

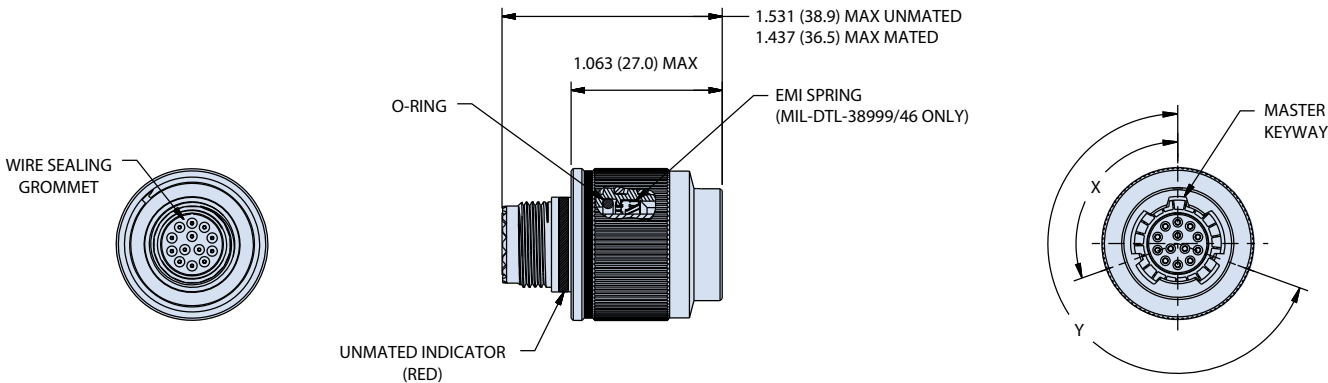
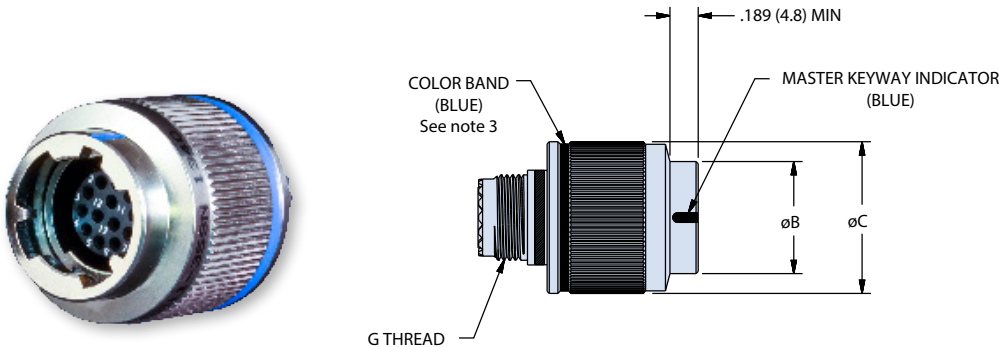
QPL QUALIFIED  
MIL-DTL-38999 Series IV, Breech Coupling

38999/46 plug with EMI ground spring  
38999/47 plug without EMI ground spring



SERIES IV ENVIRONMENTAL

| QPL Part Number Development |                                                                                                                                                                                                                                                            |   |   |    |   |   |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|----|---|---|
| Sample Part Number          | D38999/46                                                                                                                                                                                                                                                  | W | J | 30 | P | N |
| MIL-DTL-38999               | 38999/46 = Plug with EMI ground spring<br>38999/47 = Plug without EMI ground spring                                                                                                                                                                        |   |   |    |   |   |
| Class                       | F = Environmental, aluminum, electroless nickel, conductive, -65°C to +200°C<br>W = Environmental, aluminum, cadmium olive drab, conductive, -65°C to +175°C<br>G = Environmental, aluminum, electroless nickel, conductive, -65°C to +200°C (space-grade) |   |   |    |   |   |
| Shell Size                  | B, C, D, E, F, G, H, J                                                                                                                                                                                                                                     |   |   |    |   |   |
| Insert Arrangement          | Per MIL-STD-1560; See reference information section for details                                                                                                                                                                                            |   |   |    |   |   |
| Contact Style               | P = Pin Insert      A = Pin Gender, Less Contacts<br>S = Socket Insert    B = Socket Gender, Less Contacts                                                                                                                                                 |   |   |    |   |   |
| Polarization                | N (Normal), A, B, C, D, K, L, M, R; see polarization positions table                                                                                                                                                                                       |   |   |    |   |   |



| Polarization Positions |      |      |      |      |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|------|------|------|
|                        | N    | A    | B    | C    | D    | K    | L    | M    | R    |
| X                      | 110° | 100° | 90°  | 80°  | 70°  | 120° | 120° | 120° | 120° |
| Y                      | 250° | 260° | 270° | 280° | 290° | 255° | 265° | 275° | 285° |

## MIL-DTL-38999 Series IV, Breech Coupling



234-105-46 plug with EMI ground spring

234-105-47 plug without EMI ground spring

| COTS Part Number Development |                                                                                                                                                                                                                    |    |    |     |   |   |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|---|---|
| Sample Part Number           | 234-105-46                                                                                                                                                                                                         | NF | 11 | -35 | P | N |
| Series / Basic Part No.      | 234-105-46 = Environmental plug with EMI ground spring<br>234-105-47 = Environmental plug without EMI ground spring                                                                                                |    |    |     |   |   |
| Material/Finish              | ME* = Aluminum, electroless nickel, conductive, -65°C to +200°C<br>NF = Aluminum, cadmium olive drab, conductive, -65°C to +175°C<br>MA† = Aluminum, electroless nickel, conductive, -65°C to +200°C (space-grade) |    |    |     |   |   |
| Shell Size                   | 11, 13, 15, 17, 19, 21, 23, 25                                                                                                                                                                                     |    |    |     |   |   |
| Insert Arrangement           | Per MIL-STD-1560; See reference information section for details                                                                                                                                                    |    |    |     |   |   |
| Contact Designator           | P = Pin Insert      A = Pin Gender, Less Contacts<br>S = Socket Insert    B = Socket Gender, Less Contacts                                                                                                         |    |    |     |   |   |
| Polarization                 | N (Normal), A, B, C, D, K, L, M, R; see polarization positions table                                                                                                                                               |    |    |     |   |   |

\* Plug connectors, styles 46 and 47, with ME finish supplied with hard anodized coupling nuts

† Connectors must be ordered with "MA" finish and modification code "-186T" to conform to the thermal vacuum outgassing requirements of Class G. Additional material/finish options are available, consult factory for ordering information.

| Dimensions |                 |               |               |                     |
|------------|-----------------|---------------|---------------|---------------------|
| Shell Size | Shell Size Code | ØB Max        | ØC Max        | G Thread            |
| 11         | B               | .776 (19.71)  | 1.047 (26.59) | M15 X 1.0-6g 0.100R |
| 13         | C               | .902 (22.91)  | 1.220 (30.99) | M18 X 1.0-6g 0.100R |
| 15         | D               | 1.039 (26.39) | 1.346 (34.19) | M22 X 1.0-6g 0.100R |
| 17         | E               | 1.150 (29.21) | 1.472 (37.39) | M25 X 1.0-6g 0.100R |
| 19         | F               | 1.276 (32.41) | 1.583 (40.21) | M28 X 1.0-6g 0.100R |
| 21         | G               | 1.402 (35.61) | 1.705 (43.31) | M31 X 1.0-6g 0.100R |
| 23         | H               | 1.528 (38.81) | 1.831 (46.51) | M34 X 1.0-6g 0.100R |
| 25         | J               | 1.650 (41.91) | 1.957 (49.71) | M37 X 1.0-6g 0.100R |

## NOTES

1. Insert arrangements per MIL-STD-1560.
2. Connector is supplied with contacts (including spares), insertion/removal tool and sealing plugs unless otherwise specified.
3. Blue color band indicates rear release retention system.

| Additional Material/Finish Options |                                              |
|------------------------------------|----------------------------------------------|
| Finish Code                        | Description                                  |
| G2                                 | Aluminum, anodize, hardcoat                  |
| ZR                                 | Aluminum, zinc nickel, black (tri-valent cr) |
| MT                                 | Aluminum, nickel PTFE                        |