 0.05 | .397 | 10.08 |
| .003 | 0.08 | .468 | 11.89 |
| .005 | 0.13 | .515 | 13.08 |
| .020 | 0.51 | .593 | 15.06 |
| .047 | 1.19 | .70 | 17.8 |
| .094 | 2.39 | 2.250 | 57.15 |
| .124 | 3.15 | 2.700 | 68.58 |
| .144 | 3.66 | 4.000 | 101.60 |
| .25 | 6.4 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Standard coupling number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Bayonets of connector shall lock in bottom slot and shall maintain the connector interface free of dust and moisture.
10. For alternate construction only.

FIGURE 4. M39012/25-0006 cover for series BNC female connectors with bead chain.
M39012/25-0007 cover for series BNC female connectors with safety chain.
M39012/25-0106 cover for series BNC female connectors with wire rope - Continued.

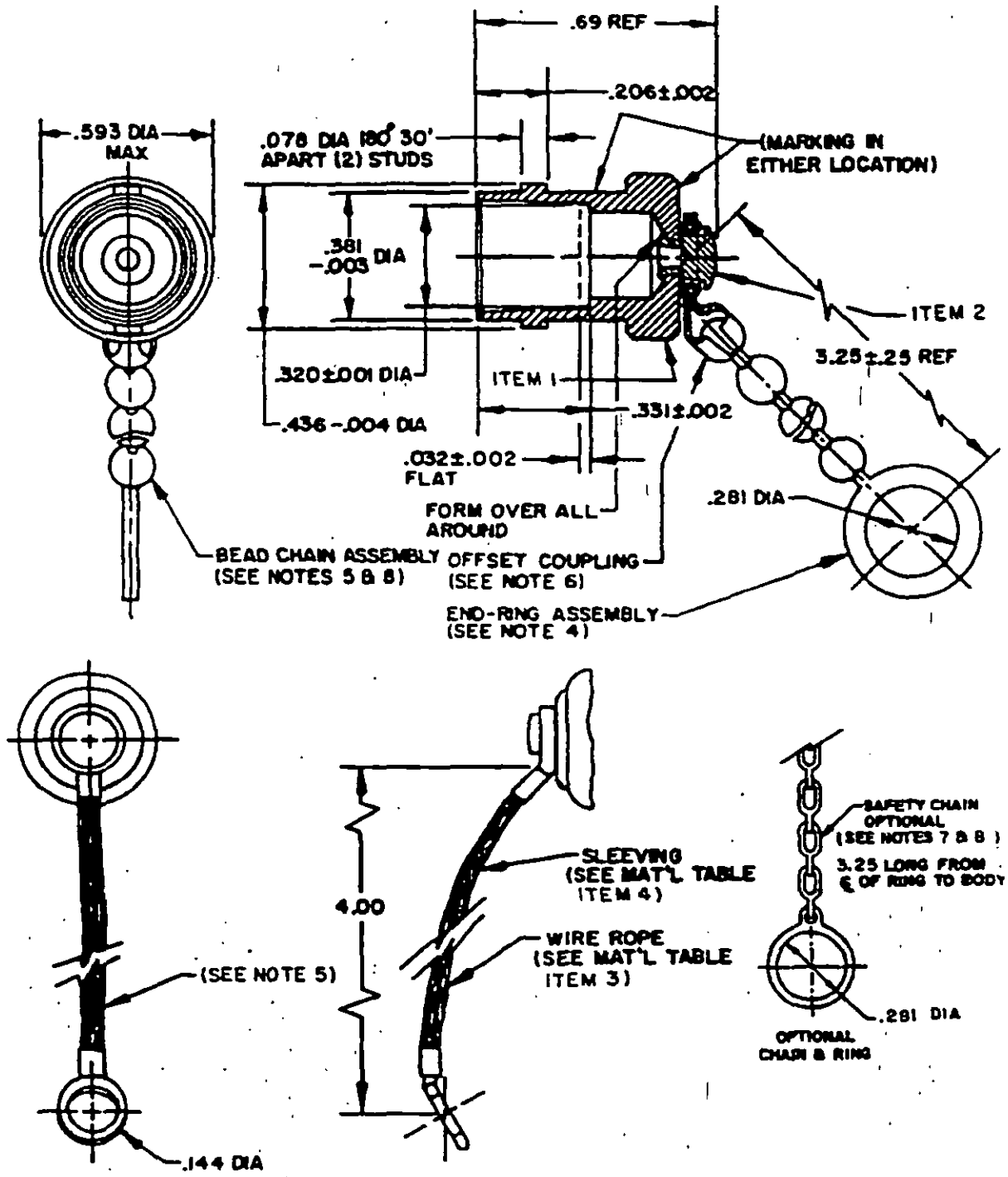


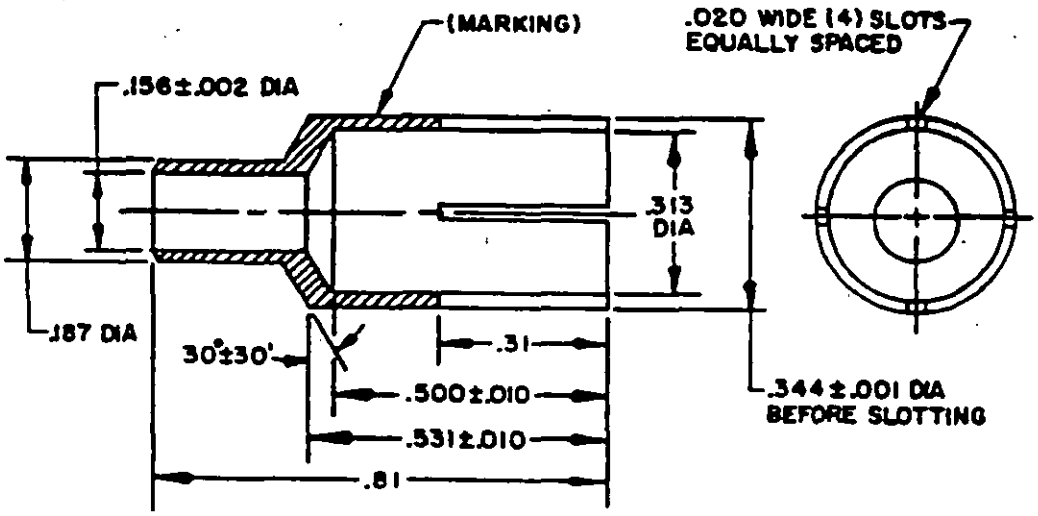

FIGURE 5. M39012/25-0008 cover for series BNC male connectors with bead chain.
M39012/25-0009 cover for series BNC male connectors with safety chain.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Body |
| 2 | Brass | Rivet |
| 3 | SST | Wire rope |
| 4 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .281 | 7.14 |
| .002 | 0.05 | .320 | 8.13 |
| .003 | 0.08 | .331 | 8.41 |
| .004 | 0.10 | .381 | 9.68 |
| .032 | 0.81 | .436 | 11.07 |
| .078 | 1.98 | .593 | 15.06 |
| .144 | 3.66 | .69 | 17.5 |
| .206 | 5.23 | 3.250 | 82.55 |
| .25 | 6.4 | 4.000 | 101.60 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. End ring assembly, number 6-R8 (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Bayonets of covers shall lock in bottom slot and shall maintain the connector interface free of dust and moisture.

FIGURE 5. M39012/25-0008 cover for series BNC male connectors with bead chain.
M39012/25-0009 cover for series BNC male connectors with safety chain - Continued.




| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .31 | 7.9 |
| .002 | 0.05 | .313 | 7.95 |
| .010 | 0.25 | .344 | 8.74 |
| .020 | 0.51 | .500 | 12.70 |
| .156 | 3.96 | .513 | 13.03 |
| .187 | 4.75 | .81 | 20.6 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals, ±.005 (0.13 mm) for three place decimals, and ±1/2° on angles.
4. The material shall be brass. Silver plate in accordance with QQ-S-365, .0001 (0.003 mm) inch thick minimum.

FIGURE 6. M39012/25-0010 shield for series BNC receptacles.

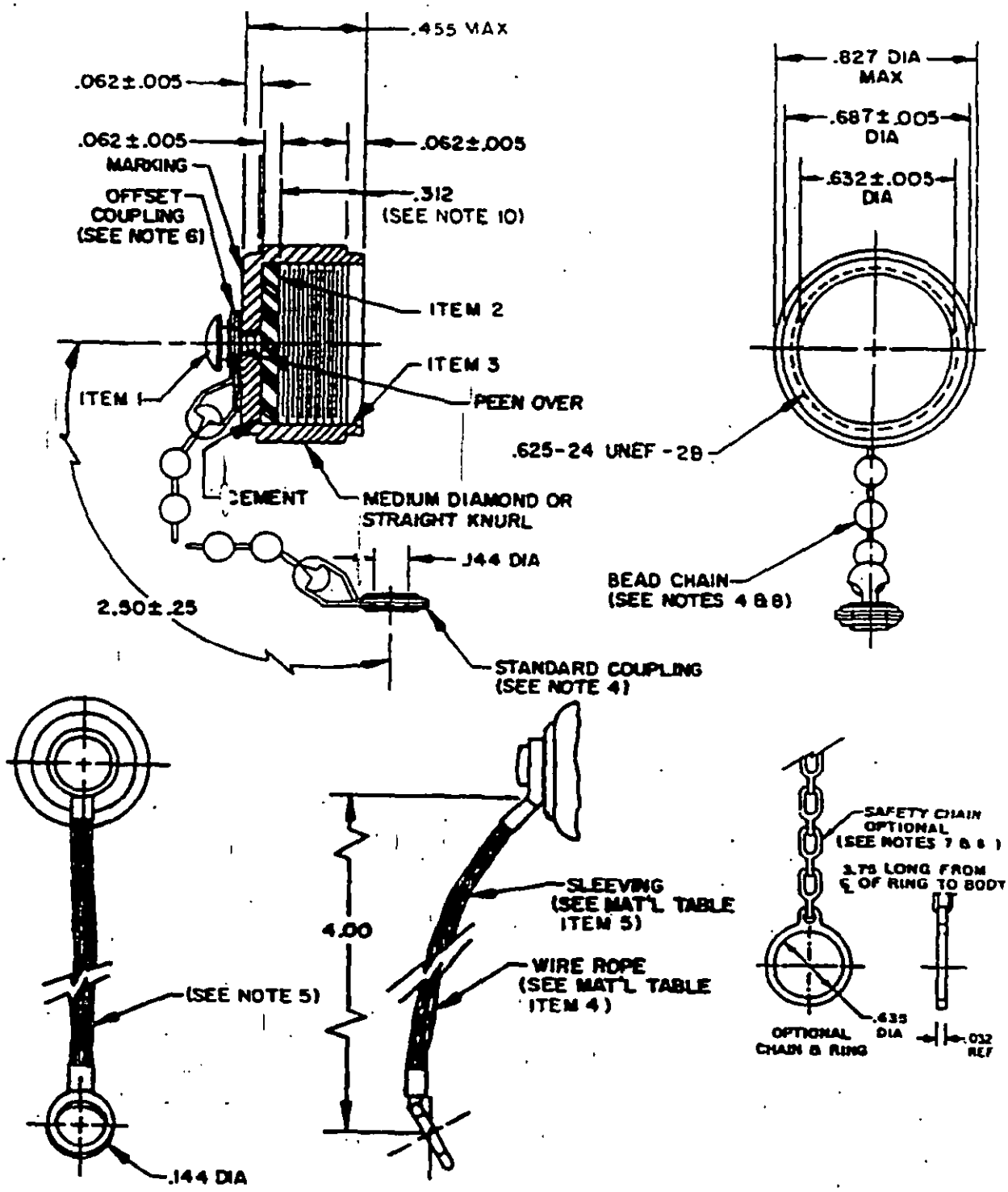



FIGURE 7. M39012/25-0011 cap and chain for series N female connectors with bead chain.
M39012/25-0012 cap and chain for series N female connectors with safety chain.
M39012/25-0111 cap and chain for series N female connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Rivet |
| 2 | Silicon rubber | Gasket |
| 3 | Brass | Cap |
| 4 | SST | Wire rope |
| 5 | Clear teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .005 | 0.13 | .632 | 16.05 |
| .062 | 1.57 | .635 | 16.13 |
| .144 | 3.66 | .687 | 17.45 |
| .25 | 6.4 | .827 | 21.01 |
| .312 | 7.92 | 2.50 | 63.5 |
| .455 | 11.56 | 3.75 | 95.2 |
| .625 | 15.88 | 4.00 | 101.6 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Standard coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall conform to MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Caps shall maintain connector interface free of dust and moisture.
10. This dimension is to the end of cap threads.

FIGURE 7. M39012/25-0011 cap and chain for series N female connectors with bead chain.
M39012/25-0012 cap and chain for series N female connectors with safety chain.
M39012/25-0111 cap and chain for series N female connectors with wire rope - Continued.

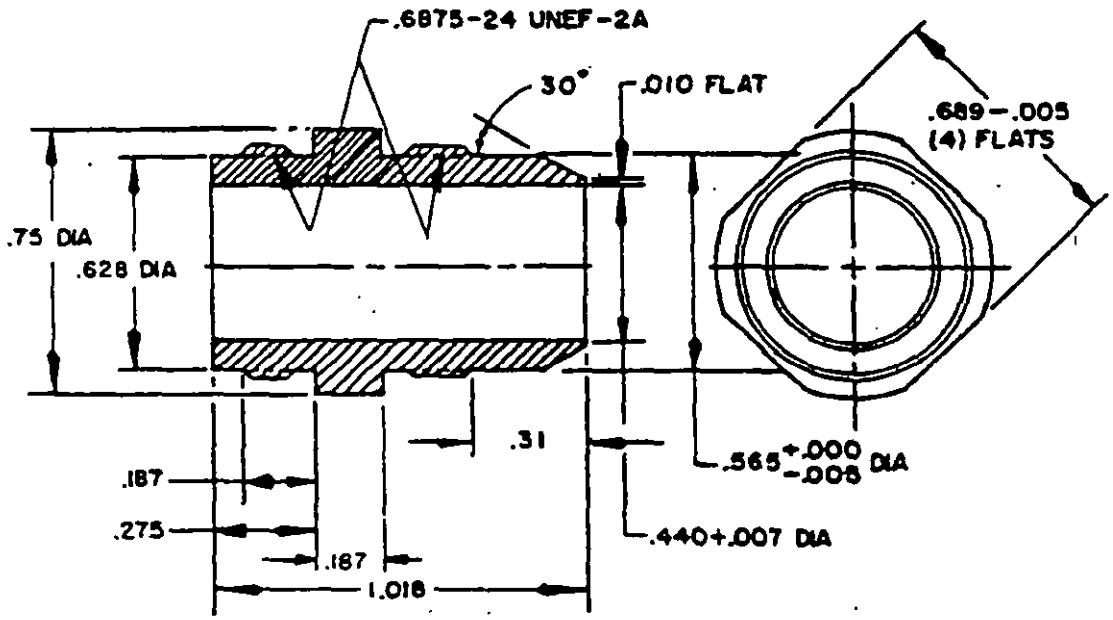



FIGURE 8A

| Inches | mm | Inches | mm |
|---|---|---|---|
| .005 | 0.13 | .440 | 11.18 |
| .007 | 0.18 | .565 | 14.35 |
| .010 | 0.25 | .628 | 15.95 |
| .062 | 1.57 | .6875 | 17.462 |
| .187 | 4.75 | .689 | 17.50 |
| .275 | 6.98 | .750 | 19.05 |
| .310 | 7.87 | 1.018 | 25.86 |

FIGURE 8. M39012/25-0013 armor clamp for M17/74-RG215 and M17/6-RG12 cable.

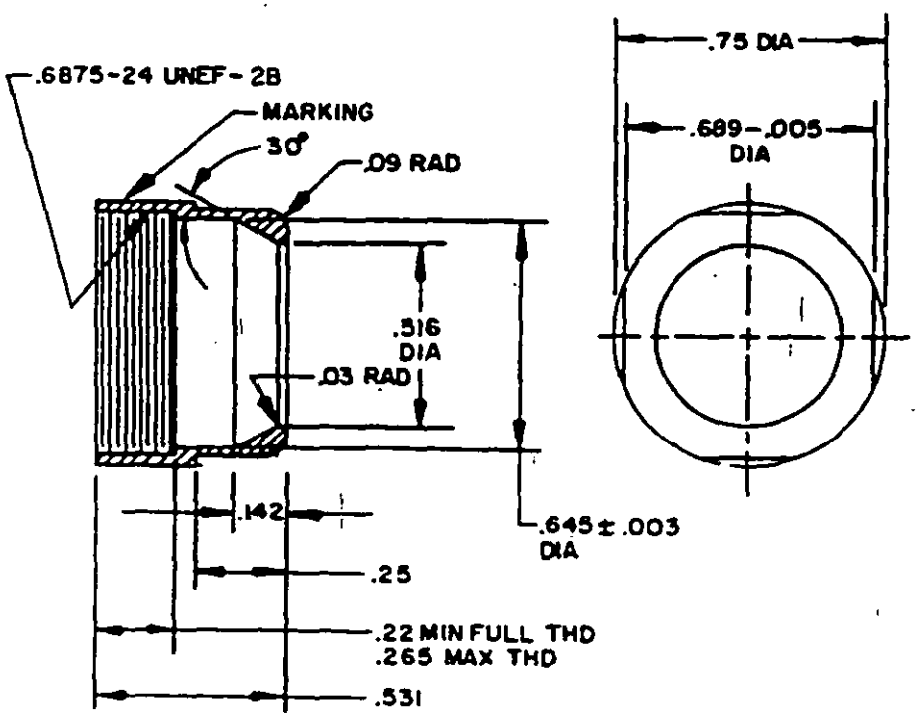



FIGURE 8B

| Inches | mm | Inches | mm |
|---|---|---|---|
| .003 | 0.08 | .265 | 6.73 |
| .005 | 0.13 | .516 | 13.11 |
| .03 | 0.8 | .531 | 13.49 |
| .09 | 2.29 | .645 | 16.38 |
| .142 | 3.61 | .689 | 17.50 |
| .22 | 5.6 | .750 | 19.05 |
| .25 | 6.4 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals, ±.005 (0.13 mm) for three place decimals, and ±1/2° on angles.
4. The material shall be brass. Silver plate in accordance with QQ-S-365, .0001 (0.003 mm) inch thick minimum.

FIGURE 8. M39012/25-0013 armor clamp for M17/74-RG215 and M17/6-RG12 cable - Continued.

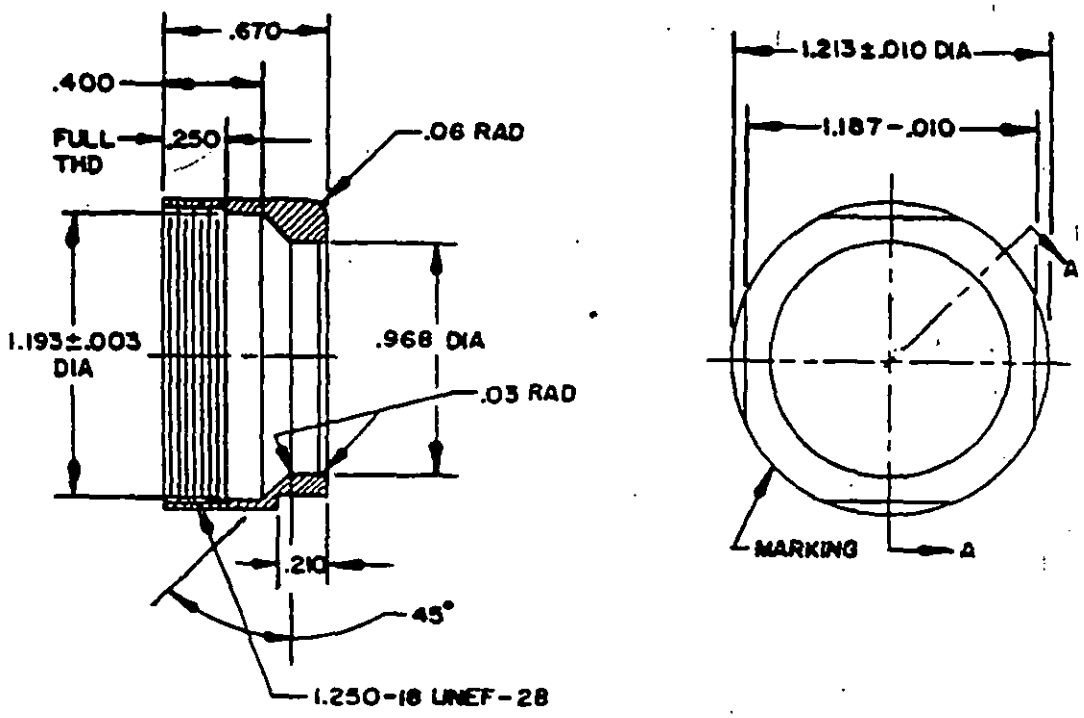
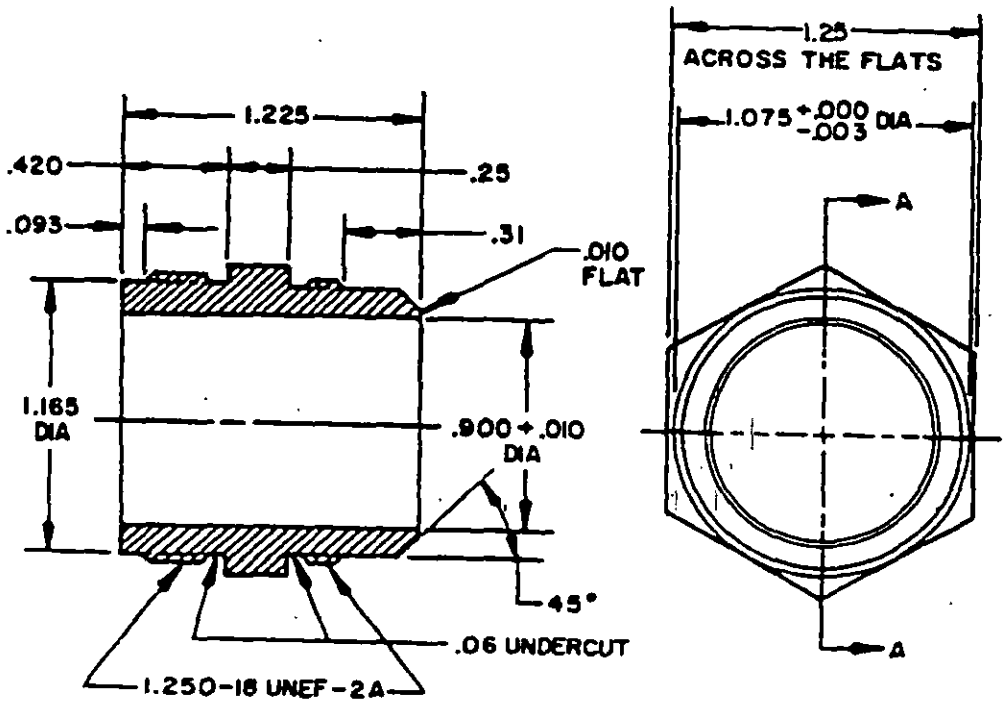



FIGURE 9A

| Inches | mm | Inches | mm |
|---|---|---|---|
| .003 | 0.08 | .670 | 17.02 |
| .010 | 0.25 | .968 | 24.59 |
| .03 | 0.8 | 1.187 | 30.15 |
| .06 | 1.5 | 1.193 | 30.30 |
| .210 | 5.33 | 1.250 | 31.75 |
| .250 | 6.35 | 1.312 | 33.32 |
| .400 | 10.16 | | |

FIGURE 9. M39012/25-0014 armor clamp for M17/79-RG219 cable.

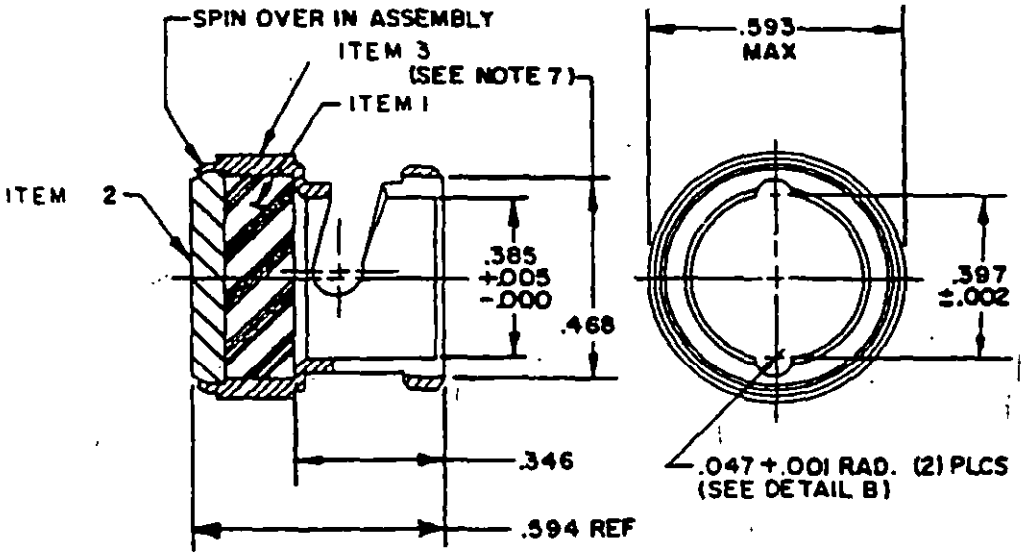


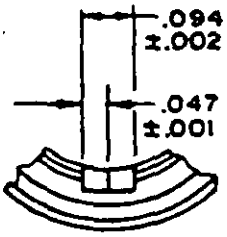

| Inches | mm |
|---|---|
| .005 | 0.13 |
| .010 | 0.25 |
| .06 | 1.5 |
| .093 | 2.36 |
| .250 | 6.35 |
| .310 | 7.87 |
| .420 | 10.67 |
| .900 | 22.86 |
| 1.075 | 27.30 |
| 1.125 | 28.58 |
| 1.165 | 29.59 |
| 1.225 | 31.12 |
| 1.250 | 31.75 |

FIGURE 9B

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals, ±.005 (0.13 mm) for three place decimals, and 1/2° on angles.
4. The material shall be brass. Silver plate in accordance with QQ-S-365, .0001 (0.003 mm) inch thick minimum.

FIGURE 9. M39012/25-0014 armor clamp for M17/79-RG219 cable - Continued.




DETAIL B

ALTERNATE CONSTRUCTION

| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .346 | 8.79 |
| .002 | 0.05 | .385 | 9.78 |
| .005 | 0.13 | .468 | 11.89 |
| .047 | 1.19 | .593 | 15.06 |
| .094 | 2.39 | .594 | 15.09 |

| Item | Material | Description |
|---|---|---|
| 1 | Silicon rubber | Gasket |
| 2 | Brass | Disc |
| 3 | Brass | Sleeve |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. Bayonets of connector shall lock in bottom slot and shall maintain the connector interface free of dust and moisture.
5. Marking shall be on any visible surface.
6. All undimensioned configurations are for reference only.
7. Alternate construction only.

FIGURE 10. M39012/25-0015 cap for series BNC female connectors.

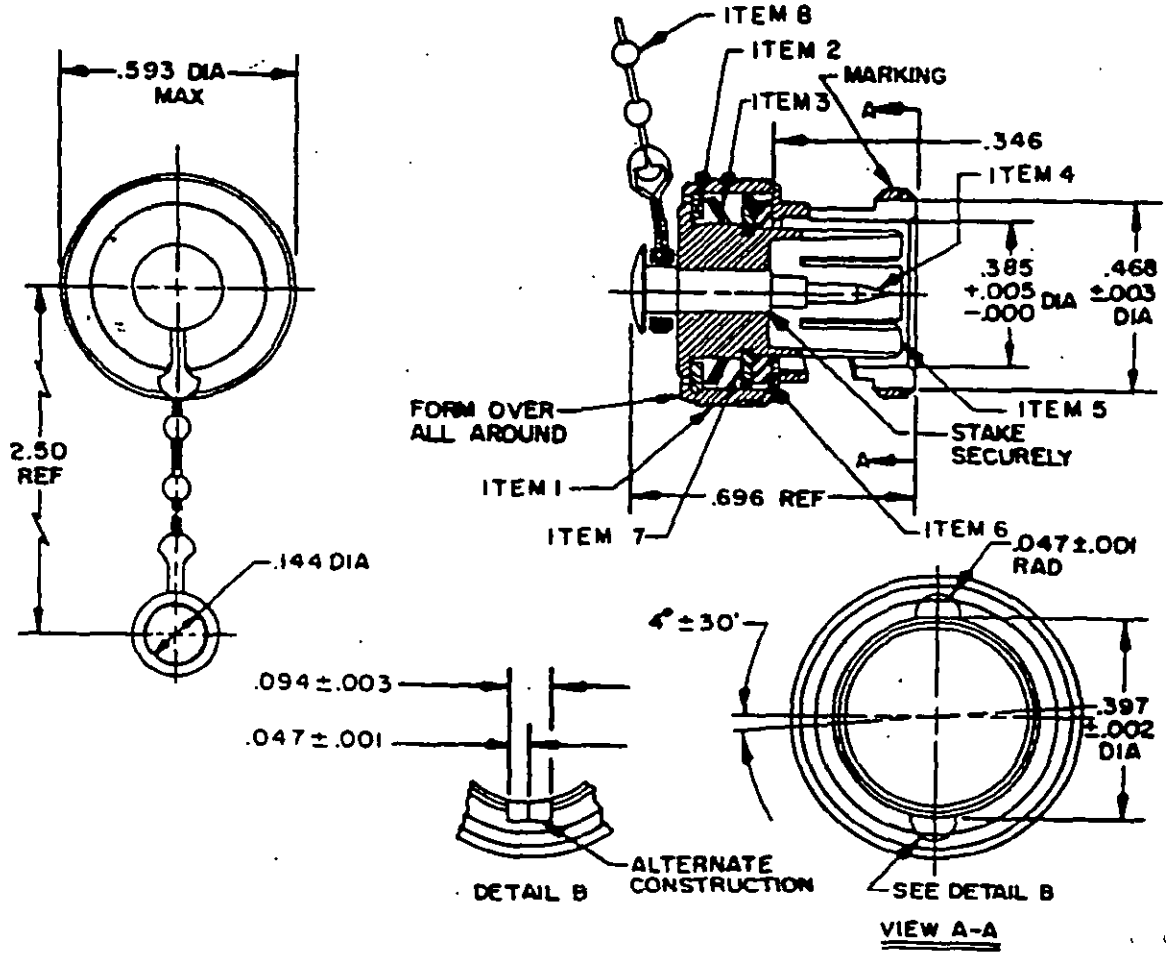
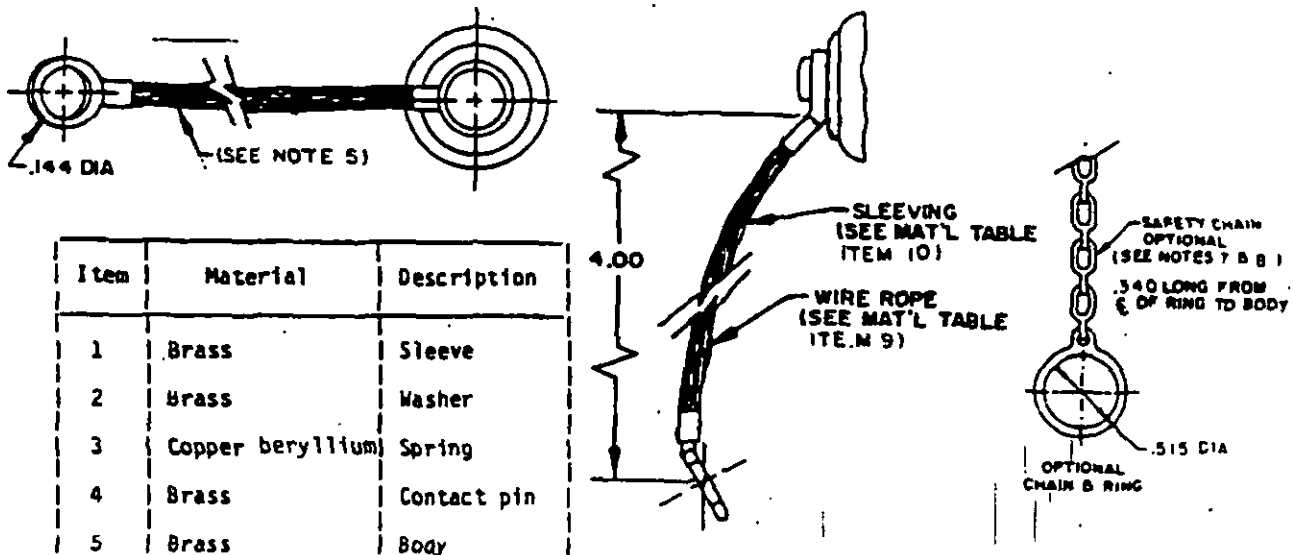



FIGURE 11. M39012/25-0016 shorting plug for series BNC female connectors with bead chain.
M39012/25-0017 shorting plug for series BNC female connectors with safety chain.
M39012/25-0116 shorting plug for series BNC female connectors with wire rope.




| Item | Material | Description |
|---|---|---|
| 1 | Brass | Sleeve |
| 2 | Brass | Washer |
| 3 | Copper beryllium | Spring |
| 4 | Brass | Contact pin |
| 5 | Brass | Body |
| 6 | Silicon rubber | Gasket |
| 7 | Brass | Washer |
| 8 | Notes 5 and 8 | Beaded chain |
| 9 | SST | Wire rope |
| 10 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .397 | 10.08 |
| .002 | 0.05 | .468 | 11.89 |
| .003 | 0.08 | .515 | 13.08 |
| .005 | 0.13 | .593 | 15.06 |
| .047 | 1.19 | .696 | 17.68 |
| .094 | 2.39 | 2.50 | 63.5 |
| .144 | 3.66 | 3.40 | 86.4 |
| .346 | 8.79 | 4.00 | 101.6 |
| .385 | 9.78 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. Standard coupling number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.

FIGURE 11. M39012/25-0016 shorting plug for series BNC female connectors with bead chain. M39012/25-0017 shorting plug for series BNC female connectors with safety chain. M39012/25-0116 shorting plug for series BNC female connectors with wire rope - Continued.

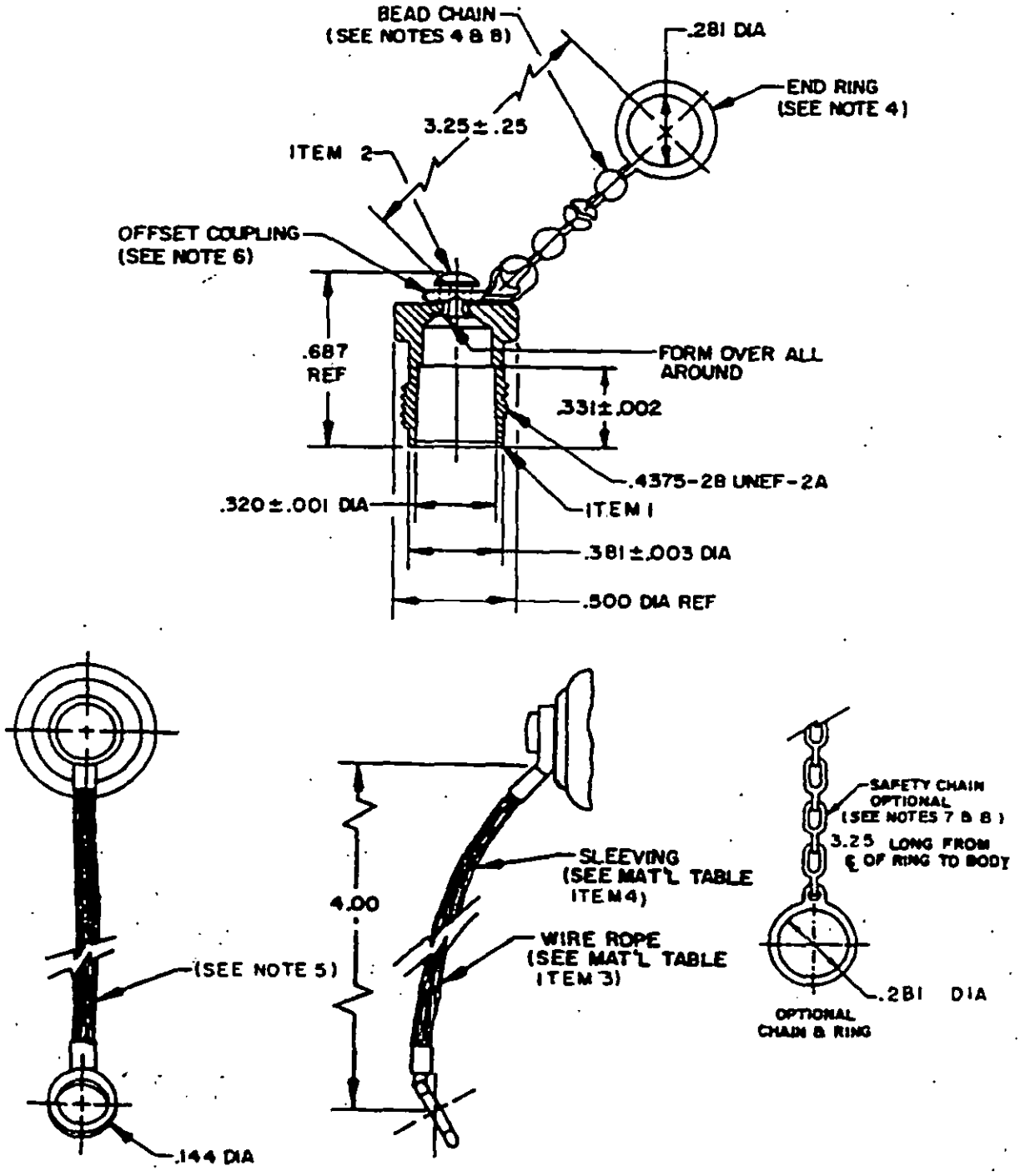



FIGURE 12. M39012/25-0018 cap and chain for series TNC male connectors with bead chain.
M39012/25-0019 cap and chain for series TNC male connectors with safety chain.
M39012/25-0018 cap and chain for series TNC male connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Body |
| 2 | Brass | Rivet |
| 3 | SST | Wire rope |
| 4 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .001 | 0.03 | .331 | 8.41 |
| .002 | 0.05 | .381 | 9.68 |
| .003 | 0.08 | .4375 | 11.112 |
| .144 | 3.66 | .593 | 15.06 |
| .25 | 6.4 | .687 | 17.45 |
| .281 | 7.14 | 3.25 | 82.6 |
| .320 | 8.13 | 4.00 | 101.6 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. End ring assembly, number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.

FIGURE 12. M39012/25-0018 cap and chain for series TNC male connectors with bead chain.
M39012/25-0019 cap and chain for series TNC male connectors with safety chain.
M39012/25-0118 cap and chain for series TNC male connectors with wire rope - Continued.

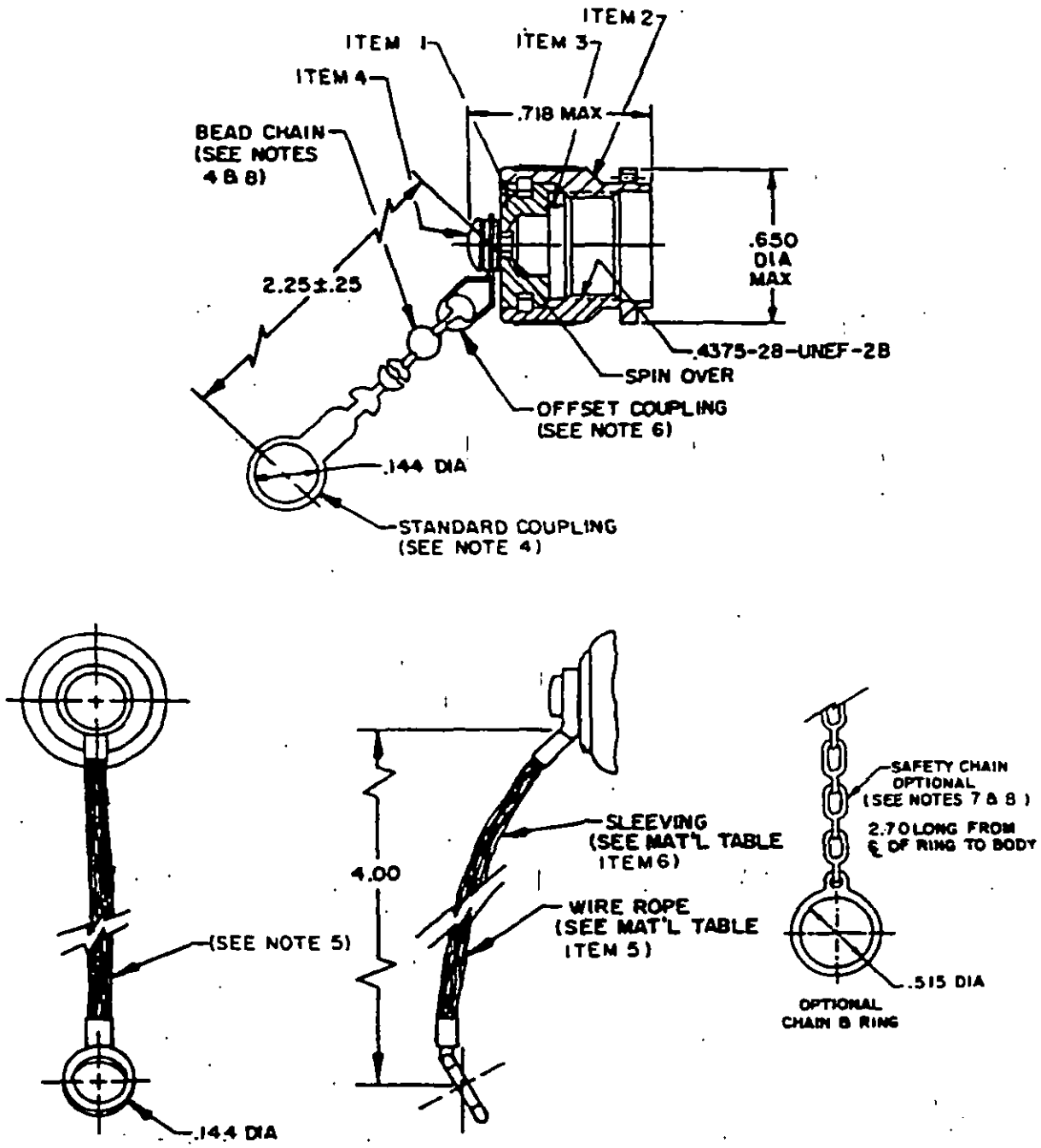



FIGURE 13. M39012/25-0020 cap and chain for TNC female connectors with bead chain.
M39012/25-0021 cap and chain for TNC female connectors with safety chain.
M39012/25-0120 cap and chain for TNC female connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Body |
| 2 | Brass | Coupling nut |
| 3 | Silicone rubber | Gasket |
| 4 | Brass | Rivet |
| 5 | SST | Wire rope |
| 6 | Teflon or nylon or equivalent | Covering |

| Inches | mm | Inches | mm |
|---|---|---|---|
| .144 | 3.66 | .718 | 18.24 |
| .25 | 6.4 | 2.25 | 57.2 |
| .4375 | 11.112 | 2.70 | 68.6 |
| .515 | 13.08 | 4.00 | 101.6 |
| .650 | 16.51 | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. Standard coupling number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Caps shall maintain connector interface free of dust and moisture.
10. All undimensioned configurations are for reference only.

FIGURE 13. M39012/25-0020 cap and chain for TNC female connectors with bead chain.
M39012/25-0021 cap and chain for TNC female connectors with safety chain.
M39012/25-0120 cap and chain for TNC female connectors with wire rope - Continued.

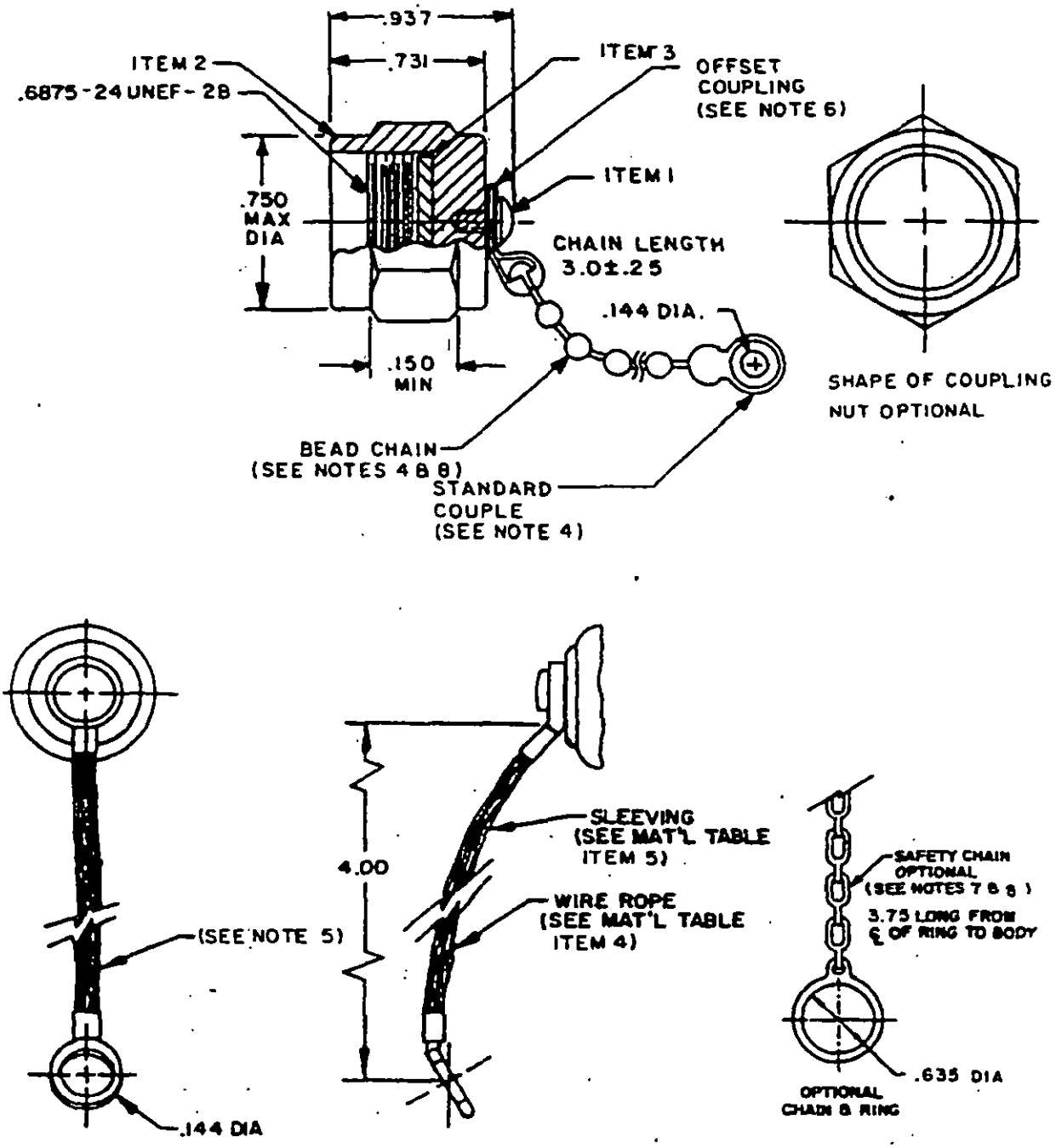



FIGURE 14. M39012/25-0022 cap and chain for series SC female connectors with bead chain.
M39012/25-0023 cap and chain for series SC female connectors with safety chain.
M39012/25-0122 cap and chain for series SC female connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Brass | Rivet |
| 2 | Brass | Cap |
| 3 | Silicone rubber | Gasket |
| 4 | SST | Wire rope |
| 5 | Teflon, nylon or equivalent | Covering |

| Inches | mm |
|---|---|
| .144 | 3.66 |
| .150 | 3.81 |
| .250 | 6.35 |
| .635 | 16.13 |
| .6875 | 17.46 |
| .731 | 18.57 |
| .750 | 19.05 |
| .937 | 23.80 |
| 3.25 | 82.55 |
| 3.75 | 95.25 |
| 4.00 | 101.60 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.5 mm) for two place decimals and ±.005 (0.13 mm) for three place decimals.
4. Standard coupling number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Caps shall maintain connector interface free of dust and moisture.

FIGURE 14. M39012/25-0022 cap and chain for series SC female connectors with bead chain. M39012/25-0023 cap and chain for series SC female connectors with safety chain. M39012/25-0122 cap and chain for series SC female connectors with wire rope - Continued.

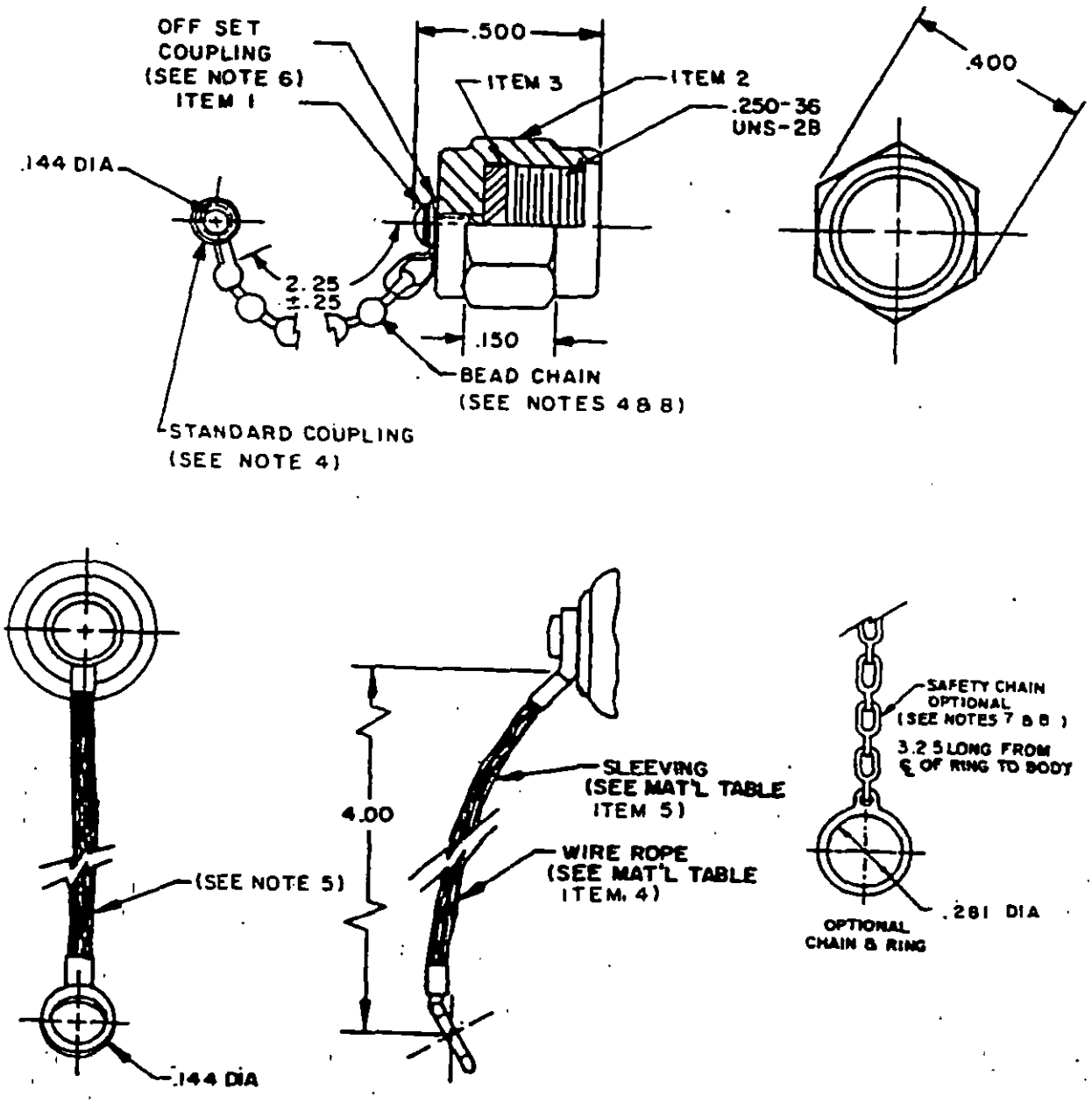



FIGURE 15. M39012/25-3024 cap and chain for series SMA female connectors with bead chain.
M39012/25-3025 cap and chain for series SMA female connectors with safety chain.
M39012/25-3124 cap and chain for series SMA female connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Stainless steel | Rivet |
| 2 | Stainless steel | Cap |
| 3 | Silicone rubber | Gasket |
| 4 | SST | Wire rope |
| 5 | Teflon, nylon or equivalent | Covering |

| Inches | mm |
|---|---|
| .144 | 3.66 |
| .150 | 3.81 |
| .250 | 6.35 |
| .281 | 7.14 |
| .500 | 12.70 |
| 2.25 | 57.15 |
| 3.25 | 82.55 |
| 4.00 | 101.60 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Standard coupling number 6AD (brass), bead chain number 6 (monel metal or stainless steel), and offset coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Caps shall maintain connector interface free of dust and moisture.

FIGURE 15. M39012/25-3024 cap and chain for series SMA female connectors with bead chain. M39012/25-3025 cap and chain for series SMA female connectors with safety chain. M39012/25-3124 cap and chain for series SMA female connectors with wire rope - Continued.

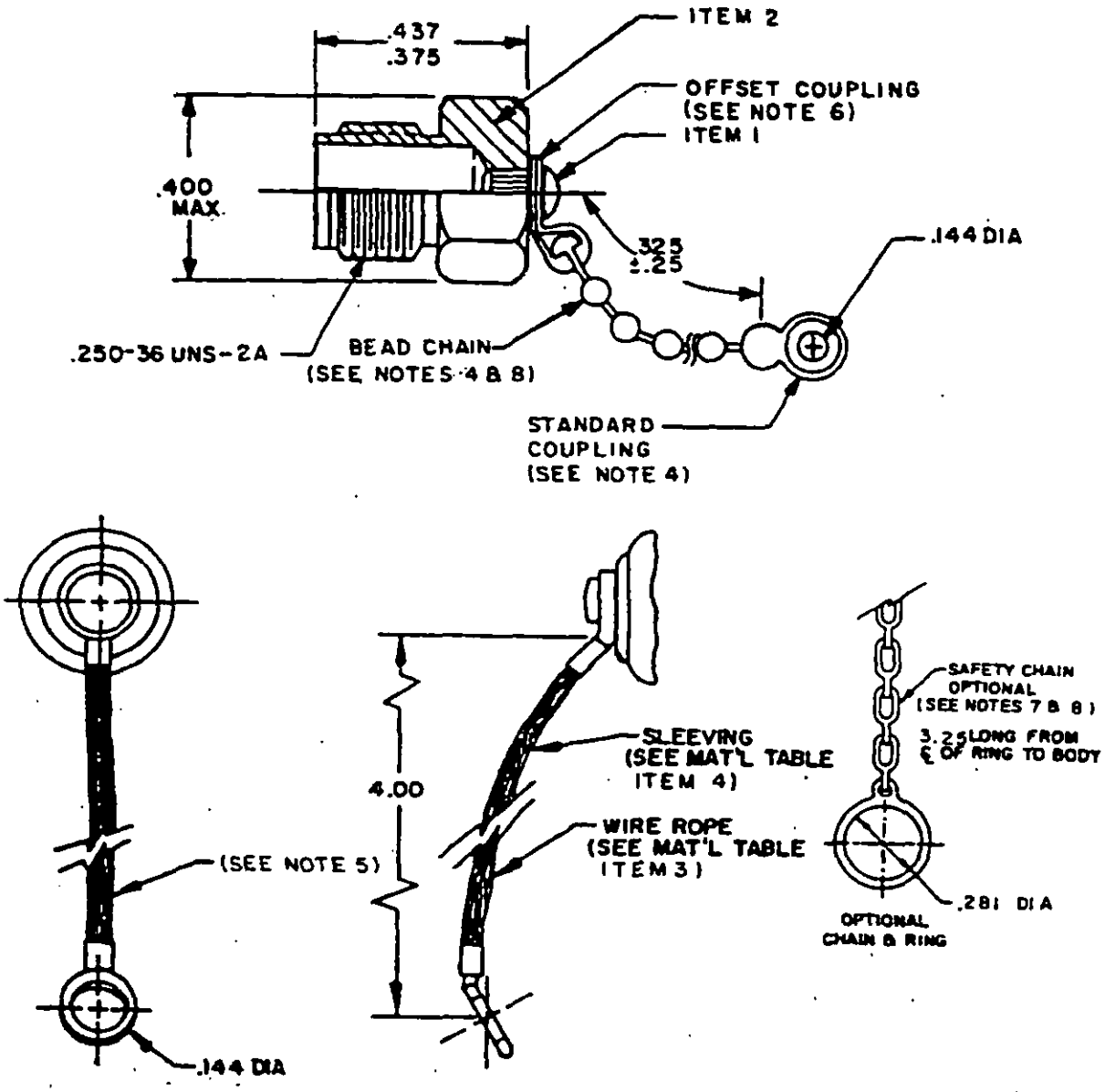



FIGURE 16. M39012/25-3026 cap and chain for series SMA male connectors with bead chain.
M39012/25-3027 cap and chain for series SMA male connectors with safety chain.
M39012/25-3126 cap and chain for series SMA male connectors with wire rope.

| Item | Material | Description |
|---|---|---|
| 1 | Stainless steel | Rivet |
| 2 | Stainless steel | Body |
| 3 | SST | Wire rope |
| 4 | Teflon, nylon or equivalent | Covering |

| Inches | mm |
|---|---|
| .144 | 3.66 |
| .250 | 6.35 |
| .281 | 7.14 |
| .325 | 8.26 |
| .375 | 9.53 |
| .400 | 10.16 |
| .437 | 11.10 |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).
4. Standard coupling number 6AD (brass), as supplied by the Bead Chain Manufacturing Company, Bridgeport, Connecticut, or equal.
5. The bead chain assembly to be finished with nickel plate, in lieu of silver, conforming to class 1, type V of QQ-N-290. (Exception: Parts which are fabricated of monel metal or stainless steel are not required to be plated, provided such parts will pass the corrosion test of MIL-C-39012.) The wire rope shall be specified in MIL-W-83420, type 2, composition B.
6. The offset coupling must rotate freely after riveting.
7. Safety chain: (Optional) corrosion resistant steel, passivated type II, class 6, trade number 00, in accordance with RR-C-271.
8. The chain shall withstand a tensile force as specified. The force shall be applied at a rate of approximately 100 pounds per minute. The applied force shall be 30 pounds for bead chain and 75 pounds for safety chain. The force shall be attached to the hole in the standard coupling.
9. Caps shall maintain connector interface free of dust and moisture.

FIGURE 16. M39012/25-3026 cap and chain for series SMA male connectors with bead chain. M39012/25-3027 cap and chain for series SMA male connectors with safety chain. M39012/25-3126 cap and chain for series SMA male connectors with wire rope - Continued.

REQUIREMENTS:

Material: See table I.

TABLE I. Materials.

| Component material | Applicable specification |
|---|---|
| Brass | QQ-B-613 or QQ-B-626 |
| Copper beryllium | QQ-C-530 or QQ-C-533 |
| Phosphor bronze | QQ-B-750 |
| Soft copper | QQ-C-576 |
| Aluminum | QQ-A-225/6 |
| Steel-corrosion resisting | QQ-S-763 |
| Flux | O-F-499 |
| TFE fluorocarbon | L-P-403 |
| Silicon rubber | ZZ-R-765 or MIL-R-5847 |
| Brazing alloy silver | QQ-B-654 |
| Soft solder | QQ-S-571 |

Design and construction: See figures 1 through 16.

Part or Identifying Number (PIN): M39012/25-(dash number from table II).

Corrosion (salt spray): Method 101, test condition B, MIL-STD-202.
The salt solution concentration shall be 5 percent.
Special detail: After exposure, hardware shall be washed, shaken and lightly brushed as specified in method 101 of MIL-STD-202, and then permitted to dry for 24 hours at 40°C. Hardware shall then be examined for evidence of corrosion and pitting and ease of coupling.

Qualification by similarity: Connector manufacturers may qualify all applicable PIN's for dust caps by similarity if they submit any representative sample of a bead chain, safty chain, and wire rope to applicable qualification testing. A manufacturer must be qualified to that connector series and material in order to be approved by similarity.

Cross reference data: See tables II and III.

TABLE II. Cross reference for hardware to connectors and cable. 1/

| PIN 2/ | Figure number | Item name | Applicable chain | Applicable cable | Applicable connector series |
|---|---|---|---|---|---|
| M39012/25-0001 | 1 | Cover | Bead | --- | All series C female connectors |
| M39012/25-0002 | | | Safety | --- | |
| M39012/25-0003 | 2 | Cover | Bead | --- | All series C male connectors |
| M39012/25-0004 | | | Safety | | |
| M39012/25-0005 | 3 | Shield | --- | M17/6-RG11<br>M17/74-RG213 and M17/163-00001<br>M17/75-RG214 and M17/164-00001<br>M17/77-RG216 | |
| M39012/25-0006 | 4 | Cover | Bead | --- | All series BNC female connectors |
| M39012/25-0007 | | | Safety | --- | |
| M39012/25-0008 | 5 | Cover | Bead | --- | All series BNC male connectors |
| M39012/25-0009 | | | Safety | --- | |
| M39012/25-0010 | 6 | Shield | --- | M17/84-RG223 and M17/167-00001<br>M17/28-RG028 and M17/155-00001 | |
| M39012/25-0011 | 7 | Cap and chain | Bead | --- | All series N female connectors |
| M39012/25-0012 | | | Safety | --- | |
| M39012/25-0013 | 8A<br>8B | Armor clamp | --- | M17/74-RG215<br>M17/6-RG12 | Series C and N connectors using applicable cables and 11/16 accessory thread |
| M39012/25-0014 | 9A<br>9B | Armor clamp | --- | M17/79-RG219 | |
| M39012/25-0015 | 10 | Cap | --- | --- | All series BNC female connectors |

See footnotes at end of table.

TABLE II. Cross reference for hardware to connectors and cable 1/ - Continued.

| PIN 2/ | Figure number | Item name | Applicable chain | Applicable cable | Applicable connector series |
|---|---|---|---|---|---|
| M39012/25-0016 | 11 | Shorting plug | Bead | --- | For shorting series BNC female connectors |
| M39012/25-0017 | | | Safety | --- | |
| M39012/25-0018 | 12 | Cap | Bead | --- | All series TNC male connectors |
| M39012/25-0019 | | | Safety | | |
| M39012/25-0020 | 13 | Cap | Bead | --- | All series TNC female connectors |
| M39012/25-0021 | | | Safety | | |
| M39012/25-0022<br>M39012/25-0023<br>M39012/25-0122 | 14 | Cap | Bead<br>Safety<br>Wire rope | --- | All series SC female connectors |
| M39012/25-0024<br>M39012/25-0025<br>M39012/25-0124 | 15 | Cap | Bead<br>Safety<br>Wire rope | --- | All series SMA female connectors |
| M39012/25-0026<br>M39012/25-0027<br>M39012/25-0126 | 16 | Plug | Bead<br>Safety<br>Wire rope | --- | All series SMA male connectors |

1/ This hardware previously covered by MIL-C-71, MIL-C-3989, MIL-C-3608, REA49131, REB49047, REA49049, and REB49068.

2/ The dash number (-0001) in the PIN is sequentially assigned and is used to designate the material of the connector. The four-digit dash numbers as shown (-0001, -0002) designates the material as brass. Phosphor bronze is designated by insertion of 1 as the first digit of the four-digit number (-1001, -1002 etc.). A 2 is inserted to designate aluminum (-2001, -2002 etc.), and a 3 shall be inserted to designate corrosion resistant steel (-3001, -3002 etc.).

TABLE III. Cross reference PIN to superseded type designation.

| PIN | Superseded type designation |
|---|---|
| M39012/25-0001 | MX-1142A/U |
| M39012/25-0003 | MX-1143A/U |
| M39012/25-0005 | MX-1144/U |
| M39012/25-0006 | CW-123A/U |
| M39012/25-0008 | CW-282/U |
| M39012/25-0010 | MX-195A/U |
| M39012/25-0011 | MX-913/U |
| M39012/25-0013 | MX-1286/U |
| M39012/25-0014 | MX-1441/U |
| M39012/25-0015 | CW-155A/U |
| M39012/25-0016 | CW-159/U |
| M39012/25-0017 | |

Revision letters are not used to denote changes due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - AR, EA, MI
Navy - SH
Air Force - 11, 17, 99
DLA - ES

User activities:
Army - AT, AV
Navy - AS, MC, OS
Air Force - 19

Preparing activity:
Army - CR

Agent:
DLA - ES

(Project 5935-3828)