Loop and lead-in cables are flexible for easy handling and installation

- Can be configured to suit any geometry; rectangular, round, or Quadrupole

- Wire insulation and cable jackets are formulated from Cross-linked Polyethylene (XLPE) and will withstand temperatures up to 426° Fahrenheit

- Cables are filled with water block gel to prevent water penetration

- All splice connections are soldered, sealed, and tested

- Splice enclosure is constructed of high impact glass impregnated plastic

- Low profile loop / lead-in cable (0.360” O.D.) minimizes effects of reflective cracking

Optional Corner Brackets
Samples available on request
(Reno A&E p/n 428-0020-00)

Ordering Information
Model PLH-XX-XX-QXX

Quadrupole Loop Center Leg Length (feet)
Blank = Conventional Loop
Lead-in Cable Length (feet)
Loop Perimeter (feet)

Model PLH-XX-XX-QXX-A also available with Lead-in Cable perpendicular to Loop Cable.

Overview
The Model PLH Preformed Loop is a prefabricated loop / lead-in assembly designed to be overlaid with hot asphalt or embedded in concrete. Each component of the PLH (loop cable, lead-in cable, and splice enclosure) is designed to maximize durability, minimize water penetration, and maintain a flexible form that is easy to install and handle. The low profile loop cable and lead-in cable are 0.360” O.D. to resist the effects of reflective cracking that can occur in asphalt. Wire insulation and cable jackets are constructed with the optimal thickness of Cross-linked Polyethylene (XLPE) necessary to ensure a long, trouble free life. XLPE insulation provides excellent thermal, electrical, and physical properties and is recognized for its outstanding resistance to moisture and chemicals.
**PLH SPECIFICATIONS**

- Double Jacketed, Four-Conductor Loop Cable (0.360" nominal O.D.)
  - Outer Jacket - 0.035" (nominal) XLPE Insulation
  - Inner Jacket - 0.040" (nominal) XLPE Insulation
  - Clear, Moisture Resistant, Mylar Binder Tape
  - Water Block Gel
  - 0.020" (nominal) XLPE Insulation
  - Conductor - #18 AWG (Seven Strands of #26 AWG Copper Wire)

- Double Jacketed, Two-Conductor Lead-in Cable (0.360 nominal O.D.)
  - Outer Jacket - 0.042" (nominal) XLPE Insulation
  - Inner Jacket - 0.040" (nominal) XLPE Insulation
  - Clear, Moisture Resistant, Mylar Binder Tape
  - Water Block Gel
  - 0.020" (nominal) XLPE Insulation
  - Conductor - #16 AWG (Nineteen Strands of #29 AWG Copper Wire)

**PLH INSTALLATION INSTRUCTIONS**

**Loop Installation - Asphalt Overlay**

1. Place the PLH Preformed Loop in the proper position and orientation on the asphalt base lift.
2. Route the lead-in cable to the desired termination point.
3. Cut the fiberglass backed mastic tape (included with the PLH) into 2" x 4" or 3" x 4" strips. Use the mastic tape (and optional corner brackets) to hold the loop and lead-in cable in place.
4. Apply the top lift.
   - Note: When applying the top lift, make certain that the loop cable does not get pulled into the augers on the paving machine.

**Loop Installation - Poured Concrete**

1. Place the PLH Preformed Loop in the proper position and orientation on top of the concrete reinforcing steel.
2. Route the lead-in cable to the desired termination point.
3. Cut an appropriate number of 1/2" poly tees as shown in Figure 1. Cut an equal number of lengths of 3/8" rebar.
4. Use the tees, rebar, and nylon cable ties to hold the loop cable in place at least 2" above the concrete reinforcing steel. See Figure 2. The lead-in cable can be tied directly to the concrete reinforcing steel.
5. Pour the concrete making certain not to disturb the loop cable.
   - Notes:
     1. The rebar should be cut long enough to allow it to be driven firmly into the ground to hold the tee securely at the correct height above the concrete reinforcing steel.
     2. Spacing of the Tee / rebar supports should be such that no more than 2 feet of cable is unsupported.
     3. If the thickness of the concrete slab and/or the depth of the reinforcing steel below the top of the slab is such that the minimum dimensions shown in Figure 2 cannot be achieved, contact Technical Support at Reno A&E for guidance.

![Asphalt Overlay](image1)

![Poured Concrete](image2)
Overview

The Model PLH-R Preformed Loop is a prefabricated loop / lead-in assembly designed for use in direct burial applications. Each component of the PLH (loop cable, lead-in cable, and splice enclosure) is designed to maximize durability, minimize water penetration, and maintain a flexible form that is easy to install and handle. Wire insulation and cable jackets are constructed with the optimal thickness of Cross-linked Polyethylene (XLPE) necessary to ensure a long, trouble free life. XLPE insulation provides excellent thermal, electrical, and physical properties and is recognized for its outstanding resistance to moisture and chemicals. The high visibility outer jacket is formulated from Elexar 8451 Thermoplastic Elastomer (TPE) for superior abrasion resistance and excellent low temperature flexibility.

Ordering Information:
Model PLH-XX-XX-R

- Lead-in Cable Length (feet)
- Loop Perimeter (feet)

Model PLH-XX-XX-RA also available with Lead-in Cable perpendicular to Loop Cable.

- Designed for direct burial in dirt or gravel roadways
- High visibility (red) outer jacket is formulated from Thermoplastic Elastomer (TPE) for superior abrasion resistance
- Wire insulation and cable jackets are formulated from Cross-linked Polyethylene (XLPE)
- Splice enclosure is constructed of high impact glass impregnated plastic
- All splice connections are soldered, sealed, and tested
- Cables are filled with water block gel to prevent water penetration
- Can be configured to suit any geometry; rectangular, round, or Quadrupole
- Loop / lead-in cables are flexible for easy handling and installation
PLH-R SPECIFICATION

**Triple Jacketed, Four Conductor Loop Cable (0.750” nominal O.D.)**

- **Outer Jacket** - 0.195” (nominal) Elexar 8451 TPE Insulation
- **Middle Jacket** - 0.042” (nominal) XLPE Insulation
- **Inner Jacket** - 0.040” (nominal) XLPE Insulation
- **Conductor** - 19 Strands of #29 AWG Copper Wire
- **Water Block Gel**
- **Clear, Moisture Resistant, Mylar Binder Tape**

**Triple Jacketed, Two Conductor Lead-in Cable (0.750” nominal O.D.)**

- **Outer Jacket** - 0.195” (nominal) Elexar 8451 TPE Insulation
- **Middle Jacket** - 0.040” (nominal) XLPE Insulation
- **Inner Jacket** - 0.040” (nominal) XLPE Insulation
- **Conductor** - 19 Strands of #29 AWG Copper Wire
- **Clear, Moisture Resistant, Mylar Binder Tape**
- **Water Block Gel**

PLH-R INSTALLATION INSTRUCTIONS

**Loop Installation:**

1. If necessary, dig a shallow trench to in which to place the PLH-R Preformed Loop. The orientation and dimensions of the trench should match the configuration of the loop and lead-in when installed.
2. If a trench has been dug, place the PLH-R in the trench. If no trench has been dug, place the PLH-R in the proper position and orientation in the desired location.
3. Route the lead-in cable to the desired termination point.
4. If desired, use the corner brackets (included with the PLH-R) to hold the loop in place.
5. Cover the loop with a suitable fill material. Make sure to maintain a minimum of 6 inches of coverage.