



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

For use with HTS HXR Series 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

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: 1.9 in. (50 mm) @ 68°F/20°C

KIT CONTENTS



| Item | Qty | Description |
|------|-----|-----------------|
| 1 | 1 | Stanchion |
| 2 | 3 | Silicon Grommet |
| 3 | 3 | Cable Guide |
| 4 | 3 | Connector |
| 5 | 3 | Ground Assembly |
| 6 | 1 | Junction Box |
| 7 | 2 | Pipe Clamp |
| 8 | 1 | Wrench |
| 9 | 3 | Core Sealer |
| 10 | 1 | Silicone Grease |



10. Silicone grease

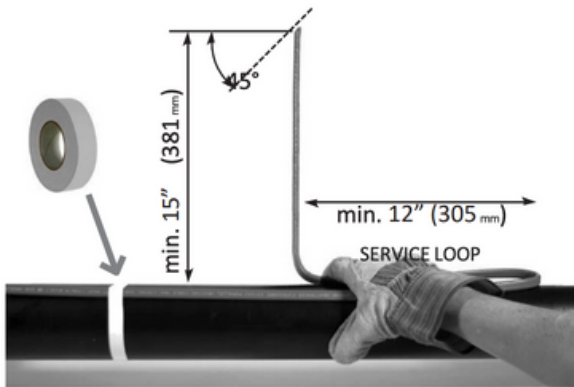


ADDITIONAL MATERIALS REQUIRED

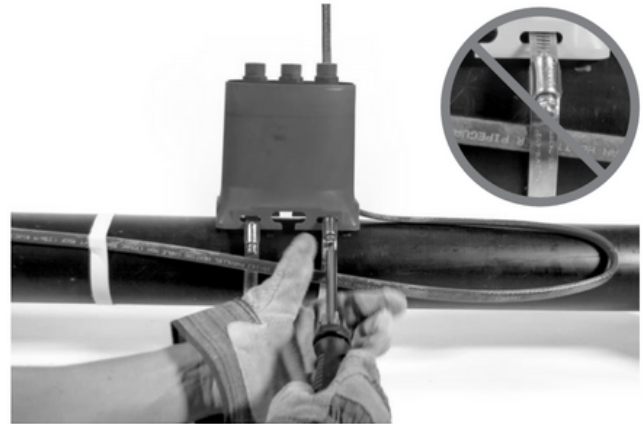


INSTALLATION INSTRUCTIONS

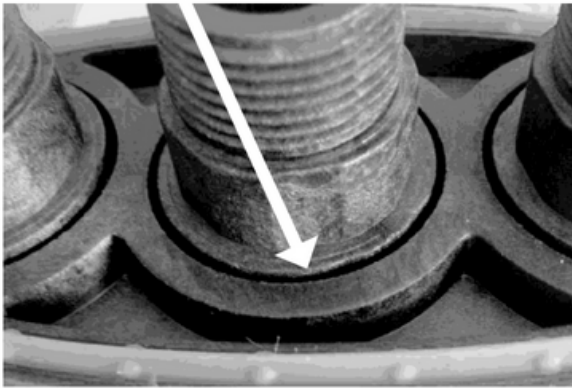
1. Cut cable at 45° angle to pierce grommet. Allow min. 15" (381 mm) for cable termination and min. 12" (305 mm) for the service loop.



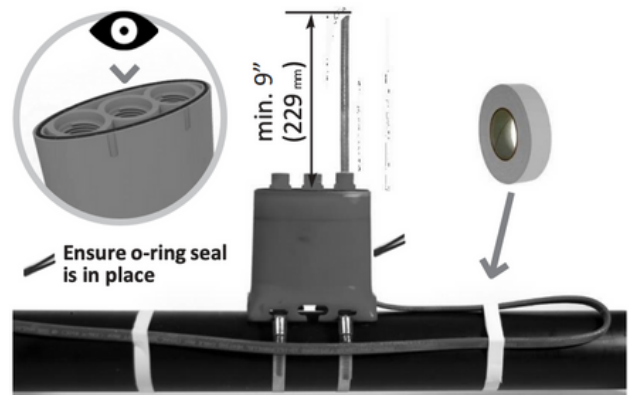
4. Attach stanchion with pipe clamps. Do not tighten clamps onto cable.



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



5. Ensure min. 9" (229 mm) remains for cable termination.



3. Apply supplied silicone grease to cable jacket and feed cable(s) through the stanchion, piercing grommet membrane.



6. Tighten all 3 connectors until they bottom out and tops are flush with each other.



INSTALLATION INSTRUCTIONS

7. Cut outer jacket flush with connector and remove. Do not cut (damage) grounding braid.



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

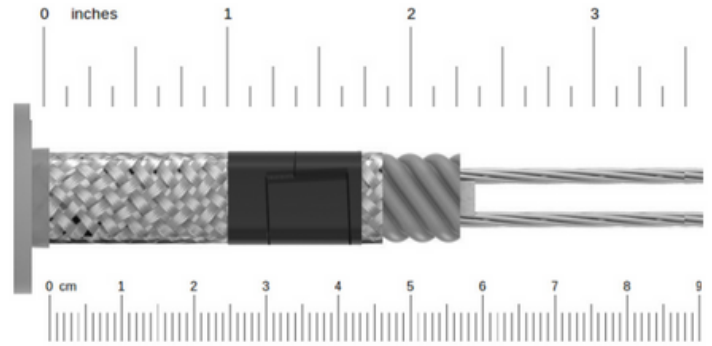


9A. For HXR Series

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.



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

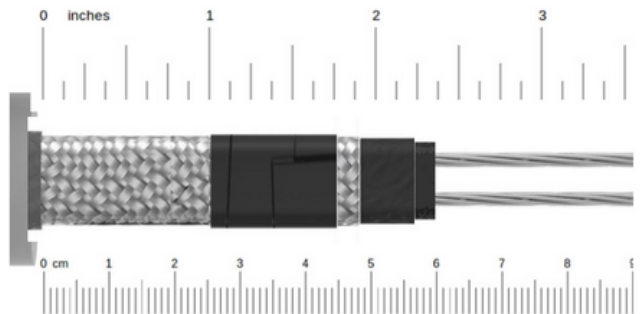


9B. For MXR Series

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 bus wires. This can be done with scissor, 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 the inner core.



INSTALLATION INSTRUCTIONS

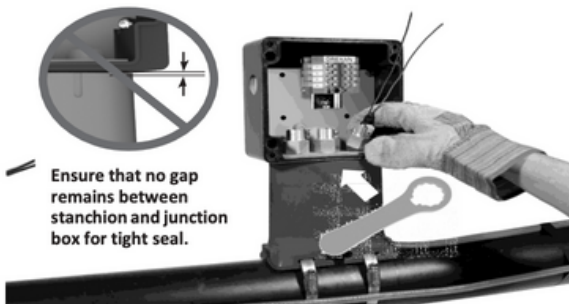
10. Slide junction box onto pipe stanchion.



13. Install Core Sealer over bus wires.

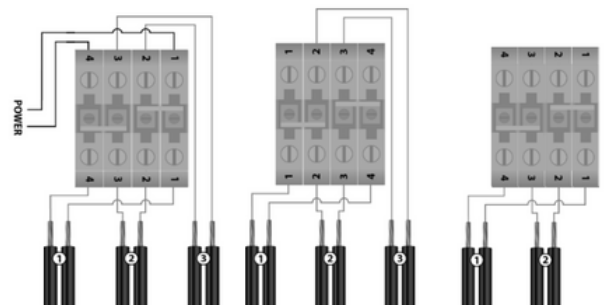
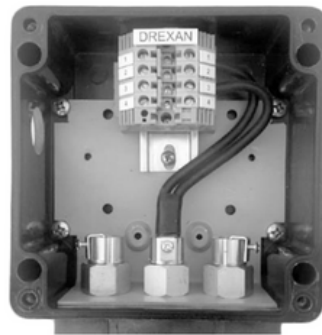
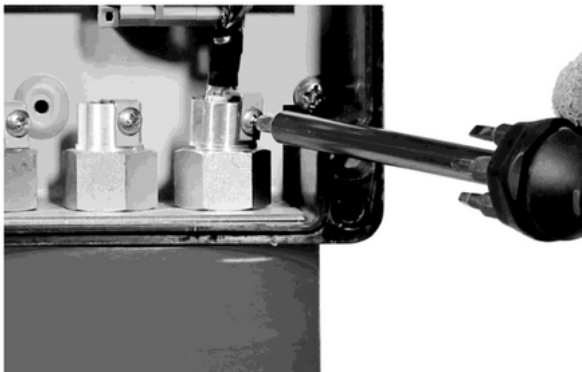


11. Thread grounding nuts onto connectors, beginning with middle nut. Tighten using supplied wrench.



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.

12. Tighten screws to capture braid under grounding contact. Ensure good grounding contact.



Power 1-3 heaters

In-line tee 3 heaters

Splice 2 heaters