



# K12C

## HEATING CABLES WITH CONSTANT ANTIFREEZE POWER FOR PIPES

- Suitable for protection against freezing pipes for misting, irrigation and fire prevention systems
- Constant power delivered ~10 W/m



CODE	Cable length	Minimum installation room temperature	Maximum room temperature powered	Maximum length of the heating circuit from the supply point
K12C25	25 m	-20 °C	40 °C	160 m
K12C50	50 m	-20 °C	40 °C	160 m
K12C75	75 m	-20 °C	40 °C	160 m

### HOMOLOGATION AND STANDARDS

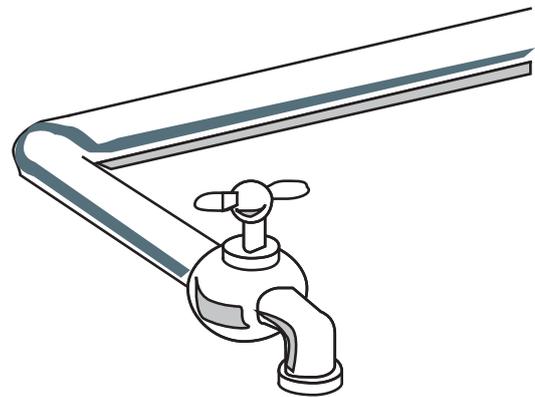
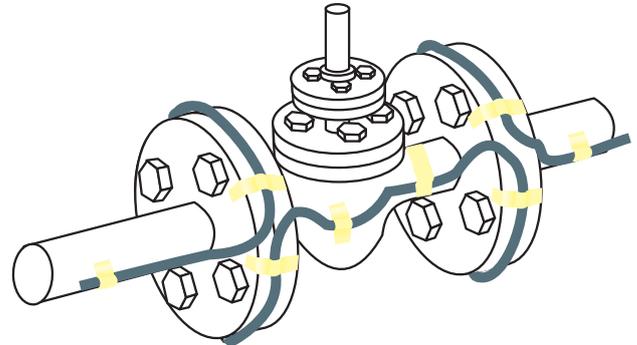


### OPERATION

- The heating cables consist of a coil-wound resistance on two conductors. The resistance is in contact with the conductors through splicing points at constant intervals; the energy to heat the resistance is drawn at the splicing points;
- The total power of the cable is determined by a combination of temperature, length of the heating circuit and supply voltage;
- They require control thermostats to be used to function.

**INSTALLATION**

- The cable can only be cut at the indicated splicing points;
- Minimum bending radius 20 mm;
- The length of the cable varies according to the diameter of the pipe;
- The cable must be secured along the pipe with the relevant fixing tape code K50 for steel pipes or code K50AL for plastic pipes;
- In the case of large pipes, the strips may need to be wound so as to ensure adequate heat;
- The conductors have cold tails and can be connected directly to the thermostat or to the junction box;
- At the end of the cable, the 2 conductors must be kept insulated and must not come into contact with each other; use the kit to seal the terminals for cables with constant power (for 1 cable) code KIT1A;
- It is advisable to apply an insulating coating over the heating cable for a correct installation;
- Refer to the table to check whether the cables must be wound in a spiral with an increase in the required length.



Ø PIPE		Minimum room temperature with 19 mm coating on the pipe	
mm	inches	-10°C	-20°C
19	3/4	1:1	1:1
25	1	1:1	1:1
38	1 1/2	1:1	1:1
50	2	1:1	1:1
63	2 1/2	1:1	1.4:1
75	3	1:1	1.6:1
100	4	1:1	2:1

The table shows the ratio between the length of the heating cable with that of the pipe, depending on the outside temperature and the pipe Ø. The values shown are based on the use of an insulating coating with a thickness of 19 mm with a coefficient of thermal conductivity of 0.034 W/m at 0°C.

## ELECTRICAL FEATURES

Power supply	230V-50Hz
Constant power delivered	~10W/m

## GENERAL FEATURES

Cable composition	<ul style="list-style-type: none"> <li>■ 2 conductors x 1.5 mm<sup>2</sup></li> <li>■ PVC sheath</li> <li>■ Nickel-chromium heating element</li> <li>■ Internal splicing point</li> <li>■ Silicone insulation</li> </ul>						
Reel length	<table> <tr> <td>K12C25</td> <td>25 m</td> </tr> <tr> <td>K12C50</td> <td>50 m</td> </tr> <tr> <td>K12C75</td> <td>75 m</td> </tr> </table>	K12C25	25 m	K12C50	50 m	K12C75	75 m
K12C25	25 m						
K12C50	50 m						
K12C75	75 m						
Maximum room temperature powered	40 °C						
Minimum installation room temperature	-20 °C						
Minimum storage room temperature	-20 ÷ -25°C						
Maximum length of the heating circuit from the supply point	160 m						

## ACCESSORIES



### KBE3A

#### JUNCTION BOX IN INSULATING MATERIAL

- Protection rating IP54 with 5 4mm<sup>2</sup> terminals;
- 7 PG16 threaded holes closed by a breakable diaphragm;
- Maximum temperature withstood is 80°C.



### KSUPP-A

#### SUPPORT FOOT FOR THE KBE3A JUNCTION BOX

- It allows the cable to pass through the protective coating of the pipe and to enter directly into the junction box;
- It consists of a Ø 22 L 80 mm pipe with a welded 15x15x60 mm bracket and two clamps;
- The pipe is in cadmium-plated steel with a Pg16 thread.



### K50

#### FIBERGLASS FIXING TAPE FOR METAL PIPES

- It does not shrink and preserves its qualities over time;
- Suitable for temperatures between -30 and + 150°C;
- Roll length 55 m, width 19 mm, recommended fastening range 30 cm.



### K50AL

#### FIXING TAPE FOR PLASTIC PIPES

- It reflects the heat as it is coated with an aluminium film;
- Suitable for temperatures between -20 and + 130°C;
- Roll length 50 m, width 50 mm.



### KIT1A

#### KIT TO SEAL TERMINALS FOR CABLES WITH CONSTANT POWER (FOR 1 CABLE)

- To insulate the unpowered end and to prepare the powered end. Composition:
  - ◇ 1 heat-shrinkable sheath Ø 6 mm, length 50 mm (unpowered side);
  - ◇ 1 heat-shrinkable sheath Ø 12 mm, length 50 mm (powered side);
  - ◇ 1 PG16 union (junction box inlet);
  - ◇ 2 cable lugs (for the version with the copper sheath);
  - ◇ 1 tube of sealant to guarantee the grip of the sheath.



### KFAN

#### LABELS FOR THE PRESENCE OF A HEATING CABLE

- Indicate the presence of the heating cable under the insulating coating;
- To be applied on the coating at intervals of about 5 m; yellow.



### L03BM1A

#### ON/OFF THERMOSTAT - proportional - P.I.D. at 1 outlet;

- DIN rail mounting;
- 1 probe NTC10K.



**C03A3**

IMMERSION THERMOSTAT FOR PIPES

- Adjustment scale 10 - 90 °C;
- Connection to the pipe with sheath Gc 1/2 Pn 10 bar.