

PLH Series

PREFORMED LOOPS FOR HIGHWAY APPLICATIONS

Each component of the PLH Series is designed to maximize durability, minimize water penetration, and maintain a flexible form that is easy to install and handle.



FEATURES

- Wire insulation and cable jackets are formulated from Cross-linked Polyethylene
- 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

HIGHLIGHTS

- Can be configured to suit any geometry; rectangular, round, or Quadrupole
- Loop and lead-in cables are flexible for easy handling and installation
- Model PLH low profile loop / lead-in cable minimizes effects of reflective cracking glass impregnated plastic
- Model PLH-R high visibility (red) outer jacket is formulated from Thermoplastic Elastomer for superior abrasion resistance



Design

The Model PLH Preformed Loop is a prefabricated loop / lead-in assembly designed to be overlaid with hot asphalt or embedded in concrete. The Model PLH-R Preformed Loop is designed for use in direct burial applications.

Durability

The Model PLH low profile loop cable and lead-in cables 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. The high visibility outer jacket is formulated from Elexar 8451 Thermoplastic Elastomer (TPE) for superior abrasion resistance and excellent low temperature flexibility.

Model Options

Model	Installation
PLH	Asphalt / Concrete
PLH-R	Gravel / Rural Roads

Specifications



Water Block Gel

0.020" (nominal) XLPE Insulation

Conductor - #16 AWG (Nineteen Strands of #29 AWG Copper Wire)

Double Jacketed, Two-Conductor Lead-in Cable (0.360 nominal O.D.) (Conductors Twisted 8 Times per Foot)

PLH-R



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



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

PLH 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.

PLH 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:

- 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.
- Spacing of the Tee / rebar supports should be such that no more than 2 feet of cable is unsupported.
- 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.



Figure 2

Cut Here Save this portion

PLH-R 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 brakets (not 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

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