# Installation Instructions

## HP-PC-E(H/L)

## High Profile Power Connection

These installation instructions are only for use with the following Drexan HeatTracer Self-Regulating heater products:

PipeGuard® Warm (PGW), PipeGuard Hot (PGH), MultiTrace® (MT), HotTape

Ta = -40°C to +65°C

⚠ **WARNING**: This is an electrical device and in order to ensure proper operation and prevent shock or fire it must be installed correctly. This equipment is designed to satisfy the requirements of Clause 1.2.7 of the Essential Health and Safety Requirements Annex II of Directive 94/9/EC. Read these important warnings. Follow all installation instructions.

**CAUTION**: Ground-fault equipment protection is required for each circuit to de-energize all normally ungrounded conductors of electrical heating cable sets, with ground fault settings sufficient to allow normal operation of the heater unless applicable codes permit otherwise, and to minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed and to comply with Drexan requirements, agency certifications and national electrical codes. Conventional circuit breakers may not stop arcing.

Do not use substitute parts or substitute electrical tape. Component approvals and performance characteristics are based on Drexan specific parts only. Any repairs or parts replacement must be done by Drexan or its appointed agent. Substitution of parts, or utilization in a manner not specified by Drexan may impair equipment protection and void warrantee, approvals and performance claims.

The DREX enclosures shall only incorporate screwed entry compression glands as supplied by Drexan Energy Systems Inc. The glands shall provide an ingress protection rating of at least IP 54, have been selected with due regard to thermal suitability, the current state of technical knowledge of explosion protection and have been suitably certified by a notified body.

The heating cable core is conductive and can short if not properly insulated and kept dry.

Heating cable core bus wires can overheat and short when damaged. When cutting the cable jacket or core do not break bus wire strands.

Components and heating cable ends must be kept dry before and during installation. Fire-resistant thermal insulation materials should be used. De-energize all power circuits before installation or servicing.

Where the equipment may be installed in locations where it may be subject to damage, or exposed to excessive external stresses (e.g. vibration, heat, impact) or aggressive substances, it must be protected by additional means of protection.

## APPROVALS

CE

Sira 12ATEX3095X

Ex II 2G Ex e IIC T6 Gb

0518

120 – 277 Volt

PGH only: 5 – 20 W/ft, Max. 40A. Max. intermittent exposure temp. +230˚C. Minimum bend radius: 44 mm @ -40˚C.

All other cables: 3 – 10 W/ft, Maximum 32A. Maximum continuous exposure temperature +65˚C. Minimum bend radius: 30 mm @ 20˚C

This kit may be installed in temperatures as low as -40°C.

## KIT CONTENTS

- Conduit box with cover and gasket
- Cable Gland Assembly (#20 grommet for PGH or #20R grommet for PGW/MT – see Note below if using HotTape)
- Bracket with sealing ring
- Warning Label
- Insulated Crimp Splices
- Cold Applied Core Sealers
- (2) Pipe Straps
- Installation Instructions
- M25/NPT adapter for Power Connection

## REQUIRED BUT NOT PROVIDED

**Materials**

- Cable Lubricant
- Glass Fiber Cloth Tape, Drexan Cat.# TAPE-GCR-HT / TAPE GCS-LT or equivalent

**Note: if using HotTape – contact Drexan to order specific cable glands / grommets**

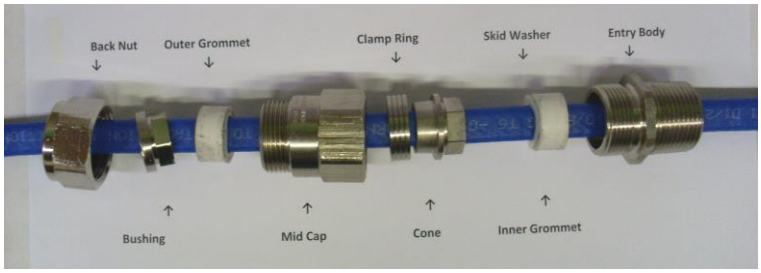
**Equipment**

- Utility Knife
- Wire Stripper
- Wire Cutter
- Crimp Tool
- Multi-head Screwdriver
- Pipe Wrench

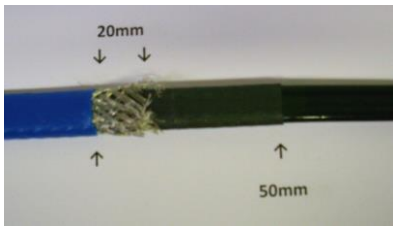
## ASSEMBLY INSTRUCTION DETAILS

1. Allow approximately 60 cm of heating cable for installation from the pipe (see Note above if using HotTape).

   **Note**: When terminating PGH (high temperature) cable, use grommet # 20.
   When terminating PGW/MT (low temperature) cable, use grommet # 20R.




2. Disassemble the Cable Gland and install the Entry Body into the enclosure. Thread the heater through the components (less Entry Body) until the heater end is exposed.




3. Strip the outer jacket and braid 18 cm from the end of the heater cable. Trim back outer jacket approximately 20mm to expose ground braid. Trim back inner jacket 50mm from outer jacket cut back.

4. Position the cone and clamping ring on each side of the exposed ground braid. Splay out braid to fit cone and capture the ground braid with the clamp ring.

5. Notch core. Peel one of the conductors from the core. Score core between the conductors as close as possible to cut-back end. Peel core from remaining conductor. Clean conductor wires until wires are completely exposed.

   **Note**: For **PGH** (PipeGuard Hot) cable trim off the fiber heating element and spacer.

6. Slide the core sealer over the bus wires of the cable and over the inner core.

   **Note**: Ensure the core sealer crotch is tight up to the inner jacket separating the two bus wires.

7. Insert cable and inner grommet into Entry Body and thread on the Mid Cap onto the Entry Body and compress the grommet into the Entry Body.


8. Place the sealing ring and bracket onto the Mid Cap, insert the Outer Grommet into the Mid Cap and compress with the Bushing and Back Nut.


9. Feed Power Conductor into the Housing in accordance with Local Electrical Codes and Standards suitable for the application, ensuring that the power connection is grounded.
10. Crimp Power Conductor cables to heater Conductors using Insulated Crimp.
11. Push conductors into the Housing taking care not to kink wires or expose conductors.
12. Install lid on Housing making sure not to pinch conductors.
13. Find a suitable location and affix the Electrical Warning Label. The presence of the trace heaters shall be made evident by the posting of caution signs or markings at appropriate locations and/or at frequent intervals along the circuit.

**DREXAN ENERGY SYSTEMS, INC.**
**KELOWNA, BC, CANADA, V4V 1S5**