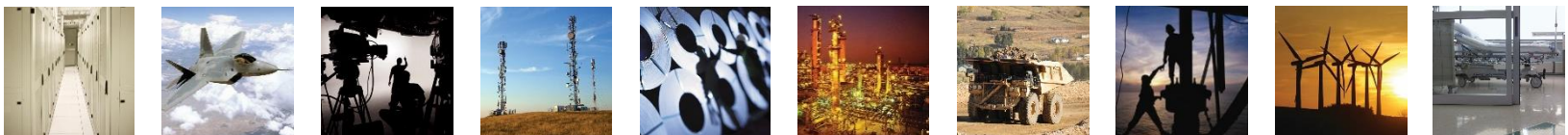


# QMini Expanded Beam Connectors



Military Aerospace Shipboard Industrial Mining Transportation Oil & Gas Broadcast Manufacturing Marine Energy Medical



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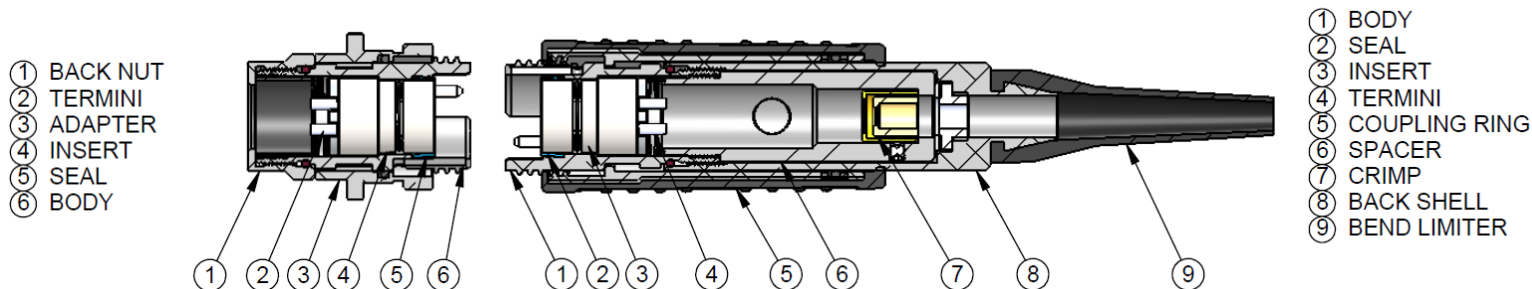


QPC's QMini Expanded Beam Fiber Optic Connectors are designed to meet the requirements of MIL-PRF-83526/20 & /21 Military Specifications. Expanded Beam fiber optic connectors are designed to operate in harsh environments, they use non-physical contact fiber optic termini that are fully sealed behind an anti-reflective coated ball lens. This lens expands the beam to many times its original size aiding optical alignment and minimizing the effects of dust, debris, vibration, and other environmental conditions. Because there is no wear on the optical surfaces / end faces of the termini during use, the QMini connector has excellent durability, in excess of 3,000 mating cycles, providing a long service life interconnect solution.

QMini is a hermaphroditic connector allowing multiple plug-to-plug cable assemblies to be combined to extend the length of the system. These connectors are available with two or four channels and with singlemode or multimode lenses. In addition to the standard plugs and receptacles, QPC offers a 90 Degree option for plugs and a Low Profile Backshell for receptacles for applications with space constraints. A QMini Receptacle to LC Adapter is also offered which provides a QMini interface on one end and LC Duplex on the other.

QMini Connectors are used in Oil & Gas, Mining, Factory Automation, Heavy Equipment, Marine, Broadcast, Medical, Military, Aerospace, and Defense for Communications, Audio / Video, and Sensing Applications.

- 2Ch / 4Ch Hermaphroditic Expanded Beam Connector System
- Plugs: With and without Rubber Grip, with Straight or 90 Degree Backshell
- Receptacles: Jam Nut, Flange Mount, and XLR Compatible Flange Mount, with or without Backshells, QMini to LC adapter
- Standard Cable OD up to 7.5mm, Extended Heat Shrink Strain Relief up to 10.5mm
- Designed to MIL-DTL-83526/20 (Plug) & MIL-DTL-83526/21 (Jam Nut Receptacle)
- Intermateability: Tyco Pro Beam Jr., Amphenol TACBeam, Glenair GMA, Stratos HMA, Fibreco Junior, DiGiCo Compatible
- Sealed to IP68



## Specifications:

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insertion Loss:<br>SM (9/125µm)   | 0.75-2.0dB Max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| MM (50/125µm)                     | 0.50-1.5dB Max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| MM (62.5/125µm)                   | 0.50-1.5dB Max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Return Loss:<br>SM (9/125µm)      | -34dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating Temperature:            | -46°C to +85°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Vibration:                        | 10 to 500Hz / 10g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mating Durability:                | 3000 Cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Impact:                           | 8 Impacts @ 8FT (2.5MT), EIA/TIA-455-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Shock:                            | 50g for 11ms, EIA/TIA-455-14, Condition A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| IP Rating:                        | IP68 - Dust Tight, No ingress of dust; complete protection against contact, Water Immersion, 1m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Material & Plating Specification: | <p>Black Hard Anodize: 6061-T6 Aluminum; Anodize per MIL-A-8625 TYPE III CLASS 2, .0022/.0018 Thick (50% Penetration), Black</p> <p>Stainless Steel: 303 Stainless Steel; PASSIVATE PER QQ-P-35</p> <p>Olive Drab Zinc-Nickel: 6061-T6 Aluminum; Zinc-Nickel Followed by Olive Drab Chromate per AMS-2417 Electroless Nickel Plate .0003 to .00035 thickness as per AMS-C-26074 Alkaline Zinc-Nickel Plate .0003 to .0004 thickness as per AMS 2417 "H" TY 2 Zinc Strike - .00005 - .000150 Thickness per ASTM B 633 "11" Dark Green Olive Drab Chromate</p> <p>Black Zinc-Nickel: 6061-T6 Aluminum; Zinc-Nickel Followed by Black Chromate per AMS-2417 Electroless Nickel Plate .0003 to .00035 thickness as per AMS-C-26074 Alkaline Zinc-Nickel Plate .0003 to .0004 thickness as per AMS 2417 "H" TY 2 Zinc Strike - .00005 - .000150 Thickness per ASTM B 633 "11" Black Chromate</p> |

## Part Number Builder, QMini Plugs and Receptacles:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |              |   |            |  |          |   |           |  |           |   |          |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|---|------------|--|----------|---|-----------|--|-----------|---|----------|-----------|
| Sample Part Number:<br><b>QMINI-PHHN-02SM-S75</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | <b>QMINI</b> | - | <b>PHH</b> |  | <b>N</b> | - | <b>02</b> |  | <b>SM</b> | - | <b>S</b> | <b>75</b> |
| <b>1 Series</b><br>QMINI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |              |   |            |  |          |   |           |  |           |   |          |           |
| <b>2 Product Type (Page 7-18)</b><br>PHH - PLUG, W/ RUBBER GRIP, COMPOSITE DUSTCOVER<br>PEE - PLUG, W/ METAL COUPLING RING, METAL DUSTCOVER<br>RFH - RECP FLANGE MOUNT, COMPOSITE DUSTCOVER<br>RFE - RECP FLANGE MOUNT, METAL DUSTCOVER<br>RJH - RECP JAM NUT, COMPOSITE DUSTCOVER<br>RJE - RECP JAM NUT, METAL DUSTCOVER<br>RXH - RECP FLANGE MOUNT RX, COMPOSITE DUSTCOVER<br>RXE - RECP FLANGE MOUNT RX, METAL DUSTCOVER                                                                                                                                                                                                                                 |  |              |   |            |  |          |   |           |  |           |   |          |           |
| <b>3 Material &amp; Finish Code</b><br>N - ALUMINUM, HARD ANODIZE, BLACK<br>S - STAINLESS STEEL, PASSVATED<br>Z - ALUMINUM, ZINC OVER NICKEL, OLIVE DRAB<br>K - ALUMINUM, ZINC OVER NICKEL, BLACK<br>(CONSULT QPC FOR OTHER OPTIONS)                                                                                                                                                                                                                                                                                                                                                                                                                        |  |              |   |            |  |          |   |           |  |           |   |          |           |
| <b>4 Channel Count</b><br>02 - 2 CHANNEL, 2x 126µm TERMINI<br>04 - 4 CHANNEL, 4x 126µm TERMINI<br>00 - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "SXX")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |              |   |            |  |          |   |           |  |           |   |          |           |
| <b>5 Fiber Type</b><br>SM - SINGLEMODE, 1310/1550nm<br>MM - MULTIMODE, 850/1300nm<br>XX - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "SXX")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |              |   |            |  |          |   |           |  |           |   |          |           |
| <b>6 Strain Relief</b><br>S00 - NO BACKSHELL, NO CRIMPS (FOR 900µm BUFFER FIBER) (RECEPTACLE ONLY)<br>S02 - NO BACKSHELL, 2mm CRIMPS (FOR 2mm BUFFER JACKET) (RECEPTACLE ONLY)<br>S45 - STRAIN RELIEF FOR 3.6mm TO 4.5mm O.D. CABLE<br>S55 - STRAIN RELIEF FOR 4.6mm TO 5.5mm O.D. CABLE<br>S65 - STRAIN RELIEF FOR 5.6mm TO 6.5mm O.D. CABLE<br>S75 - STRAIN RELIEF FOR 6.6mm TO 7.5mm O.D. CABLE<br>S105 - HEAT SHRINK STRAIN RELIEF FOR 7.6mm TO 10.5mm O.D. CABLE<br>SXX - NO CABLE INTERFACE KIT (MUST BE ORDERED WITH CHANNEL COUNT "00" AND FIBER TYPE "XX")<br><br><i>*For Insert and Cable Interface Kit ordering information, see Pages 19-20</i> |  |              |   |            |  |          |   |           |  |           |   |          |           |

## Part Number Builder, QMini 90° Plugs:

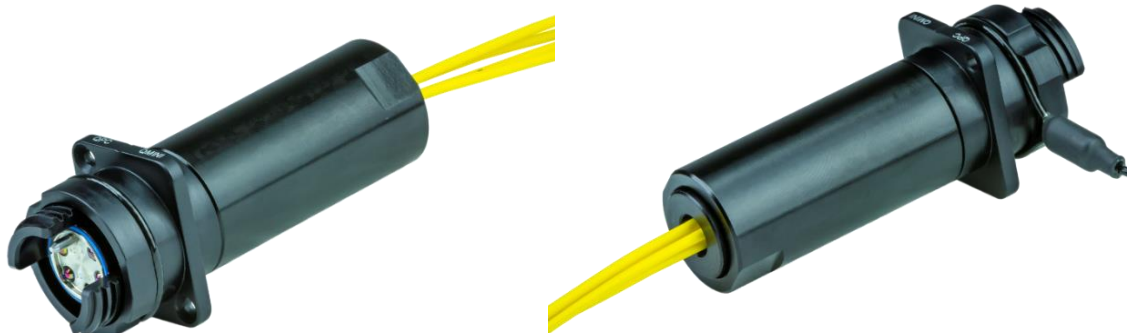
|                                                                                                                                                                                                                                                                                                                                          |  |         |   |     |   |   |    |    |   |   |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|---|-----|---|---|----|----|---|---|----|
| Sample Part Number:<br>QMINI90-PEHN-02SM-S75                                                                                                                                                                                                                                                                                             |  | QMINI90 | - | PEH | N | - | 02 | SM | - | S | 75 |
| 1 <u>Series</u><br>QMINI90                                                                                                                                                                                                                                                                                                               |  |         |   |     |   |   |    |    |   |   |    |
| 2 <u>Product Type (Page 9)</u><br>PEH - PLUG, W/ METAL COUPLING RING, COMPOSITE DUSTCOVER<br>PEE - PLUG, W/ METAL COUPLING RING, METAL DUSTCOVER                                                                                                                                                                                         |  |         |   |     |   |   |    |    |   |   |    |
| 3 <u>Material &amp; Finish Code</u><br>N - ALUMINUM, HARD ANODIZE, BLACK<br>S - STAINLESS STEEL, PASSIVATED<br>Z - ALUMINUM, ZINC OVER NICKEL, OLIVE DRAB<br>K - ALUMINUM, ZINC OVER NICKEL, BLACK<br>(CONSULT QPC FOR OTHER OPTIONS)                                                                                                    |  |         |   |     |   |   |    |    |   |   |    |
| 4 <u>Channel Count</u><br>02 - 2 CHANNEL, 2x 126µm TERMINI<br>04 - 4 CHANNEL, 4x 126µm TERMINI<br>00 - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "SXX")                                                                                                                                                                   |  |         |   |     |   |   |    |    |   |   |    |
| 5 <u>Fiber Type</u><br>SM - SINGLEMODE, 1310/1550nm<br>MM - MULTIMODE, 850/1300nm<br>XX - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "SXX")                                                                                                                                                                                |  |         |   |     |   |   |    |    |   |   |    |
| 6 <u>Strain Relief</u><br>S45 - STRAIN RELIEF FOR 3.6mm TO 4.5mm O.D. CABLE<br>S55 - STRAIN RELIEF FOR 4.6mm TO 5.5mm O.D. CABLE<br>S65 - STRAIN RELIEF FOR 5.6mm TO 6.5mm O.D. CABLE<br>S75 - STRAIN RELIEF FOR 6.6mm TO 7.5mm O.D. CABLE<br>SXX - NO CABLE INTERFACE KIT (MUST BE ORDERED WITH CHANNEL COUNT "00" AND FIBER TYPE "XX") |  |         |   |     |   |   |    |    |   |   |    |
| *For Insert and Cable Interface Kit ordering information, see Pages 19-20                                                                                                                                                                                                                                                                |  |         |   |     |   |   |    |    |   |   |    |



Part Number Shown: QMINI-PEHN-04SM-S75

## Part Number Builder QMini Receptacle, Low Profile Backshell:

|                                                                                                                                                                                                                                                                                                                                                                                                            |              |   |            |  |          |   |           |  |           |   |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---|------------|--|----------|---|-----------|--|-----------|---|-------------|
| Sample Part Number:<br><b>QMINI-RFHN-02SM-L42</b>                                                                                                                                                                                                                                                                                                                                                          | <b>QMINI</b> | - | <b>RFH</b> |  | <b>N</b> | - | <b>02</b> |  | <b>SM</b> | - | <b>L 42</b> |
| <b>1 Series</b><br>QMINI                                                                                                                                                                                                                                                                                                                                                                                   |              |   |            |  |          |   |           |  |           |   |             |
| <b>2 Product Type (Page 10, 13, &amp; 16)</b><br>RFH - RECP FLANGE MOUNT, COMPOSITE DUSTCOVER<br>RFE - RECP FLANGE MOUNT, METAL DUSTCOVER<br>RJH - RECP JAM NUT, COMPOSITE DUSTCOVER<br>RJE - RECP JAM NUT, METAL DUSTCOVER<br>RXH - RECP FLANGE MOUNT RX, COMPOSITE DUSTCOVER<br>RXE - RECP FLANGE MOUNT RX, METAL DUSTCOVER                                                                              |              |   |            |  |          |   |           |  |           |   |             |
| <b>3 Material &amp; Finish Code</b><br>N - ALUMINUM, HARD ANODIZE, BLACK<br>S - STAINLESS STEEL, PASSVATED<br>Z - ALUMINUM, ZINC OVER NICKEL, OLIVE DRAB<br>K - ALUMINUM, ZINC OVER NICKEL, BLACK<br>(CONSULT QPC FOR OTHER OPTIONS)                                                                                                                                                                       |              |   |            |  |          |   |           |  |           |   |             |
| <b>4 Channel Count</b><br>02 - 2 CHANNEL, 2x 126µm TERMINI<br>04 - 4 CHANNEL, 4x 126µm TERMINI<br>00 - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "LXX")                                                                                                                                                                                                                                     |              |   |            |  |          |   |           |  |           |   |             |
| <b>5 Fiber Type</b><br>SM - SINGLEMODE, 1310/1550nm<br>MM - MULTIMODE, 850/1300nm<br>XX - NO INSERT OR TERMINI (MUST BE ORDERED WITH STRAIN RELIEF "LXX")                                                                                                                                                                                                                                                  |              |   |            |  |          |   |           |  |           |   |             |
| <b>6 Strain Relief</b><br>L42 - STRAIN RELIEF FOR 4X 2mm O.D. INDIVIDUAL JACKETED FIBERS<br>L45 - STRAIN RELIEF FOR 3.6mm TO 4.5mm O.D. CABLE<br>L55 - STRAIN RELIEF FOR 4.6mm TO 5.5mm O.D. CABLE<br>L65 - STRAIN RELIEF FOR 5.6mm TO 6.5mm O.D. CABLE<br>L75 - STRAIN RELIEF FOR 6.6mm TO 7.5mm O.D. CABLE<br>LXX - NO CABLE INTERFACE KIT (MUST BE ORDERED WITH CHANNEL COUNT "00" AND FIBER TYPE "XX") |              |   |            |  |          |   |           |  |           |   |             |
| <i>*For the Strain Relief option "LXX", crimps must be ordered separately, please contact QPC for ordering information</i>                                                                                                                                                                                                                                                                                 |              |   |            |  |          |   |           |  |           |   |             |



Part Number Shown: QMINI-RXHN-04SM-L42



## Part Number Builder, QMini LC Adapter:

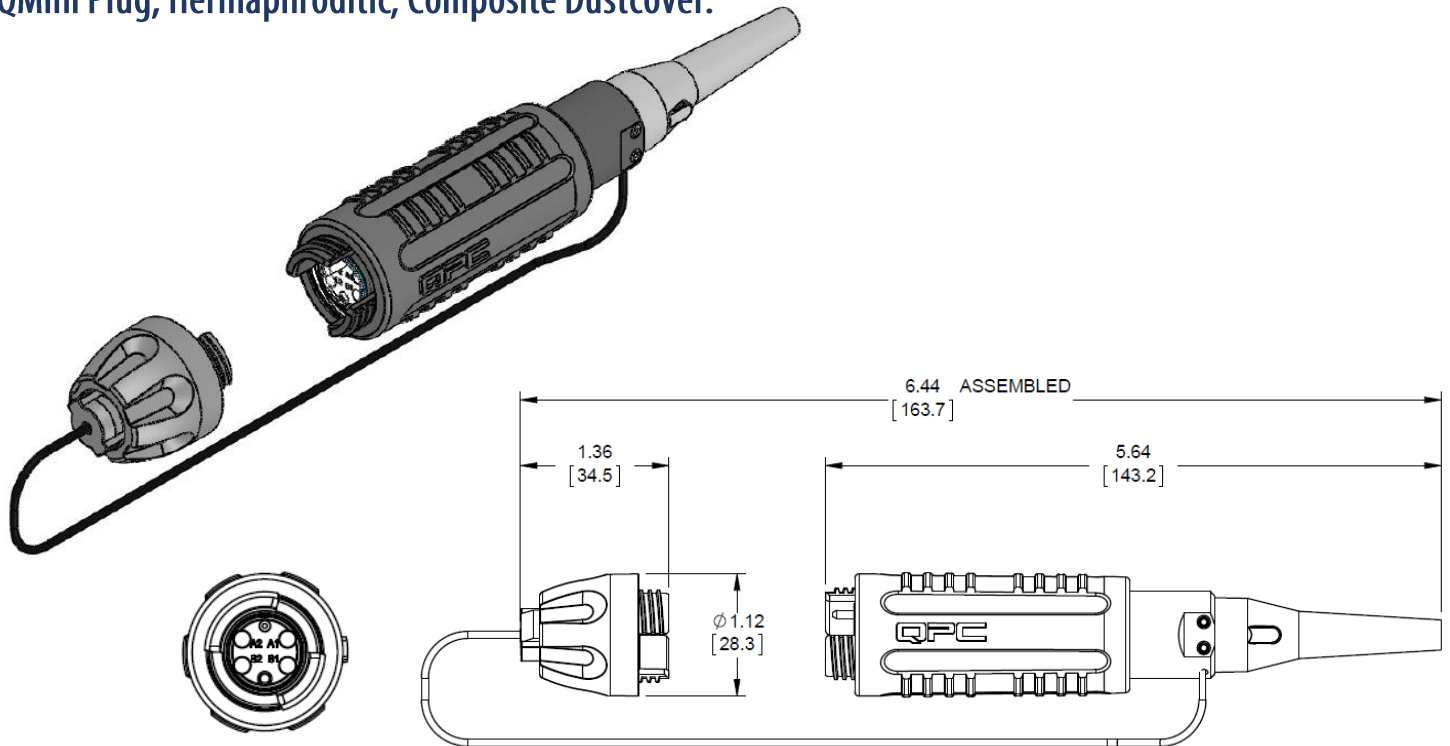
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------|---|------------|--|----------|---|-----------|--|-----------|---|-----------|
| <b>Sample Part Number:</b><br><b>QMINILC-RFHN-02SM-09</b>                                                                                                                                                                                                                                                                                                  |  | <b>QMINILC</b> | - | <b>RFH</b> |  | <b>N</b> | - | <b>02</b> |  | <b>SM</b> | - | <b>09</b> |
| <b>1 Series</b><br>QMINILC                                                                                                                                                                                                                                                                                                                                 |  |                |   |            |  |          |   |           |  |           |   |           |
| <b>2 Product Type (Page 12, 15 &amp; 18)</b><br>RFH - RECP FLANGE MOUNT, COMPOSITE HERM DUSTCOVER<br>RFE - RECP FLANGE MOUNT, METAL HERM DUSTCOVER<br>RJH - RECP JAM NUT, COMPOSITE HERM DUSTCOVER<br>RJE - RECP JAM NUT, METAL HERM DUSTCOVER<br>RXH - RECP FLANGE MOUNT RX, COMPOSITE HERM DUSTCOVER<br>RXE - RECP FLANGE MOUNT RX, METAL HERM DUSTCOVER |  |                |   |            |  |          |   |           |  |           |   |           |
| <b>3 Material &amp; Finish Code</b><br>N - ALUMINUM, BLACK HARD ANODIZE<br>S - STAINLESS STEEL, PASSIVATED<br>Z - ALUMINUM, ZINC OVER NICKEL, OLIVE DRAB<br>K - ALUMINUM, ZINC OVER NICKEL, BLACK<br>(CONSULT QPC FOR OTHER OPTIONS)                                                                                                                       |  |                |   |            |  |          |   |           |  |           |   |           |
| <b>4 Channel Count</b><br>02 - 2 CHANNEL<br>04 - 4 CHANNEL (JAM NUT RJH & RJE ONLY)                                                                                                                                                                                                                                                                        |  |                |   |            |  |          |   |           |  |           |   |           |
| <b>5 Fiber Type</b><br>SM - SINGLEMODE, 1310/1550nm<br>MM - MULTIMODE, 850/1300nm                                                                                                                                                                                                                                                                          |  |                |   |            |  |          |   |           |  |           |   |           |
| <b>6 Fiber Size</b><br>09 - 9/125µm SINGLEMODE<br>50 - 50/125µm MULTIMODE<br>62 - 62.5/125µm MULTIMODE                                                                                                                                                                                                                                                     |  |                |   |            |  |          |   |           |  |           |   |           |



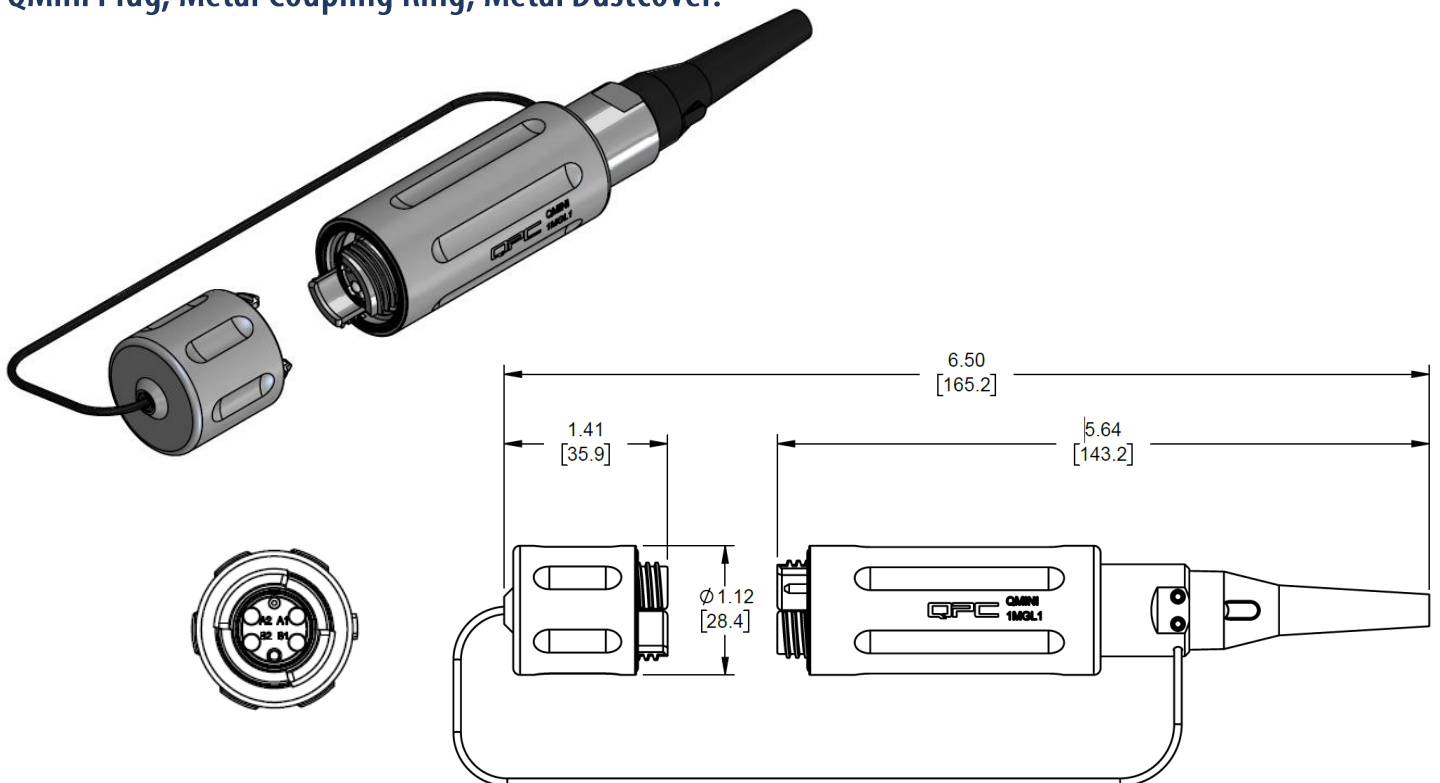
Part Number Shown: QMINI-RXHN-02SM-09



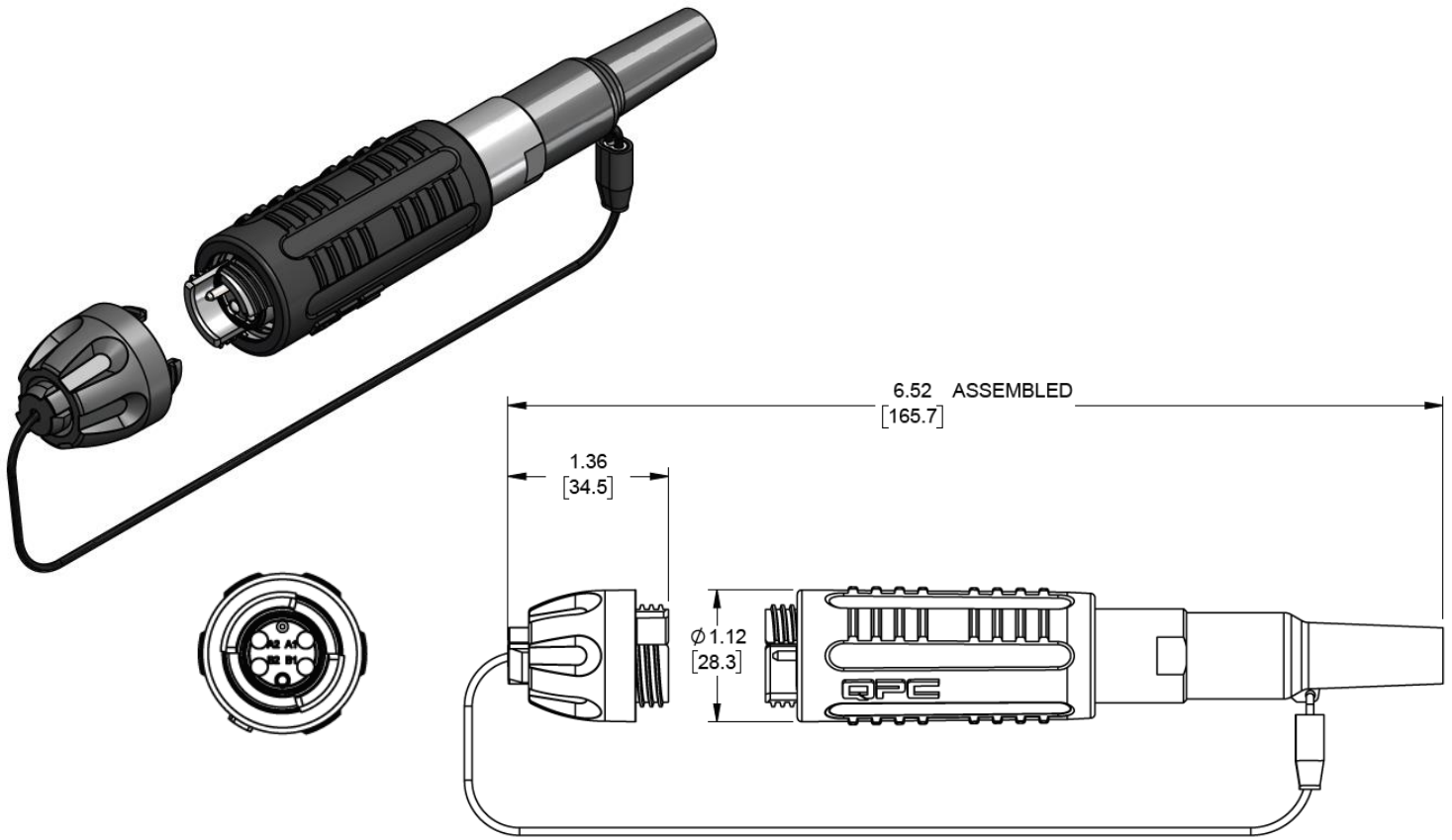
## QMini Plug, Hermaphroditic, Composite Dustcover:



## QMini Plug, Metal Coupling Ring, Metal Dustcover:



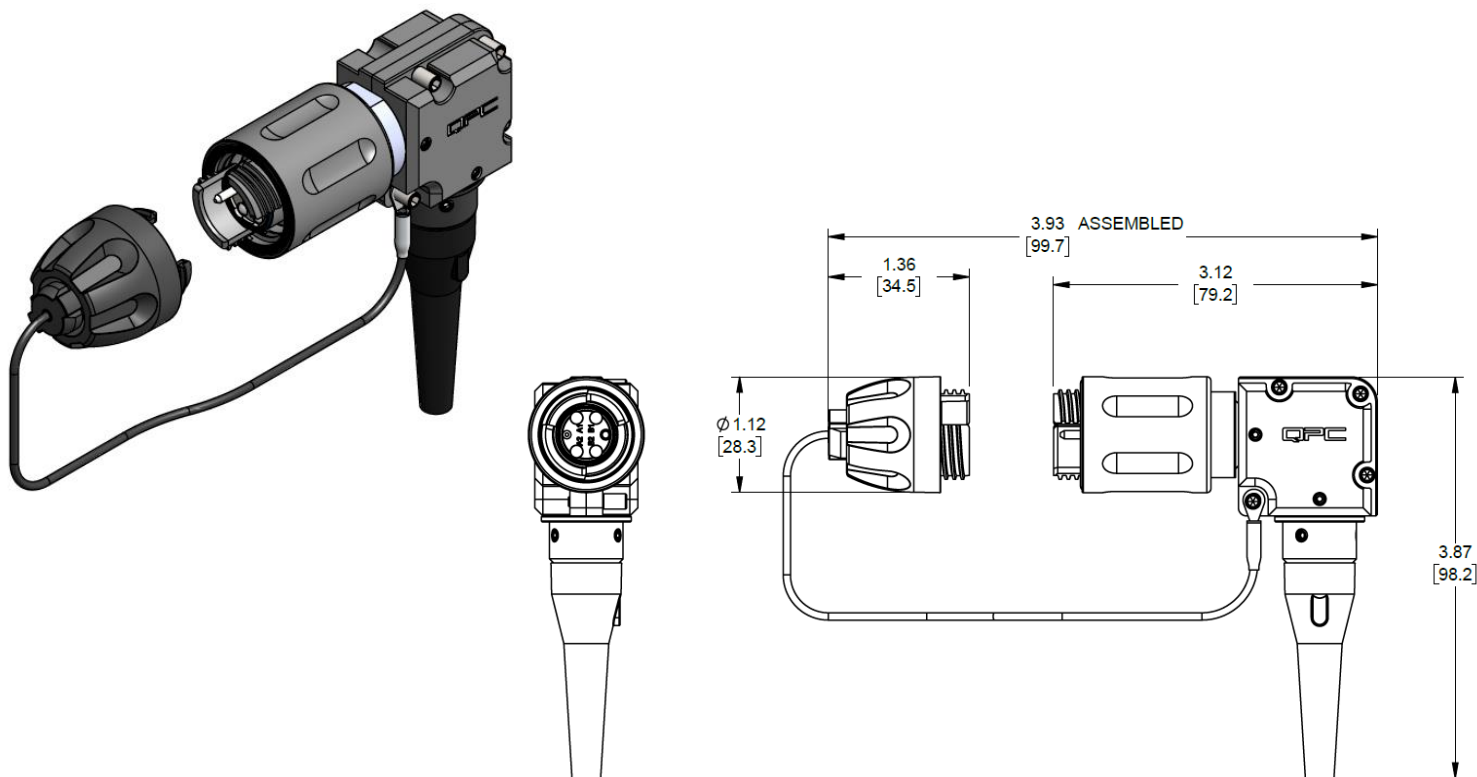
## QMini Plug, Hermaphroditic, 10.5mm Heat Shrink Strain Relief, Composite Dustcover:



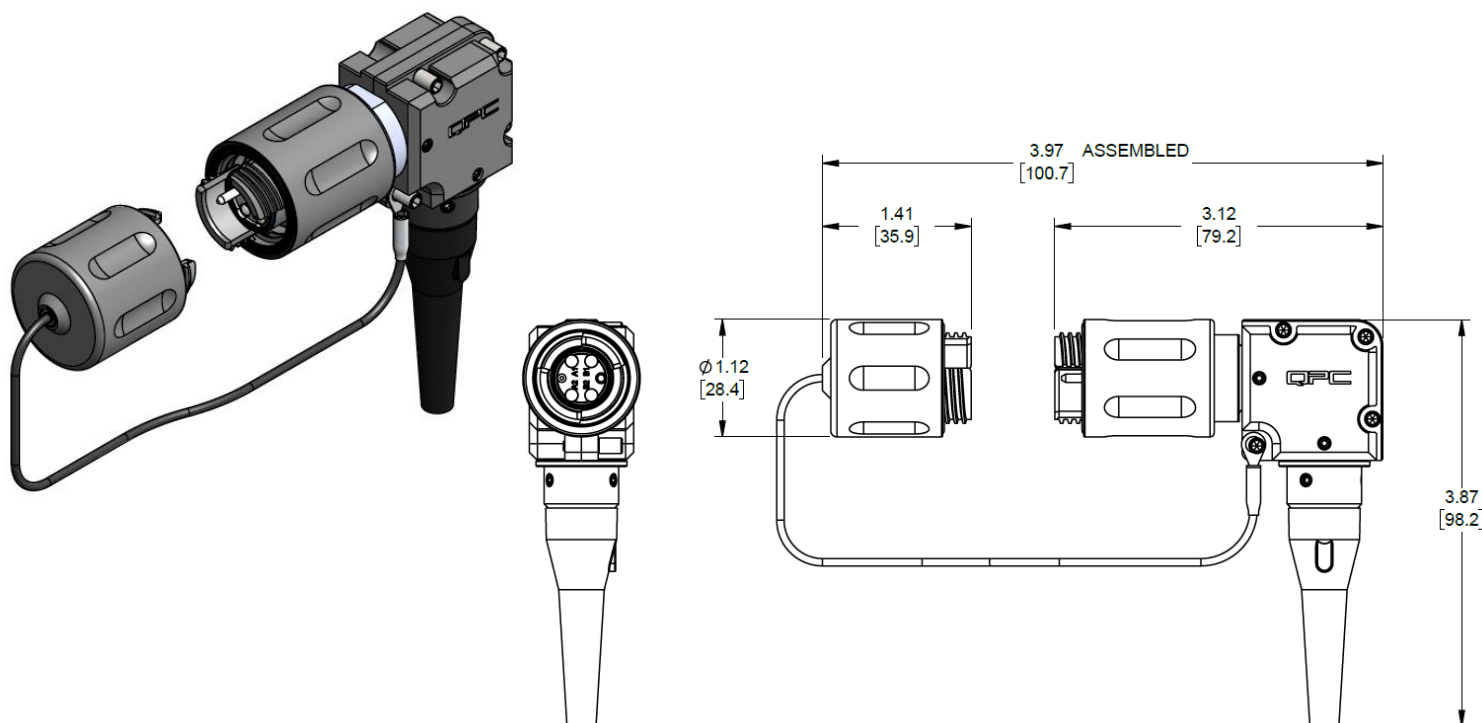
*\*Available with Metal Coupling Ring and Metal Dustcover (not shown)*

## QMini Expanded Beam Connectors

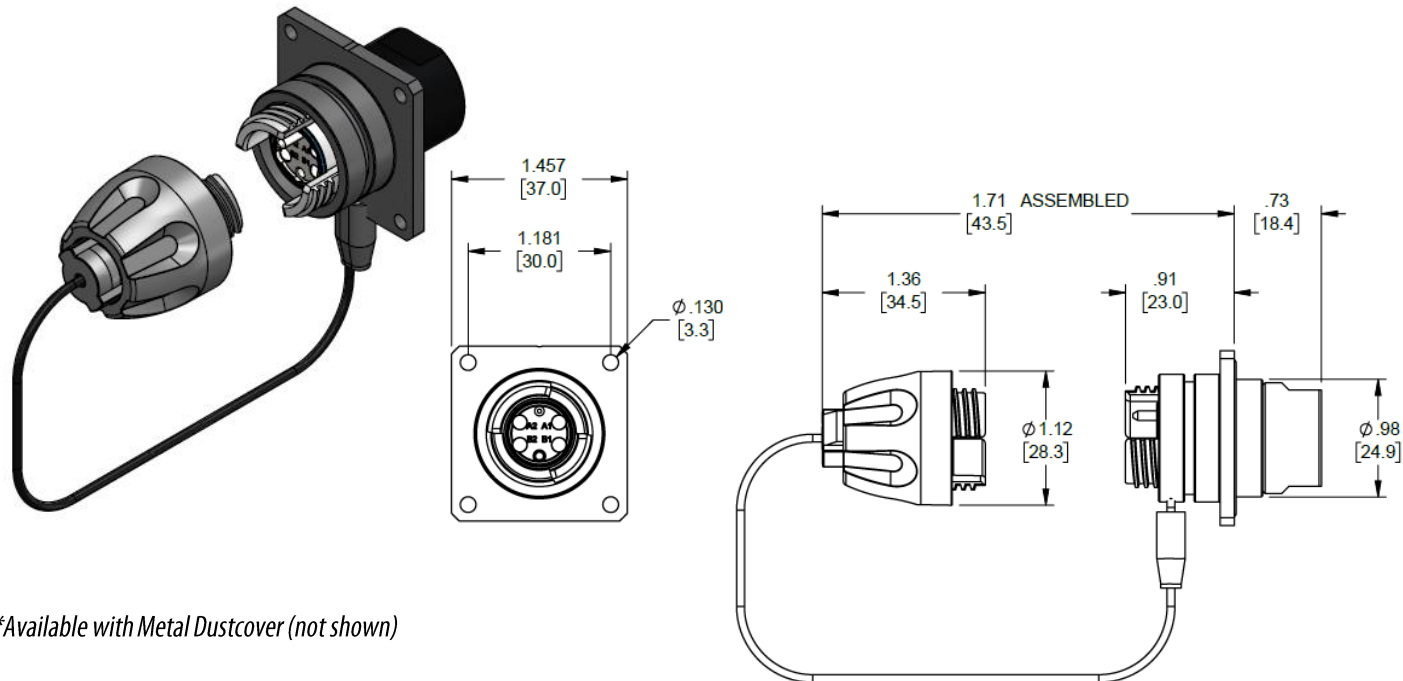
### QMini Plug, Hermaphroditic, 90° Backshell, Metal Coupling Ring, Composite Dustcover:



### QMini Plug, Hermaphroditic, 90° Backshell, Metal Coupling Ring, Metal Dustcover:

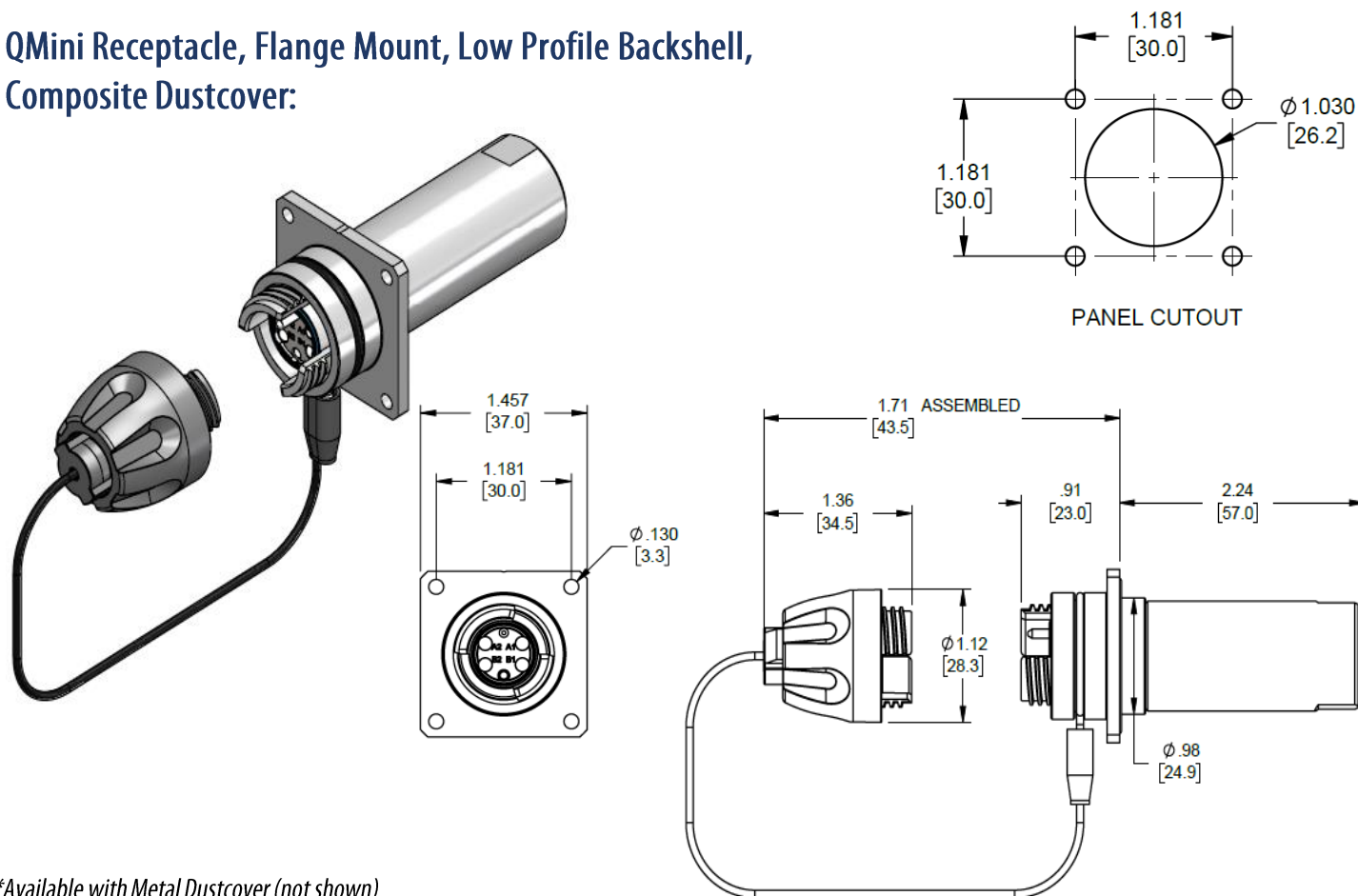


## QMini Receptacle, Flange Mount, Composite Dustcover:



*\*Available with Metal Dustcover (not shown)*

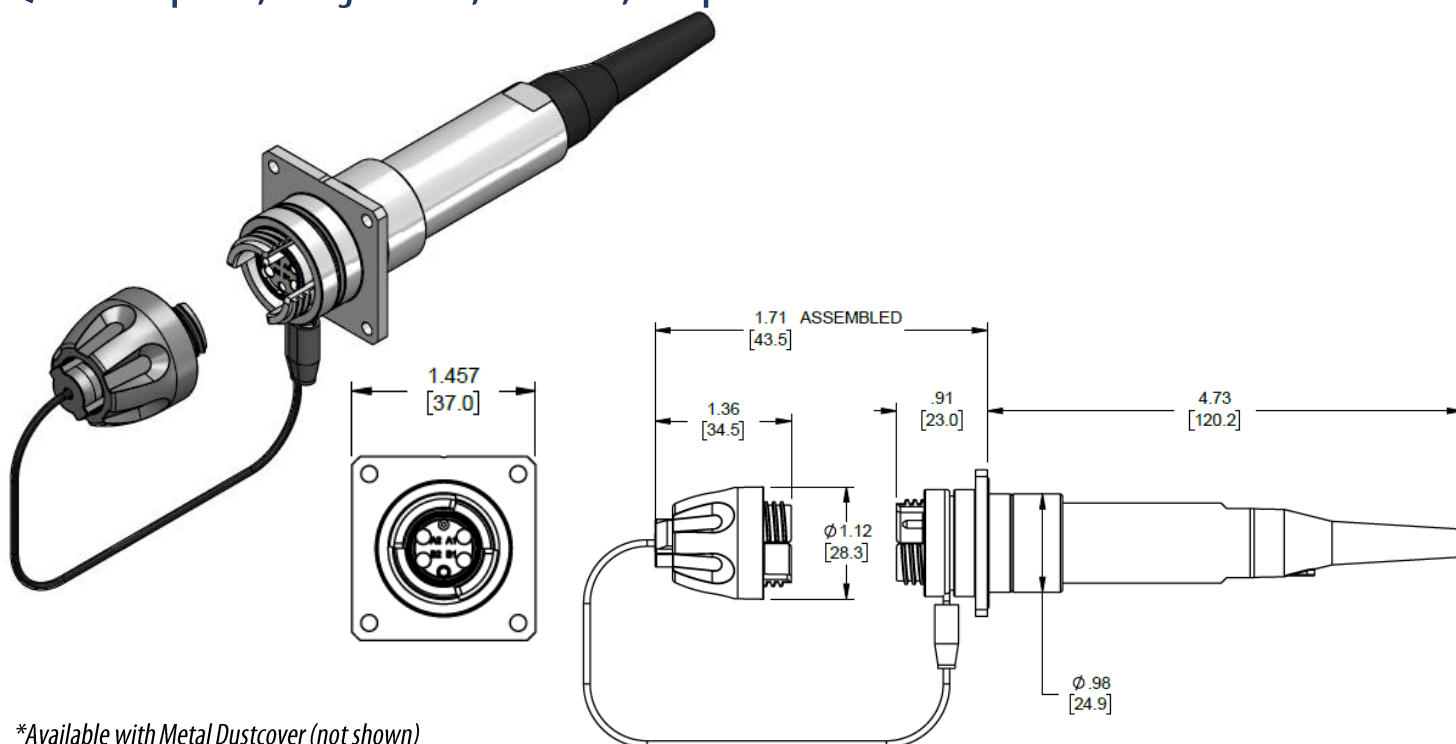
## QMini Receptacle, Flange Mount, Low Profile Backshell, Composite Dustcover:



*\*Available with Metal Dustcover (not shown)*

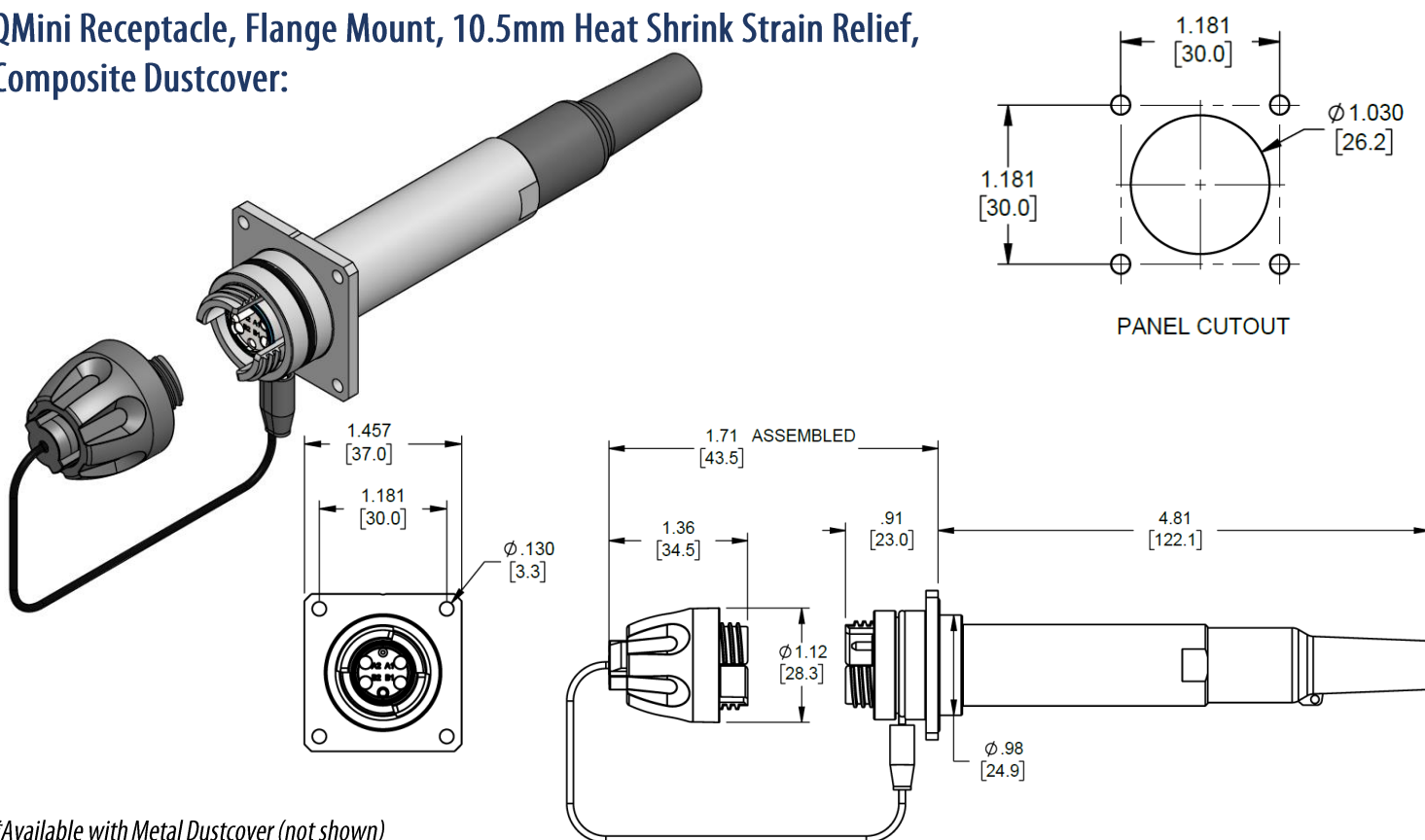
# QMini Expanded Beam Connectors

## QMini Receptacle, Flange Mount, Backshell, Composite Dustcover:



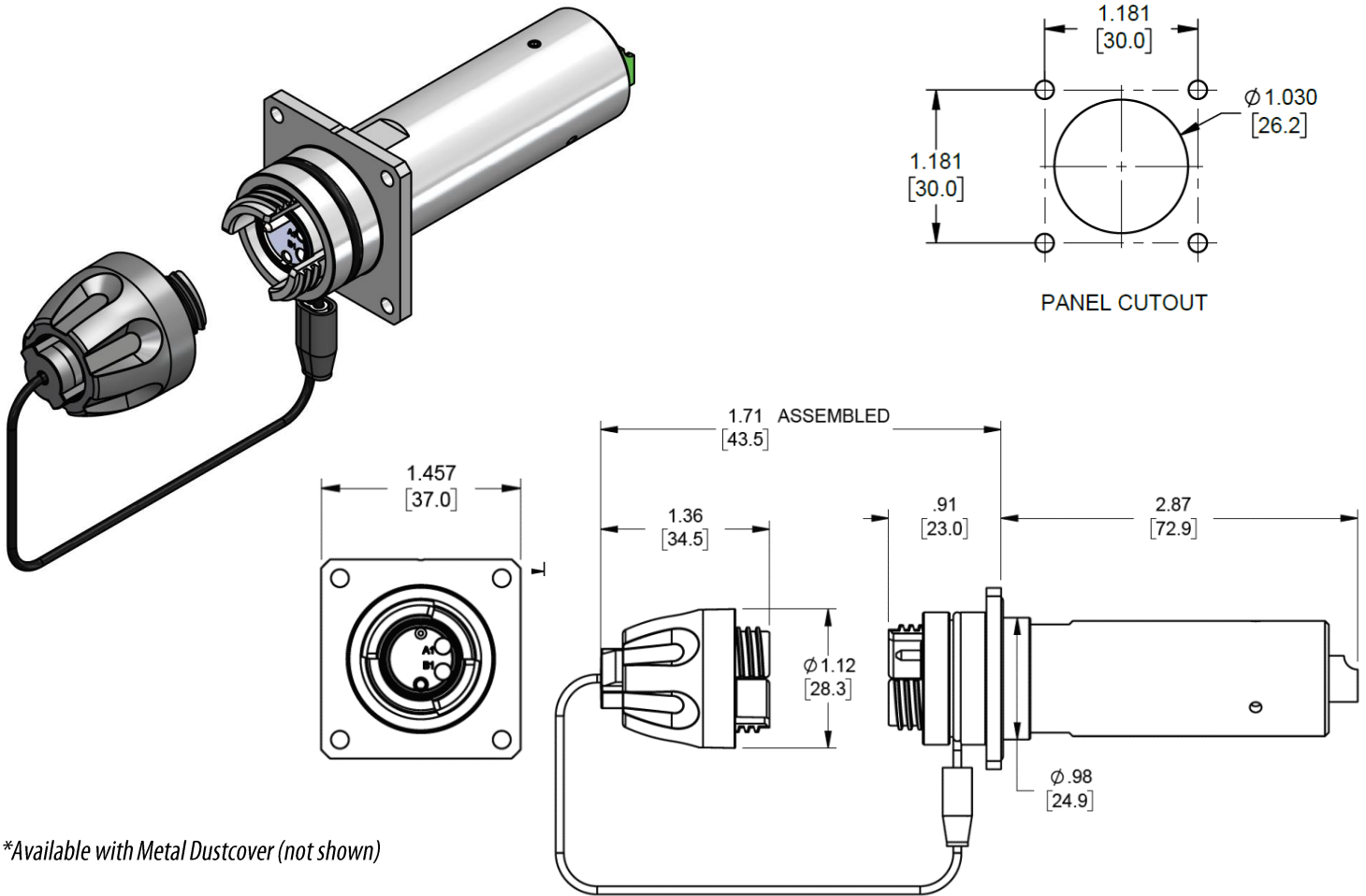
*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Flange Mount, 10.5mm Heat Shrink Strain Relief, Composite Dustcover:

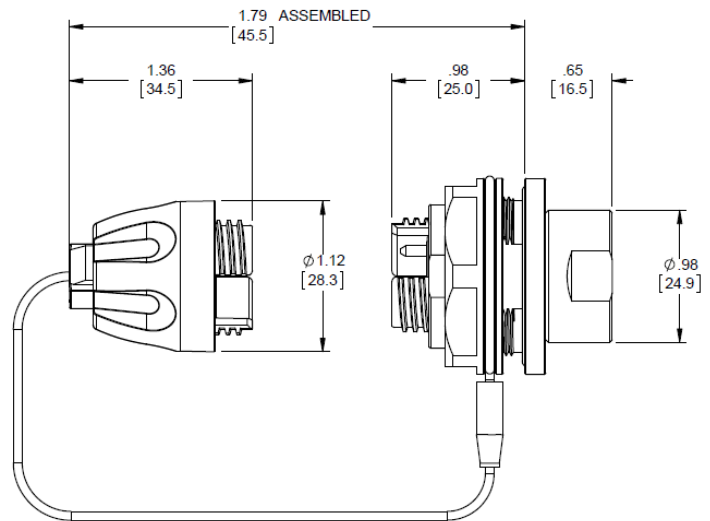


*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Flange Mount, LC Adapter, 2CH, Composite Dustcover:

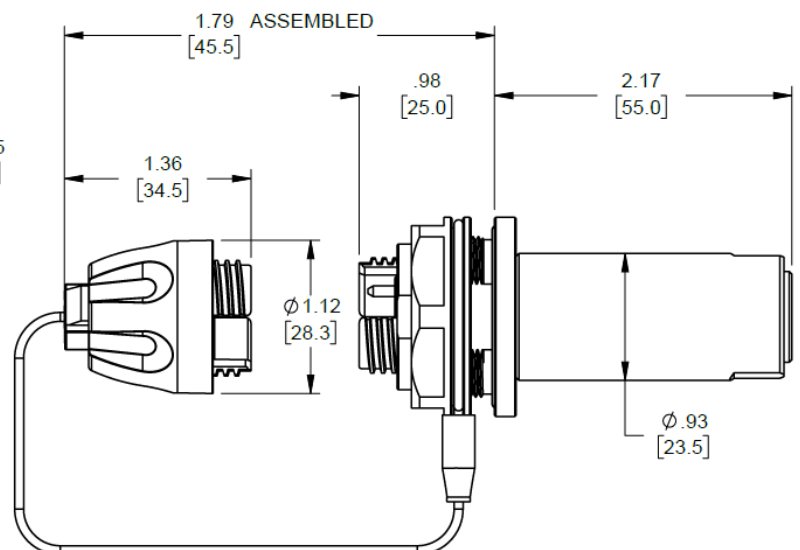
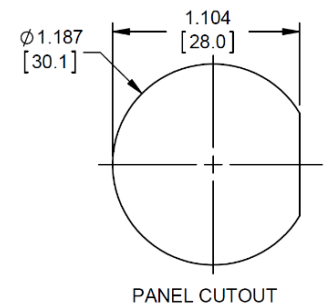


## QMini Receptacle, Jam Nut, Composite Dustcover:



*\*Available with Metal Dustcover (not shown)*

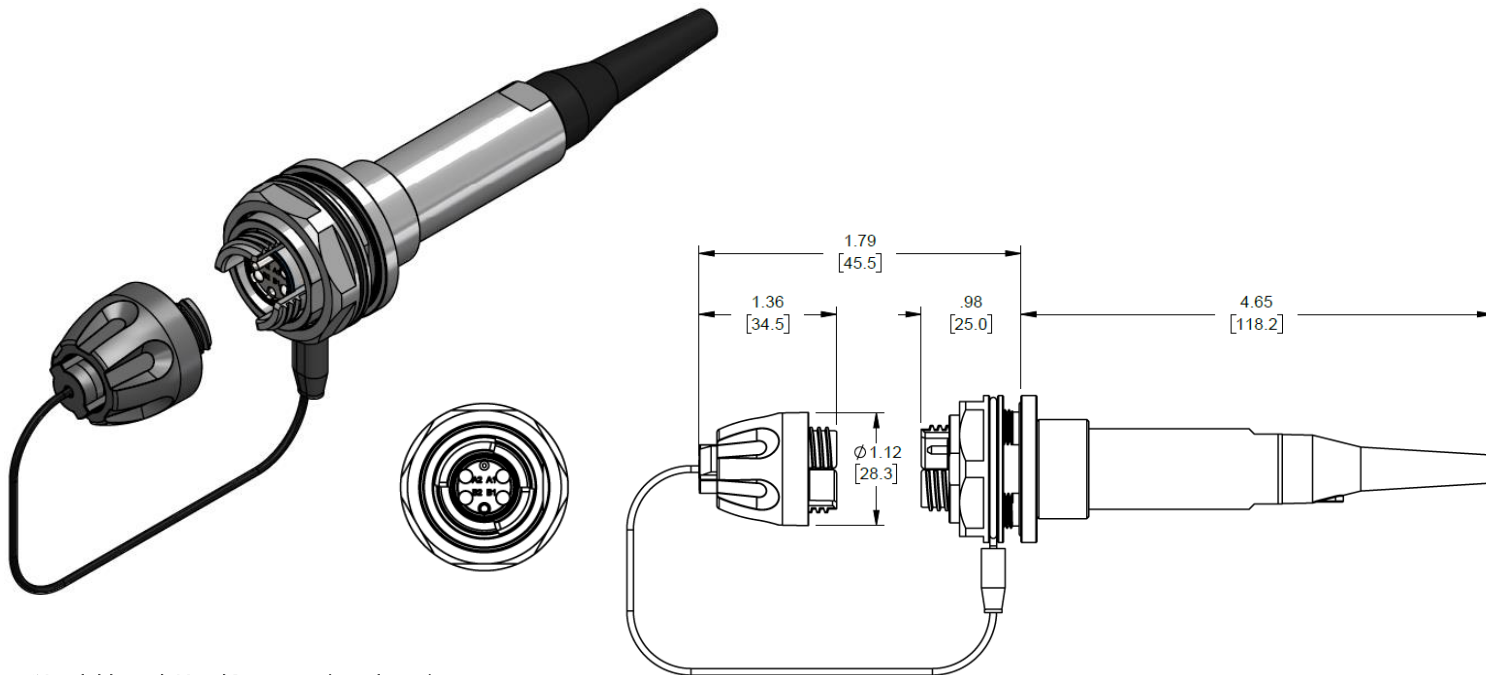
## QMini Receptacle, Jam Nut, Low Profile Backshell, Composite Dustcover:



*\*Available with Metal Dustcover (not shown)*

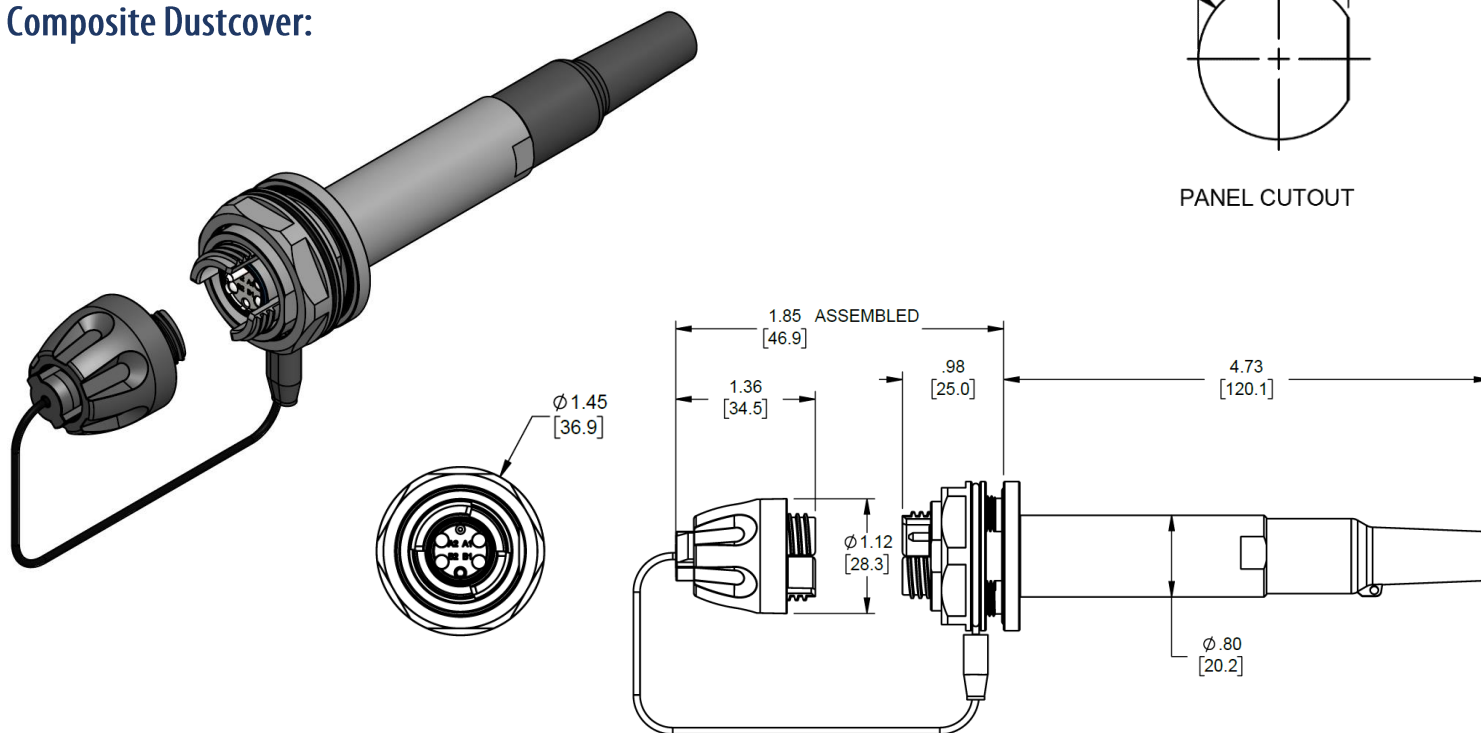


## QMini Receptacle, Jam Nut, Backshell, Composite Dustcover:



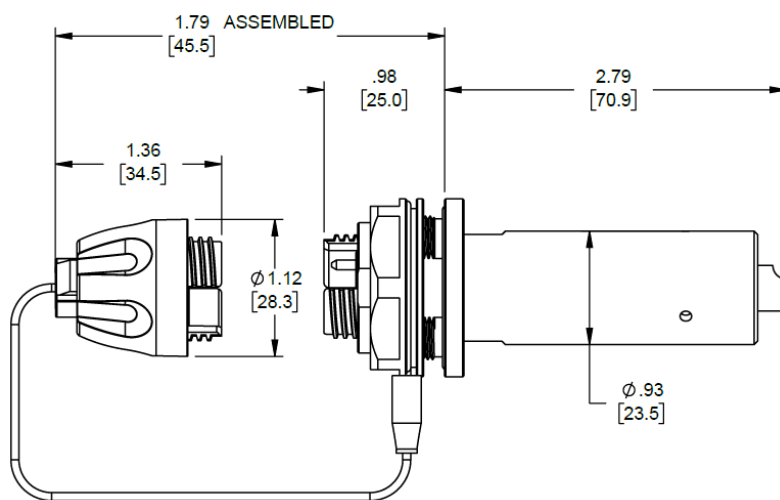
*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Jam Nut, 10.5mm Heat Shrink Strain Relief, Composite Dustcover:



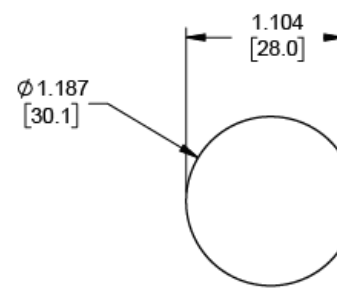
*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Jam Nut, LC Adapter, 2CH, Composite Dustcover:

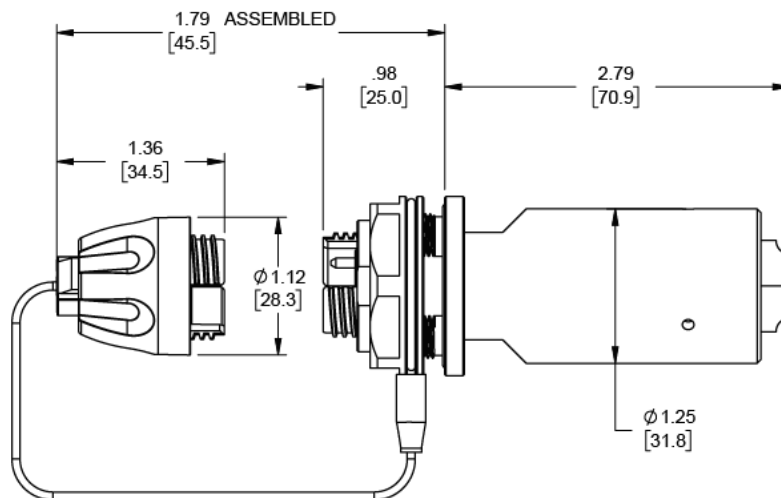


*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Jam Nut, LC Adapter, 4CH, Composite Dustcover:

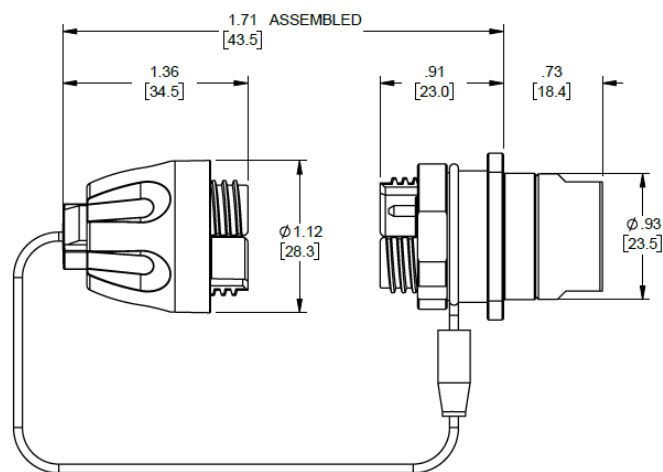
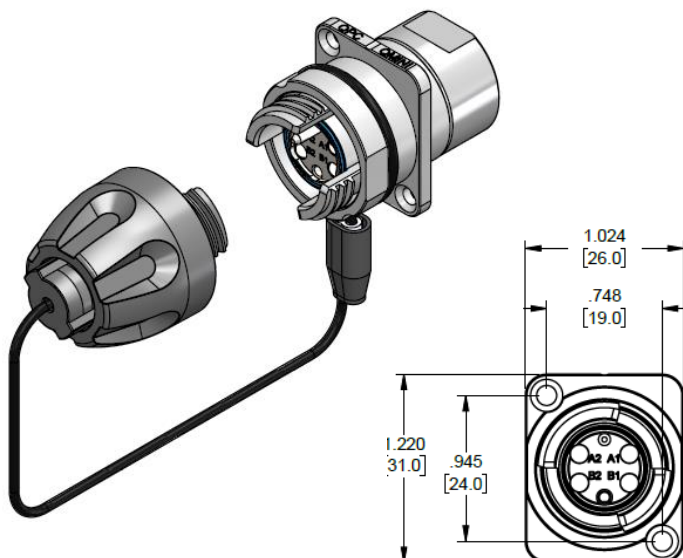


PANEL CUTOUT



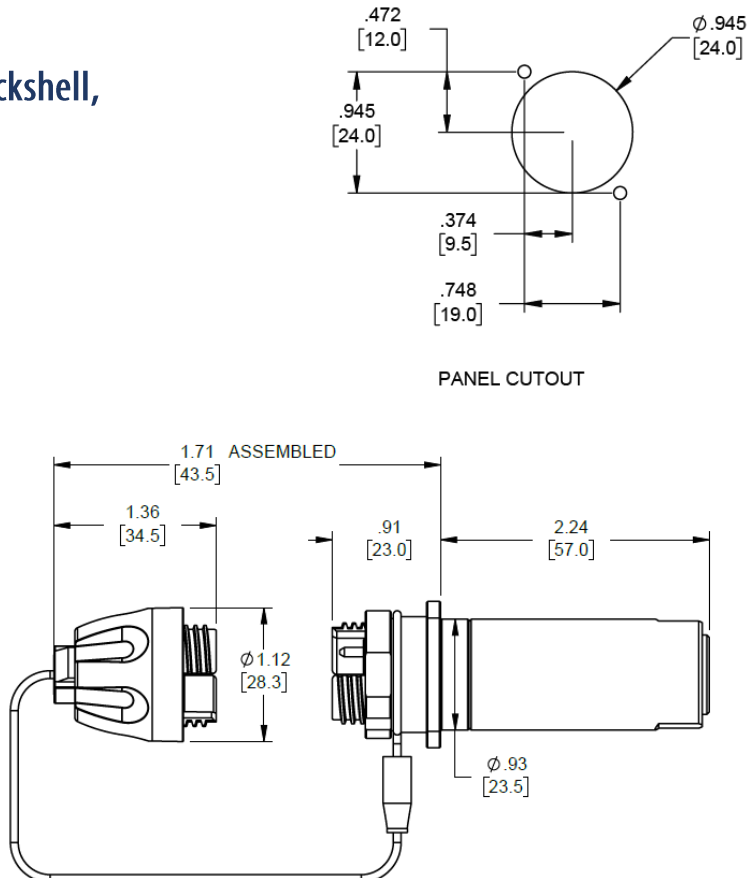
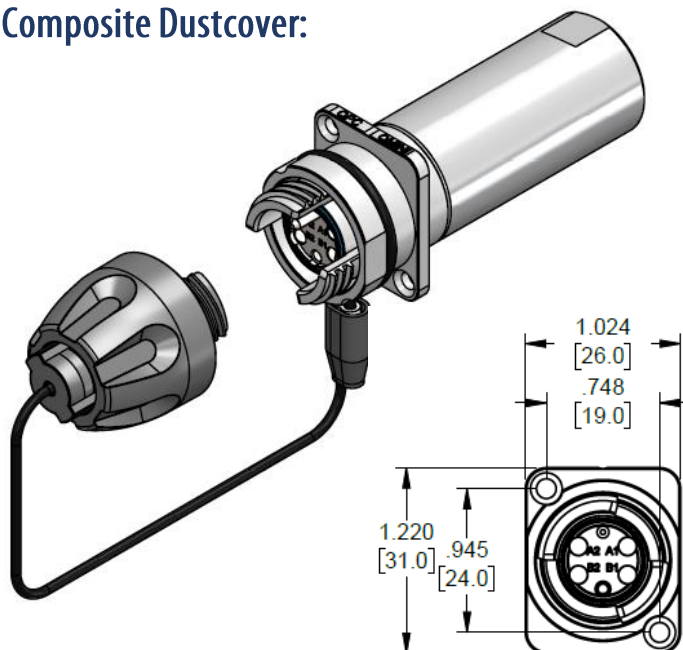
*\*Available with Metal Dustcover (not shown)*

## QMini Receptacle, Flange Mount, Rx, Composite Dustcover:



*\*Available with Metal Dustcover (not shown)*

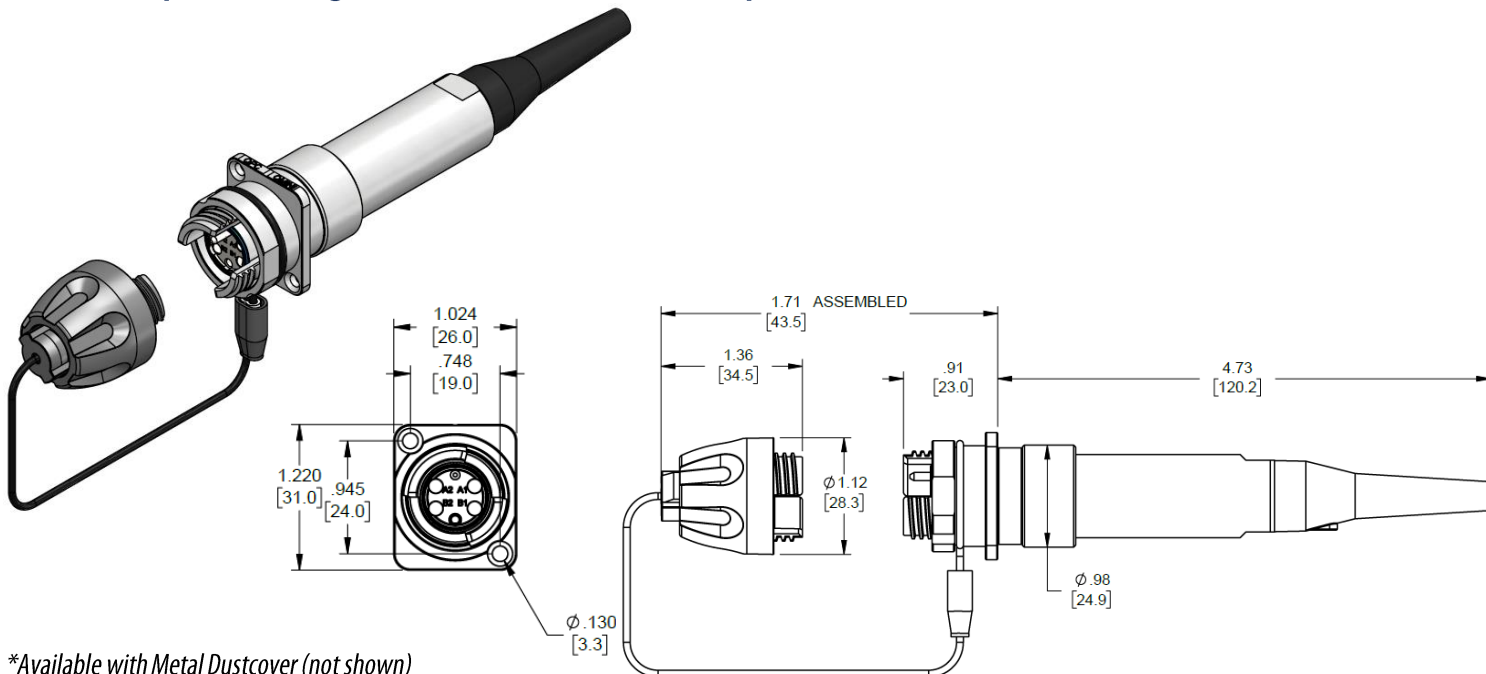
## QMini Receptacle, Flange Mount, Rx, Low Profile Backshell, Composite Dustcover:



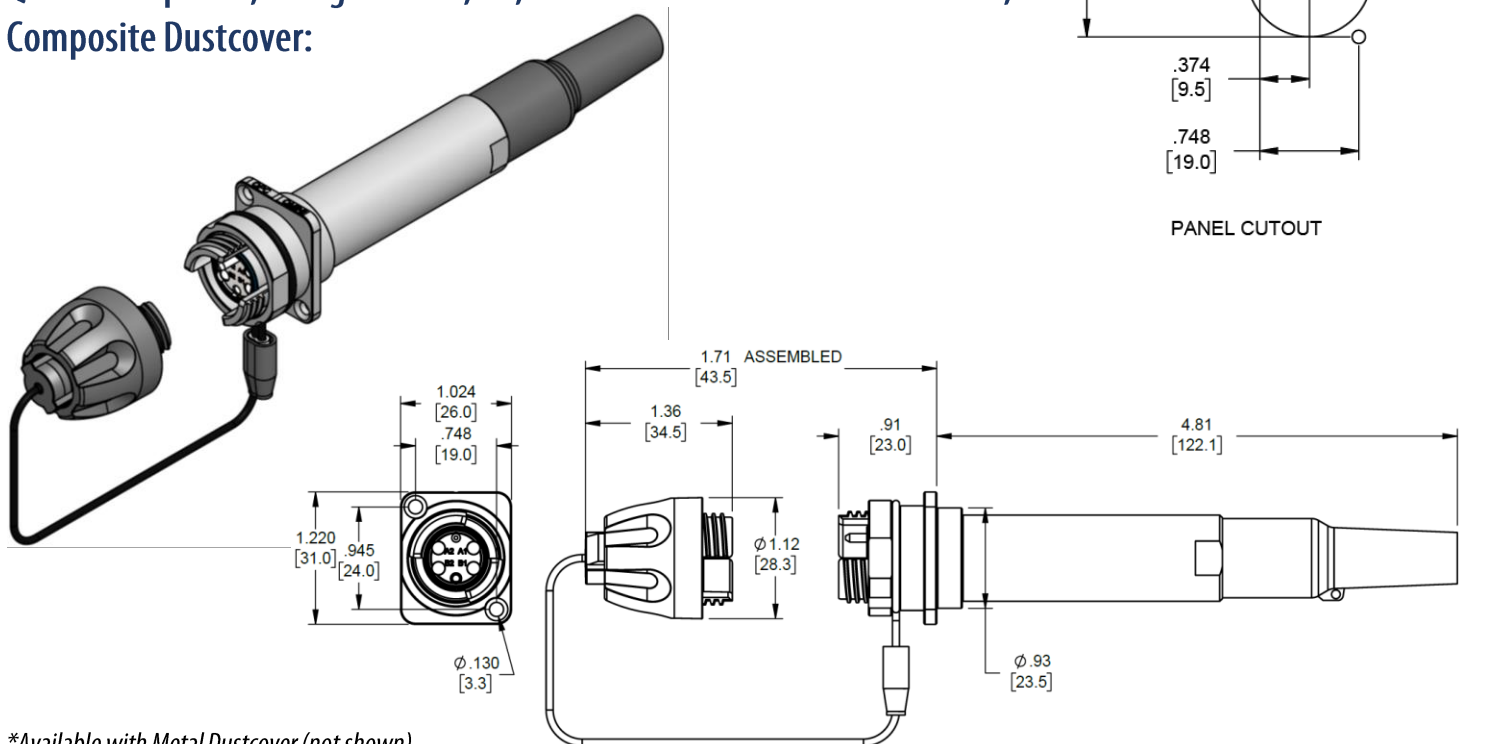
*\*Available with Metal Dustcover (not shown)*

# QMini Expanded Beam Connectors

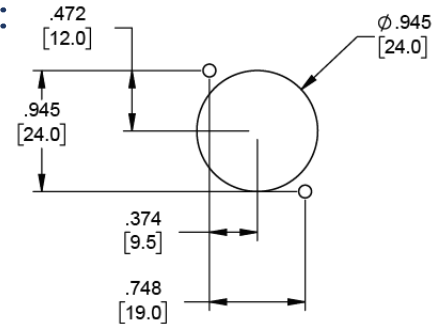
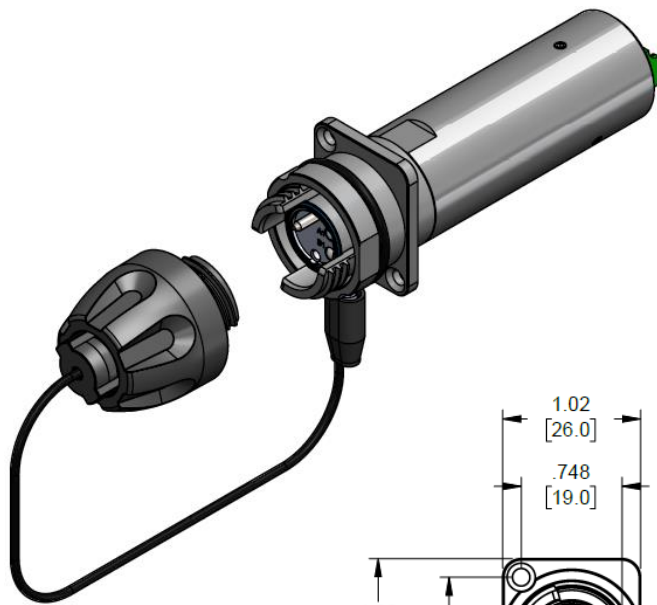
## QMini Receptacle, Flange Mount, Rx, Backshell, Composite Dustcover:



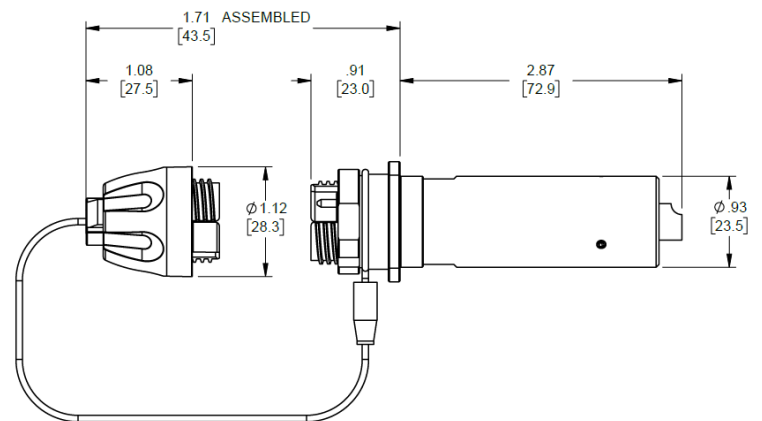
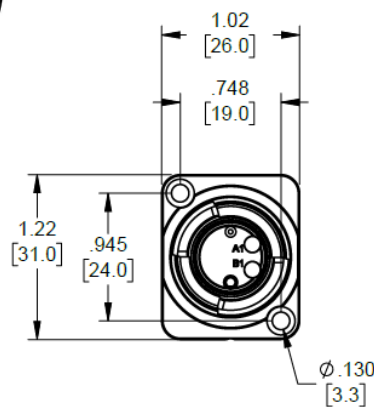
## QMini Receptacle, Flange Mount, Rx, 10.5mm Heat Shrink Strain Relief, Composite Dustcover:



## QMini Receptacle, Flange Mount, Rx, LC Adapter, 2CH, Composite Dustcover:



PANEL CUTOUT



*\*Available with Metal Dustcover (not shown)*

## QMini Termini:

| PART NUMBER | DESCRIPTION                                                            |
|-------------|------------------------------------------------------------------------|
| QM-TRM      | Terminus Assembly; QMini; 2.5mm Ferrule OD; 126µm Singlemode/Multimode |

## QMini Dustcovers:

| PART NUMBER   | DESCRIPTION                                                      |
|---------------|------------------------------------------------------------------|
| QMINI-DCHPP   | Dust Cap; QMini; Plug; Composite; Black                          |
| QMINI-DCHPN   | Dust Cap; QMini; Plug; Alloy; Hard Anodize; Black                |
| QMINI-DCHPS   | Dust Cap; QMini; Plug; Alloy; Stainless Steel; Passivated        |
| QMINI-DCHPK   | Dust Cap; QMini; Plug; Alloy; Zinc over Nickel; Black            |
| QMINI-DCHPZ   | Dust Cap; QMini; Plug; Alloy; Zinc over Nickel; Olive Drab       |
| QMINI-DCHRP   | Dust Cap; QMini; Receptacle; Composite; Black                    |
| QMINI-DCHRN   | Dust Cap; QMini; Receptacle; Alloy; Hard Anodize; Black          |
| QMINI-DCHRS   | Dust Cap; QMini; Receptacle; Alloy; Stainless Steel; Passivated  |
| QMINI-DCHRK   | Dust Cap; QMini; Receptacle; Alloy; Zinc over Nickel; Black      |
| QMINI-DCHRZ   | Dust Cap; QMini; Receptacle; Alloy; Zinc over Nickel; Olive Drab |
| QMINI90-DCHPP | Dust Cap; QMini; 90° Plug; Composite; Black                      |
| QMINI90-DCHPN | Dust Cap; QMini; 90° Plug; Alloy; Hard Anodize; Black            |
| QMINI90-DCHPS | Dust Cap; QMini; 90° Plug; Alloy; Stainless Steel; Passivated    |
| QMINI90-DCHPK | Dust Cap; QMini; 90° Plug; Alloy; Zinc over Nickel; Black        |
| QMINI90-DCHPZ | Dust Cap; QMini; 90° Plug; Alloy; Zinc over Nickel; Olive Drab   |

## QMini Inserts:

| PART NUMBER    | DESCRIPTION                                                                                  |
|----------------|----------------------------------------------------------------------------------------------|
| QMINI-INS-02SM | QMini Insert; 2 Channel; Singlemode (1310/1550nm); Includes Termini Retainer Plate and Screw |
| QMINI-INS-02MM | QMini Insert; 2 Channel; Multimode (850/1300nm); Includes Termini Retainer Plate and Screw   |
| QMINI-INS-04SM | QMini Insert; 4 Channel; Singlemode (1310/1550nm); Includes Termini Retainer Plate and Screw |
| QMINI-INS-04MM | QMini Insert; 4 Channel; Multimode (850/1300nm); Includes Termini Retainer Plate and Screw   |

## QMini Strain Relief Kits:

| PART NUMBER   | DESCRIPTION                                                                                                               |
|---------------|---------------------------------------------------------------------------------------------------------------------------|
| QMINI-SRK-45  | Cable Interface Kit; QMini; Includes: Crimp, Crimp Support, Cable Seal, & Bend Limiter Boot; for Cable OD (3.6mm - 4.5mm) |
| QMINI-SRK-55  | Cable Interface Kit; QMini; Includes: Crimp, Crimp Support, Cable Seal, & Bend Limiter Boot; for Cable OD (4.6mm - 5.5mm) |
| QMINI-SRK-65  | Cable Interface Kit; QMini; Includes: Crimp, Crimp Support, Cable Seal, & Bend Limiter Boot; for Cable OD (5.6mm - 6.5mm) |
| QMINI-SRK-75  | Cable Interface Kit; QMini; Includes: Crimp, Crimp Support, Cable Seal, & Bend Limiter Boot; for Cable OD (6.6mm - 7.5mm) |
| QMINI-SRK-105 | Cable Interface Kit; QMini; Includes: Crimp, Crimp Support, Cable Seal, & Heat Shrink Boot; for Cable OD (7.6mm - 10.5mm) |

## QMini Tools:

| PART NUMBER | DESCRIPTION                                                       |
|-------------|-------------------------------------------------------------------|
| TK-046      | QMini Tool Kit (Includes all items below)                         |
| PT-392      | QMini Torque Fixture                                              |
| PT-540      | Hydraulic Hand Crimper                                            |
| PT-541      | Die Set, 0.324 Hex                                                |
| PT-005      | Universal Crimp Tool - 2mm & 3mm (Hex Sizes: .131/.147/.171/.197) |







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