

MIL-DTL-38999 Series I Type  
231-100-H7 Jam-nut mount hermetic receptacle

HERMETIC CONNECTORS



**CONNECTOR FEATURES**

- Bayonet coupling for rapid mating
- Scoop proof technology
- MIL-STD-1560 insert arrangements
- Same EMI performance as D38999 Series III
- Quick turn, positive lock, full mate indicator
- 500 cycles per D38999
- Enhanced finishes like passivated stainless steel and electrodeposited nickel over stainless steel
- Available in Jam-nut, solder and box mount
- Meets  $1 \times 10^{-7}$  cc/sec He leak requirement
- Hi-reliability stainless steel bayonets utilized

**TABLE I: CONNECTOR DIMENSIONS**

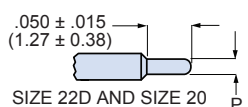
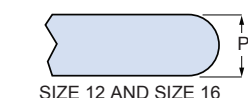
| Shell Size | A Thread Class 2A | B DIA $\pm .016(0.4)$ | C $\pm .016(0.4)$ | D Flat $\pm .005(0.1)$ | E DIA $\pm .011(0.3)$ | F DIA $\pm .005(0.1)$ |
|------------|-------------------|-----------------------|-------------------|------------------------|-----------------------|-----------------------|
| 9/09       | .6875-24 UNEF     | 1.188(30.2)           | 1.062(27.0)       | .65(16.5)              | .602(15.3)            | .648(16.5)            |
| 11         | .8125-20 UNEF     | 1.375(34.9)           | 1.25(31.8)        | .75(19.1)              | .726(18.4)            | .772(19.6)            |
| 13         | 1.000-20 UNEF     | 1.5(38.1)             | 1.375(34.9)       | .937(23.8)             | .852(21.6)            | .898(22.8)            |
| 15         | 1.125-18 UNEF     | 1.625(41.3)           | 1.5(38.1)         | 1.061(26.9)            | .978(24.8)            | 1.024(26.0)           |
| 17         | 1.250-18 UNEF     | 1.75(44.5)            | 1.625(41.3)       | 1.186(30.1)            | 1.102(28.0)           | 1.148(29.2)           |
| 19         | 1.375-18 UNEF     | 1.938(49.2)           | 1.812(46.0)       | 1.311(33.3)            | 1.228(31.2)           | 1.274(32.4)           |
| 21         | 1.500-18 UNEF     | 2.062(52.4)           | 1.938(49.2)       | 1.436(36.5)            | 1.352(34.3)           | 1.398(35.5)           |
| 23         | 1.625-18 UNEF     | 2.188(55.6)           | 2.062(52.4)       | 1.561(39.6)            | 1.478(37.5)           | 1.524(38.7)           |
| 25         | 1.750-18 UNS      | 2.312(58.7)           | 2.188(55.6)       | 1.686(42.8)            | 1.602(40.7)           | 1.648(41.9)           |

**TABLE I (CONTINUED): CONNECTOR DIMENSIONS**

| Shell Size | G $\pm .016(0.4)$ | K DIA $\pm .005(0.1)$ | L Max        | M Max      | N $\pm .004(0.1)$                |
|------------|-------------------|-----------------------|--------------|------------|----------------------------------|
| 9/09       | .109 (2.8)        | .698 (17.7)           | 1.200 (30.5) | .280 (7.1) | .657 (16.7); +.004(.1)/-.002(.1) |
| 11         | .109 (2.8)        | .830 (21.1)           | 1.200 (30.5) | .280 (7.1) | .765 (19.43)                     |
| 13         | .109 (2.8)        | 1.015 (25.8)          | 1.200 (30.5) | .280 (7.1) | .949 (24.10)                     |
| 15         | .109 (2.8)        | 1.140 (29.0)          | 1.200 (30.5) | .280 (7.1) | 1.079 (27.41)                    |
| 17         | .109 (2.8)        | 1.265 (32.1)          | 1.200 (30.5) | .280 (7.1) | 1.204 (30.58)                    |
| 19         | .140 (3.6)        | 1.390 (35.3)          | 1.231 (31.3) | .311 (7.9) | 1.329 (33.76)                    |
| 21         | .140 (3.6)        | 1.515 (38.5)          | 1.231 (31.3) | .311 (7.9) | 1.454 (36.93)                    |
| 23         | .140 (3.6)        | 1.640 (41.7)          | 1.231 (31.3) | .311 (7.9) | 1.579 (40.11)                    |
| 25         | .140 (3.6)        | 1.765 (44.8)          | 1.231 (31.3) | .311 (7.9) | 1.704 (43.28)                    |

**TABLE LL: CONTACT SIZE**

PRINTED CIRCUIT TAIL CONFIGURATIONS  
CONTACT STYLE C AND D



| Contact Size | ø P                        |
|--------------|----------------------------|
| 22D          | .011 (0.28); .015 (0.38)   |
| 20           | .024 (0.61); .028 (0.71)   |
| 16           | .0635 (1.61); .0615 (1.56) |
| 12           | .095 (2.41); .093 (2.36)   |

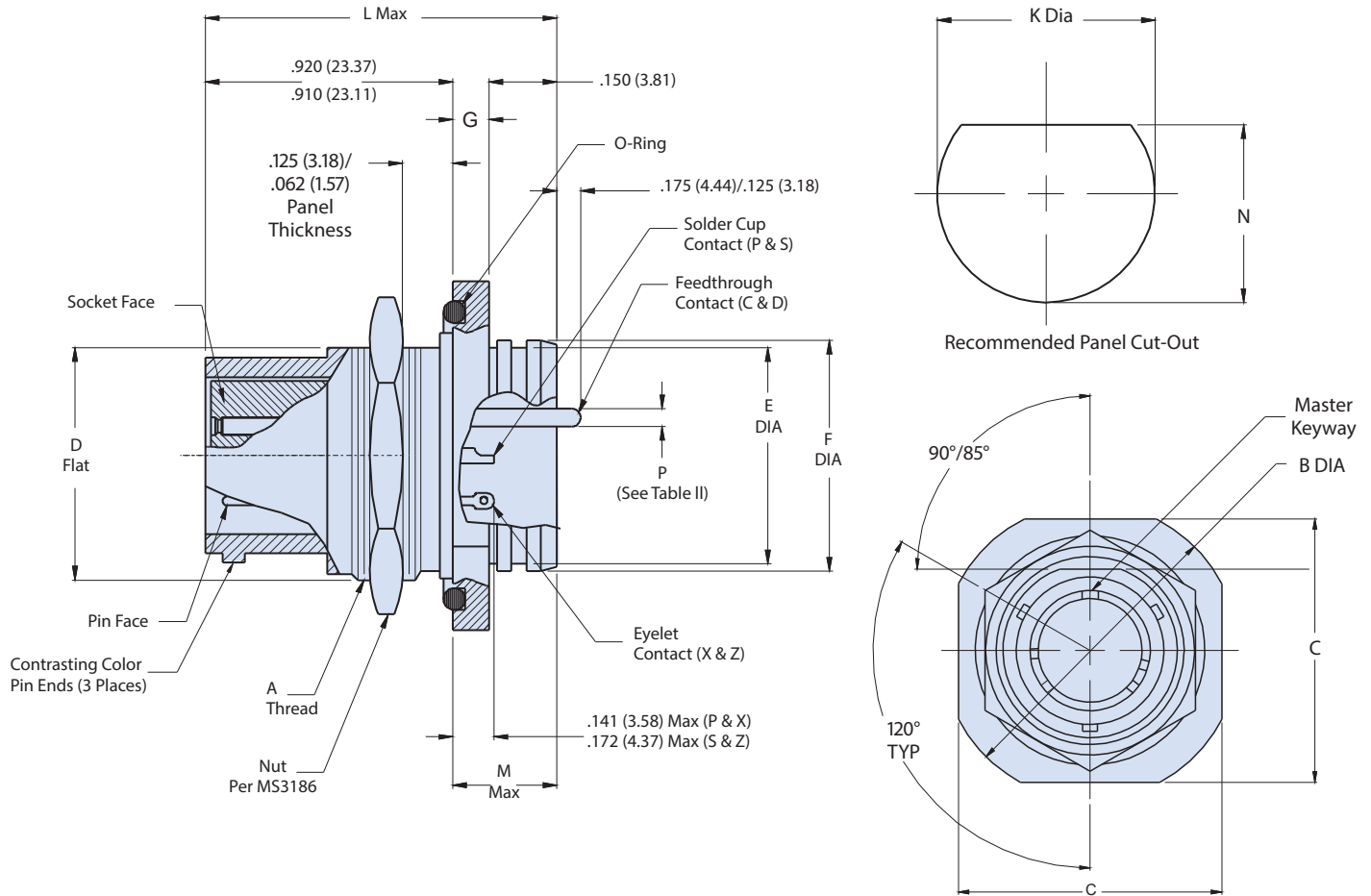
**HERMETIC LEAK RATE MOD CODES**

| Designator | Required Leak Rate                       |
|------------|------------------------------------------|
| -585A      | $1 \times 10^{-10}$ cc Helium per second |
| -585B      | $1 \times 10^{-9}$ cc Helium per second  |
| -585C      | $1 \times 10^{-8}$ cc Helium per second  |

**WIRE ACCOMMODATION**

| Contact Size | Wire Gauge |
|--------------|------------|
| 22D          | #22 - #28  |
| 20           | #20 - #24  |
| 16           | #16 - #20  |
| 12           | #12 - #14  |

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