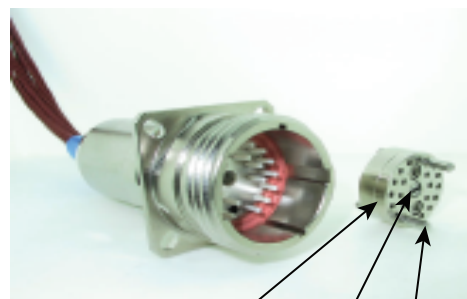


High Density Circular Connector PHD38999 Series

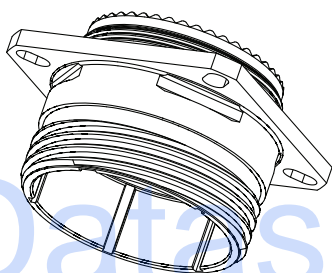
Meets MIL-DTL-38999 envelope dimensions including Standard Polarization, Backshell Threads and Panel Cut-Out / Mounting Holes.

Product Features

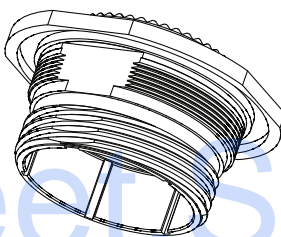
- PHD Optical Contact System (Including Tuned Contacts)
- All Metallic 38999 Compatible Outside Dimensions
- Internal Metallic Web for EMI Suppression and Terminus Stability
- Standard 38999 Keys
- All Metallic Backshell w/Sealing Grommet
- Size 22 and Size 16 Termini Back body to accommodate large variety of fiber buffering/Jackets
- Removable alignment insert assembly mountable in either plug or receptacle.



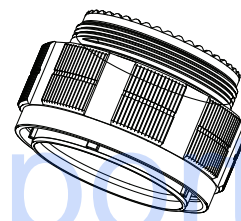
Insert Assy
Guide Pin
Jackscrew



Wall Mount Receptacle

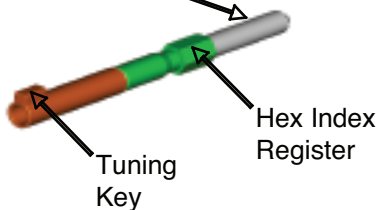


Jam Nut Receptacle

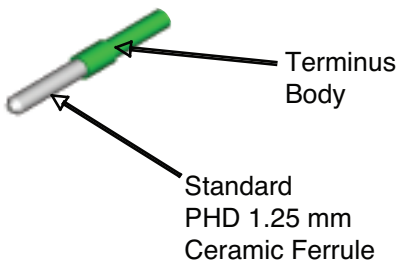


Plug

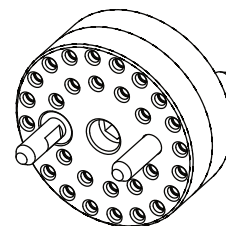
Standard
PHD 1.25 mm
Ceramic Ferrule



Size 22 Termini



Size 16 Termini



INSERT ASSY SIZES
13 THRU 25



INSERT ASSY
SIZE 11

Front Alignment Insert Assembly

PRODUCT NOTES

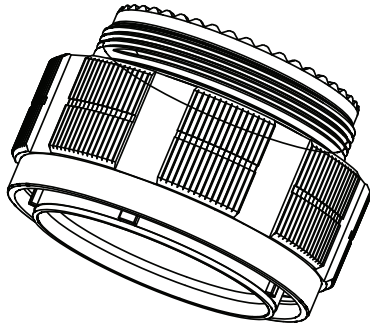
- 1. Packaging:** Packaging identification includes manufacturer's name and part number
- 2. Material / Finish:**
Insert: Aluminum Alloy / Electroless Nickel
 Hardware Stainless Steel / Passivated
 Internal Alignment Sleeves: Ceramic
Shell / Shell Hardware: Aluminum Alloy/Electroless Nickel or Cadmium plating. See Connector Assembly Matrix for Part Numbers
 Internal Springs, Cups, Clips, Screws, Washers,
 Alignment pins: Stainless Steel / NA

- 3. Insertion / Removal tool:**
 Size 22 – Metal Insertion/Extraction 274-0053-0000
 Size 16 Plastic Insertion/Extraction CIET-16-03
 Size 16 Metal Insertion – 995-0001-732
 Size 16 Metal Extraction – 995-0001-731
- 4. Alignment Insert Assembly** may be added to the Plug Assembly or the Receptacle Assembly but not both. See Connector Assembly Matrix for Part Numbers.
- 5. Applications:** Military/Aero space Fiber Optic Interconnect environments.



High Density Circular Connector PHD38999 Series

PHD Plug Connector



NOTES: UNLESS OTHERWISE SPECIFIED.

1. FOR CAVITY LAYOUT / MARKING, SEE APPLICABLE "CSA" CANNON STANDARD ARRANGEMENT.

2. MATERIAL TYPE:

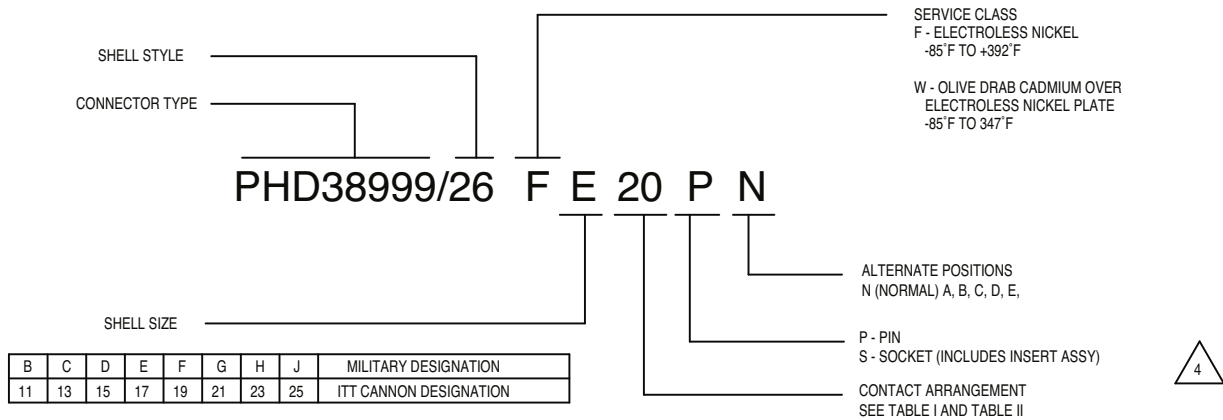
- BARREL: ALUMINUM ALLOY
- COUPLING NUT: ALUMINUM ALLOY
- REAR PLATE: ALUMINUM ALLOY
- COUPLING NUT RETAINING RING: STAINLESS STEEL
- SCREW, WASHERS, DOWEL PINS: STAINLESS STEEL
- INTERNAL SPRINGS: STAINLESS STEEL
- INTERNAL CUPS / CLIPS: COPPER

3. FINISH: ELECTROLESS NICKEL PLATING OR CADMIUM PLATING
SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.

4. INSERT ASSEMBLY SHOWN IS OPTIONAL AND MAY BE ADDED TO, THE PLUG ASSEMBLY OR THE RECEPTACLE ASSEMBLY BUT NOT BOTH. SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.
INSERT ASSEMBLY MATERIALS: ALUMINUM ALLOY
FINISH: ELECTROLESS NICKEL PLATING
STAINLESS STEEL HARDWARE
INTERNAL SLEEVES CERAMIC

PART NUMBER

SHOWN: SHELL SIZE 17/20 POSITION CONTACT ARRANGEMENT

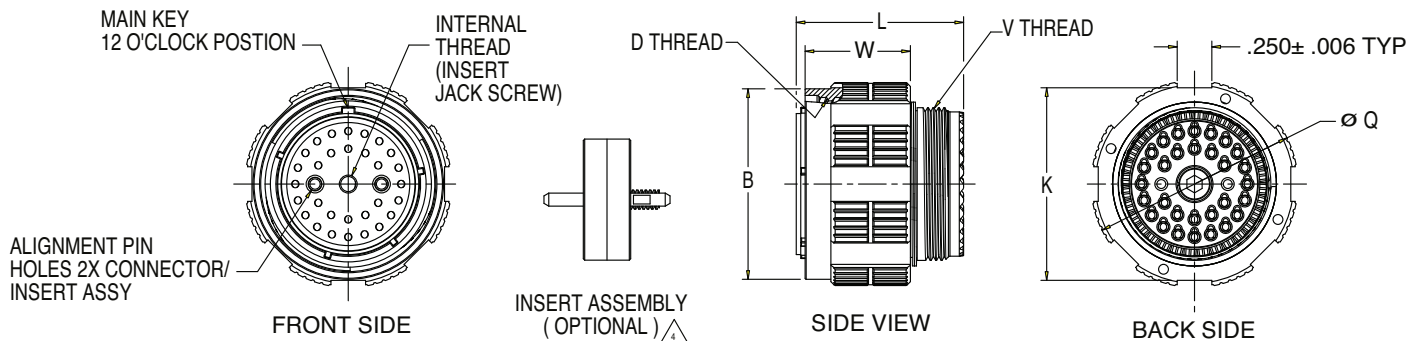


High Density Circular Connector PHD38999 Series

PHD Plug Connector

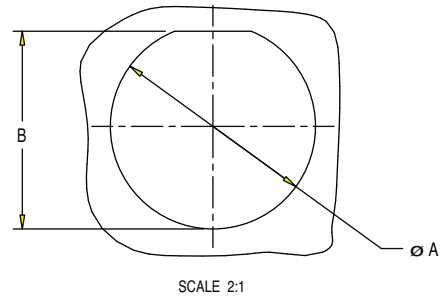
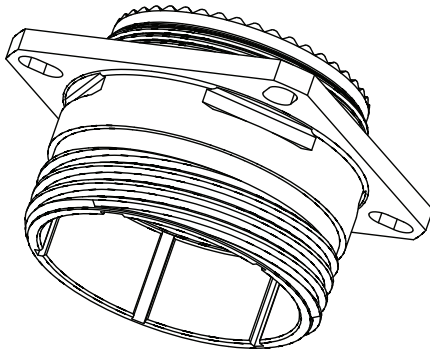
| CONNECTOR ASSEMBLY - SIZE #22 CONTACT MATRIX / 900um CABLE TYPE | | | | | | | | | | | | |
|---|--------------------------|--------|------------|--------------------------|---------------|----------------------------|-------|-------|------------|--------------------------|---------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | B +.008 -.000 | D THREAD CLASS 2B (PLATED) | K MAX | L MAX | Q DIA. MAX | METRIC V THREAD (PLATED) | W +.008 -.004 | INSERT ASSEMBLY (OPTIONAL) \triangle 4 |
| PHD38999/26FB4XX | CSA-PHD 11-4 | NICKEL | 11 | 4 | .831 | .7500-0.1P-0.3L-TS | .862 | 1.234 | .969 | M15X1-6g0.100R | .760 | 195-2000-003 |
| PHD38999/26FC8XX | CSA-PHD13-8 | | 13 | 8 | 1.000 | .8750-0.1P-0.3L-TS | 1.027 | | 1.141 | M18X1-6g0.100R | | 195-2000-005 |
| PHD38999/26FD12XX | CSA-PHD15-12 | | 15 | 12 | 1.130 | 1.0000-0.1P-0.3L-TS | 1.153 | | 1.266 | M22X1-6g0.100R | | 195-2000-007 |
| PHD38999/26FE20XX | CSA-PHD17-20 | | 17 | 20 | 1.268 | 1.1875-0.1P-0.3L-TS | 1.291 | | 1.391 | M25X1-6g0.100R | | 195-2000-009 |
| PHD38999/26FF30XX | CSA-PHD19-30 | | 19 | 30 | 1.374 | 1.2500-0.1P-0.3L-TS | 1.398 | | 1.500 | M28X1-6g0.100R | | 195-2000-011 |
| PHD38999/26FG40XX | CSA-PHD21-40 | | 21 | 40 | 1.500 | 1.3750-0.1P-0.3L-TS | 1.524 | | 1.625 | M31X1-6g0.100R | | 195-2000-013 |
| PHD38999/26FH48XX | CSA-PHD23-48 | | 23 | 48 | 1.618 | 1.5000-0.1P-0.3L-TS | 1.642 | | 1.750 | M34X1-6g0.100R | | 195-2000-015 |
| PHD38999/26FJ72XX | CSA-PHD25-72 | | 25 | 72 | 1.744 | 1.6250-0.1P-0.3L-TS | 1.768 | | 1.875 | M37X1-6g0.100R | | 195-2000-017 |

| CONNECTOR ASSEMBLY - SIZE #16 CONTACT MATRIX / 2MM CABLE TYPE | | | | | | | | | | | | |
|---|--------------------------|--------|------------|--------------------------|---------------|----------------------------|-------|-------|------------|--------------------------|---------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | B +.008 -.000 | D THREAD CLASS 2B (PLATED) | K MAX | L MAX | Q DIA. MAX | METRIC V THREAD (PLATED) | W +.008 -.004 | INSERT ASSEMBLY (OPTIONAL) \triangle 4 |
| PHD38999/26FB2XX | CSA-PHD11-2 | NICKEL | 11 | 2 | .831 | .7500-0.1P-0.3L-TS | .862 | 1.234 | .969 | M15X1-6g0.100R | .760 | 195-2000-002 |
| PHD38999/26FC4XX | CSA-PHD13-4 | | 13 | 4 | 1.000 | .8750-0.1P-0.3L-TS | 1.027 | | 1.141 | M18X1-6g0.100R | | 195-2000-004 |
| PHD38999/26FD6XX | CSA-PHD15-6 | | 15 | 6 | 1.130 | 1.0000-0.1P-0.3L-TS | 1.153 | | 1.266 | M22X1-6g0.100R | | 195-2000-006 |
| PHD38999/26FE8XX | CSA-PHD17-8 | | 17 | 8 | 1.268 | 1.1875-0.1P-0.3L-TS | 1.291 | | 1.391 | M25X1-6g0.100R | | 195-2000-008 |
| PHD38999/26FF12XX | CSA-PHD19-12 | | 19 | 12 | 1.374 | 1.2500-0.1P-0.3L-TS | 1.398 | | 1.500 | M28X1-6g0.100R | | 195-2000-010 |
| PHD38999/26FG16XX | CSA-PHD21-16 | | 21 | 16 | 1.500 | 1.3750-0.1P-0.3L-TS | 1.524 | | 1.625 | M31X1-6g0.100R | | 195-2000-012 |
| PHD38999/26FH24XX | CSA-PHD23-24 | | 23 | 24 | 1.618 | 1.5000-0.1P-0.3L-TS | 1.642 | | 1.750 | M34X1-6g0.100R | | 195-2000-014 |
| PHD38999/26FJ36XX | CSA-PHD25-36 | | 25 | 36 | 1.744 | 1.6250-0.1P-0.3L-TS | 1.768 | | 1.875 | M37X1-6g0.100R | | 195-2000-016 |



High Density Circular Connector PHD38999 Series

PHD Wall Mount Receptacle



NOTES: UNLESS OTHERWISE SPECIFIED.

1. FOR CAVITY LAYOUT / MARKING, SEE APPLICABLE "CSA" CANNON STANDARD ARRANGEMENT.

2. MATERIAL TYPE:

- BARREL: ALUMINUM ALLOY
- COUPLING NUT: ALUMINUM ALLOY
- REAR PLATE: ALUMINUM ALLOY
- COUPLING NUT RETAINING RING: STAINLESS STEEL
- SCREW, WASHERS, DOWEL PINS: STAINLESS STEEL
- INTERNAL SPRINGS: STAINLESS STEEL
- INTERNAL CUPS / CLIPS: COPPER

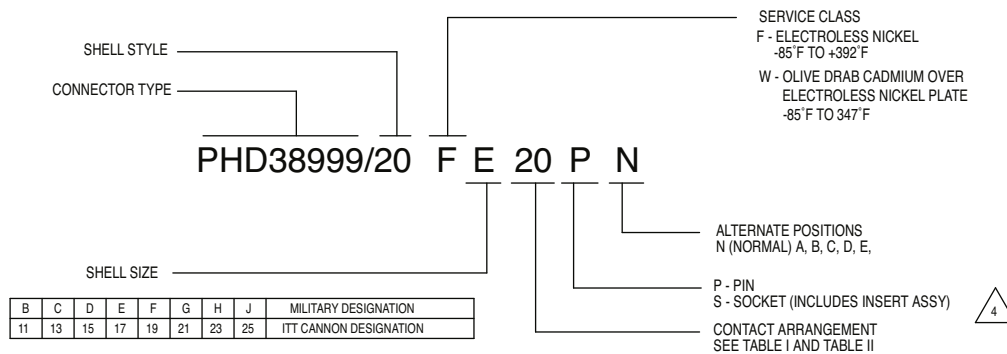
3. FINISH: ELECTROLESS NICKEL PLATING OR CADMIUM PLATING
SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.

4. INSERT ASSEMBLY SHOWN IS OPTIONAL AND MAY BE ADDED TO, THE PLUG ASSEMBLY OR THE RECEPTACLE ASSEMBLY BUT NOT BOTH. SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.

INSERT ASSEMBLY MATERIALS: ALUMINUM ALLOY
FINISH: ELECTROLESS NICKEL PLATING
STAINLESS STEEL HARDWARE
INTERNAL SLEEVES CERAMIC


| CONNECTOR PANEL CUTOUT | | |
|------------------------|------------------|------------------|
| SHELL SIZE | A +.010/-.000 | B +.000/-.010 |
| 11 | .825 | .770 |
| 13 | 1.010 | .995 |
| 15 | 1.135 | 1.085 |
| 17 | 1.260 | 1.210 |
| 19 | 1.385 | 1.335 |
| 21 | 1.510 | 1.460 |
| 23 | 1.635 | 1.585 |
| 25 | 1.760 | 1.710 |


PART NUMBER
SHOWN: SHELL SIZE 17/20 POSITION CONTACT ARRANGEMENT

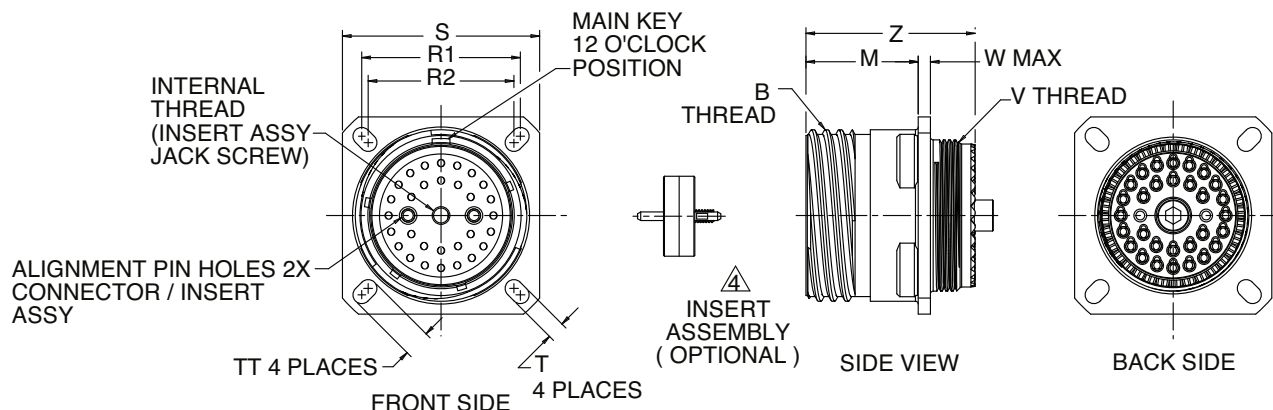


High Density Circular Connector PHD38999 Series

PHD Wall Mount Receptacle


| CONNECTOR ASSEMBLY - SIZE #22 CONTACT MATRIX / 900um CABLE TYPE | | | | | | | | | | | | | | | |
|---|--------------------------|--------|------------|--------------------------|-----------------------------|---------------|-------|-------|------------|----------------|----------------|--------------------------|-------|---------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | B THREAD CLASS 2 A (PLATED) | M +.000 -.005 | R1 | R2 | S +/- .012 | T +.004 -.002 | TT +.004 -.002 | METRIC V THREAD (PLATED) | W MAX | Z +.005 -.010 | INSERT ASSEMBLY (OPTIONAL)  |
| PHD38999/20FB4XX | CSA-PHD11-4 | NICKEL | 11 | 4 | .7500-0.1P-0.3L-TS | .820 | .812 | .719 | 1.031 | .128 | .194 | M15X1-6g0.100R | .098 | 1.235 | 195-2000-003 |
| PHD38999/20FC8XX | CSA-PHD13-8 | | 13 | 8 | .8750-0.1P-0.3L-TS | | .906 | .812 | 1.125 | | | M18X1-6g0.100R | | | 195-2000-005 |
| PHD38999/20FD12XX | CSA-PHD15-12 | | 15 | 12 | 1.0000-0.1P-0.3L-TS | | .969 | .906 | 1.219 | | | M22X1-6g0.100R | | | 195-2000-007 |
| PHD38999/20FE20XX | CSA-PHD17-20 | | 17 | 20 | 1.1875-0.1P-0.3L-TS | | 1.062 | .969 | 1.312 | | | M25X1-6g0.100R | | | 195-2000-009 |
| PHD38999/20FF30XX | CSA-PHD19-30 | | 19 | 30 | 1.2500-0.1P-0.3L-TS | .790 | 1.156 | 1.062 | 1.438 | .154 | .242 | M28X1-6g0.100R | .126 | 1.235 | 195-2000-011 |
| PHD38999/20FG40XX | CSA-PHD21-40 | | 21 | 40 | 1.3750-0.1P-0.3L-TS | | 1.250 | 1.156 | 1.562 | | | M31X1-6g0.100R | | | 195-2000-013 |
| PHD38999/20FH48XX | CSA-PHD23-48 | | 23 | 48 | 1.5000-0.1P-0.3L-TS | | 1.375 | 1.250 | 1.688 | | | M34X1-6g0.100R | | | 195-2000-015 |
| PHD38999/20FJ72XX | CSA-PHD25-72 | | 25 | 72 | 1.6250-0.1P-0.3L-TS | 1.500 | 1.375 | 1.812 | 1.54 | M37X1-6g0.100R | 195-2000-017 | | | | |


| CONNECTOR ASSEMBLY - SIZE #16 CONTACT MATRIX / 2MM CABLE TYPE | | | | | | | | | | | | | | | |
|---|--------------------------|--------|------------|--------------------------|-----------------------------|---------------|-------|-------|------------|----------------|----------------|--------------------------|-------|---------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | B THREAD CLASS 2 A (PLATED) | M +.000 -.005 | R1 | R2 | S +/- .012 | T +.004 -.002 | TT +.004 -.002 | METRIC V THREAD (PLATED) | W MAX | Z +.005 -.010 | INSERT ASSEMBLY (OPTIONAL)  |
| PHD38999/20FB2XX | CSA-PHD11-2 | NICKEL | 11 | 2 | .7500-0.1P-0.3L-TS | .820 | .812 | .719 | 1.031 | .128 | .194 | M15X1-6g0.100R | .098 | 1.235 | 195-2000-002 |
| PHD38999/20FC4XX | CSA-PHD13-4 | | 13 | 4 | .8750-0.1P-0.3L-TS | | .906 | .812 | 1.125 | | | M18X1-6g0.100R | | | 195-2000-004 |
| PHD38999/20FD6XX | CSA-PHD15-6 | | 15 | 6 | 1.0000-0.1P-0.3L-TS | | .969 | .906 | 1.219 | | | M22X1-6g0.100R | | | 195-2000-006 |
| PHD38999/20FE8XX | CSA-PHD17-8 | | 17 | 8 | 1.1875-0.1P-0.3L-TS | | 1.062 | .969 | 1.312 | | | M25X1-6g0.100R | | | 195-2000-008 |
| PHD38999/20FF12XX | CSA-PHD19-12 | | 19 | 12 | 1.2500-0.1P-0.3L-TS | .790 | 1.156 | 1.062 | 1.438 | .154 | .242 | M28X1-6g0.100R | .126 | 1.235 | 195-2000-010 |
| PHD38999/20FG16XX | CSA-PHD21-16 | | 21 | 16 | 1.3750-0.1P-0.3L-TS | | 1.250 | 1.156 | 1.562 | | | M31X1-6g0.100R | | | 195-2000-012 |
| PHD38999/20FH24XX | CSA-PHD23-24 | | 23 | 24 | 1.5000-0.1P-0.3L-TS | | 1.375 | 1.250 | 1.688 | | | M34X1-6g0.100R | | | 195-2000-014 |
| PHD38999/20FJ36XX | CSA-PHD25-36 | | 25 | 36 | 1.6250-0.1P-0.3L-TS | 1.500 | 1.375 | 1.812 | 1.54 | M37X1-6g0.100R | 195-2000-016 | | | | |

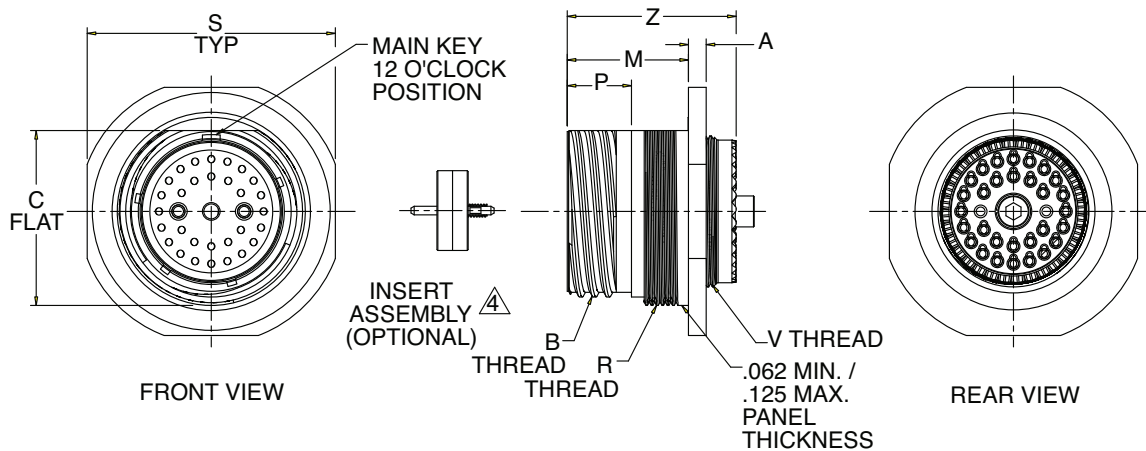


High Density Circular Connector PHD38999 Series

PHD Jam-Nut Receptacle

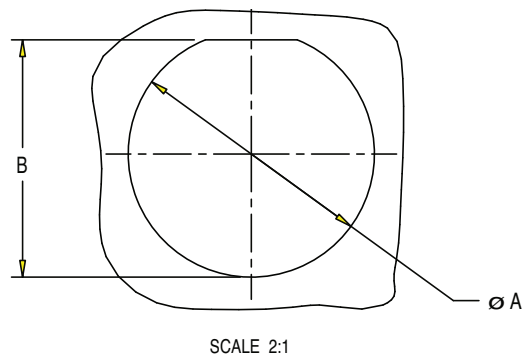
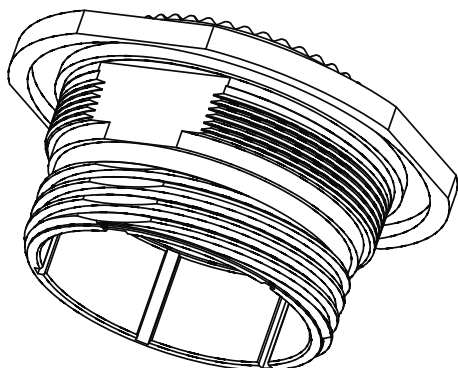
| PHD38999 JAM RECEPTACLE - SIZE 22 CONTACT MATRIX / 900um CABLE TYPE | | | | | | | | | | | | | | |
|---|--------------------------|--------|------------|--------------------------|-----------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|--------------------------|--------------------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | A + .010 - .005 | B THREAD CLASS 2 A (PLATED) | C + .004 - .010 | Z + .005 - .004 | M + .005 - .004 | P + .016 - .004 | S | METRIC R THREAD (PLATED) | METRIC V THREAD (PLATED) | INSERT ASSEMBLY (OPTIONAL)  |
| PHD38999/24FB4XX | CSA-PHD11-4 | NICKEL | 11 | 4 | .104 | .7500-0.1P-0.3L-TS | .751 | 1.243 | .871 | .555 | 1.250 | M20X1-6g0.100R | M15X1-6g0.100R | 195-2000-003 |
| PHD38999/24FC8XX | CSA-PHD13-8 | | 13 | 8 | .104 | .8750-0.1P-0.3L-TS | .938 | | | | 1.375 | M25X1-6g0.100R | M18X1-6g0.100R | 195-2000-005 |
| PHD38999/24FD12XX | CSA-PHD15-12 | | 15 | 12 | .104 | 1.0000-0.1P-0.3L-TS | 1.062 | | | | 1.500 | M28X1-6g0.100R | M22X1-6g0.100R | 195-2000-007 |
| PHD38999/24FE20XX | CSA-PHD17-20 | | 17 | 20 | .104 | 1.1875-0.1P-0.3L-TS | 1.187 | | | | 1.625 | M32X1-6g0.100R | M25X1-6g0.100R | 195-2000-009 |
| PHD38999/24FF30XX | CSA-PHD19-30 | | 19 | 30 | .135 | 1.2500-0.1P-0.3L-TS | 1.312 | | .878 | .563 | 1.812 | M35X1-6g0.100R | M28X1-6g0.100R | 195-2000-011 |
| PHD38999/24FG40XX | CSA-PHD21-40 | | 21 | 40 | .135 | 1.3750-0.1P-0.3L-TS | 1.437 | | | | 1.938 | M38X1-6g0.100R | M31X1-6g0.100R | 195-2000-013 |
| PHD38999/24FH48XX | CSA-PHD23-48 | | 23 | 48 | .135 | 1.5000-0.1P-0.3L-TS | 1.562 | | | | 2.062 | M41X1-6g0.100R | M34X1-6g0.100R | 195-2000-015 |
| PHD38999/24FJ72XX | CSA-PHD25-72 | | 25 | 72 | .135 | 1.6250-0.1P-0.3L-TS | 1.687 | | | | 2.188 | M44X1-6g0.100R | M37X1-6g0.100R | 195-2000-017 |

| PHD38999 JAM RECEPTACLE - SIZE #16 CONTACT MATRIX / 2MM CABLE TYPE | | | | | | | | | | | | | | |
|--|--------------------------|--------|------------|--------------------------|-----------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|--------------------------|--------------------------|--|
| SAMPLE PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | A + .010 - .005 | B THREAD CLASS 2 A (PLATED) | C + .004 - .010 | Z + .005 - .004 | M + .005 - .004 | P + .016 - .004 | S | METRIC R THREAD (PLATED) | METRIC V THREAD (PLATED) | INSERT ASSEMBLY (OPTIONAL)  |
| PHD38999/24FB2XX | CSA-PHD11-2 | NICKEL | 11 | 2 | .104 | .7500-0.1P-0.3L-TS | .751 | 1.243 | .871 | .555 | 1.250 | M20X1-6g0.100R | M15X1-6g0.100R | 195-2000-002 |
| PHD38999/24FC4XX | CSA-PHD13-4 | | 13 | 4 | .104 | .8750-0.1P-0.3L-TS | .938 | | | | 1.375 | M25X1-6g0.100R | M18X1-6g0.100R | 195-2000-004 |
| PHD38999/24FD6XX | CSA-PHD15-6 | | 15 | 6 | .104 | 1.0000-0.1P-0.3L-TS | 1.062 | | | | 1.500 | M28X1-6g0.100R | M22X1-6g0.100R | 195-2000-006 |
| PHD38999/24FE8XX | CSA-PHD17-8 | | 17 | 8 | .104 | 1.1875-0.1P-0.3L-TS | 1.187 | | | | 1.625 | M32X1-6g0.100R | M25X1-6g0.100R | 195-2000-008 |
| PHD38999/24FF12XX | CSA-PHD19-12 | | 19 | 12 | .135 | 1.2500-0.1P-0.3L-TS | 1.312 | | .878 | .563 | 1.812 | M35X1-6g0.100R | M28X1-6g0.100R | 195-2000-010 |
| PHD38999/24FG16XX | CSA-PHD21-16 | | 21 | 16 | .135 | 1.3750-0.1P-0.3L-TS | 1.437 | | | | 1.938 | M38X1-6g0.100R | M31X1-6g0.100R | 195-2000-012 |
| PHD38999/24FH24XX | CSA-PHD23-24 | | 23 | 24 | .135 | 1.5000-0.1P-0.3L-TS | 1.562 | | | | 2.062 | M41X1-6g0.100R | M34X1-6g0.100R | 195-2000-014 |
| PHD38999/24FJ36XX | CSA-PHD25-36 | | 25 | 36 | .135 | 1.6250-0.1P-0.3L-TS | 1.687 | | | | 2.188 | M44X1-6g0.100R | M37X1-6g0.100R | 195-2000-016 |



High Density Circular Connector PHD38999 Series

PHD Jam-Nut Receptacle

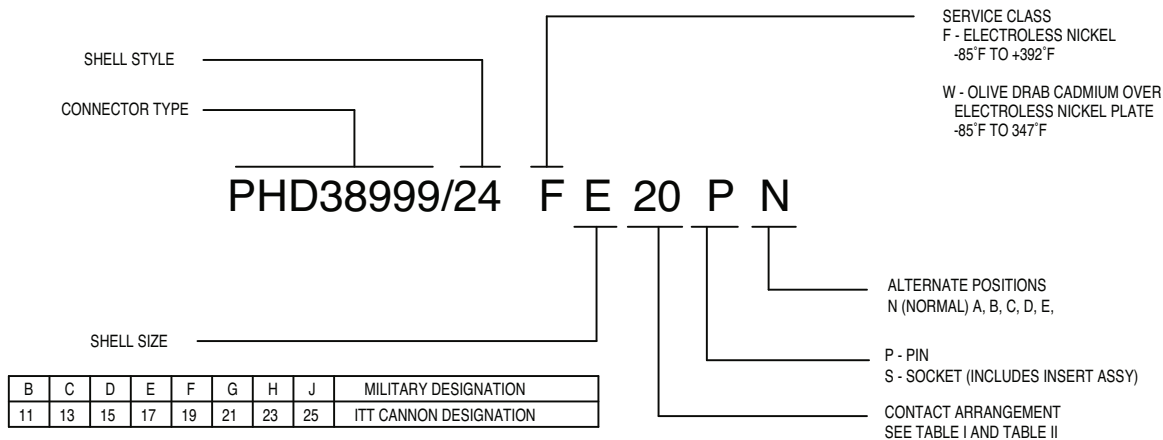


NOTES: UNLESS OTHERWISE SPECIFIED.

- FOR CAVITY LAYOUT / MARKING, SEE APPLICABLE "CSA" CANNON STANDARD ARRANGEMENT.
- MATERIAL TYPE:
 - SHELL: ALUMINUM ALLOY
 - FRONT PERIPHERAL SEAL: FLUOROSILICONE
 - REAR PLATE: ALUMINUM ALLOY
 - SCREWS, WASHERS, DOWEL PINS: STAINLESS STEEL
 - INTERNAL SPRINGS: STAINLESS STEEL
 - INTERNAL CUPS / CLIPS: COPPER
- FINISH: ELECTROLESS NICKEL PLATING OR CADMIUM PLATING
SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.
- INSERT ASSEMBLY IS OPTIONAL AND MAY BE ADDED TO THE PLUG ASSEMBLY OR THE RECEPTACLE ASSEMBLY BUT NOT BOTH.
SEE CONNECTOR ASSEMBLY MATRIX TABLE FOR PART NUMBERS.
INSERT ASSEMBLY MATERIALS:
 - ALUMINUM ALLOY
 - STAINLESS STEEL HARDWARE
 - INTERNAL SLEEVES CERAMIC

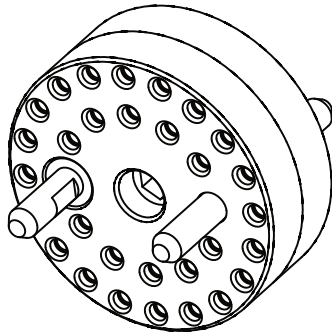
| CONNECTOR PANEL CUTOUT | | |
|------------------------|------------------|------------------|
| SHELL SIZE | A +.010/-.000 | B +.000/-.010 |
| 11 | .825 | .770 |
| 13 | 1.010 | .995 |
| 15 | 1.135 | 1.085 |
| 17 | 1.260 | 1.210 |
| 19 | 1.385 | 1.335 |
| 21 | 1.510 | 1.460 |
| 23 | 1.635 | 1.585 |
| 25 | 1.760 | 1.710 |

PART NUMBER SHOWN: SHELL SIZE 17/20 POSITION CONTACT ARRANGEMENT

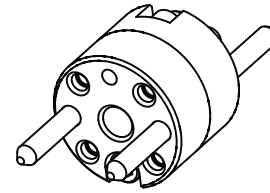


High Density Circular Connector PHD38999 Series

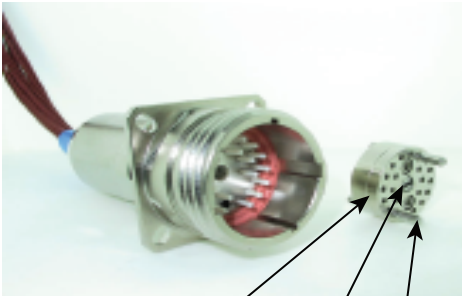
PHD Front Insert Assembly



INSERT ASSY SIZES
13 THRU 25



INSERT ASSY
SIZE 11



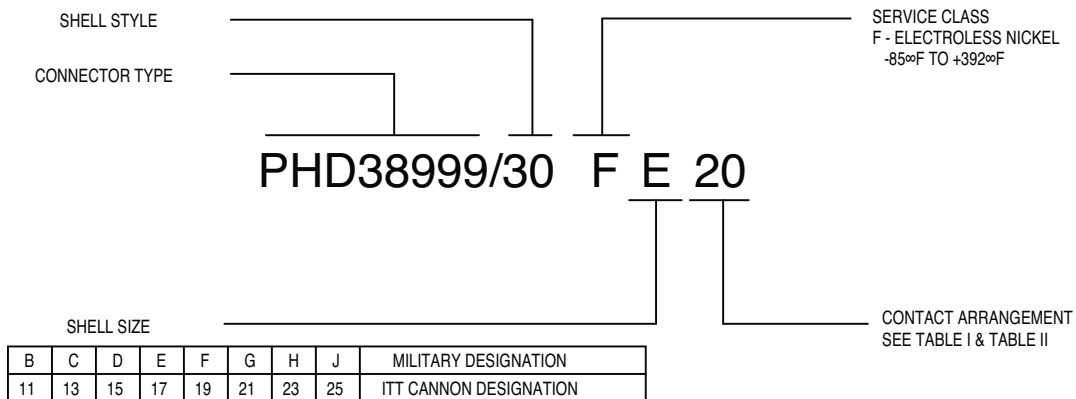
Insert Assy
Guide Pin
Jackscrew

NOTES: UNLESS OTHERWISE SPECIFIED.

1. FOR CAVITY LAYOUT SEE APPLICABLE "CSA" CANNON STANDARD ARRANGEMENT.
2. MATERIAL: TYPE / FINISH
 INSERT: ALUMINUM ALLOY / ELECTROLESS NICKLE PLATE
 HARDWARE: STAINLESS STEEL / PASSIVATED
 INTERNAL SLEEVES: CERAMIC

PART NUMBER

SHOWN: SHELL SIZE 17/20 POSITION CONTACT ARRANGEMENT



PHD Front Insert Assembly

| INSERT ASSEMBLY - SIZE #22 CONTACT MATRIX | | | | | |
|---|-----------------------------|--------|---------------|-----------------------------|------------|
| PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | A (DIA) |
| PHD38999/30FB4 | CSA-PHD11-4 | NICKEL | 11 | 4 | .421 |
| PHD38999/30FC8 | CSA-PHD13-8 | | 13 | 8 | .535 |
| PHD38999/30FD12 | CSA-PHD15-12 | | 15 | 12 | .660 |
| PHD38999/30FE20 | CSA-PHD17-20 | | 17 | 20 | .785 |
| PHD38999/30FF30 | CSA-PHD19-30 | | 19 | 30 | .874 |
| PHD38999/30FG40 | CSA-PHD21-40 | | 21 | 40 | 1.000 |
| PHD38999/30FH48 | CSA-PHD23-48 | | 23 | 48 | 1.124 |
| PHD38999/30FJ72 | CSA-PHD25-72 | | 25 | 72 | 1.248 |

| INSERT ASSEMBLY - SIZE #16 CONTACT MATRIX | | | | | |
|---|-----------------------------|--------|---------------|-----------------------------|------------|
| PART NUMBER | CSA NUMBER CAVITY LAYOUT | FINISH | SHELL SIZE | STANDARD NO. OF CAVITIES | A (DIA) |
| PHD38999/30FB2 | CSA-PHD11-2 | NICKEL | 11 | 2 | .421 |
| PHD38999/30FC4 | CSA-PHD13-4 | | 13 | 4 | .535 |
| PHD38999/30FD6 | CSA-PHD15-6 | | 15 | 6 | .660 |
| PHD38999/30FE8 | CSA-PHD17-8 | | 17 | 8 | .785 |
| PHD38999/30FF12 | CSA-PHD19-12 | | 19 | 12 | .874 |
| PHD38999/30FG16 | CSA-PHD21-16 | | 21 | 16 | 1.000 |
| PHD38999/30FH24 | CSA-PHD23-24 | | 23 | 24 | 1.124 |
| PHD38999/30FJ36 | CSA-PHD25-36 | | 25 | 36 | 1.248 |

