

Heat Mat

Ice & Snow Systems

Heat Mat PipeGuard Heating Cable System

Heat Mat PipeGuard provides a simple-to-install solution for internal and external pipes of metallic or non-metallic construction that require protection from freezing conditions. Heat Mat PipeGuard is an integrated unit with a built in thermal sensor. It can be installed onto pipe of all material including copper and plastic. The cables have an output of 14W per metre. The integrated temperature sensor will automatically detect changes in the ambient temperature and start to warm up when required, ensuring the pipe remains ice free whilst using a low amount of electricity. **You should always insulate your pipe after installing Heat Mat PipeGuard.**

Product Code	Length	Wattage @230V	Amp Rating	Suitable for 10-22mm pipes of the following lengths	Suitable for 23-38mm pipes of the following lengths
ACC-FRO-0019	1.4m	19W	0.08	0.7m - 1.4m	0.7m - 1.2m
ACC-FRO-0026	2.0m	26W	0.11	1.5m - 2.0m	1.3m - 1.6m
ACC-FRO-0039	3.0m	39W	0.17	2.1m - 3.0m	1.7m - 2.1m
ACC-FRO-0053	4.0m	53W	0.23	3.1m - 4.0m	2.2m - 3.4m
ACC-FRO-0065	5.0m	65W	0.28	4.1m - 5.0m	3.5m - 4.0m
ACC-FRO-0107	8.0m	107W	0.46	5.1m - 8.0m	4.1m - 7.2m
ACC-FRO-0140	10.5m	140W	0.61	8.1m - 10.5m	7.3m - 9.4m
ACC-FRO-0185	14.0m	185W	0.80	10.6m - 14.0m	9.5m - 12.6m
ACC-FRO-0246	18.5m	246W	1.07	14.1m - 18.5m	12.7m - 16.7m
ACC-FRO-0300	22.5m	300W	1.30	18.6m - 22.5m	16.8m - 20.2m
ACC-FRO-0474	38.0m	474W	2.06	22.6m - 38.0m	20.3m - 34.2m
ACC-FRO-0567	45.0m	567W	2.47	38.1m - 45.0m	34.3m - 40.5m

Place the sensor on the underside of the pipe, secure using either cable ties or aluminium tape. The heating cable can then be fixed to the underside of the pipe (Fig 1.) and returned along the top (Fig 2) or spiralled around the full length of the pipe (Fig 3). For non-metallic pipes the pipe should be wrapped in aluminium tape.



Fig 1.

Fig 2.

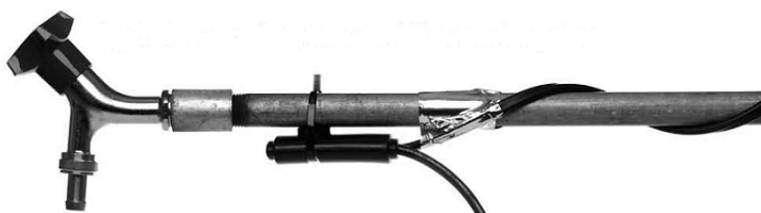


Fig 3.

A competent and suitably qualified electrician should only carry out the final electrical connection of the system. The pipe heater must be powered by a suitably rated and RCD protected supply. We recommend that the power cable to the 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.

Please call Heat Mat Technical Support on 01444 247020 if you have any questions or queries.

Important Information
Please read prior to installation.

- Power must not be supplied to the heating cable while it is coiled; doing so will cause the cable to overheat causing irreversible damage.
- Do not install the cable in ambient temperatures beneath 5 °C or where the temperature of the pipe is expected to exceed 65 °C. PipeGuard 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.
- The cables should never be crossed or allowed to touch each other, this will cause overheating and, once damaged the system cannot be repaired.
- 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.
- **Heat Mat PipeGuard is not suitable for pipes containing combustible liquids.**
- Secure the cable along the underside of the pipe using aluminium tape or cable ties at approximately 500mm intervals.
- The thermostatic sensor should be securely fixed to the coldest section of the pipe to ensure the system runs efficiently.
- All pipes should be fully lagged using a maximum of 13mm non-combustible insulation. To ensure an accurate temperature reading the thermostatic unit should also be covered with insulation.
- Ensure the exterior of the pipe insulation is suitably marked advising that the pipe is protected using 230v electric heating.
- The heating cable must never be immersed in liquid.
- Heating cables must be RCD protected and a suitably rated fused spur used. 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 both the receptacle and thermostatic unit.
- Care must be taken to protect the system from physical abuse (e.g. chewing by animals, damage from tools used to move ice/snow)
- 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.
- **WARNING LABELS MUST BE AFFIXED TO THE OUTSIDE OF THE INSULATION WARNING, NOTING THAT AN ELECTRIC ELEMENT IS PRESENT.**
- Once you have selected your cable a quick way to install it on the pipe is as follows:
 - Affix the thermostat end of the cable to the pipe with zip-ties.
 - Roll out the cable and affix the return end of the heater (again with zip-ties) to the far end of the pipe you are protecting.
 - Take the halfway point of the heating cable and spiral it around the pipe until taught, then zip-tie in place.
 - Secure the cable at regular intervals along the pipe with further zip-ties and cover with insulation.



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02000043 PipeGuard
 Standard

Technical Data	
Applications:	Frost protection of metallic and non-metallic water pipes
Voltage:	230V ac
Output per metre:	Maximum 14 Watts
Frost protection:	Effective at temperatures to minus 40°C
Temperature range:	+3°C to +13°C
Max surface temp of cable:	70°C
Sensor:	Integrated thermal sensor
Insulation:	Expanded low-density polyethylene
Protection:	Braided copper screen
Cable flexibility:	Minimum allowed cable radius is 30mm
Approvals/Rating:	CE marked/IPX7
Warranty:	10 Years