

## MIL-DTL-38999 Series III Type

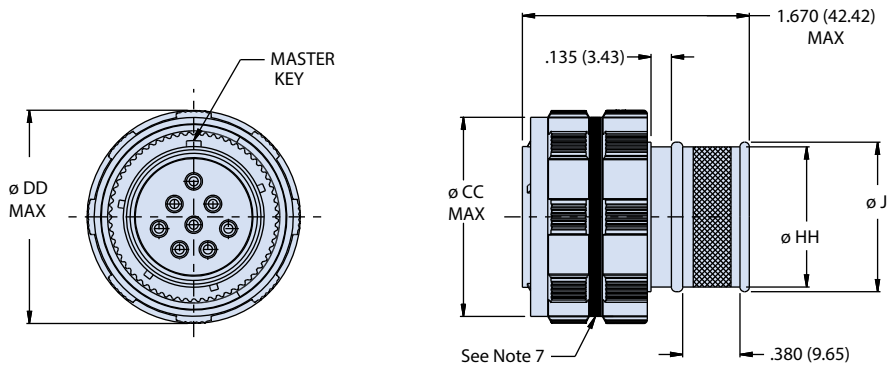
### 233-206 crimp-contact connectors with banding porch / boot groove

ENVIRONMENTAL CONNECTORS

| Part Number Development        |  |  |  |  |  |    |      |   |   |
|--------------------------------|--|--|--|--|--|----|------|---|---|
| Sample Part Number             | 233-206  |  |  |  | -G6  | MT | 17-8 | P | N |
| Series / Basic Part No.        | 233-206 = SuperNine crimp contact wire harness connectors  |  |  |  |  |    |      |   |   |
| Connector Style*               | G6 = Plug, with EMI spring<br>05 = Receptacle, In-Line<br>07 = Receptacle, Jam Nut<br>00 = Receptacle, Wall Mount with Slotted Holes<br>CM = Receptacle, Wall Mount with Metric Clinch Nuts<br>CS = Receptacle, Wall Mount with Standard Clinch Nuts<br>HM = Receptacle, Wall Mount with Metric Helicoils<br>HS = Receptacle, Wall Mount with Standard Helicoils |  |  |  |  |    |      |   |   |
| Finish                         | NF = Aluminum alloy/Cadmium Olive Drab<br>ME = Aluminum alloy/Electroless Nickel   |  |  |  | MT = Aluminum alloy/Nickel PTFE<br>ZR = Aluminum alloy/Black Zinc Nickel                                   |    |      |   |   |
| Shell Size-Insert Arrangement* | Per MIL-STD-1560   |  |  |  |  |    |      |   |   |
| Contact Type                   | P = Pin, Gold, 1500 cycles<br>H = Pin, Pd/Ni, 1500 cycles<br>A = Pin Insert, Less Pin Contacts   |  |  |  | S = Socket, Gold, 1500 Cycles<br>J = Socket, Pd/Ni, 1500 cycles<br>B = Socket Insert, Less Socket Contacts |    |      |   |   |
| Alternate Polarization*        | A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)   |  |  |  |  |    |      |   |   |

\*Refer to Section A for complete details

### G6 - PLUG WITH BANDING PORCH AND BOOT GROOVE

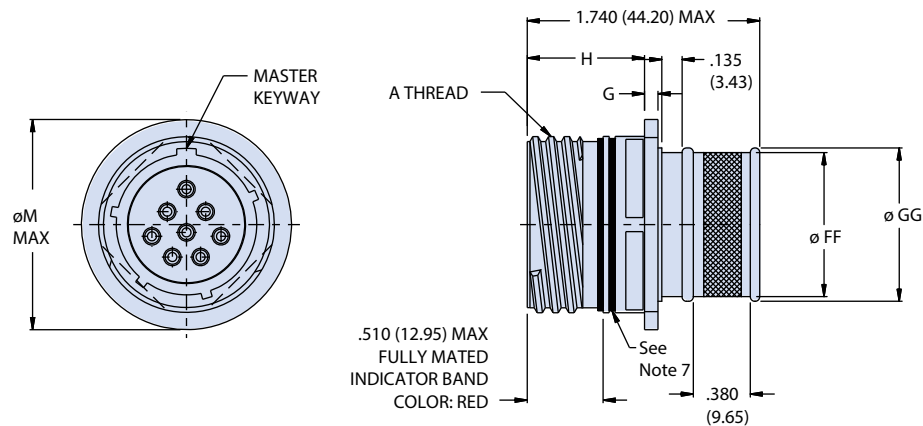


| Plug Dimensions |            |               |               |
|-----------------|------------|---------------|---------------|
| Shell Size Code | Shell Size | Ø CC Max      | Ø DD Max      |
| A               | 09         | .811 (20.60)  | .858 (21.79)  |
| B               | 11         | .929 (23.60)  | .984 (24.99)  |
| C               | 13         | 1.110 (28.19) | 1.157 (29.39) |
| D               | 15         | 1.232 (31.29) | 1.280 (32.51) |
| E               | 17         | 1.358 (34.49) | 1.406 (35.71) |
| F               | 19         | 1.469 (37.31) | 1.516 (38.51) |
| G               | 21         | 1.594 (40.49) | 1.642 (41.71) |
| H               | 23         | 1.720 (43.69) | 1.768 (44.91) |
| J               | 25         | 1.843 (46.81) | 1.890 (48.01) |

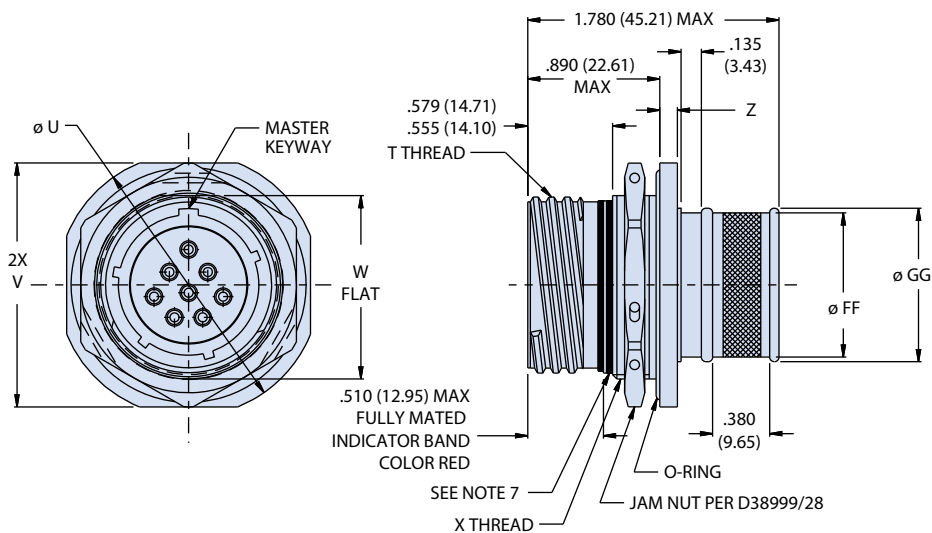
### NOTES

- 233-206 is designed to meet or exceed the mechanical, electrical, environmental and dimensional requirements of D38999/20, /24 & /26. Except as shown and/or noted. Connectors mate with any QPL manufacturer's MIL-DTL-38999, Series III connectors having the same shell size, insert arrangement, and polarization
- 233-206 connectors are designed to withstand a minimum of 1500 mating durability cycles when mated to a SuperNine® mating connector and appropriate contacts. Contact finish should be the same for both mating connectors to optimize performance.
- Insert arrangements IAW MIL-STD-1560 arrangements. Contact manufacturer for additional arrangement options.
- Alternate polarization 'U' is a non-standard/non-mil-spec option, allows mating to any QPL manufacturers MIL-DTL-38999 connector, intended for use in testing facilities.
- Connector is supplied with contacts (including spares), insertion/removal tool and sealing plugs.
- Insertion/removal tool and sealing plugs supplied.
- Blue color band indicates rear release retention system.
- Front panel mount only
- Material/finish
  - Shell, barrel, coupling nut jam nut: see part number development table
  - Ratchet Ring, detent spring: stainless steel/passivated
  - Grounding spring: BeCu alloy/electroless nickel
  - Insulator: high grade rigid dielectric/N.A.
  - Seals, grommet: fluorosilicone blend/N.A.
  - Contacts: copper alloy/see part number development table

**05 - IN-LINE RECEPTACLE WITH BANDING PORCH AND BOOT GROOVE**



**07 - JAM NUT RECEPTACLE WITH BANDING PORCH AND BOOT GROOVE**



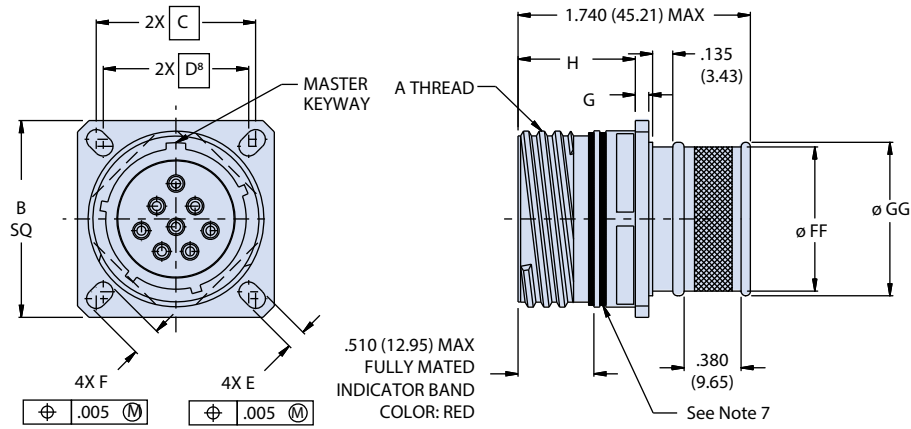
ENVIRONMENTAL CONNECTORS

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

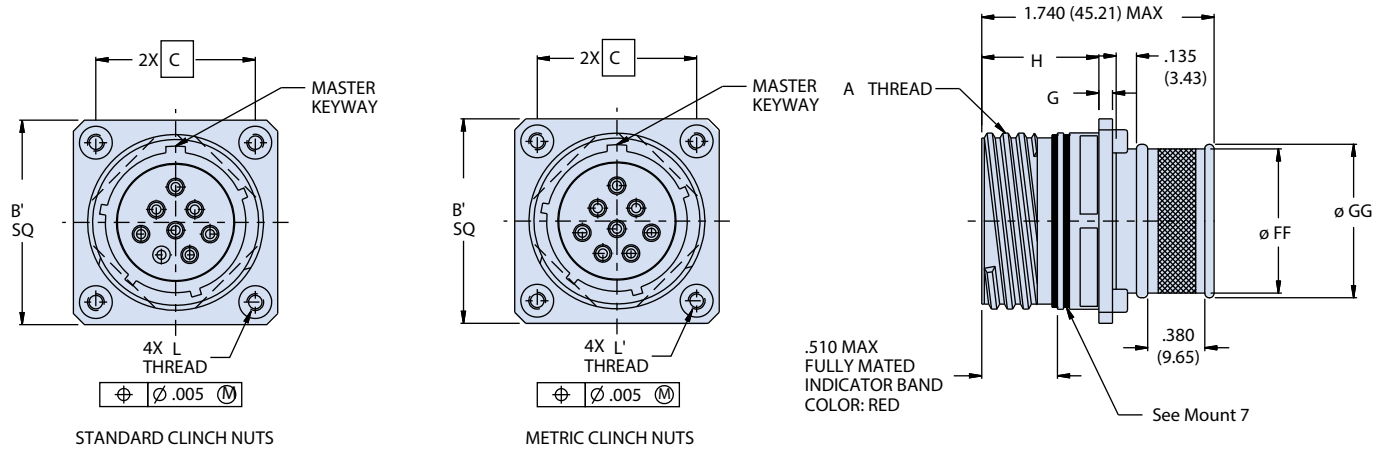
**233-206 crimp-contact connectors with banding porch / boot groove**

ENVIRONMENTAL CONNECTORS

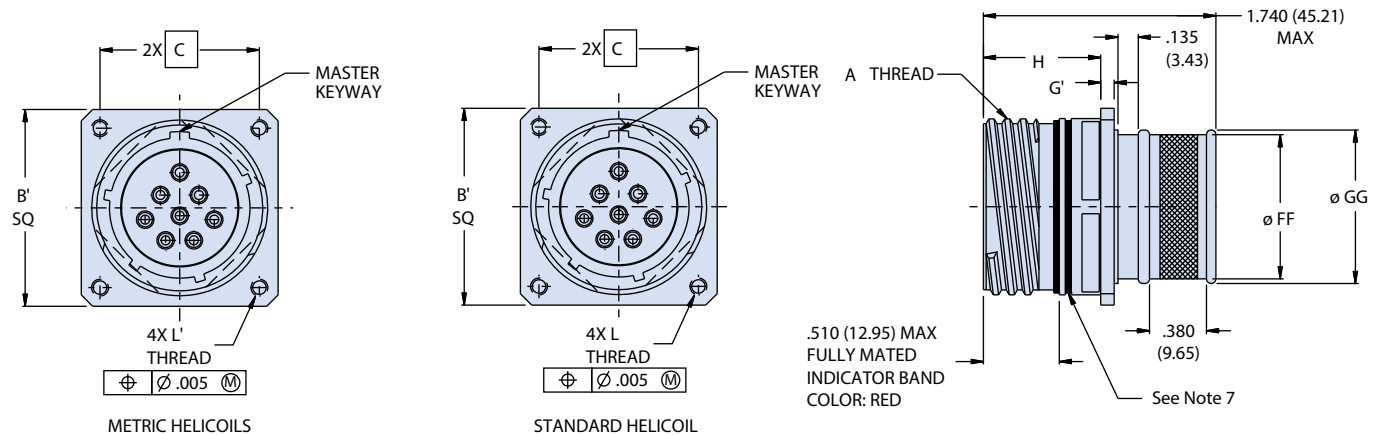
**00 - SQUARE FLANGE RECEPTACLE WITH BANDING PORCH AND BOOT GROOVE**



**CS AND CM - WALL MOUNT RECEPTACLE WITH BANDING PORCH AND BOOT GROOVE**



**HS AND HM - WALL MOUNT RECEPTACLE WITH BANDING PORCH AND BOOT GROOVE**



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

**233-206 crimp-contact connectors with banding porch / boot groove**

ENVIRONMENTAL CONNECTORS

| Wall Mount and In-Line Dimensions |            |                    |                                |                                |               |                    |                       |                            |                            |                            |                              |                |        |                            |                              |                |        |               |               |
|-----------------------------------|------------|--------------------|--------------------------------|--------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------|----------------------------|------------------------------|----------------|--------|----------------------------|------------------------------|----------------|--------|---------------|---------------|
| Shell Size Code                   | Shell Size | A Thread           | B Sq                           | B' Sq                          | C Bsc         | D Bsc <sup>9</sup> | E                     | F                          | G                          | G'                         | H                            | L Thd          | L' Thd | Ø M Max                    |                              |                |        |               |               |
| A                                 | 09         | .6250-1P-3L-TS-2A  | .949 (24.10)<br>.925 (23.50)   | 1.094 (27.79)<br>1.054 (26.77) | .719 (18.26)  | .594 (15.09)       | .136 (3.45)<br>(3.05) | .224 (5.69)<br>.208 (5.28) | .098 (2.49)<br>.083 (2.11) | .179 (4.55)<br>.140 (3.56) | .820 (20.83)<br>.771 (19.58) | .112-40 UNC-2B | M3X0.5 | .875 (22.23)               |                              |                |        |               |               |
| B                                 | 11         | .7500-1P-3L-TS-2A  | 1.043 (26.49)<br>1.019 (25.88) | 1.187 (30.15)<br>1.147 (29.13) | .812 (20.62)  | .719 (18.26)       |                       | .202 (5.13)                |                            |                            |                              |                |        | .994 (25.25)               |                              |                |        |               |               |
| C                                 | 13         | .8750-1P-3L-TS-2A  | 1.138 (28.91)<br>1.114 (28.30) | 1.281 (32.54)<br>1.241 (31.52) | .906 (23.01)  | .812 (20.62)       |                       | .186 (4.72)                |                            |                            |                              |                |        | 1.167 (29.64)              |                              |                |        |               |               |
| D                                 | 15         | 1.0000-1P-3L-TS-2A | 1.232 (31.29)<br>1.208 (30.68) | 1.344 (34.14)<br>1.304 (33.12) | .969 (24.61)  | .906 (23.01)       |                       | .181 (4.60)<br>.165 (4.19) |                            |                            |                              |                |        | 1.290 (32.77)              |                              |                |        |               |               |
| E                                 | 17         | 1.1875-1P-3L-TS-2A | 1.323 (33.60)<br>1.299 (32.99) | 1.437 (36.50)<br>1.397 (35.48) | 1.062 (26.97) | .969 (24.61)       |                       | .202 (5.13)<br>.186 (4.72) |                            |                            |                              |                |        | 1.416 (35.97)              |                              |                |        |               |               |
| F                                 | 19         | 1.2500-1P-3L-TS-2A | 1.449 (36.80)<br>1.425 (36.20) | 1.531 (38.89)<br>1.491 (37.87) | 1.156 (29.36) | 1.062 (26.97)      |                       |                            |                            |                            |                              |                |        | 1.526 (38.76)              |                              |                |        |               |               |
| G                                 | 21         | 1.3750-1P-3L-TS-2A | 1.575 (40.00)<br>1.551 (39.40) | 1.625 (41.28)<br>1.585 (40.26) | 1.250 (31.75) | 1.156 (29.36)      |                       | .126 (3.20)<br>.083 (2.11) |                            |                            |                              |                |        | .190 (4.83)<br>.170 (4.32) | .790 (20.07)<br>.741 (18.82) | .138-32 UNC-2B | M4X0.7 | 1.652 (41.96) |               |
| H                                 | 23         | 1.5000-1P-3L-TS-2A | 1.701 (43.21)<br>1.677 (42.60) | 1.750 (44.45)<br>1.710 (43.43) | 1.375 (34.92) | 1.250 (31.75)      |                       |                            |                            |                            |                              |                |        | .162 (4.11)<br>.146 (3.71) | .250 (6.35)<br>.234 (5.94)   |                |        | 1.778 (45.16) |               |
| J                                 | 25         | 1.6250-1P-3L-TS-2A | 1.823 (46.30)<br>1.799 (45.69) | 1.875 (47.63)<br>1.835 (46.61) | 1.500 (38.10) | 1.375 (34.92)      |                       |                            |                            |                            |                              |                |        |                            |                              |                |        |               | 1.900 (48.26) |

| Jam Nut Dimensions |            |                    |                                |                                |                                |                         |                              |
|--------------------|------------|--------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|------------------------------|
| Shell Size Code    | Shell Size | T Thread           | Ø U                            | V                              | W Flat                         | X Thread                | Z                            |
| A                  | 09         | .6250-1P-3L-TS-2A  | 1.200 (30.48)<br>1.178 (29.92) | 1.078 (27.38)<br>1.048 (26.62) | 0.654 (16.61)<br>0.645 (16.38) | M17 X 1.0-6g<br>0.100R  | 0.122 (3.10)<br>0.083 (2.11) |
| B                  | 11         | .7500-1P-3L-TS-2A  | 1.386 (35.20)<br>1.362 (34.59) | 1.268 (32.21)<br>1.236 (31.39) | 0.755 (19.18)<br>0.745 (18.92) | M20 X 1.0-6g<br>0.100R  |                              |
| C                  | 13         | .8750-1P-3L-TS-2A  | 1.512 (38.40)<br>1.488 (37.80) | 1.390 (35.31)<br>1.358 (34.49) | 0.942 (23.93)<br>0.932 (23.67) | M25 X 1.0-6g<br>0.100R  |                              |
| D                  | 15         | 1.0000-1P-3L-TS-2A | 1.638 (41.61)<br>1.614 (41.00) | 1.516 (38.51)<br>1.484 (37.69) | 1.066 (27.08)<br>1.056 (26.82) | M28 X 1.0-6g<br>0.100R  |                              |
| E                  | 17         | 1.1875-1P-3L-TS-2A | 1.764 (44.81)<br>1.740 (44.20) | 1.642 (41.71)<br>1.610 (40.89) | 1.191 (30.25)<br>1.181 (30.00) | M32 X 1.0-6g<br>0.100R* |                              |
| F                  | 19         | 1.2500-1P-3L-TS-2A | 1.949 (49.50)<br>1.925 (48.90) | 1.827 (46.41)<br>1.795 (45.59) | 1.316 (33.43)<br>1.306 (33.17) | M35 X 1.0-6g<br>0.100R  |                              |
| G                  | 21         | 1.3750-1P-3L-TS-2A | 2.075 (52.71)<br>2.051 (52.10) | 1.953 (49.61)<br>1.921 (48.79) | 1.441 (36.60)<br>1.431 (36.35) | M38 X 1.0-6g<br>0.100R  |                              |
| H                  | 23         | 1.5000-1P-3L-TS-2A | 2.201 (55.91)<br>2.177 (55.30) | 2.079 (52.81)<br>2.047 (51.99) | 1.566 (39.78)<br>1.556 (39.52) | M41 X 1.0-6g<br>0.100R  |                              |
| J                  | 25         | 1.6250-1P-3L-TS-2A | 2.323 (59.00)<br>2.299 (58.39) | 2.205 (56.01)<br>2.173 (55.19) | 1.691 (42.95)<br>1.681 (42.70) | M44 X 1.0-6g<br>0.100R  |                              |

| Integral Backshell Dimensions* |            |               |               |               |               |
|--------------------------------|------------|---------------|---------------|---------------|---------------|
| Shell Size Code                | Shell Size | Ø FF          | Ø GG          | Ø HH          | Ø JJ          |
| A                              | 09         | .475 (12.07)  | .538 (13.67)  | .420 (10.67)  | .465 (11.81)  |
| B                              | 11         | .600 (15.24)  | .662 (16.81)  | .550 (13.97)  | .595 (15.11)  |
| C                              | 13         | .700 (17.78)  | .762 (19.35)  | .670 (17.02)  | .715 (18.16)  |
| D                              | 15         | .835 (21.21)  | .898 (22.81)  | .815 (20.70)  | .860 (21.84)  |
| E                              | 17         | .960 (24.38)  | 1.022 (25.96) | .945 (24.00)  | .990 (25.15)  |
| F                              | 19         | 1.062 (26.97) | 1.125 (28.58) | 1.050 (26.67) | 1.100 (27.94) |
| G                              | 21         | 1.188 (30.18) | 1.250 (31.75) | 1.170 (29.72) | 1.220 (30.99) |
| H                              | 23         | 1.275 (32.39) | 1.338 (33.99) | 1.290 (32.77) | 1.340 (34.04) |
| J                              | 25         | 1.475 (37.47) | 1.538 (39.07) | 1.400 (35.56) | 1.450 (36.83) |

\* Modified major diameter 31.95 - 31.80 (1.257 - 1.252)

See accessories section for bands and banding tools