**DESCRIPTION**
The Raychem FTC-P Power Connection and End Seal Kit is for use with XL-Trace, RaySol and IceStop heating cables. Materials for one power connection and one end seal are included in this kit. These installation instructions should be used in conjunction with the XL-Trace, RaySol and IceStop System Installation and Operation Manuals. For technical support contact your Pentair Thermal Management representative or call Pentair Thermal Management at 800-545-6258.

**TOOLS REQUIRED**
- Screwdriver
- Pen
- Needle-nose pliers
- Diagonal cutters
- Utility knife
- Heat gun or propane torch

**ADDITIONAL MATERIALS REQUIRED**
*(NOT PROVIDED IN THIS KIT)*
- UL Listed or CSA Certified junction box suitable for the location, with a clearance hole or threaded hub for ½-inch NPT. For RaySol applications, the power connection and end seal may be terminated in the same box.

**APPROVALS**
- 718K Pipe Heating Cable or 877Z De-Icing and Snow-Melting Equipment or 9386 Radiant Heating Cable
- Certified with XL-Trace, IceStop and RaySol heating cables
- For 1XL2-CT, CR only
- With XL-Trace and IceStop heating cables only
  - For Class I, Div. 2, Groups A, B, C, D hazardous locations—GM-1XT and GM-2XT only
  - GM-1XT or GM-2XT only
  - Certified with XL-Trace, IceStop and RaySol heating cables—WS

**WARNING:**
This component is an electrical device that must be installed correctly to ensure proper operation and to prevent shock or fire. Read these important warnings and carefully follow all the installation instructions.
- To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of Pentair Thermal Management, agency certifications, and national electrical codes, ground-fault equipment protection must be used. Arcing may not be stopped by conventional circuit breakers.
- Bus wires will short if they contact each other. Keep bus wires separated.
- Keep components and heating cable ends dry before and during installation.
- The black heating cable core is conductive and can short. It must be properly insulated and kept dry.
- Component approvals and performance are based on the use of Pentair Thermal Management—specified parts only. Do not use substitute parts or vinyl electrical tape.
- Leave these instructions with end user for reference and future use.

**CAUTION:**
- HEALTH HAZARD: Overheating heat-shrinkable tubes will produce fumes that may cause irritation. Use adequate ventilation and avoid charring or burning. Consult MSDS RN8122 for further information.
- CHEMTREC 24-hour emergency telephone: (800) 424-9300
- Non-emergency health and safety information: (800) 545-6258.
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**Power Connection Installation**

1. Discard black grommet and use blue grommet.

2. Do not cut through braid or inner jacket.

3. 6 1/2 in

4. 1/2 in

5. 1/2 in
Do not cut through bus wires.

- Slide heat-shrinkable tubes over end of cable.
- Starting from the center of the tube, move the heat source continuously from side to side.

⚠️ CAUTION: Health Hazard. Consult material safety data sheet RAY3122.

- Starting at center of tube, move heat source continuously from side to side.

- While tube is still hot, pinch with pliers between bus wires to seal; hold for 10 seconds.

- Slip green/yellow tube over braid and shrink.

- While tube is still hot, pinch with pliers between bus wires to seal; hold for 10 seconds.

- Slip green/yellow tube over braid and shrink.

Note: Pipe mounting bracket and strap not used with RaySol and IceStop.

Note: For junction box with clearance hole, use lock nut.

Note: Pipe mounting bracket and strap not used with RaySol and IceStop.
End Seal Installation for XL-Trace-CR and -CT, RaySol, and IceStop Heating Cables

1. Score down and around outer jacket 1 inch from the end.
2. Remove the outer jacket.
3. Do not cut or damage inner jacket. If damaged, remove damaged section and repeat step 1.

15. Apply appropriate warning label to junction box cover:
   - IceStop = Yellow
   - RaySol = Orange
   - XL-Trace = Orange

3. Push end seal completely onto heating cable.

**Note:** The end seal is designed to be installed only once; it cannot be removed from the heating cable once installed. Do not use until ready for final installation.