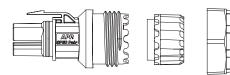


An IDEAL Company

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



Tools & supplies you will need:

- Wire strippers
- · Wire lubricant
- Crimp tool(s)
- · Insertion tool
- Extraction tool
- Wrench

Step 1 Wire Protection

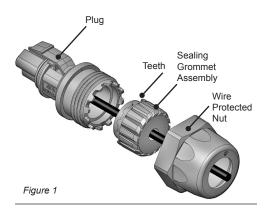
- a. Strip approximately 0.75 inches (19 mm) from the outer cable jacket, if applicable.
- b. If using a sealing gland, lubricate individual wires using Isopropyl alcohol. WARNING: Dry thoroughly before energizing the circuit. Follow all cautions on the lubricant container.
- c. If not using a sealing gland, use step 2 through 4.
- d. Slide approximately 1.6 inches (40 mm) of wire through wire protection nut and then through the sealing grommet assembly with teeth facing the connector. (See figure 1). If using discrete wires, align the holes in the sealing grommet with the wires.

Step 2 Prepare Wires

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

Table 1 (See figure 2). Crimp Barrel ID For more details,

Wire Guage	in.	mm.	X Inches (mm)	see document:
#24 / 20	0.04	1.1	Wire Insulation OD < crimp barrel ID	
#20 / 16	0.07	1.7	x = 0.21" (5.5mm)	1S6420
#16 / 14	0.08	2.1	Wire Insulation OD > crimp barrel ID	130420
#12	1.10	2.6	x = 0.28" (7.0mm)	



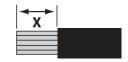


Figure 2

Step 3 Crimp Contacts

b. 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 PN	Wire Size	Hand Tool PN	Instruction Sheet PN	Please inquire for additional tooling options:
PM16S2024S32	24 – 20 AWG			
	0.25 - 0.50 mm ²			
PM16S1620S32	20 – 16 AWG			
	0.50 - 1.30 mm ²	PM1000G1	1S6497	Pneumatic
PM16S1416S32	16 – 14 AWG	1 W1100001	100407	Tilcamatic
	1.30 – 2.10 mm ²			
PM16S12S32	12 AWG			
	3.30 mm ²			

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Step 4 Populate Shell

- a. Insert the contact from the rear side of the connector, using insertion tool (part number PM1002G1). (See figure 3). From the rear, on the inside, note contact position 1 through 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.
 - 1. Slide tool over the contact until the tool bottoms on the housing. (See figure 4).
 - 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.

Step 5 Final Assembly

- a. Seat sealing gland assembly in the connector. (See figure 5).
- b. Gently pull on the wires to remove excess slack in the wires.
- c. Hand tighten wire protection nut until snug.
- d. Using a wrench, tighten an additional 1/4 to 1/2 turn.

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









Figure 5

