Mult-Use Freeze Protection for Pipes, Tanks and Vessels of All Types and Sizes.

Paladin/EXT Series is a job-ready freeze protection kit for use on both metal and plastic pipes. Paladin is direct earth burial approved and wet location approved, making it suitable to be installed inside non-pressurized, non-potable pipes such as drainage pipes.
CSA APPROVED

Paladin/EXT carries CSA approvals for wet location and direct earth burial which is not found on any other external heating cable on the market.

The wet location approval allows the heating cable to be installed inside non-pressurized, non-potable, non-metallic or metallic pipes such as drains and culverts, making installation easy for pre-buried pipes. Direct earth burial allows installation on the outside of water supply lines and septic pipes before they are buried.

VERSATILE APPLICATIONS

The Paladin/EXT systems are so versatile that they are used in a variety of applications, including but not limited to water supply lines such as lake/river to house, well to house, building to building, farm water or fluid supply, RV and marine water supply as well as under structure copper pipes, any exposed pipes, culverts, drains, tanks and even in some soil heating applications.

SAFE ON ALL PIPE MATERIALS

Paladin/EXT is safe to use on all pipe materials, including plastic and metals, even if there is no water in the pipe. Insulation and a thermostat can be added to the system to further optimize energy efficiency.

FACTORY FINISHED

Paladin/EXT is factory finished to length making installation simple, fast and cost effective. The need for an electrician to provide on-site power and complex terminations is eliminated.

GREAT FOR BARNs, GARAGES

EXT3T Series cable jacket does not deteriorate when exposed to harsh substances such as organic and inorganic materials that may be found in buildings such as barns, garages and workshops.
REDUCE LENGTH, INSTALL IN A SINGLE RUN

Paladin/EXT is designed to be applied to the outside of the pipe, making it suitable for both small and large pipe diameters. Traditional style heat tapes must be pitched or spiraled around the pipes in order to apply an adequate amount of heat, making them very high in energy consumption. In most applications, the Paladin/EXT systems are installed in a single run, reducing the overall length of product by as much as 60 percent. For large pipe diameters or where more heat is required, a dual (double) trace system is adequate, which still saves on product length.
# Paladin®/EXT Series Features / Benefits / Differentiators / Applications

## Features
- Can be overlapped without the concern of overheating
- Direct earth burial approved
- Wet location approved
- Fluoropolymer jacket suitable for organic and inorganic environments (EXT3T)
- Thermostats and other control devices are optional
- Will not melt or overheat
- Can be fully insulated
- Extremely energy efficient
- Available in 120 volt or 240 volt systems
- Available with either GFCI plug or CS hard wire connection
- Self-regulating, high performance, conductive polymer cable
- 5 year limited warranty/ 10 year optional
- Available in common and custom lengths

## Benefits
- Suitable for use with metal and plastic pipes, tanks and vessels
- Can be used on small and large pipe diameters
- Wet location approved
- Direct earth burial approved
- Fast installation
- Proven performance in extreme cold climates
- Each finished system is tested prior to shipment
- Single trade installation where a receptacle is within reach
- Manufactured to finished lengths for individual service requirements
- Can be insulated to maximize energy efficiency
- Thermostats not required for applications where they are not beneficial
- Unlimited control options

## Differentiators
- Wet location and direct earth burial approved
- Suitable for use on metallic and non-metallic pipes of all diameters
- Suitable for external temperatures up to 150°F
- Fluoropolymer jacket suitable for organic and inorganic environments (EXT3T models)
- Manufactured in North America
- cCSAus approved for installation throughout the USA and Canada
- Clear, concise installation and support documentation
- Will not melt or overheat pipe
- Up to 80% more efficient compared with uninsulated constant wattage heating cables
- Available in short, long and custom lengths
- Extremely High Quality
- Excellent Warranty

## Applications
- Existing water supply lines subject to freezing
- Small diameter water supply lines
- Large diameter pipes
- Sewage pipes
- Drains and culverts
- All metal pipes
- All plastic pipes
- Metal tanks
- Non-metal tanks
- Lake homes and cottages
- Farms, agriculture
- Commercial, industrial
- Construction sites
- Camps
- Mining
Paladin®/EXT Series Sample Applications

Pipe Freeze Protection

Unheated Structure Applications: Drains and Water Supply

Freeze Protecting Pumpout Chamber and Sewage Forced Main

Freeze Protecting a Culvert or Drain

Paladin (Short & Medium Length Metal & Non-metal Pipes, Roof & Gutter) Product Code

Example: PLDI – 100 – GFC

Product | PLDI | 120 volt Paladin 5 watt, TPR heater jacket
PLD12 | 240 volt Paladin 5 watt, TPR heater jacket

Cord-Set Type | GFC | Ground fault protected
CS | Cord connected (No GFCI)

Length of Heater
10 to 120 feet | 120 volt systems
10 to 240 feet | 240 volt systems

EXT Series (Long Length Metal & Non-metal Pipes) Product Code

Example: EXT120 – 5R – 100 – GFC or CS

Product | EXT External
Voltage | 120 | 240
Wattage | 5R | 5 watt, TPR heater jacket
3T | 3 watt, Tefzel heater jacket

Cord-Set Type | GFC | Ground Fault Protected
| CS (No GFCI) | Cord Connected

Length of Heater
Max length
3 watt / 120 volt | 270 ft
5 watt / 120 volt | 230 ft
3 watt / 240 volt | 550 ft
5 watt / 240 volt | 460 ft

Max length
120 ft
230 ft
660 ft
540 ft

Note: “CS” systems must provide 20 Amp circuits for circuit lengths greater than 550 ft for 3 watt EXT Series and 460 ft for 5 watt EXT Series.