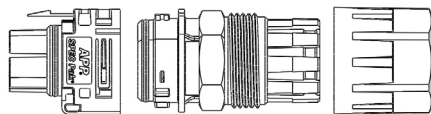


## 5 Position Mini PL SPEC Pak® Plug (female) Assembly Instructions



#### Tools & supplies you will need:

- Wire stripper
- Wire lubricant
- Crimp tool(s)
- Insertion tool
- Extraction tool
- Wrench

### Step 1 Wire Protection

- a. Strip approximately 0.75 inches (19 mm) from the outer cable jacket, if applicable.
- b. Lubricate individual wires using Isopropyl alcohol. **WARNING:** Dry thoroughly before energizing the circuit. Follow all cautions on the lubricant container.
- c. Slide approximately 1.6" (40 mm) of wires through wire protection nut and then through the sealing grommet side of the sealing grommet assembly. ( See figure 1)

### Step 2 Prepare Wires

- a. Strip individual wires, taking care not to damage the copper conductor. (See Table 1)

Table 1 (See figure 2)

| APP Contact Number | X Inches  | X (mm) | Instruction Sheet |
|--------------------|---|--------|-------------------|
| PM16S2024S32       | Wire Insulation OD < crimp barrel ID<br>x = 0.21" (5.5mm) | ----   | 1S6420            |
| PM16S1620S32       |   |        |                   |
| PM16S1416S32       | Wire Insulation OD > crimp barrel ID<br>x = 0.28" (7.0mm) | ----   |                   |
| PM16S12S32         |   |        |                   |

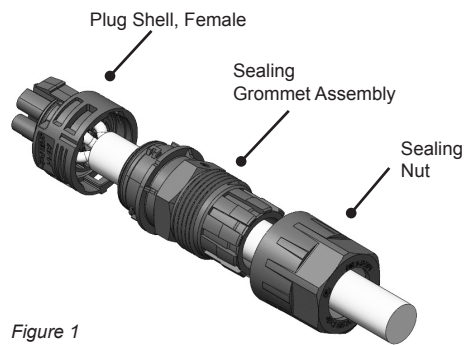


Figure 1

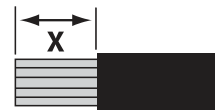


Figure 2

### Step 3 Crimp Contacts

- a. Crimp contacts per crimp tool instructions. (See Table 2)

**WARNING:** APP tooling is required for UL and CSA compliance. Use of unapproved tooling will void the connector warranty.

Table 2

| APP Contact Part Number | Wire Size                                  | Hand Tool Part Number | Instruction Sheet | Please inquire for additional tooling options: |
|-------------------------|--|-----------------------|-------------------|--|
| PM16S2024S32            | 24 – 20 AWG<br>0.25 – 0.50 mm <sup>2</sup> | PM1000G1              | 1S6497            | Pneumatic                                      |
| PM16S1620S32            | 20 – 16 AWG<br>0.50 – 1.30 mm <sup>2</sup> |                       |                   |  |
| PM16S1416S32            | 16 – 14 AWG<br>1.30 – 2.10 mm <sup>2</sup> |                       |                   |  |
| PM16S12S32              | 12 AWG<br>3.30 mm <sup>2</sup>             |                       |                   |  |

5 Position Mini PL  
SPEC Pak® Plug, (female)  
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**Step 4 Contact Insertion**

- a. Insert the contact from the rear side of the connector, using insertion tool (part number PM1002G1). (See figure 3)
  - i. **NOTE:** A tactile snap will be felt when contacts are properly inserted. Apply a slight tug on the wire(s) to confirm that the contact(s) are properly inserted. If using discrete wires, the wires will spin freely when properly inserted in the housing.
  - ii. **NOTE:** If necessary, contacts can be extracted by using extraction tool part number PM1003G1. (See figure 4)
    1. Slide tool over the contact until the tool bottoms on the housing.
    2. Push the button on the top of the tool with your thumb while gently pulling on the wires from the back of the connector.
    3. Contact will be released.
- b. Repeat Step 4a as necessary.



Figure 3



Figure 4

**Step 5 Final Assembly**

- a. Insert the sealing grommet assembly in the back of the connector and twist to lock. (see figure 5)
- b. Gently pull on the wires to remove excess slack in the wires.
- c. Hand tighten sealing nut.
- d. Wrench (24 mm wrench or strap wrench) tighten sealing nut 1/4 - 1/2 turn more.

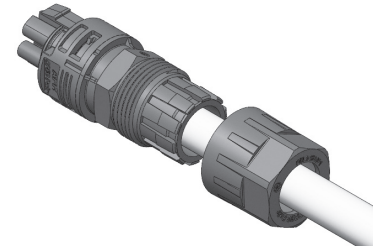


Figure 5

**Step 6 Assembly is complete. (See figure 6)**

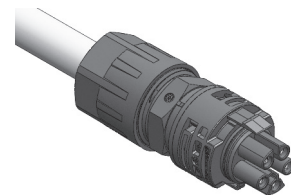


Figure 6