## www.elektra-heating.com







ANTIFROST PROTECTION SYSTEM





EASY INSTALLATION
RELIABILITY
COMFORT
SAFETY
COST-EFFICIENT

#### THE **ELEKTRA** SELFREGULATING HEATING CABLE

The ELEKTRA SelfTec system protects even during the most severe winters: gutters, down pipes, valves, compressed air or hydraulic cylinders other objects and which might be easily damaged by low temperatures.

No more fear of cracking pipes or valves, of cicles hanging from gutters, of choked down pipes, etc. Once you have the ELEKTRA SelfTec protection system, no more fear of water supply pipes or valves in non-heated rooms or outside of your house.

The ELEKTRA SelfTec system operates based on the selfregulation of heating cables.

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### **Description of the ELEKTRA SelfTec** antifrost system

Even in the most adverse winter weather, the ELEKTRA SelfTec system protects water supply lines, valves, gutters, cylinders and other objects which are likely to fail due to low temperatures. Once you have the ELEKTRA SelfTec system installed, you do not need to be afraid any more, whether the water supply lines or water valves both in the non-heated compartments of your house and outside get frozen.

#### Easy assembly

The ELEKTRA SelfTec system is designed to be laid directly on the protected part such as a pipe, a valve, or a gutter. You may install the SelfTec system on plastic products as well. Unlike other heating cables, the ELEKTRA SelfTec selfregulating cable stays flexible even in low temperatures and is easy to remove.

#### **Operational comfort**

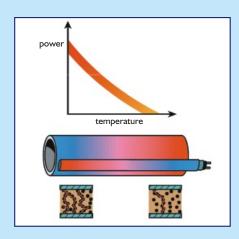
The ELEKTRA SelfTec system operates any time it is needed. You do not need to think any more of unexpected weather or air temperature changes. The system automatically adjusts the cable temperature so that the basic condition is met: the protected object must not be damaged by either the low air temperature, or by the high temperature of the heating cable.

#### Reliable design

The cable core is made of crosslinked polymer with an addition of carbon, and spread between two parallel copper conductors. The power is supplied from one end only. This design allows for a failure-free operation: in case of a local overheating, it is just that part which does not operate, and all of the remaining cable length keeps its properties. A tin-covered copper-wire braided screen protects the core without decreasing the cable flexibility. The external coat made of modified polyolefins largely improves the mechanical specification of the cable.

#### Selfregulation

The selfregulation of heating cables is their capability to vary the power output (heat) when exposed to the changing environment conditions (temperature). The diagram presents the relation between the cable temperature and the pipeline (water supply) temperature. After the system has been switched on, while the pipe is still cool (blue), the heating cable "warms up" and delivers more power (red). When the pipe is warmer, the cable operates with less power and "cools down".



The adjustment of the heat emitted by the cable is automatic. Thanks to that, the heating cable may be laid multi-layered, does not need to have a special thermal insulation, its position may be changed. The ELEKTRA SelfTec system is supplied from 230 V AC network. Both simulated operation and practical tests confirm the operational comfort and dependability.

The ELEKTRA SelfTec system keeps pipelines operable, protects buildings and people even at low winter temperatures.

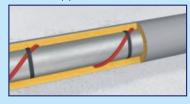
#### Installation of the selfregulating cable

Depending on the application, two installation methods are adopted:

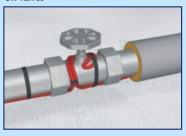
On pipelines - along the pipe



- round the pipe



#### On valves



#### In gutters and down pipes



Install the ELEKTRA SelfTec now, and you will forget your troubles with frozen pipelines and gutters in a cold winter.

# ELEKTRA SelfTec ANTIFROST PROTECTION SYSTEM

CABLE Type	HEATING CABLE LENGTH (m)	HEAT OUTPUT (W) (+5°C)
SelfTec 16/1	1	16
SelfTec 16/2	2	32
SelfTec 16/3	3	48
SelfTec 16/5	5	80
SelfTec 16/7	7	112
SelfTec 16/10	10	160
SelfTec 16/15	15	240
SelfTec 16/20	20	320
SelfTec 16/X	length acc. to order (up. to 80 m)	

#### **ELEKTRA**







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