

PlugIn Self-limiting cable system

PlugIn self-limiting cable system provides a simple to install solution for internal and external pipes of metallic or non-metallic construction that require protection from freezing conditions. The cables are particularly suited to being placed within water pipes, such as condensate pipes, but are also suitable for installing on the outside of water pipes. PlugIn self-limiting cable is also approved for use within water pipes to prevent them from freezing. It is a quick to install product and, as the cable is self-limiting, it cannot overheat even if the cables are repeatedly crossed over one another. PlugIn self-limiting cable is not suitable for pipes containing combustible liquids and you should always insulate your pipe after installing any PlugIn product. The cable is rated at 11 Watts per meter at 5 °C, and is economical to run. In systems where the cable is only switched on during the winter months the system

Data

Type:	PlugIn
• Power:	11 W/m@5 °C
• Outer sheath:	Adflex
• Coldtail:	1.5 m Neoprene rubber (H05RN-F 3G1)
• Max. Water pressure:	10 bar
• Min. Bending radius:	35 mm. Cable must only be bent over the flat side.
• Maks. Operating temperature:	65 C°



Important Information

Please read prior to installation

- Do not install the cable in ambient temperatures beneath 5 °C or in any cases where the temperature of the pipe is expected to exceed 65 °C. PlugIn should not be used on pipes such as steam lines as the temperature will exceed 65°C as this will damage the heating cable.
- The heating cables must not be shortened or altered, this will void the warranty.
- Always ensure the pipe to be protected is free from sharp edges, the heating cable should always be kept a minimum of 30mm away from any combustible materials.
- If the pipe is plastic, aluminium tape must be applied to the pipe prior to installing the cable to allow even heat distribution with the exception of pipes where the cable is mounted internally.
- If the cable is to be installed within a pipe a suitable watertight sealing unit must be installed where the cable enters the pipe and these can supply these if required. Please note, the cold-tail connection, **MUST NOT** be installed within the pipe itself.
- If installing within a condensate pipe the cable is inserted into the condensate pipe through a suitable opening and runs down the inside the pipe to the base, where any excess cable can be simply run back up the outside of the pipe.
- If installed externally, for pipes up to 22mm in diameter the cable can be run along the base of the pipe or spiralled around. For larger pipes the cable must be spiralled around to provide even heat coverage.
- Secure the cable along the underside of the pipe using aluminium tape or cable ties at approximately 500mm intervals.
- All pipes should be fully lagged using minimum of 13mm non-combustible insulation.
- Ensure the exterior of the pipe insulation is suitably marked advising that the pipe is protected using 230V electric heating cables.
- Heating cables must be RCD protected and be powered by a suitably rated fused spur. Ensure that a suitably rated electrical receptacle is located close enough to the heating cable for ease of installation. A drip loop should be installed to eliminate the risk of water ingress to the receptacle.
- Care must be taken to protect the system from physical abuse. (e.g. chewing by animals, damage from tools used to move ice/snow)
- The final electrical connection of the system should only be carried out by a competent and suitably qualified electrician. The PlugIn heater must be powered by a suitably rated and RCD protected supply. We recommend that the power cable to the PlugIn unit is passed into the property before making the electrical connections. In circumstances where the unit has to be supplied via an external source this source and all connections must be suitably IP rated.
- **WARNING LABELS MUST BE AFFIXED TO THE OUTSIDE OF THE INSULATION WARNING, NOTING THAT AN ELECTRIC ELEMENT IS PRESENT. WHERE CABLES ARE INSTALLED INTERNALLY WITHIN PIPES ADDITIONAL LABELS MUST BE INSTALLED ON THE PIPE BENEATH THE INSULATION.**
- All self-limiting cables degrade with use which leads to their maximum attainable temperature falling over time. PlugIn Self Limiting cable has an expected useful life of at least 10 years under normal circumstances.