Waterproof Electrical Connections

To watch the instructional video “Multidrop Probe & Sensor Wiring Instructions” that includes detailed instructions for the assembly of the Epoxy packs, use one of the following:

If you have a smartphone with a QR-code scanner, scan this QR Code:

- If you are viewing this manual on a PC or laptop click this link

  Click Here for the Waterproof Electrical Connections Video

- The instructional video can also be found at www.YouTube.com by entering the search word “OPWGlobal.”

The procedure for assembling the wire connections and resin sealpacks is outlined below.

Safety Information

DANGER

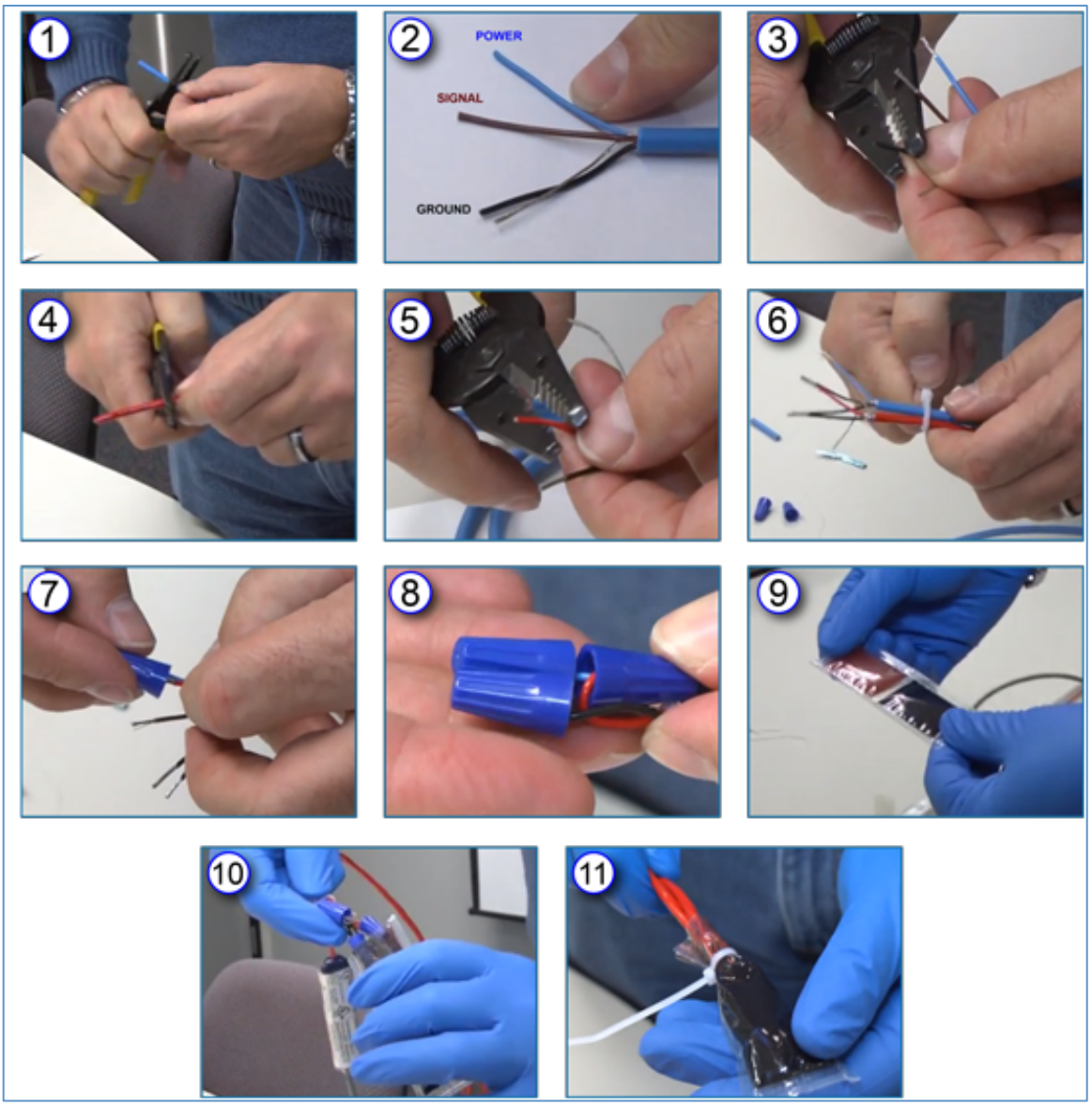
Contains vinyl cyclohexene dioxide. Harmful if swallowed. Do not get product on skin or in eyes. Do not inhale fumes.

NFPA 704

For detailed product hazard information see the MSDS for the 3M™ Scotchcast 3570G-N (Parts A & B). Use one of the following, go to the Documents tab and select the MSDS:

If you have a smartphone with a QR-code scanner, scan this QR Code:

Or at this link MSDS - Scotchcast 3570G-N (Parts A & B)



Assembling the Epoxy Sealpack for Waterproof Electrical Connections

NOTICE

It is VERY important to seal all probe and sensor connections in the junction box to prevent corrosion of the wires.

To make the connections waterproof, use the supplied SCOTCHCAST™ epoxy-resin Insulating Resin Sealpacks. They are provided to seal the electrical connections from moisture and water and prevent corrosion of the connections. Install one for each cable connection.

1. Strip approximately 1.5 inches of the cable jacket from the end of the probe/sensor cable to expose the four (4) wires inside (power, signal ground and shield).

NOTE: When stripping cables and wires do not cut so deep as to nick the wiring inside the jacket material.

2. There are four (4) wires inside the probe/sensor cable.
    - The Blue wire is the Power connection
    - The Brown wire is the Signal connection
    - The Black wire and Braided Shield are the Ground
3. Strip 0.5 inch of jacket material from the ends of the Blue, Brown and Black wires.
4. Strip approximately 1.5 inches of the cable jacket from the end of the Home-run cable (Belden 88760 or 88761) to expose the three (3) wires inside (Red = Power, Black = Signal, Braided Shield = Ground).
5. Strip 0.5 inch of jacket material from the ends of the Red and Black wires.
6. Place a wire tie wrap around both of the stripped cables about 1 inch from the end of the cable jackets. Pull the tie snug and cut the excess tie material at the clamp.
7. Connect the Power, Signal and Grounds of the probe/sensor cable to the Power, Signal and Ground of the Home-run cable together using the three (3) supplied wire nuts.
    - Twist the ends of the exposed wires together
    - Insert the twisted wires into the end of the wire nut
    - Turn the nut clockwise several turns until the wires are firmly attached

NOTE: Refer to the wiring diagrams in the manual for specific information on probe/sensor wiring.

8. Fold one of the fastened wire nuts back as shown in the photo. This will allow the entire wire nut assembly to fit completely into the epoxy bag.

CAUTION

Always wear protective gloves and safety glasses when handling the epoxy resin packs!

9. Prepare the epoxy resin sealpack.
    - Bend the sealpack until the barrier between the two resins weakens
    - Thoroughly mix the two (2) resins together for approximately two (2) minutes. The mixed epoxy will become warm to the touch.
    - Push all of the mixed resin to the bottom of the bag
    - Cut and tear the top of the bag to open
10. Insert the wire-nut assembly all the way into the bottom of the bag. Fold the bag tightly around the tied cables. Attach a second tie wrap around the bag just above the tie wrap holding the wires (this will prevent the wire-nut assembly from slipping out of the bag.

Move the epoxy around to thoroughly cover all of the wires and wire nuts inside the bag. Once the epoxy has set this will provide a secure, waterproof electrical connection and will prevent corrosion of the wiring connections.