

XL-Trace Self-Regulating Pipe Freeze Protection System

Reliable Freeze Protection from the Industry Leader

The XL-Trace system provides freeze protection for metal and plastic water pipes in commercial, institutional, and residential construction.

The XL-Trace family of heating cables is ideal for use on:

- Cooling tower lines
- Sprinkler systems
- Fire stand pipe and drain pipes
- Exposed plumbing systems
- Metal and plastic pipes

The heating element in the XL-Trace heating cable consists of a continuous core of conductive polymer extruded between two copper bus wires. As current flows through the core, the XL-Trace heating cable regulates its own heat output in response to pipe temperature changes.

This self-regulating feature eliminates hot spots and results in better temperature control and exceptionally long cable life. More than 300 million feet of Raychem self-regulating heating cable have been installed worldwide since 1970.

Low total installed cost

The XL-Trace heating cable's parallel circuitry allows it to be cut to the exact length required, with no wasted cable. Its flexibility allows it to be wrapped around complex fittings and valves and overlapped without overheating plastic pipes. No thermostat is necessary. All of these characteristics simplify and streamline the design of a heat-tracing system. Installation is quick and simple.

Low total operating cost

Building operators are assured of optimal energy efficiency and low maintenance costs when an XL-Trace system is specified.

Self-regulation makes the XL-Trace heating cable an energy miser. Its conductive core supplies more heat as the temperature drops, and reduces its heat output as the temperature rises—and this is done automatically, at every point along the cable's length.

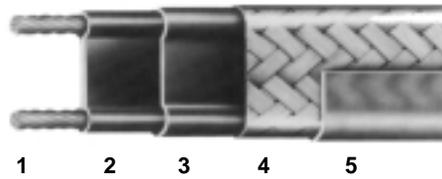
The same features that make an XL-Trace system easy to install the first time also simplify additions or changes to the system during building renovations.

- 
- Excellent performance
 - High reliability
 - Low installed cost
 - Low total operating cost



Product construction

1. Copper bus wire (16 AWG)
2. Self-regulating conductive core
3. Modified polyolefin jacket
4. Tinned copper braid
5. Modified polyolefin jacket (-CR) or optional fluoropolymer jacket (-CT)



Product ratings

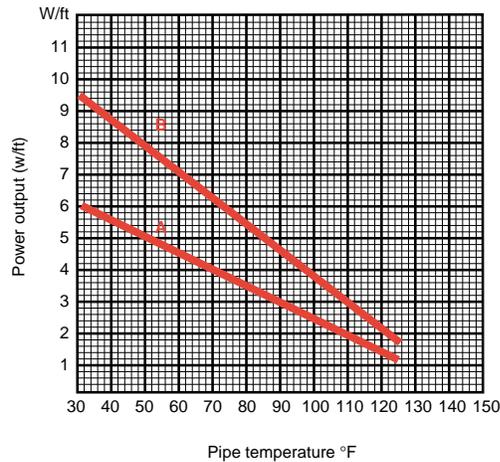
Catalog number	5XL1-CR/CT	5XL2-CR/CT	8XL1-CR/CT	8XL2-CR/CT
Thermal rating at 50°F	5 W/ft	5 W/ft	8 W/ft	8 W/ft
Service voltage	120 Vac	208 Vac*	120 Vac	208 Vac*
Maximum circuit length	250 ft	450 ft	190 ft	350 ft

*Product approval for 208–277 Vac operation.

Thermal output ratings

Power output on insulated metal pipes at 120 Vac and 208 Vac:

- A** 5XL1-CR and 5XL1-CT
5XL2-CR and 5XL2-CT
- B** 8XL1-CR and 8XL1-CT
8XL2-CR and 8XL2-CT



System design

Be sure to consult the XL-Trace System Application and Design Guide (H55838) for information regarding design, heating cable and component selection, and circuit breaker sizing.

Raychem and the 1996 National Electrical Code Article 427 require ground-fault equipment protection on each heating cable branch circuit. To reduce the risk of fire caused by damage or improper installation, circuit breakers such as Square D QO-EPD and QOB-EPD or equivalent, with a 30-mA trip level, should be used. Use a TraceGuard 277 GFEPD for 277-volt applications, up to 50 amps. Alternative designs providing comparable levels of ground-fault protection may also be acceptable. A grounded metal braid is also required.

For technical assistance, call Raychem at (800) 545-6258.

System components

Component	Catalog number
Power connection kit with end seal	RayClic-PC
Tee kit	RayClic-T
Splice kit	RayClic-S
End seal kit	RayClic-E
Glass tape	GT-66
Electric-Traced label	ETL

Approvals



718K Pipe Heating Cable



DESIG. 3A, 3B, 3C



XL-Trace, TraceGuard, and RayClic are registered trademarks of Raychem Corporation.

Raychem Corporation

300 Constitution Drive
Menlo Park, CA 94025-1164
USA
Tel (800) 545-6258
Fax (800) 611-2323
Fax-on-Demand (800) 329-4494
ciinfo@raychem.com
www.raychem.com

Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Raychem makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Raychem's only obligations are those in the Raychem Standard Terms and Conditions of Sale for this product, and in no case will Raychem or its distributors be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, Raychem reserves the right to make changes—without notification to Buyer—to processing or materials that do not affect compliance with any applicable specification.