

AMIGA-1



DREX0079

INSTALLATION INSTRUCTIONS

These installation instructions are for use with Drexan Energy Systems PipeGuard® Hot (PGH), PipeGuard Warm (PGW) and MultiTrace® (MT) self-regulating heater products. This kit may be installed in temperatures as low as -40°F (-40°C).

For technical support call Drexan at
1.800.663.6873



HD190412-1 Rev 0

Warnings

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.

Metallic structures or materials such as metal pipes used to support the heater cable shall be grounded.

Component approvals and performance characteristics are based on Drexan specific parts only. Maximum surface temperature: +260°C (500°F)*.

*Applies to PGH product only

Substitution will void approvals and performance claims.

Component and heating cable ends must be kept dry before and during installation. Fire resistant thermal insulation should be used. Bond the metallic braid of the self-regulating heating cable to a suitable grounding (earth) terminal. De-energize before installation or servicing.



WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON- HAZARDOUS.



AVERTISSEMENT - RISQUE D'EXPLOSION - AVANT DE DECONNECTER L'EQUIPEMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DESIGNE NON DANGEREUX.

Approvals



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

For use with Drexan HeatTracer PipeGuard Heating Cables only.

CAUTION: A ground fault protection device must be used with this heating device.

T-rating: Classified to rated output and conditions of use/limited pipe temperature.

Cable-Specific Specifications

PGH Only:

5-20 W/ft., Maximum 40A. 120-277V

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

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

PGW/MT Only:

3-10 W/ft., Maximum 32A. 120-277V

Maximum continuous exposure temperature
150°F/65°C.

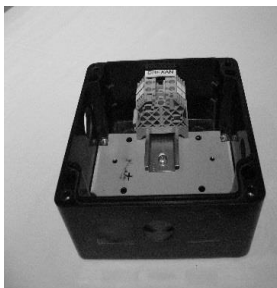
Min. bend radius: 1.18 in. (30 mm) @ 68°F/20°C

AMIGA-1 Kit Contents



Item	Qty	Description
1	1	Stanchion
2	1	Silicon Grommet
3	1	Cable Guide
4	1	Connector
5	1	Ground Assembly
6	1	Junction Box
7	1	Pipe Clamp
8	2	WAGO Splices
9	1	Core Sealer / 3/16" tube

6



Junction Box

7



Pipe Clamp



8

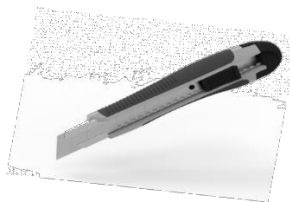
WAGO Splices

9

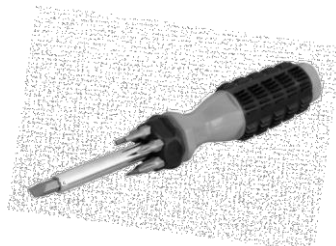


Core Sealer

Additional Materials Required



Knife



Multi Head Screwdriver



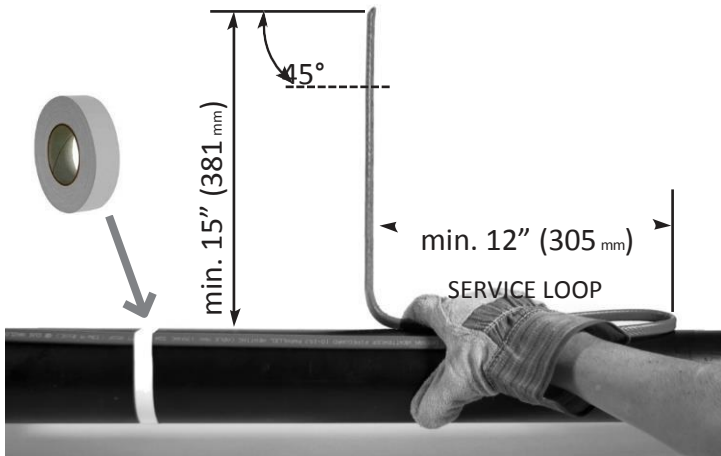
Glass FiberTape

Installation OPTION # 1

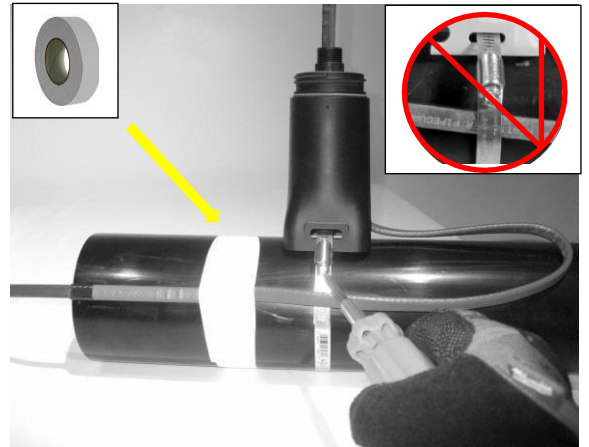
For PGH, PGW and MT

Cut cable at 45° angle to pierce grommet.

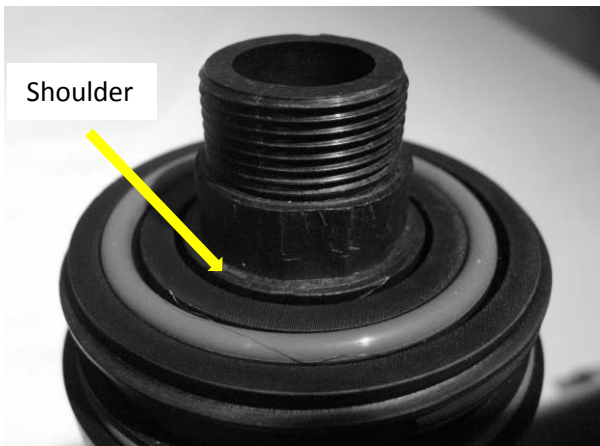
1. Allow min. 15" (381 mm) for cable termination and min. 12" (305 mm) for the service loop.



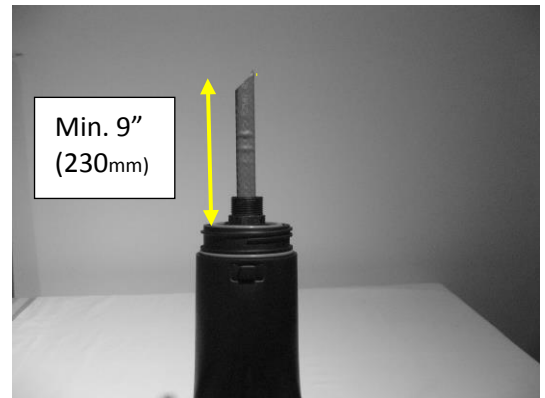
4. Attach stanchion with pipe clamps. **Do not tighten clamps onto cable.**



2. Ensure the shoulder of the connector is flush with stanchion.



5. Ensure min. 9" (230 mm) remains for cable termination and tape service loop.



3. Feed cable(s) through the stanchion, piercing the grommet membrane.



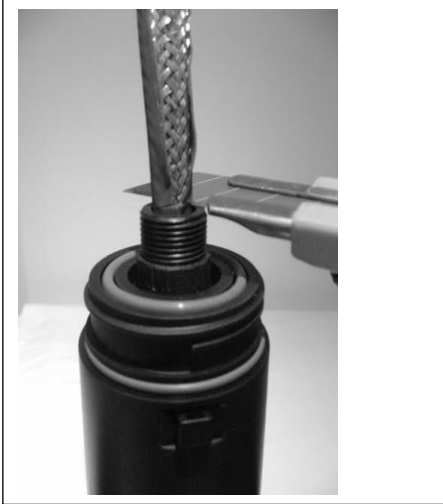
6. Tighten the connector until it bottoms out.



Installation Instructions

7. Cut the outer jacket flush with the connector and remove.

✂ **Do not damage the ground braid.**



8. Wrap tape around the braid 1" (25 mm) from the end of the cut back outer jacket.

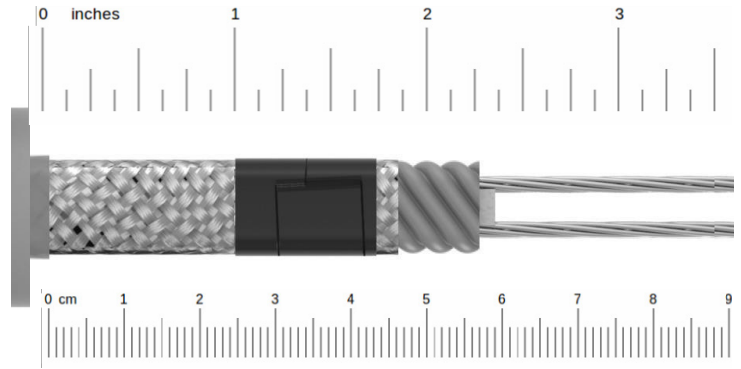


9A. For PipeGuard Hot (PGH)

Cut the braid and inner jacket ½" (13 mm) from the outer edge of the tape.

Remove the braid, inner jacket, black fibers and spacer.

9A. Trim the braid back to the edge of the tape.
✂ **Do not damage the inner jacket.**

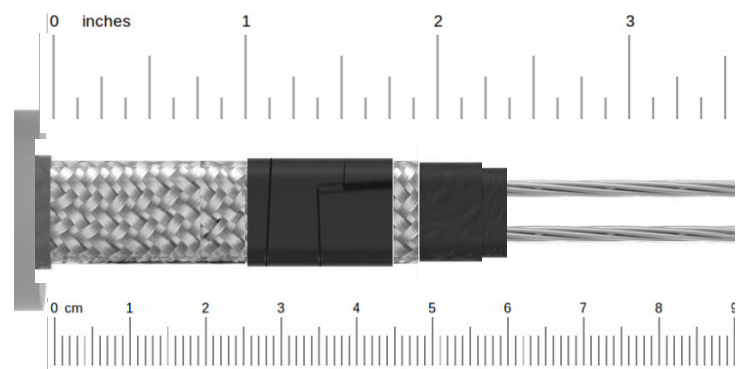


9B For PipeGuard Warm (PGW) or MultiTrace (MT) Cable

Cut the braid ½" (13 mm) from the outer edge of the tape. Remove the braid and inner core, exposing the Bus Wires. This can be done with scissors by removing the core between the bus wires or with a knife from the outside of the bus wires.

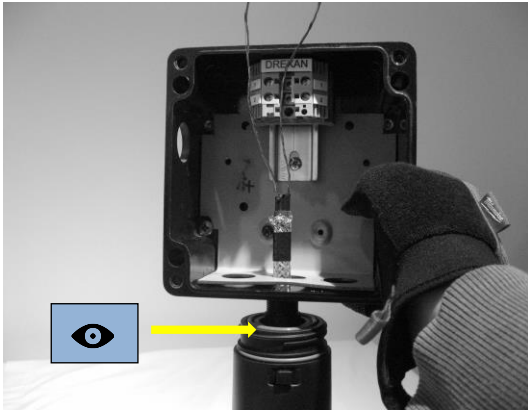


Trim the braid back to the edge of tape.
✂ **Do not damage the inner core.**

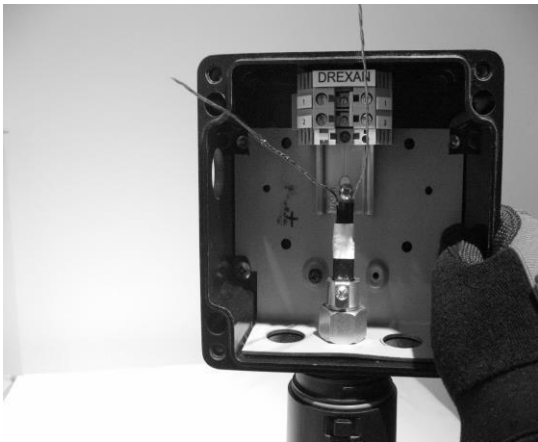


Installation Instructions

- 10.** Slide junction box onto pipe stanchion. Ensure the o-ring between the stanchion and the junction box is in place.

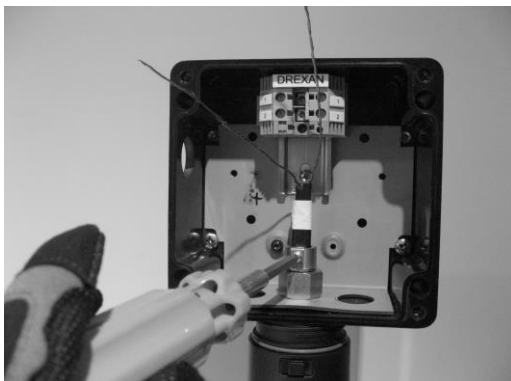


- 11.** Thread the ground nut onto connector and tighten.



- 12.** Tighten screw to securely capture the ground braid.

 Ensure good ground contact.



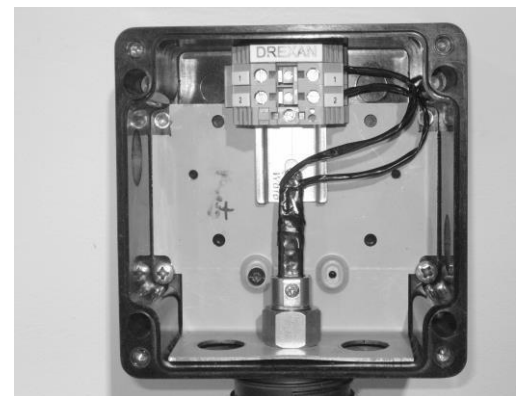
- 13.** **PGW/MT only:** Place the supplied tube over one bus wire prior to sliding the core sealer over the bus wires. This will provide added protection from a short between the two bus wires (see inset).



Install Core Sealer over bus wires.



- 14.** Feed field wiring power and ground conductors into the cutout in junction box using suitable wiring method. For hazardous location installations the wiring method shall comply with one of the wiring methods permitted in the NEC or CEC (as applicable) for hazardous location classification of the installation. Ensure the grounding conductor and raceway used for field wiring are grounded on the grounding plate inside the junction box



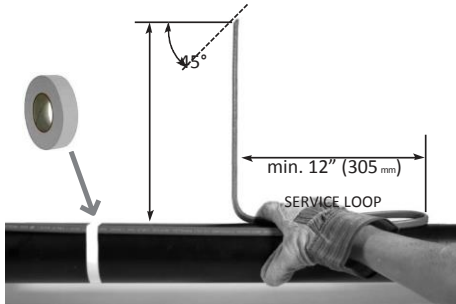
Installation Instructions

The AMIGA-1 allows for Drexan Heating Cables to be terminated using two methods.

Following Option 2: Provides a method with minimal stripping of the cable (exposing of bus wires) utilizing a certified splice connector.

OPTION # 2

1. Cut cable at an angle to pierce grommet. Allow 15" (381mm) for cable termination and minimum 12" (305mm) for service loops.



4. Attach stanchion with pipe clamp. Do not tighten clamp onto cable.



2. Ensure the shoulder of the connector is flush with the stanchion.



5. Ensure a min. 3.5" (90mm) remains for cable termination.



3. Feed the cable through the stanchion grommet, piercing the grommet.



6. Tighten connector compressing the grommet assembly.



Installation Instructions

- 7.** Cut outer jacket flush with the connector and remove outer jacket.
Do not damage braid.



- 8.** Cut and remove braid 1.5" (38mm) from outer jacket cut back. Place a layer of glass fiber tape over the end of the braid cutback and up the inner jacket leaving 1" (50mm) of exposed inner jacket.



- 9.** Remove inner jacket down to the tape. Remove core **flush with inner jacket** exposing the bus wires. **Important the core be removed flush/clean with inner jacket.**

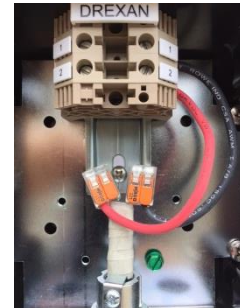


- 10.** Trim bus wires back leaving $\frac{3}{4}$ " (19mm).



- 11.** Place the junction box over the prepared cable end, onto the stanchion. Install nut and tighten to secure the junction box to the stanchion.
Tighten the ground screw to capture the braid and ensure proper grounding to the ground plate

- 12.** Install the supplied leads by way of the WAGO splice connectors **ensuring there is no exposed bus wire.** Terminate the leads into the terminal blocks.



- 13.** After installing power bus to terminal blocks, secure power wire ground to ground plate and install the AMIGA-1 Cover.