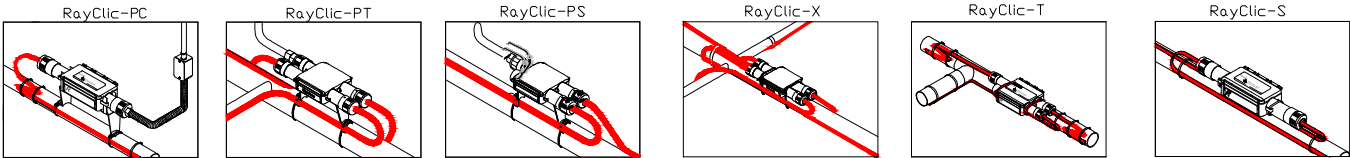
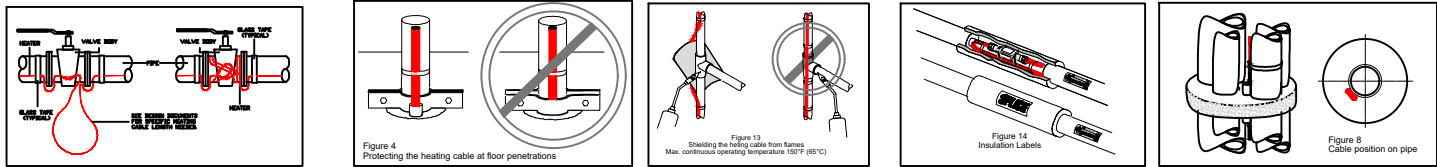


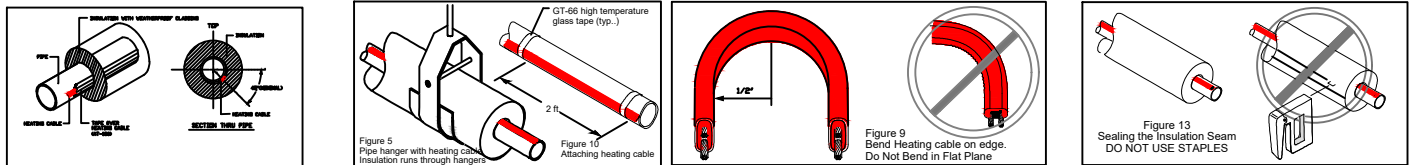
Typical C910 Control System for XL-Trace Edge Heating Cable



Typical heating cable valve



Use AT-180 AL Tape along full length of heating cable for plastic pipe

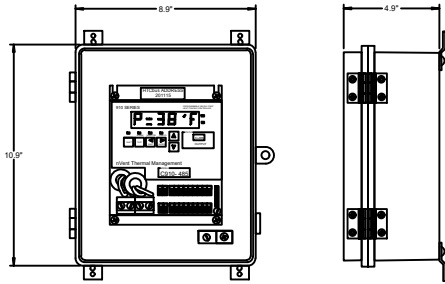


Freeze Protection Heating Cable System Schedule

Circuit Number	PC Location	Operating Temperature	Estimated Length	Circuit Breaker (A)	Max. CT. Length	Notes:

NOTES:

- A. Heating Cable (Plumbing, Mechanical, Fire Protection, Domestic Water) – Maintain 40F using nVent RAYCHEM XL-Trace Edge self-regulating heating cable manufactured by nVent Thermal Management. The heating cable shall operate on line voltages of 208–277 volts without the use of transformers. For above ground piping heating cable shall have polyolefin (–CR) outer jacket, where as for below ground piping heating cable shall have a fluoropolymer (–CT) outer jacket.
- B. Heating Cable (Fuel Lines) – Maintain 110F using XL-Trace Edge self-regulating heating cable manufactured by nVent Thermal Management. The heating cable shall operate on line voltages of 208–277 volts without the use of transformers. The heating cable shall be covered in a fluoropolymer (–CT) jacket outer jacket.
- C. Heating Cable (Grease Lines) – Maintain 110F using XL-Trace self-regulating heating cable manufactured by nVent Thermal Management. The heating cable shall operate on line voltages of 208–277 volts without the use of transformers. The heating cable shall be covered in a fluoropolymer (–CT) jacket outer jacket.
- D. Connection Kits – nVent RAYCHEM RayClic connection kits. All components shall be UV stabilized and shall not require the installing contractor to cut into the heating-cable core to expose the bus wires.
- E. Accessories – High temperature, glass filament tape for attachment of heating cable to metal pipe. High temperature, aluminum tape for attachment of heating cable to plastic pipe. (Catalog Number: GT-66, GS-54, or AT-180). Provide warning labels every 10 feet on exterior of insulation, opposite sides of pipe. (Catalog Number: ETL)
- F. Controls:
- F.1. Single Circuit Control – nVent RAYCHEM C910–485 Digital Temperature Controller with built-in Ground–Fault Protection Device. Controller shall be configured for Ambient Control and Line-temperature monitoring. Features: Automatic self-test feature to verify proper functionality of heating cable system, isolated triac alarm relay and a dry contact relay for alarm annunciation back to the BMS.
- F.2. The C910–485 Controller provides the ground fault required by NEC. Standard, non-ground fault breakers shall be used to power the heat trace system.
- F.3. One C910–485 heat trace controller shall be used for each heat tracing circuit.
- G. System Listing – The system (heating cable, connection kits, and controller) shall be UL Listed, CSA Certified, or FM Approved for associated applications. Fire Sprinkler freeze protection shall meet NFPA–13 requirements by carrying a c-CSA–us system certification for freeze protection of fire suppression branch lines. No parts of the system may be substituted or exchanged.
- H. Installation – Install and secure the heating cable in accordance with the Manufacturer’s System Installation and Operation Manual.
- I. Testing – Test per Manufacturer’s System Installation and Operation Manual. Insulation resistance must be tested up to 2500Vdc megohmmeter. Minimum acceptable insulation resistance shall be 1000 megohms. Contractor shall submit to owner results of installation tests required by the manufacturer.
- J. Start-up – Start-up of system shall be performed by factory technician or factory representative per the owner’s requirements.
- K. Warranty – Manufacturer shall provide a standard ten (10) year limited warranty for heating cables and components. 10 Year Warranty shall be openly published on manufacturer’s website. Provide one (1) year warranty for all heat trace controllers. Manufacturer – Manufacturer basis of design is nVent Thermal Management, LLC. For pricing and technical information, contact your local Area Sales Manager.



C910-485

B	AL	4/26/22	Added XL-TRACE EDGE
A	CD	1/21/16	Issued for Review
REV	BY	DATE	DESCRIPTION

TITLE: C910 System Control Schematic			
SCALE: NONE	DWG. NO: C910-1	REV: B	