### **FIXING THE CABLE TO PIPE**

Fix the heating cable to the pipe approx. every 20cm using good quality electrical insulating tape. BN Thermic's PF-T is recommended. Do not use any other method. After fastening the cable in this way, it is recommended to seal up the whole length of cable with AL-50 Tape so that it adheres perfectly to the pipe surface. Sealing with AL-50 tape is highly recommended when protecting a pipe that may be empty.





## THERMAL INSULATION OF PIPE AND THE CABLE

Insulate the pipe and heating cable with thermal insulation of minimum and maximum thickness 10mm and 20mm respectively. The heating cable on the pipe may be insulated with mineral wool or any other fireproof type foam insulation. Insulation of the same thickness must be used along the whole length of pipe in order to preserve the same thermal conditions in all the sections of the heating cable including the thermostat section. Should the thermostat section be insulated more than the rest of the pipe, the pipe may freeze. Should the thermostat area have less insulation than the rest of the pipe, the pipe may over heat. Ask your supplier of heating insulation for information on its absorption, in respect of the environment and where the heating insulation should be used. Protect moisture-absorbent materials with an impermeable layer, otherwise their thermal insulation abilities may be reduced considerably. Always cover the thermostat with insulation.

#### **CONNECTION TO WIRING**

Make sure that a correctly installed socket is within reach of the supply lead of the heating cable. If an extension cable is used, it must be of an approved type. It is recommended to create a loop on the supply lead to prevent water condensing on the pipe and running down the supply lead to the socket.

#### WARRANTY

The PW heating cable supplier provides a 12 month warranty for the cable operation. The warranty period starts on the day of installation of the heating cable, confirmed in the Warranty Certificate (the installation shall not be carried out later than 6 months from the date of sale). To recognise any complaint as justified, it is necessary all installation procedures specified in this Manual have been observed. Then submit the completed Warranty Certificate below along with proof of purchase.

	instal	

Print name:

Signature:

# **User Instructions**

# PW HEATING CABLE

Automatic heating cable with thermostatic control



BN Thermic Limited 34 Stephenson Way, Three Bridges, Crawley, West Sussex RH10 1TN. **t:** +44 (0)1293 547361

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BNTM PW02

#### FEATURES

- Frost protection for pipes.
- · Built-in thermostat.
- Standard UK plug with 1.5m cold lead.
- Protection rating IP66.
- The heating cable is maintenance free.
- The PW heating cable may only be used in accordance with the enclosed user instructions and for the purposes stated there-in.

#### RECOMMENDATIONS

- It is recommended to disconnect the heating cable from the supply during the summer. The heating cable and supply lead should then be checked for mechanical damage before being reconnected in winter.
- The heating cable must not touch, cross or overlap, as this could result in the heating cable overheating.
- Never cut or shorten the heating cable.
- Never connect the rolled-up heating cable to the power supply.
- Do not install the PW cable on pipes heated to more than 66°C e.g. steam piping.
- Allow a minimum of 13mm from all inflammable materials, including inflammable insulations.
- Never use thermal insulation thicker than 20mm. Any insulation used should be fire-proof.
- Always take measures to prevent physical damage to the cable. The cable may be damaged by sharp objects or edges.
- The cold lead connection must not be put under stress.
- The PW cable is not designed for immersion in liquids.
- The supply lead may not be changed. If damaged the cable should be replaced.
- The cable should be disconnected from the supply before any work is carried out.
- If there is any doubt concerning the suitability of a specific pipe, please contact your pipe supplier.

#### Caution:

Do not use in areas subject to high mechanical loads or impact. Not UV protected.

# **SELECTING THE CORRECT CABLE**

Selecting the correct cable size									
Thickness	Min. surrounding temperature (°C)	Pipe diameter (mm)							
of insulation (mm)		15	20	25	32	40	50		
		Wattage of heating cable per linear meter (W)							
10	-15	7	9	11	13	15	19		
10	-25	11	14	16	19	23	28		
20	-15	5	6	7	8	9	11		
	-25	7	9	10	12	14	16		

#### TECHNICAL DATA

Part Number	PW-01	PW-02	PW-03	PW-04	PW-06	PW-10	PW-14	PW-21	PW-30	PW-42
Length (m)	1	2	3	4	6	10	14	21	30	42
Power (W)	12	25	36	48	72	136	152	281	337	490
Switch Temp.	+ 3°C									
Supply	230V +/- 10% 50HZ									
Protection Rating	IP 66									
Max Operating Temp.	+ 70°C									
Sensor	Bimetallic thermostat									
Supply Lead (m)	1.5m supplied with 3pin UK fused plug									

#### THERMOSTAT FUNCTION

The PW automatic heating cable protects pipes from freezing. It includes a bimetallic thermostat which switches the heating cable on when the pipe temperature drops close to 0°C. Correctly installed cable works automatically and protects pipes from freezing without any additional control and with minimum power consumption.

#### PREPARATION OF PIPE

Before installing the PW heating cable make sure that the pipe area and its surroundings are free, of sharp edges and flammables to reduce the risk of damage to the cable and surrounding areas. It is recommended to degrease the pipe, e.g. with white spirit, for better adhesiveness of adhesive tape. If the PW automatic heating cable is used to protect plastic pipe, it is recommended to cover the plastic piping with AL-50 aluminium tape before installing the PW cable. The aluminium tape ensures better heat transmission and even distribution along the entire pipe perimeter.



# **CABLE INSTALLATION**

Spread the heating cable along the pipe, or (if it is longer) wind it around the pipe in an evenly spaced helix. If installed on plastic pipe, have the cable sufficiently loose to prevent its tensile stress in thermal dilatation.

