

## Freeze Protection for Pipes

A simple and easy way to protect pipe systems from freezing

### Application

Pipe systems designed to transport water or other liquids are often exposed to cold weather. They may be directly exposed to outdoor conditions, or may be in an unheated area of a building. If the ambient conditions are cold enough, the contents of the pipes may thicken and resist flow (viscosity) or even worse they may freeze and expand causing pipes to burst. The damage, repair cost, and downtime can be extensive and costly.

### Solution

Self-Regulating heating cable is the perfect solution to protect pipes from freezing. The cable is semi-flexible and can be straight traced or spiral wrapped around pipe for long runs or long lengths on a single circuit. Self-regulating cable is specifically designed for freeze protection because the temperature never rises to a level that would damage pipes or a heated system. It will automatically adjust its heat output based upon ambient conditions and never exceed a specific rated temperature, most commonly 149°F (65°C). Higher temperature self-regulating heating cable can reach 248°F (120°C). Self-regulating cable is grounded for safe worry free operation. A protective outer shell resists moisture and chemicals for worry free use in outdoor and wash down environments.

To improve thermal efficiency, the cable is insulated with BriskHeat's Insul-Lock®DS flexible closed-cell foam pipe insulation. The insulation is offered in a variety of diameters to fit any pipe and tube size up to 4" (100 mm). It is suitable for outdoor use and has an R-value of 3 to keep the heat on the pipe even in extreme cold conditions. Insul-Lock DS is easy to install and the peel-and-stick flap ensures the insulation remains installed for extended service periods.

### Connection Kits and Optional Accessories

- Input Power Connection, GFCI, Splice connection, End termination kits available for complete installations
- PSAT36A Fiberglass adhesive tape for standard installations
- AAT2180 Aluminum adhesive tape for heavy duty installations
- INSUL-LOCK DS Foam insulation improves thermal efficiency
- TD101N, TB250N, TC4X temperature controllers - Used when ambient temperature sensing and pipe temperature sensing is necessary

### Additional Uses

Self-regulating heating cable is used to protect large tanks, vessels, and even small household pipes from freezing conditions. Pre-terminated SpeedTrace self-regulating heating cable is available for fast, easy, and convenient plug-and-play installations. Available in up to 150ft (45.7m) lengths.

For examples of customers, see Customer Reference section (page A) in the *Application Book*.



#### Industries

- Adhesives
- Aerospace
- Agriculture
- Biodiesel
- Chemical
- Composites
- Concrete/Asphalt
- Food & Beverage
- General Manufacturing
- Heavy Industry
- Home & Office
- Oil & Gas
- Petrochemical
- Plastics
- Pulp & Paper
- Power Generation
- Transportation
- Waste Water Treatment

#### Types of Users

- Facilities Maintenance Personnel
- Process Engineers
- Production Managers