



## INSTALLATION INSTRUCTIONS

These installation instructions are for use with HTS Self-Regulating heater products: LXR, MXR & HXR Series.  
This kit may be installed in temperatures as low as -40°F (-40° C).

For technical support call HTS.

## WARNINGS

This is an electrical device and 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 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 HTS product 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.

The person(s) responsible for installation shall verify that the installation and inspection are preformed by personnel who are trained, qualified, and knowledgeable in trace heating systems when using the Division method of area classification. The installation and inspection shall be in accordance with the system manufacturers design documents, product recommendations, and installation instructions.

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 HTS specific parts only. Maximum surface temperature: +260°C (500°F)\*.

\*Applies to HXR Series product only.

Substitution will void approvals and performance claims.

Components and heating cable ends must be kept dry before and during installation. Fire resistant thermal installation 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.**

## APPROVALS



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

**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

HXR Series only:  
5-30 W/ft., Maximum 30A. 120-277V  
Maximum continuous exposure temp.  
375°F/190°C.  
Min. bend radius: 1.72 in. (44 mm) @ -40°F/C

LXR & MXR Series only:  
3-15 W/ft., Maximum 30A. 120-277V  
Maximum continuous exposure temp.  
250°F/120°C.  
Min. bend radius: 1.18 in. (30 mm) @ 68°F/20°C

## KIT CONTENTS

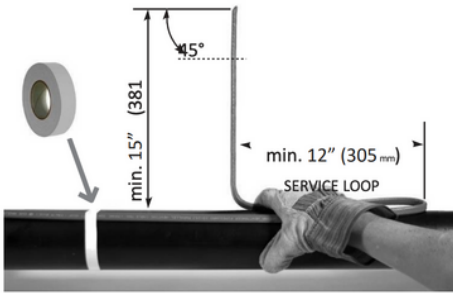
QTY.	Description
1	Stanchion
1	Silicone Grommet
1	Cable Guide
1	Connector
1	Ground Assembly
1	Junction Box
1	Pipe Clamp
1	Core Sealer 3/16" tube
1	Silicone Grease

## MATERIALS REQUIRED

Knife, Multi Head Screwdriver, Glass Fiber Tape

## INSTALLATION INSTRUCTIONS

1. Cut cable at a 45° angle to pierce grommet. Allow min 15" (381 mm) for Cable Termination and min 12" (305 mm) for service loop.



2. Ensure the shoulder of the Connector is flush with the Stanchion shoulder.

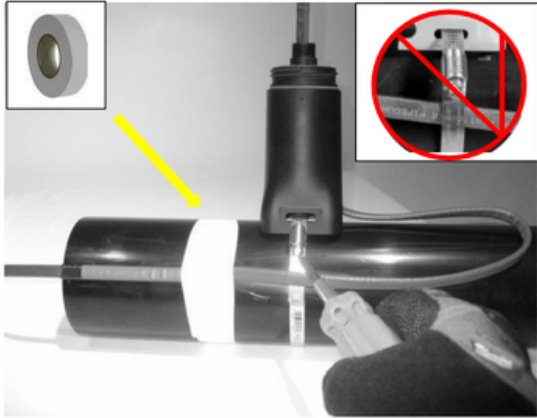


3. Apply supplied Silicone Grease to cable jacket and feed the cable(s) through the Stanchion piercing the Grommet membrane.

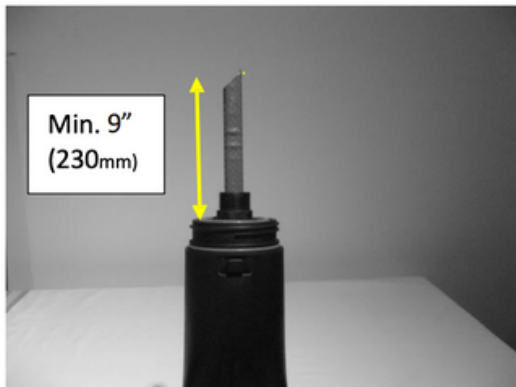


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4. Attach Stanchion with Pipe Clamps allowing for a service loop. Do not tighten clamps onto cable.



5. Ensure min 9" (230 mm) remains for cable termination.



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.



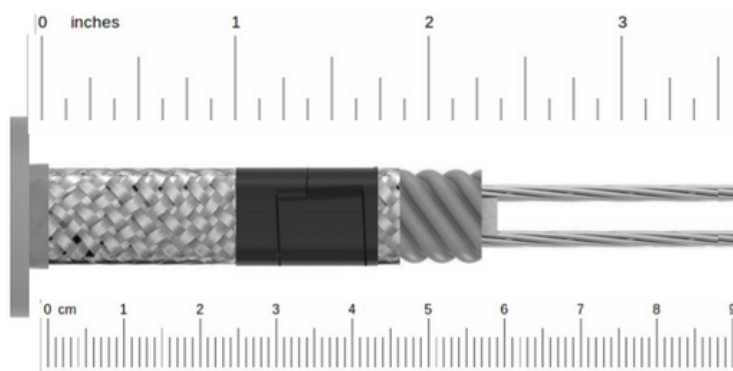
8. Wrap tape around the braid 1" (25 mm) from the end of the cut back outer jacket.



9A. For LXR Series

Cut the braid and Inner jacket 1/2" (13 mm) from the outer edge of the tape. Remove the braid, inner jacket, black fibers and spacer.

Trim the braid back to the edge of the tape. Do not damage the inner jacket.



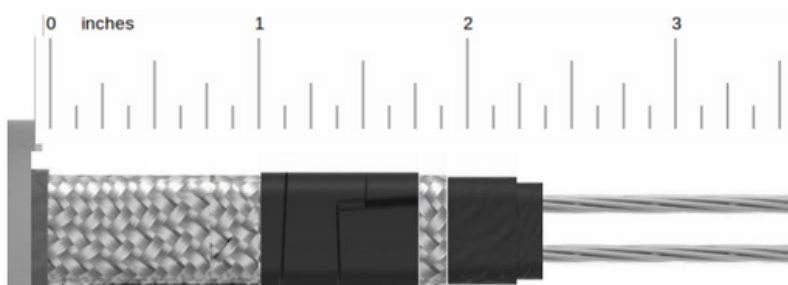
## INSTALLATION INSTRUCTIONS

9B. For MXR and HXR Series

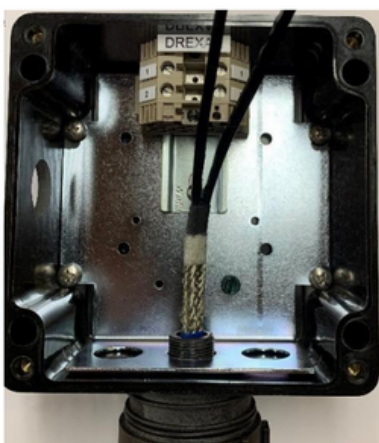
Cut the inner jacket 1/2" (13 mm) from the outer edge of the tape. Remove the inner jacket. Cut down the middle of the heater core between the bus wires. This can be done with a scissors, knife or other tool. The core sealer will fit over the bus wires while still encapsulated by the heater core. It is not necessary to expose the bare bus wires.



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

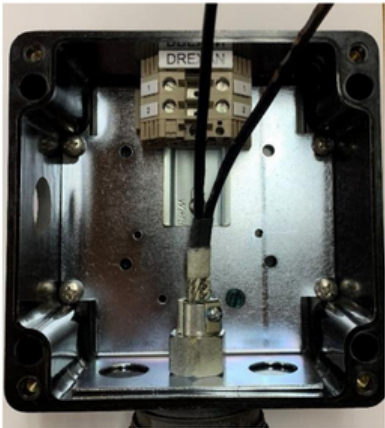


10. Slide junction box onto pipe stanchion. Ensure the o-ring between the stanchion and the junction box is in place.

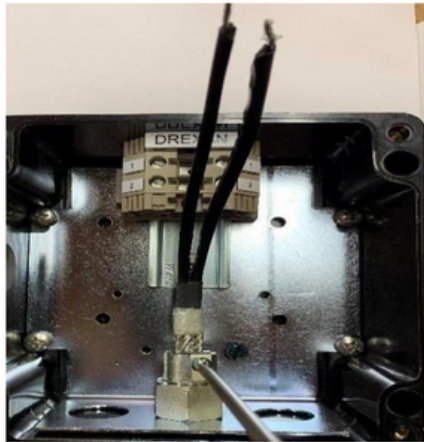


## INSTALLATION INSTRUCTIONS

11. Thread the ground nut onto connector and tighten.



12. Tighten screw to securely capture the ground braid. Ensure good ground contact.



13. Install core sealer over bus wires. Trim the bus wires 1/2 inch from where they exit the core sealer. Strip the bus wires bare and make electrical connection in the terminal block.



**INSTALLATION INSTRUCTIONS**

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 the field wiring are grounded on the grounding plate inside the junction box.

