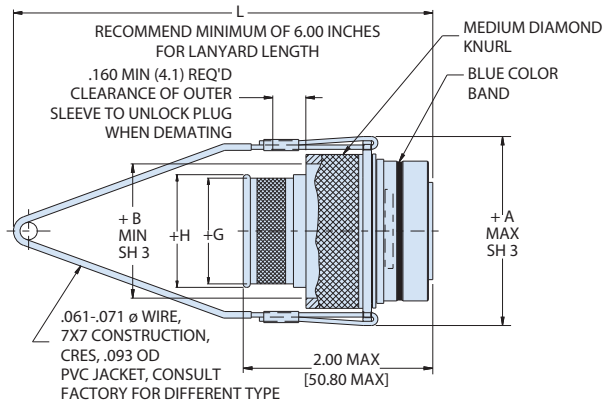
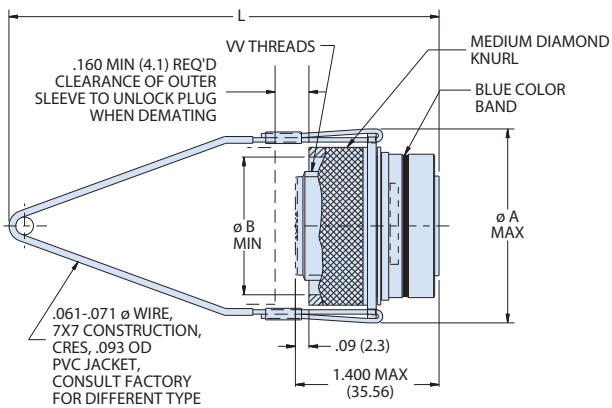


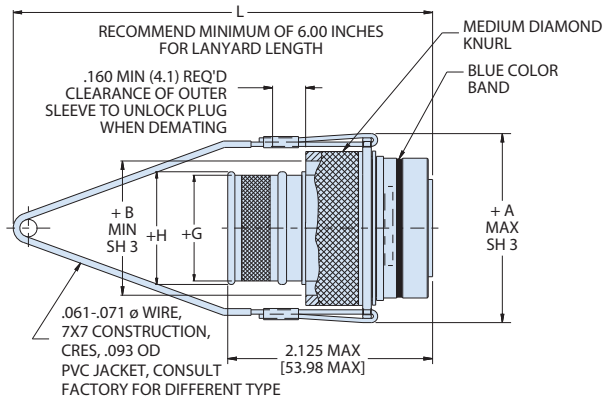
**MIL-DTL-38999 Series III Type**

**233-223 Electrical connector, quick disconnect plug**

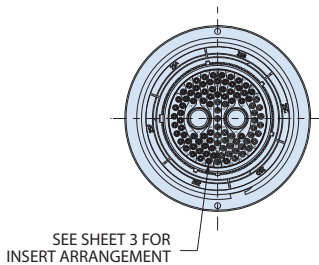
| Part Number Development        |  |
|--------------------------------|--|
| <b>Sample Part Number</b>      | 233-223 B G6 ME 25 - 8 E P N -991  |
| <b>Series / Basic Part No.</b> | 233-223 = Electrical Connector, Quick Disconnect Plug  |
| <b>Rear Accessory Options</b>  | - = Accessory Thread and Teeth<br>B = Intergrated Backshell Boot Adapter<br>S = Intergrated Backshell Single Band  |
| <b>Plug</b>                    |  |
| <b>Material / Finish</b>       | ME = Aluminum Alloy, Electroless Nickel<br>NF = Aluminum Alloy, Olive Drab-Cadmium Over Nickel<br>MT = Aluminum Alloy, Nickel Fluorocarbon Polymer<br>Z1 = Stainless Steel, Passivated ZL = Stainless Steel, Electrodeposited Nickel |
| <b>Shell Size</b>              | See Dimensions table   |
| <b>Ground Option</b>           | G = Common Ground - = None   |
| <b>Insert Arrangement</b>      | MIL-STD-1560   |
| <b>Lanyard Length Code</b>     | See Lanyard Length Code table  |
| <b>Conact Style</b>            | A = Pin Less Contact P = Pin Insert Contacts<br>B = Socket Less Contact S = Socket Insert Contacts   |
| <b>Alternate Polarization</b>  | A, B, C, D, E, N = Normal  |
| <b>Optional Mod Code</b>       | Optional mod code 991 is added to end of part to control lanyard straight pulling force. At max 22 LBF (100 newton) pull test is performed without contact.  |



**S - SINGLE BAND**



**B - BOOT GROOVE**



# MIL-DTL-38999 Series III Type

## 233-223 Electrical connector, quick disconnect plug

| Dimensions |                 |              |              |                  |
|------------|-----------------|--------------|--------------|------------------|
| Shell Size | Shell Size Code | A Max        | B Min        | Vv Thread        |
| 09         | A               | 1.800 (45.7) | 0.977 (24.8) | M12 x1-6g-0.100R |
| 11         | B               | 1.846 (46.9) | 1.003 (25.5) | M15 x1-6g-0.100R |
| 13         | C               | 1.972 (50.1) | 1.177 (29.9) | M18 x1-6g-0.100R |
| 15         | D               | 2.078 (52.8) | 1.299 (33.0) | M22 x1-6g-0.100R |
| 17         | E               | 2.204 (56.0) | 1.425 (36.2) | M25 x1-6g-0.100R |
| 19         | F               | 2.330 (59.2) | 1.535 (39.0) | M28 x1-6g-0.100R |
| 21         | G               | 2.472 (62.8) | 1.661 (42.2) | M31 x1-6g-0.100R |
| 23         | H               | 2.594 (65.9) | 1.787 (45.4) | M34 x1-6g-0.100R |
| 25         | J               | 2.704 (68.7) | 1.909 (48.5) | M37 x1-6g-0.100R |

| Separation Pull Forces Maximum |                             |                              |
|--------------------------------|-----------------------------|------------------------------|
| Shell Size                     | Straight Pull Lbs. (Newton) | 15 Degree Pull Lbs. (Newton) |
| 9                              | 44.96 (200)                 | 55.08 (245)                  |
| 11                             | 44.96 (200)                 | 55.08 (245)                  |
| 13                             | 44.96 (200)                 | 55.08 (245)                  |
| 15                             | 44.96 (200)                 | 55.08 (245)                  |
| 17                             | 89.92 (400)                 | 100.04 (445)                 |
| 19                             | 89.92 (400)                 | 100.04 (445)                 |
| 21                             | 89.92 (400)                 | 100.04 (445)                 |
| 23                             | 89.92 (400)                 | 100.04 (445)                 |
| 25                             | 89.92 (400)                 | 100.04 (445)                 |

| Lanyard Length Code |               |      |               |      |               |      |               |
|---------------------|---------------|------|---------------|------|---------------|------|---------------|
| Code                | L ± .236 (±6) | Code | L ± .236 (±6) | Code | L ± .236 (±6) | Code | L ± .236 (±6) |
| A                   | 4.016(102)    | G    | 7.007(178)    | M    | 10.000(254)   | U    | 13.031(331)   |
| B                   | 4.527(115)    | H    | 7.519(191)    | N    | 10.511(267)   | V    | 14.015(356)   |
| C                   | 5.000(127)    | I    | 7.992(203)    | P    | 11.023(280)   | W    | 15.000(381)   |
| D                   | 5.511(140)    | J    | 8.503(216)    | R    | 11.535(293)   | X    | 16.023(407)   |
| E                   | 6.024(153)    | K    | 9.015(229)    | S    | 12.007(305)   | Y    | 17.007(432)   |
| F                   | 6.535(166)    | L    | 9.527(242)    | T    | 12.519(318)   | Z    | 18.031(458)   |

| Integral Backshell |               |               |
|--------------------|---------------|---------------|
| Shell Size         | + G           | + H           |
| 11                 | 0.535 (13.59) | 0.585 (14.86) |
| 13                 | 0.643 (16.33) | 0.703 (17.86) |
| 15                 | 0.800 (20.32) | 0.860 (21.84) |
| 17                 | 0.930 (23.62) | 0.980 (24.89) |
| 19                 | 1.040 (26.42) | 1.100 (27.94) |
| 21                 | 1.155 (29.34) | 1.215 (30.86) |
| 23                 | 1.273 (32.33) | 1.333 (33.86) |
| 25                 | 1.391 (35.33) | 1.451 (36.86) |

| Supplied Components |                         |                            |                          |                                    |
|---------------------|-------------------------|----------------------------|--------------------------|------------------------------------|
| Contact Size        | Contact Pin Part Number | Contact Socket Part Number | Sealing Plug Part Number | Insertion/Removal Tool Part Number |
| 23                  | M39029/122-670          | M39029/121-663             | M27488-23                | M81969/1-05                        |
| 22D                 | M39029/58-360           | M39029/56-348              | M27488-22                | M81969/14-01                       |
| 20                  | M39029/58-363           | M39029/56-351              | M27488-20                | M81969/14-10                       |
| 16                  | M39029/58-364           | M39029/56-352              | M27488-16                | M81969/14-03                       |
| 12                  | M39029/58-365           | M39029/56-353              | M27488-12                | M81969/14-04                       |
| 12                  | M39029/102-558 Coax     | M39029/103-559 Coax        | M27488-12                | M81969/14-04                       |
| 8                   | M39029/60-367 Coax      | M39029/59-366 Coax         | M27488-8                 | M81969/14-06                       |
| 8                   | M39029/90-529 Twinax    | M39029/91-530 Twinax       | M27488-8                 | M81969/14-06                       |

### NOTES

- This connector mates with DOD-C-38999/20, /21, /23, /24, /25, and /27.
- Blue color band indicates rear release retention system.
- Dim b is clearance to accommodate Mil-C-85049 accessories.
- For backshell extender consult factory.
- All contacts, insertion / removal tool, and sealing plug to be ordered separately.
- Connector 233-223 is commercial equivalent of D38999/29, /30 and /31 type 2. Glenair test data #GT-15-107, and #GT-16-176
- Ground plane option only available for insert arrangement where all contacts are shielded type.
- Banding Port Option:
  - B = intergrated backshell boot adapter over all dimension is 2.125 Max for size 11-25-not offered for size 9
  - S = intergrated backshell single band over all dimension is 2.00 Max. For size 11-25- not offered for size 9.
- Coupling nut clearance is for backshell. Boot and overmold O.D must be less than ø B dimensions.
- Material/finish
  - Shell, coupling sleeve, lanyard ring, inner sleeve, locking-al alloy or cres/ see Lanyard Length Code table
  - Contacts - copper alloy/gold plate
  - Insulators - high grade rigid dielectric/ N.A.
  - Seals - fluorosilicone/N.A.