Installation Instructions

LP-E-E(H/L)

Low Profile End Seal

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

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Ex II 2G Ex e IIC T6 Gb

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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)
- Opaque Silicone End Cap (for PGH only)
- Heat Shrink End Cap
- Aluminum Pipe Plug
- Installation Instructions
- Warning Label

REQUIRED BUT NOT PROVIDED

Materials

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

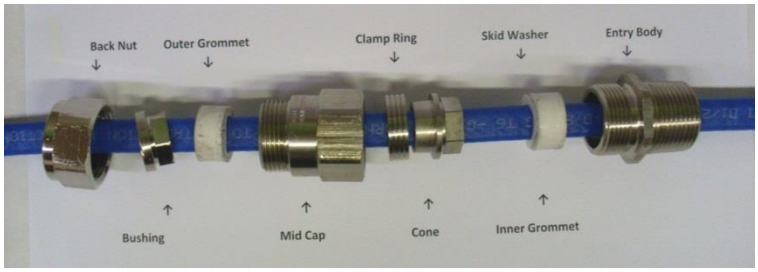
Note: if using HotTape – contact Drexan to order specific cable glands / grommets

Equipment

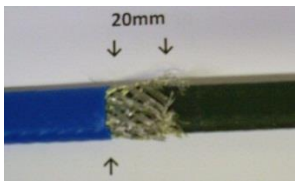
- Utility Knife
- Wire Stripper
- Heat Gun
- Wire Cutter
- Crimp Tool
- Needle Nose Pliers
- Multi-head Screwdriver
- Pipe Wrench

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) 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.

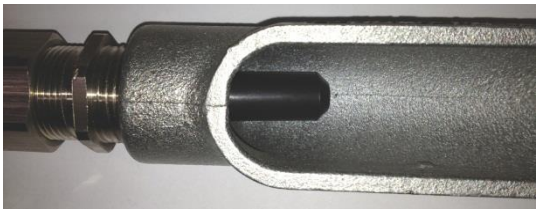



3. Strip the outer jacket and braid 6 cm from the end of the heater cable. Trim back outer jacket approximately 20 mm to expose ground braid. Cut inner jacket and core flush 70mm from outer jacket cut back.

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


6. Insert the Outer Grommet into the Mid Cap and compress with the Bushing and Back Nut.



7. Place the adhesive-lined Heat Shrink End Cap over the end of the cable. Heat-shrink in place to affect a seal. Let cool and ensure that the seal is firm and tight.

   Note: For **PGH** (PipeGuard Hot) cable place the supplied opaque silicone boot over the end of the cable.

8. Install the Plug in the open end.

9. 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.

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