# **Retro-Line<sup>®</sup> 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 NS

#### **Retro-Line Mini**

#### Features & Benefits

- The only manufactured, self-regulating heating cable for in-pipe applications
- 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 jobsite 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), special wattage available
- Max length 130 ft
- Available with either GFCI plug or CS hard wire connection
- Proprietary end seal technology engineered 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  $\frac{1}{2}$  inch ID.

## **Fully Serviceable**

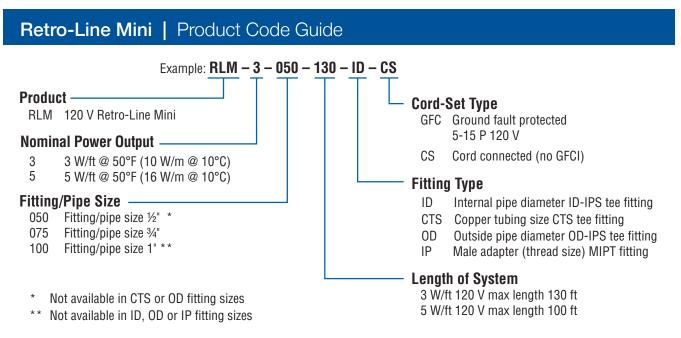
Short Retro-Line Minis can simply be pushed into the pipe while longer systems may be pulled in using a fish tape. The downward end of the cable does not need to be internally fastened, as it will not re-coil, which is extremely important as it renders the system fully serviceable. The system can be 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.



**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 Hla-120	120V plug-in thermostat (GFC) 120V plug-in thermostat (GFC)	INSUL-1.00 HLP-TAPE WARRANTY	Insulation sleeve for 1 inch ID pipe (1 5/8 inch ID, 6 ft long)
TIMER-120P	120V plug-in timer (GFC)		Tape for insulation sleeve butt joints (100 ft) Extended 10 year limited warranty
TIMER-CS MA-10	120/240V hard wire timer (CS) 120/240V GFCI/ELCI (CS)		

#### Retro-Line Mini | Sample Installation

