### Trace Heating Redefined

DREXAN ENERGY SYSTEMS OFFERS THE MOST TECHNOLOGICALLY ADVANCED AND STRINGENTLY MANUFACTURED TRACE HEATING SYSTEMS THAT PROVIDE OUTSTANDING COST SAVINGS IN ENGINEERED DESIGN AND FIELD INSTALLATION.



## **Installation Instructions**

# DREX0007AL LP-E-AL Metallic Low Profile Seal



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

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

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

**WARNING**: This is an electrical device and in order to ensure proper operation and prevent shock or fire it must be installed correctly. Read these important warnings. Follow all installation instructions.

**CAUTION**: Ground-fault equipment protection shall be provided 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. Each heating device branch circuit or each heating device shall have ground fault equipment protection.

Do not use substitute parts or substitute electrical tape. Component approvals and performance characteristics are based on Drexan specific parts only. Substitution will void warrantee, approvals and performance claims.

The heating cable core is conductive and can short if not properly insulated and kept dry. Component and heating cable ends must be kept dry before and during installation. Fire-resistant thermal insulation materials should be used.

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

Bond the metallic braid of the self-regulating heating cable to a suitable grounding (earth) terminal. De-energize before installation or servicing.

#### **HEATING CABLE RATINGS**

120 – 277 Volt

PGH only: 5–20 W/ft., Maximum 40A.

Maximum intermittent exposure temperature 446°F/230°C.

Minimum bend radius: 1.72 in. (44 mm) @ -40°F/°C

All other cables: 3–10 W/ft., Maximum 32A.

Maximum continuous exposure temperature 150°F/65°C. Minimum bend radius: 1.9 in. (50 mm) @ 68°F/20°C

#### \*APPROVALS



2



E471335 \*\*E484945 Class I, Div. 2, Groups A, B, C, D Class II, Div. 2, Groups F, G

Class I, Div. 2, Groups A, B, C, D Class II, Div. 2, Groups F, G Class III

\*\*General Purpose/Ordinary Location UL File

\*This kit is not UL listed for use with PGH/HotTape products

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#### KIT CONTENTS

- Metallic Conduit box with cover and gasket
- Metallic Strain Relief (cap, washer, grommet, base)
- Heat Shrink End Cap
- Opaque Silicone End Cap (for PGH only)

- 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

#### Equipment

- Utility Knife
- Wire Cutter
- Multi-head Screwdriver
- Pipe Wrench

- Wire Stripper Crimp Tool
- Heat Gun

Needle Nose Pliers

#### **ASSEMBLY INSTRUCTION DETAILS**

- 1. Allow approximately 24" (61 cm) of heating cable of installation from the pipe.
- 2. Disassemble the Strain Relief. Thread the heater through the Strain Relief Cap, Washer and, using cable lubricant, through the Grommet (wide end towards Washer) respectively until 4" (10.2 cm) of the heater end is exposed (see photo below). Put the Strain Relief base aside.
- 3. Strip the outer jacket ¾" (19 mm) from the end of the heater cable. Unravel the Ground Braid and trim to outer jacket cutback.
- 4. Place the heater into the adhesive-lined Heat Shrink End Cap, tight against the end so that the conductor wires are covered. 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
- 5. Push the Strain Relief Grommet until it is 2" (51 mm) from the end.
- 6. Install the Strain Relief base into the Housing, and tighten with Pipe Wrench.
- 7. Feed the heater into the Housing and seat the Grommet, hand-tightening the Strain Relief Nut.
- 8. Install the Plug in the open end.
- 9. Retighten Strain Relief Nut and Cap as tight as possible
- 10. Install lid on Housing making sure not to pinch the heater.
- 11. 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.

#### Cap Washer Grommet



