



PRODUCT DATA SHEET
FV+RS....-FPC..
FLEXALEN 1000+ with
HC-...Frost protection cable

www.thermaflex.com
Flexalen

FLEXALEN 1000+ FPC

The multi functional system with high performance heating cable.

Application:

Buried water supply lines in laying conditions with risk of frost and/or non permanent service
Non buried water supply lines

Main advantages

- High flexibility at low temperatures < 0° C
- Single lines 25 – 110 mm
- Welded jointing system produces homogenous connections
- Complete heating cable system with easy connection

The type of the cable has been calculated assuming that we have a non buried pipe with the following parameters:

Laying condition: not buried
Surrounding: air
Temperature of surrounding: -20°C
Temperature of the Medium: 5°C
Alpha value surrounding: 24 W/m*K
Estimated wind speed: 20 km/h

ARTICLE CODES:

Product code	DN	Inch	Casing pipe O.D. [mm]	Carrier pipe O.D. [mm]	I.D. [mm]	Wall thickness [mm]	No. of medium pipes	Min. bending radius [m]	Coil* Length [m]	Weight [kg/m]	Used Cable
FV+RS63A25-FPC	20	¾	63	25	20,4	2,3	1	0,40	500	0,57	HC-TRACECO20
FV+RS75A32-FPC	25	1	75	32	26,0	3,0	1	0,40	500	0,82	HC-TRACECO20
FV+RS75A40-FPC	32	1¼	75	40	32,6	3,7	1	0,50	500	0,96	HC-TRACECO20
FV+RS90A50-FPC	40	1½	90	50	40,8	4,6	1	0,70	500	1,31	HC-TRACECO20
FV+RS125A63-FPC	50	2	125	63	51,4	5,8	1	0,80	300	2,53	HC-TRACECO20
FV+RS125A75-FPC	65	2½	125	75	61,2	6,9	1	0,80	300	2,99	HC-TRACECO20
FV+RS160A90-FPC	80	3	160	90	73,6	8,2	1	1,00	150	3,74	HC-TRACECO20
FV+R200A110-FPC	100	4	200	110	90,0	10	1	1,25	110	5,50	HC-TRACECO20

*mentioned length are only for deliveries. The useable heat circuit length has to be determined according the graph "Maximal heat circuit length

Please note:

If the expected parameters differ from the above mentioned ones (especially **lower** surrounding temperature or **higher** wind speed) a new calculation of the needed power of the cable has to be executed.

FLEXALEN HC – Heating cable

Type: Eltrace TRACECO®



Description

The TRACECO® line, of self-regulating heating tapes is used for protection of pipes and gutters against freezing. The heating power from the heating element increases or decreases and depends on the ambient or surface temperature. Variable power prevents any overheating. The self-limitation takes effect at every point along the heating tape.

RANGE OF APPLICATIONS

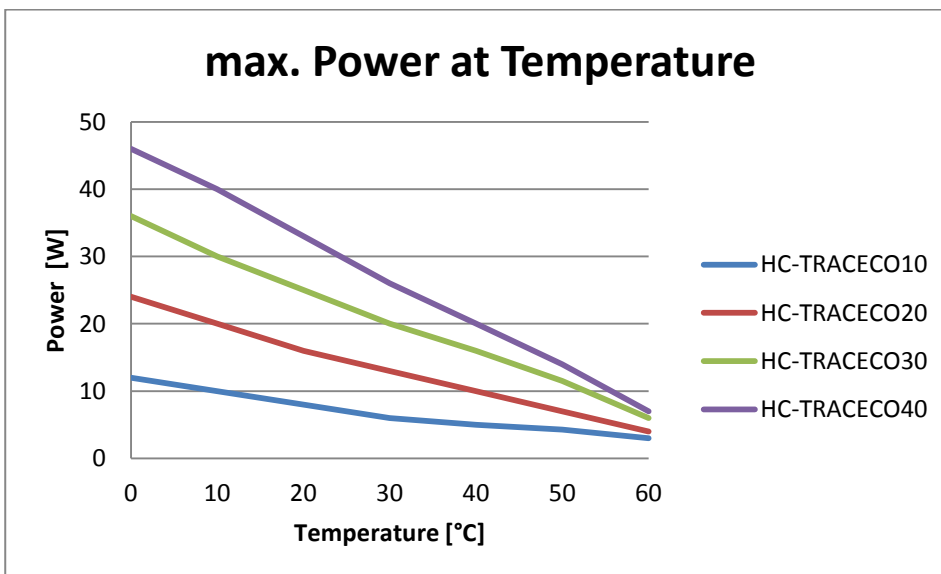
Protection against freezing in water pipes

TECHNICAL SPECIFICATION

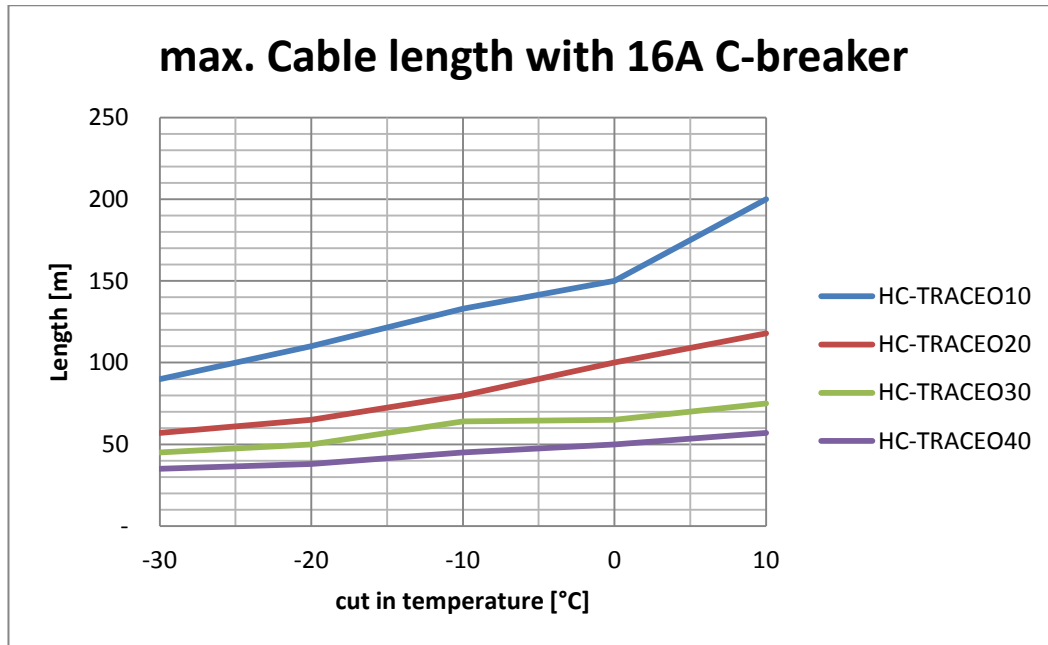
Product code	Voltage	Nominal power at 10°C	Minimum bending radius	Maximum temp. Energised	Maximum temp. deenergised	Cross section	Circuit Breaker Type C
HC-TRACECO10	230V/50Hz	10 W	20mm	65°C	80°C	4,9 x 13	16 A
HC-TRACECO20	230V/50Hz	20 W	20mm	65°C	80°C	4,9 x 13	16 A
HC-TRACECO30	230V/50Hz	30 W	20mm	65°C	80°C	5,3 x 15,6	16 A
HC-TRACECO40	230V/50Hz	40 W	20mm	65°C	80°C	5,3 x 15,6	16 A

POWER OUTPUT

Depending on the start up temperature of the heating process the following outputs of the cables occur:



MAXIMUM HEATING CIRCUIT LENGTH:



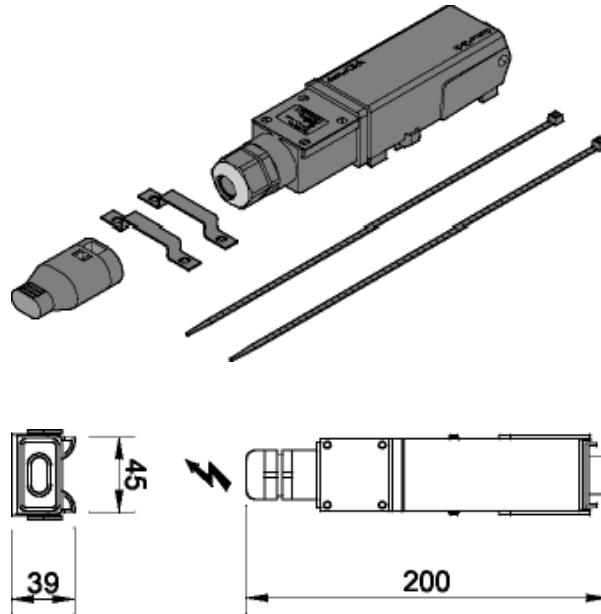
ACCESSORIES

- Eltrace heating tapes are supplied and connected between themselves with a minimum of manipulations. Only a knife is needed to strip the band ends. The different clicks are made up of only three parts.
- The mounting stages are visible and easily controllable. The upper and lower blades guarantee a sure contact.
- It takes only a few minutes to assemble the Click, for it involves only four stages:
 - Insert the band into the cover and the metal cone
 - Strip the band end.
 - Insert the heating tape into the Click.
 - Push the lever and shut

Reference	HC-TRACECO-10	HC-TRACECO-20	HC-TRACECO-30	HC-TRACECO-40
Thermostat	HC-ELTE-1	HC-ELTE-1	HC-ELTE-1	HC-ELTE-1
Termination and connection to el. Supply	HC-DHB-100	HC-DHB-100	HC-DHB-100	HC-DHB-100
Junction of two cables	HC-DHB-101	HC-DHB-101	HC-DHB-101	HC-DHB-101
T derivation	HC-DHB-103	HC-DHB-103	HC-DHB-103	HC-DHB-103
Aluminium tape	HC-E-LAA-50	HC-E-LAA-50	HC-E-LAA-50	HC-E-LAA-50
Termination (additional)	HC-DHB400	HC-DHB-400	HC-DHB-400	HC-DHB-400

HC-DHB-100

DomoClick® connection set with electrical supply for the junction between the heating tape and the supply cable.

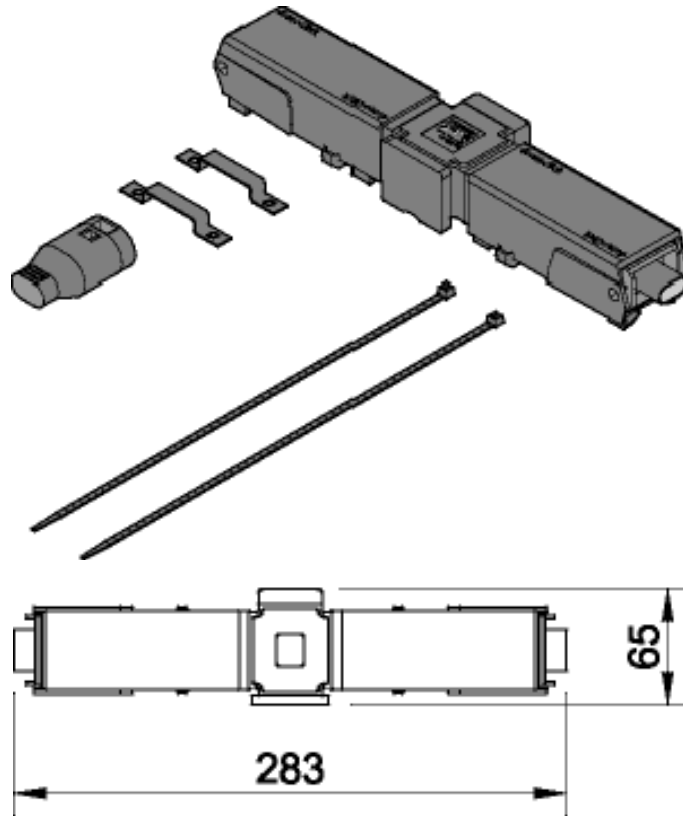


Package content:

- incorporated electric supply box
- 1 terminal
- 2 heat-resistant ligatures
- 2 stirrups for wall mounting
- self-adhesive labels “electric supply” and “terminal”

HC-DHB-101

DomoClick® junction set for the junction between two heating tapes (for example for extending a circuit).

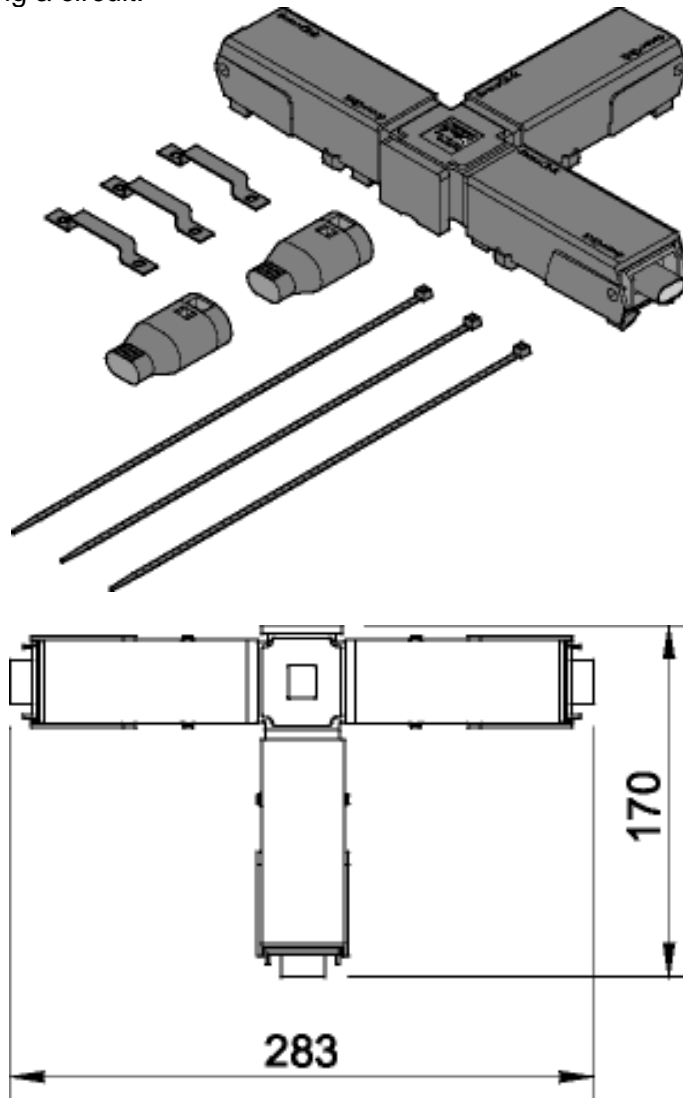


Package content:

- junction
- 1 terminal
- 2 heat-resistant ligatures
- 2 stirrups for wall mounting
- self-adhesive labels “electric supply” and “terminal”

HC-DHB-103

DomoClick® T derivation set for the junction between three heating tapes (for example for a T derivation or extending a circuit).



Package content:

- T derivation
- 2 terminals
- 3 heat-resistant ligatures
- 3 stirrups for wall mounting
- self-adhesive labels “electric supply” and “terminal”

HC-E-LAA-50

DomoClick® heating tape terminal

Aluminium adhesive tape for fixing the heating tape (for example to plastic pipes)

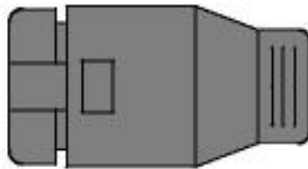


Package content:

- Aluminium adhesive tape 50 m, 50 mm

HC-DHB-400

DomoClick® heating tape terminal

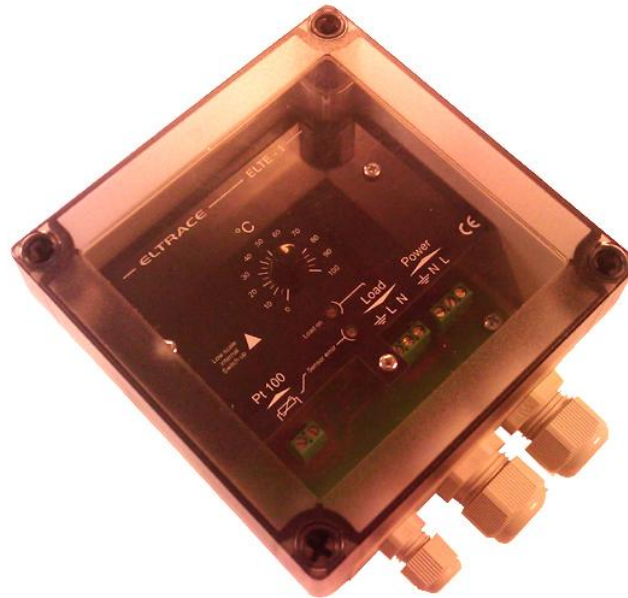


Package content:

- Terminal
- "Terminal" self-adhesive label

HC-ELTE-1

Electronic surface thermostat



Casing: polycarbonate with transparent cover.

Size: 130 x 130 x 75 mm.

Weight: 520 g.

Protection type: IP 66.

Wiring: 2 x PG 16./ 1 x PG 7.

Power supply: 230 V+/-10%, 50 / 60 Hz.

Breaking capacity: 15 A / 230V.

Lighted indicators: "green" ON heating / "red" probe fault.

Ambient temperature: -30 to +80°C.

Measurement input: PT 100 DIN, 2 or 3 conductors.

Electrical connection by stuffing box and terminal block.

Type: ELTE-1: Regulation range: 0 to +100°C

Package content:

- Thermostat
- Surface temperature sensor

INSTALLATION PRESCRIPTIONS

- The installation of bands, connections to DomoClick® connectors to connection boxes will be carried out according to the rules of the trade.
- Before going ahead with work on electric tracers, care will be taken to isolate them from the mains.
- The DomoClick® connection and junction techniques are approved if used together with self-adjusting Eltrace heating tapes.
- Eltrace guarantees correct working only in relation with the mentions heating tapes. Through the direct mounting onto the pipe, DomoClick® uses less heating tape.
- As a general rule, DomoClick® is fixed to the pipe with the supplied ligatures. DomoClick® can also be fixed to the wall with supplied stirrups.
- The supply cable is to be directly connected into the DomoClick®. Any exterior supply, junction or derivation box is thus avoided. In anti-frost installations for gutters, DomoClick® must not be installed in a gutter or on the roof, but in a sheltered position under the roof or eave
- DomoClick® can be installed directly on pipes with a service temperature of less than 70°C. Short periods at 80°C are admitted. Important : for admitted temperatures of heating tapes, refer to the technical data
- DomoClick® incorporated into pipe insulation. All supply points, junctions and terminals must remain accessible. Electrical supply points and terminals must be indicated with the supplied self-adhesive labels.

ELECTRICAL SUPPLY AND PROTECTION

The equipment must be installed in accordance with the assembly instructions and defined specifications made when the installation is designed. The installation must be in conformity with the valid national standards.

- Supply voltage : 230 V
- Electrical protection is ensured by C or D curb 30 mA or 300 mA circuit breakers. Their calibres must be defined according to the number of circuits they protect.
- Max. number of circuits per circuit breaker : 3
- Start of service.

Once the installation work of the heating cables have been finished, the insulation resistance of each circuit between the conductors and the metal frame or metal pipe has to be checked. (With a 500 VCC min. Mega ohm metre)



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WORKING AND MAINTAINANCE

Tests

The exposure temperature must not exceed the temperature specified in the technical documentation of the product. Exceeding these limits is to shorten the life of the band and run the risk of permanent damage to the heating tape.

Heat insulation must be complete and dry to maintain the right temperature.

Periodical inspection

Make periodical visual checks of the heating tape and heat insulation (if not installed in the ground) to ensure that there is no mechanical damage. Check the insulation resistance regularly. The frost-free installations must be checked each year before the winter. In the case of maintaining temperature, a check must be made twice yearly. Make a regular check of the trouble-free working of the protections and thermostats.

Repairing and maintaining the pipes

Disconnect the heating tape and protect it from any mechanical or heat damage during repair work on the pipes. Check the installation of the heating tape after repairing the pipe, and put the heat insulation back into place. Check the proper working of the electrical insulation.