

Retro-Line[®] Mini

Leading Advanced Internal Water Supply Pipe Freeze Protection Systems

Retro-Line Mini is a job-ready freeze protection kit designed to be installed in minutes inside existing small diameter water supply pipes and drains from ½" to 1" of many piping materials.



See more product information, videos, photos, technical documents, and more



Patents USA and Canada NSF/ANSI 61

Retro-Line Mini

Features & Benefits

- The only manufactured complete self-regulating heating cable system designed for in-pipe applications, independently certified safe by third-party agencies
- Multiple plumbing fittings available – Tees in ID-IPS, CTS and OD-IPS sizes, MIPT threads in ½ inch, ¾ inch and 1 inch sizes
- Available in a plug-in GFCI model or hard wire cord-set model depending on application
- Completely customizable for various application requirements
- Length can be adjusted (shortened) on the job-site by means of extracting the cable through plumbing fitting (contact Heat-Line for guidance)
- Available in common lengths
- Suitable for pipe diameters ½ inch to 1 inch, for larger pipe diameters see Retro-Line
- Withstands water pressure up to 230 PSI
- Suitable for installation in plastic or metal pipes
- Can be installed into existing pipes without excavation
- Can be pushed in most pipes up to 100 feet
- Long systems can be drawn in with fish tape or twine
- Lengths 40 feet and greater are supplied on a dispensing reel for ease of installation
- Heating cable is rigid enough to stay in place within the entire length of pipe, no downward fastening device
- Fully serviceable, can easily be removed if necessary
- Suitable for above ground applications with insulation
- Suitable for sump pump lines
- Will never melt or overheat, even if pipe is dry
- Proven in -40°F weather above ground with ¾ inch polyethylene insulation



Specifications

- cCSAus approved (Canada and USA) LR85446
- NSF/ANSI 61 Drinking Water Safe
- Approved for potable drinking water
- Certified Usage Type P and X Canada
- Installation Type D USA
- Self-regulating/conductive polymer heating cable
- Fluoropolymer outer jacket
- Standard wattage 3 W/ft @ 50°F (10 W/m @ 10°C), 5 W/ft @ 50°F (16 W/m @ 10°C) available by special request
- Max length 130 ft
- Available with either GFCI plug or CS hard wire connection
- Proprietary end seal technology engineered and third party tested for applications up to 230 PSI
- Standard warranty of 5 yrs with optional 10 yrs

Applications

- Small diameter – problematic municipal service tubes
- Small diameter sump pump discharge pipes
- Well water supply lines, including dug, drilled and artesian wells
- Building to building water supply
- Commercial/ Industrial Facilities
- Suitable for jet pump and submersible pump applications

For more Features and Benefits common to all Heat-Line systems, refer to page 6.





Internal Water Supply Freeze Protection

Retro-Line Mini is an internal self-regulating heat tracing system designed to provide freeze protection of existing small diameter water supply and fluid pipes without their removal. Insulation and an optional thermostat can be used to optimize energy efficiency.

CSA/NSF Approved

Retro-Line Mini is the only cCSAus NSF/ANSI 61 Drinking Water approved, internal self-regulating P and X factory finished freeze protection system for small diameter pipes available on the market.

Complete System

The Retro-Line Mini system is supplied in a predetermined length with all necessary components for a complete system. For polyethylene pipe applications Retro-Line Mini is supplied with a compression fitting for connection to the pipe.

Multiple Interfacing

An ID controlled tee fitting for polyethylene pipe is supplied standard with the Retro-Line Mini system. Retro-Line Mini can also be ordered with a CTS controlled tee or a threaded male adapter for easy interfacing to pipe such as ABS, PVC, PEX, copper, galvanized and steel.

Requirements

Retro-Line Mini orders require the length of heating cable and pipe size for polyethylene installations or male adapter thread size for other pipe installations. System lengths are 3 W/ft 120 V up to 130 feet and 5 W/ft 120 V up to 100 feet . Minimum pipe size required is ½ inch ID.

Fully Serviceable

Short Retro-Line Mini systems can be easily pushed into the pipe, while longer systems may require pulling in with a fish tape. The downward end of the cable does not need to be internally fastened, as it will not re-coil, which is extremely important as it renders the system fully serviceable. The system can be removed and replaced should it become necessary.

Easy Installation

Heat-Line developed a unique, patented dispensing system called “Retro-Reel” to protect the heating cable and fittings from mechanical injury while the product is deployed into the pipe with absolute ease. It is not unusual to push systems in up to 100 feet.

Versatile Application

Retro-Line Mini can be used in a variety of applications, including small diameter metal and plastic water supply, sump pump lines and pressurized or high volume drain pipes.

Retro-Line Mini | Product Code Guide

Example: **RLM - 3 - 050 - 130 - ID - CS**

Product

RLM 120 V Retro-Line Mini

Nominal Power Output

3 3 W/ft @ 50°F (10 W/m @ 10°C)
5 5 W/ft @ 50°F (16 W/m @ 10°C)

Fitting/Pipe Size

050 Fitting/pipe size ½" *
075 Fitting/pipe size ¾"
100 Fitting/pipe size 1" **

Cord-Set Type

GFC Ground fault protected
5-15 P 120 V
CS Cord connected (no GFCI)

Fitting Type

ID Internal pipe diameter ID-IPS tee fitting
CTS Copper tubing size CTS tee fitting
OD Outside pipe diameter OD-IPS tee fitting
IP Male adapter (thread size) MIPT fitting

Length of System

3 W/ft 120 V max length 130 ft
5 W/ft 120 V max length 100 ft

* Not available in CTS or OD Tee sizes

** Not available in ID, OD or IP fitting sizes

NOTE: The heating cable is measured and cut to the length of system ordered. Some of this length will remain within the interface fitting. Only available in Drinking Water Safe Fluoropolymer outer heating cable jacket. Minimum pipe inside diameter must be 0.485" or greater. Cold water use only.

Retro-Line Mini | Accessories

HLJ-STAT	120V plug-in thermostat (GFC)
HLP-STAT	120/240V hard wire thermostat (CS)
HLA-120	120V plug-in thermostat (GFC)
TIMER-120P	120V plug-in timer (GFC)
TIMER-CS	120/240V hard wire timer (CS)
MA-10	120/240V GFCI/ELCI (CS)
JMA-050-CTS	½" CTS x ½" NPT Male Connector Black

JC-075/050-CTS	¾" CTS x ½" CTS Straight Reducing Coupling Black
INSUL-1.00	Insulation sleeve for 1 inch ID pipe (1 5/8 inch ID, 6 ft long)
HLP-TAPE	Tape for insulation sleeve butt joints (100 ft)
WARRANTY	Extended 10 year limited warranty

Retro-Line Mini | Sample Installation

