FRENCH MANUFACTURER OF HEATING CABLES

PRODUCT CATALOG

TECHNITRACE

heating cables

www.heating-cables.com

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TechniTrace range of constant power/constant wattage heating cables

- The Modulotrace© concept
- Constant wattage heating cable PCBT
- Constant wattage heating cable PCMT
- Constant wattage heating cable PCHT

NOVATRACE© power management system

Accessories

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- Connection boxes
- Miscellaneous accessories
- Cable reel and drum unwinder DER/NOVA
- Digital insulation controller

TECHNI-TRACE software (SNO suite)

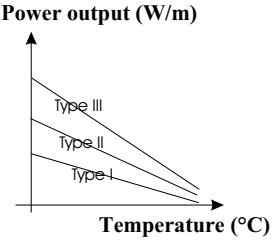
Factory acceptance testing and quality control

Operational principle

Parallel type self-regulating heating cable with variable power output

☒ Cut to length

☒ Supports branches

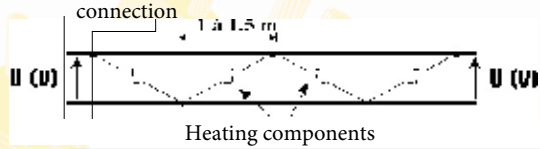


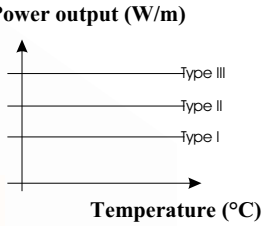
Parallel type self-regulating heating cable that adjusts its power output according to the local temperature of the cable.
Maximum maintaining temperature of 65°C/CABT and 120°C/CAHT

Parallel type heating cable with constant power output

☒ Cut to length

☒ Supports branches





Parallel type heating cable are composed of heating zones (approx. 1 meter long) that dissipate a constant heating power

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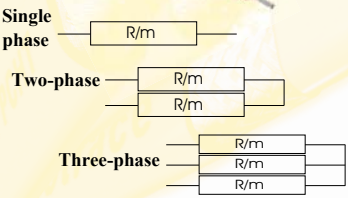
Series resistance heating cable with constant power output



Heating cable composed of one or several ohmic heating wires designed precisely (length, voltage, resistance) for specific usage. Cannot be cut to length and does not support branches.

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Technitrace range of self-regulating heating cables

Core	TA	EA	EP	EP	EP	Epf
Inner jacket	POLY	POLY	POLY	ETFE	FEP	FEP

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	CABT/FLEX	CABT	CABT ++	CAMT	CAMT ++	CAHT
Bus wire						
cross-section area	1,00 mm²	1,00 to 1,25 mm²	1,00 to 1,25 mm²	1,00 to 1,25 mm²	1,00 to 1,25 mm²	1,25 mm²
type	tinned or nickel-plated copper	nickel-plated copper	nickel-plated copper	nickel-plated copper	nickel-plated copper	nickel-plated copper
semi-conductor type	TA	EA	EP	EP	EP	
inner jacket						
material	polyolefine SEBS	polyolefin SEBS	polyolefin SEBS	Fluoropolymer ETFE	Fluoropolymer FEP	Fluoropolymer FEP
temperature class	125°C	125°C	125°C	150°C	200°C	200°C
minimum thickness	0,50 mm	0,50 mm	0,50 mm	0,50 mm	0,50 mm	0,50 mm
dielectric strength	15KV / mm	15KV / mm	15KV / mm	15KV / mm	15KV / mm	22 KV /mm
braid						
type	tinned copper	tinned copper or stainless steel	tinned copper or stainless steel	tinned copper or stainless steel	tinned copper or stainless steel	tinned copper or stainless steel
distinctive feature	16*0,15*8	16*0,15*8	16*0,15*8	16*0,15*8	16*0,15*8	16*0,15*8
outer jacket						
nature		POLY/TPR/Fluoro	Fluoro	Fluoropolymer ETFE	Fluoropolymer FEP	Fluoropolymer FEP
temperature strength		125/125/200°C	150°C	150°C	200°C	200°C
cable features						
Application range	For freeze protection only	Temperature Maintenance	Freeze protection of domestic hot water networks	Freeze protection of domestic hot water networks	Temperature Maintenance	Temperature Maintenance
Max. maintenance temperature	5°C	35°C	5°C	65°C	75°C	85°C
Max. exposure temp. (power on)	45°C	65°C	85°C	85°C	100°C	120°C
Max. exposure temp. (power off)	65°C	75°C	125°C	125°C	150°C	200°C
Minimum exposure temperature	-25°C	-25°C 110m	-25°C	-25°C	-25°C	-25°C
Maximum length	70m	110m	110m	110m	110m	110m
Starting current / Peak current	2 * RC (3,5*RC / 300ms)	2 * RC (3*RC / 300ms)	2 * RC (3*RC/300ms)	2 * RC (3*RC/ 300ms)	2 * RC (3*RC / 300ms)	2 * RC (3*RC/300ms)
Circuit breaker type	C or D curve	C or D curve	C or D curve	C or D curve	C or D curve	C or D curve
Maximum power output Available	15 W/m	30 W/m	30 W/m	40 W/m	30 W/m	30 W/m
power outputs	10,15 W/m	7,10,15,20,26,30 W/m	10,15,20,26,30 W/m	15 & 40 W/m	15 & 30 W/m	15 & 30 W/m
Voltage	230 V	115V or 230 V	115V or 230 V	115V or 230 V	115V or 230 V	115 V or 230 V
ATEX certification		CABT/EX xx,x C Gf				CAHT/EX xx,x C Gf
French CSTB agreement	NO	YES	YES	YES	YES	NO

Self-regulating heating cable **CABT FLEX**

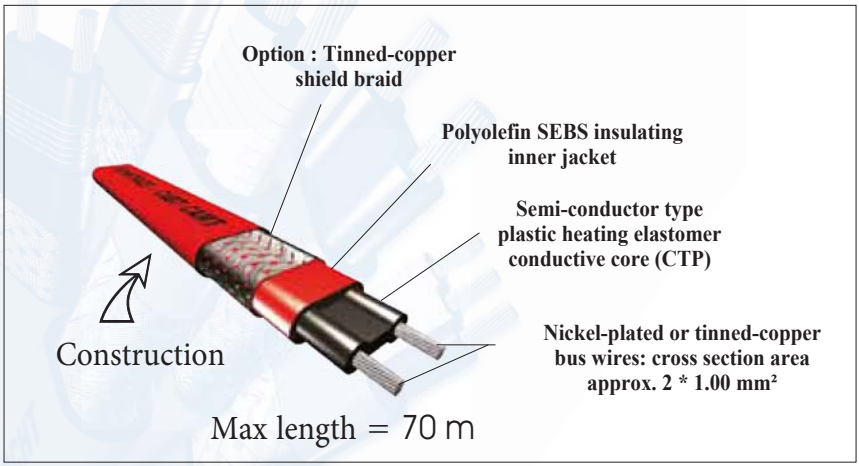
CE *FIQ 117*

Lower-temperature self-regulating heating cables CABT/FLEX consist of a semi-conductor plastic heating core that adjusts its linear heating power (W/m) according to the local temperature of the cable. This intrinsic feature may avoid the use of (auto)-regulation systems in some cases. They can be cut to length on site and are therefore implemented very easily.

Heating cables CABT/FLEX offer unmatched flexibility among self-regulating heating cables. They can be used in the most complex implementations and can be overlapped.

Application range

Reserved exclusivly for freeze protection of water pipe systems



Thermal power output determined in compliance to standard EN 62.395

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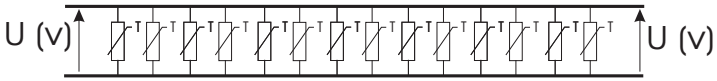
Benefits

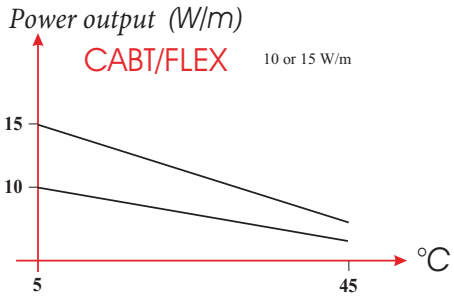
- cut to length on site
- allow connecting branches with power supplied from a single point
- semi-conductor plastic heating core that adjusts locally its heating power
- very good flexibilty enabling hydraulic parts tracing (valve, pump)
- cables can be overlapped during implementation (self-regulating feature)
- CABT/FLEX heating cables withstand 45°C power on / 65°C power off

Operational principle



The dissipated heating power at each point of the cable varies according to the temperature of the contact point of diffusion where the cable is positionned
Thermal power output determined by the manufacturer in compliance to standard EN62.395

Main features



Maximum exposure temperature power on: 45°C
Maximum exposure temperature power off: 65°C

Recommended maintenance temperature = freeze protection

Dissipation curves are theoretical and solely provided for information purposes

- Calibration: rated current * 3
- Only use C or D curve circuit-breaker
- Possible peak current : 3,5 * rated current /300ms
- Compulsory residual-current circuit breaker : 30 mA
- Maximal length = approx 70 m

CABT/FLEX 15.2 + C

- Tinned-copper braid (C)
- Voltage 1=110V - 2=230V
- Power in W/m at 5°C

Self-regulating heating cable CABT & CABT ++

CE *FIQ 117*

Low-temperature self-regulating heating cables CABT et CABT ++ consist of a semi-conductor plastic heating core that adjusts its linear heating power (W/m) according to the local temperature of the cable. This intrinsic feature can save using (auto)-regulation systems in some cases. They can be cut to length on site and are therefore implemented very easily.

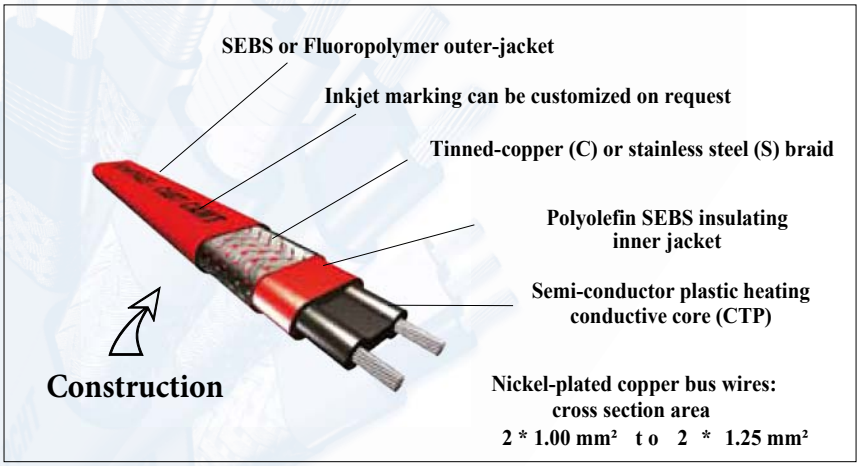
Application range

CABT

- freeze protection of cold water, ice water, greasy water pipe systems
- temperature maintenance of pipes & tanks up to 35°C

CABT ++

- freeze protection of domestic water supply networks (65°C & 85°C)



Thermal power output determined in compliance to standard EN 62.395

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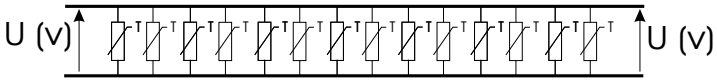
Benefits

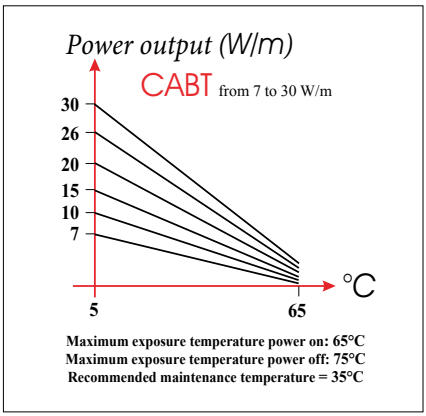
- **cut to length on site**
- **allow connecting branches with power supplied from a single point**
- **semi-conductor plastic heating core that adjusts locally its heating power**
- **good flexibilty enabling hydraulic parts tracing (valve, pump)**
- **cables can be overlapped during implementation (self-regulating feature)**
- **CABT heating cables withstand 65°C power on / 75°C power off**
- **CABT++ heating cables withstand 85°C power on / 125°C power off**

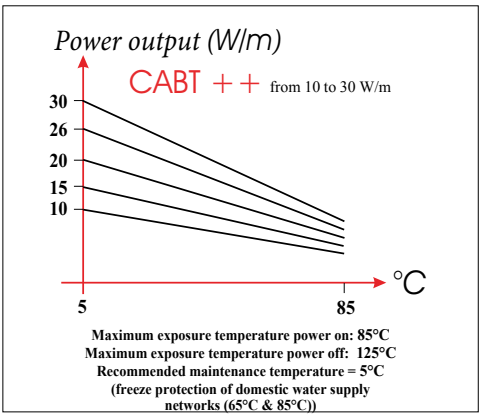
Operational principle



The dissipated heating power at each point of the cable varies according to the temperature of the contact point of diffusion where the cable is positionned
Thermal power output determined by the manufacturer in compliance to standard EN62.395

Main features





Dissipation curves are theoretical and solely provided for information purposes

- **calibration: rated current * 2**
- **use C or D curve circuit-breaker**
- **possible peak current : 3 * rated current /300ms**
- **compulsory residual-current circuit breaker : 30 mA**
- **maximal length = approx 110 m**

CABT 26.2 + C + Gf

- **Gf** — Fluoro-polymer outer jacket
- **C** — Tinned-copper (C) or stainless steel (S) braid
- **2** — Voltage 1=110V - 2=230V
- **26** — Power in W/m at 5°C

Self-regulating heating cables CAMT et CAMT ++

CE *FIQ 117*

Medium-temperature self-regulating heating cables CAMT et CAMT ++ consist of a semi-conductor plastic heating core that adjusts its linear heating power (W/m) according to the local temperature of the cable. This intrinsic feature can avoid using (auto)-regulation systems in some cases. They can be cut to length on site and are therefore implemented very easily.

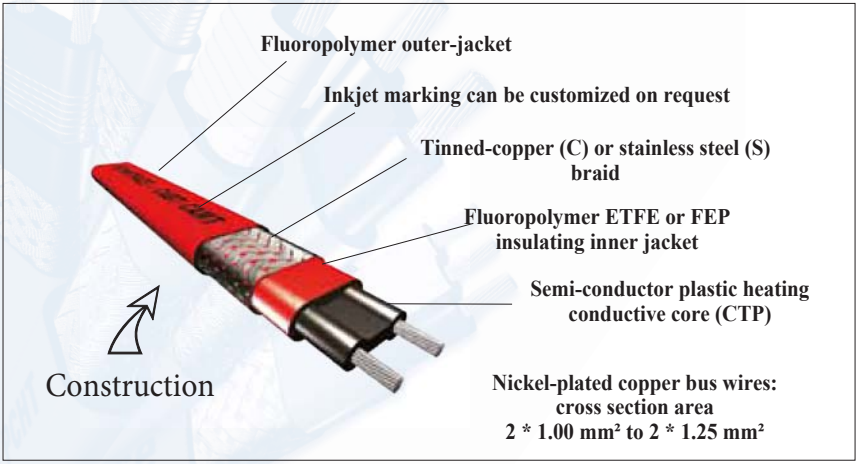
Application range

CAMT

- freeze protection of domestic hot water supply networks 45/50/55°C

CAMT ++

- freeze protection of domestic hot water supply networks 60/65°C
- temperature maintenance of pipes & tanks up to 75°C



Thermal power output determined in compliance to standard EN 62.395

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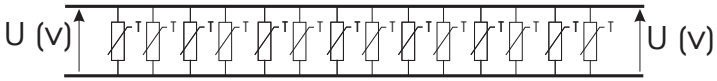
Benefits

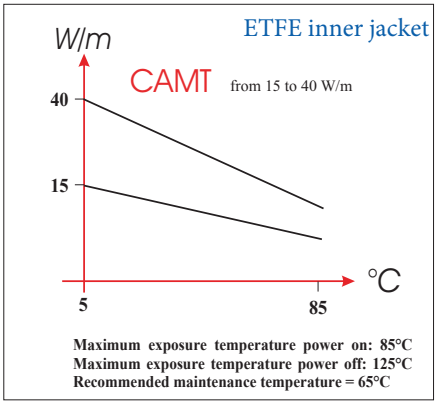
- cut to length on site
- allow connecting branches with power supplied from a single point
- semi-conductor plastic heating core that adjusts locally its heating power
- good flexibilty enabling hydraulic parts tracing (valve, pump)
- cables can be overlapped during implementation (self-regulating feature)
- CAMT heating cables withstand 85°C power on / 125°C power off
- CAMT++ heating cables withstand 100°C power on / 150°C power off

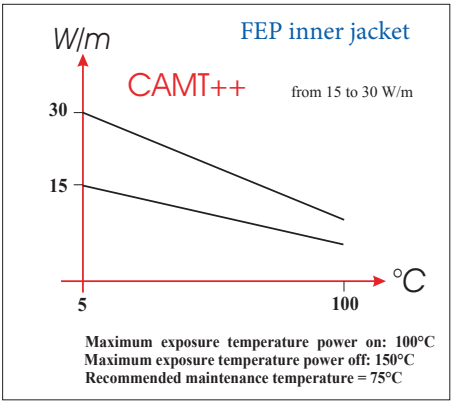
Operational principle



The dissipated heating power at each point of the cable varies according to the temperature of the contact point of diffusion where the cable is positionned
Thermal power output determined by the manufacturer in compliance to standard EN62.395

Main features





Dissipation curves are theoretical and solely provided for information purposes

- calibration: rated current * 2
- use C or D curve circuit-breaker
- possible peak current : 3 * rated current /300ms
- compulsory residual-current circuit breaker : 30 mA
- maximal length = approx 110 m

CAMT 30.2 + C + Gf

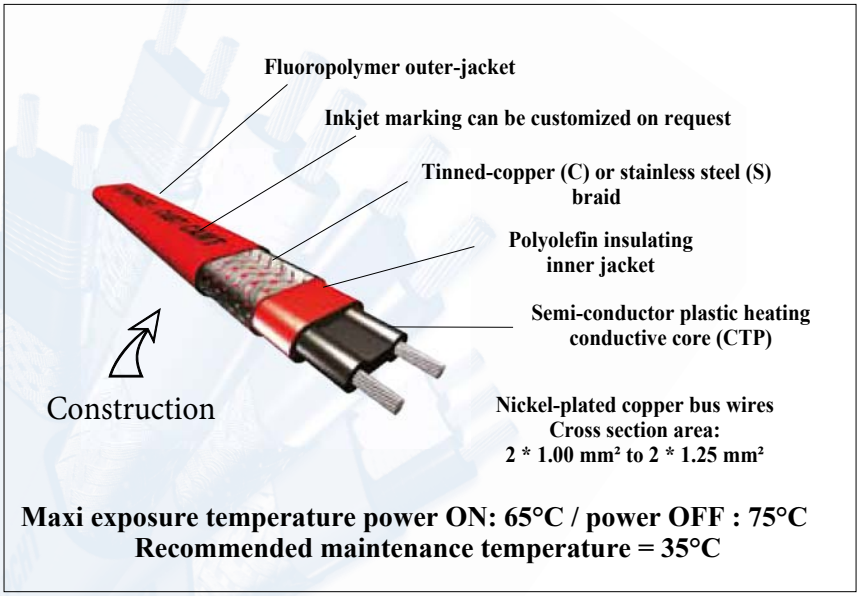
- Gf: Fluoro-polymer outer jacket
- C: Tinned-copper (C) or stainless steel (S) braid
- 2: Voltage 1=110V - 2=230V
- 30.2: Power in W/m at 5°C

Self-regulating heating cables *CABT/Ex*

FIQ 117

Low temperature self-regulating heating cables CABT/EX are only for temperature maintenance of pipes, tanks and other hydraulic units located in zones classified as explosion-hazardous areas (explosive atmosphere -ATEX). Cut to length on site, they are implemented very easily.

Power connection through a cabinet certified EEx e (increased safety) or EEx d (flameproof) in compliance to European standards EN 60079.14 / EN 60079-0/07/30.



Thermal power output determined in compliance to standard EN 62.395

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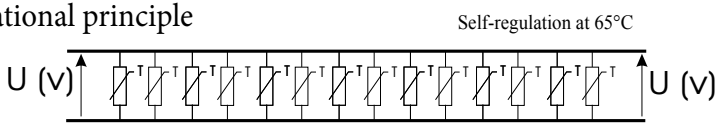
Benefits

Self-regulating heating cables CABT/Ex are cut on-site to the requested length. Due to their design, they ensure an intrinsic maximum temperature of 65°C without the use of regulation in some cases.

They also enable branches from a single point of electrical power supply (power along the whole cable length) : use a cabinet certified EEx e (increased safety) or EEx d (flameproof)

Operational principle



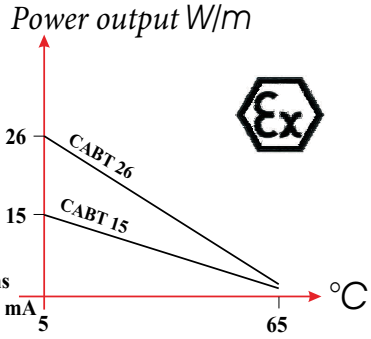
The dissipated heating power at each point of the cable varies according to the temperature of the contact point of diffusion where the cable is positionned
Thermal power output determined by the manufacturer in compliance to standard EN62.395

Main features

Maximum length : 110 m

Recommended maximum maintain temp: 35°C
Maximum exposure temp power on: 65°C
Maximum exposure temp power off : 75°C

Calibration : rated current * 2
Only use at least C curve circuit-breaker
*** Possible peak current : 3 * rated current /300ms**
Compulsory residual-current circuit breaker : 30 mA



Dissipation curves are theoretical and solely provided for information purposes

Product code

CABT/EX 26.2 + C + G f

- **Fluoro-polymer outer jacket**
- **Tinned-copper (C) or stainless steel (S) braid**
- **Voltage 1=110V - 2=230V**
- **Power in W/m at 5°C**
- **Cable intended for potentially explosive atmosphere**
  Insulating Polyolefin inner jacket

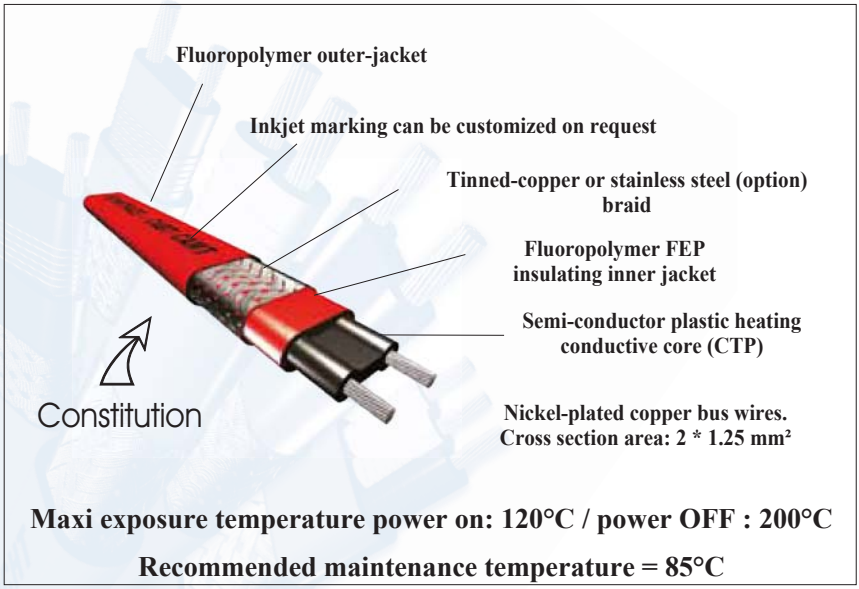



Self-regulating heating cables CAHT/Ex

FIQ 118

High-temperature self-regulating heating cables CAHT/Ex are dedicated for maintaining the temperature of pipes, tanks and other hydraulic units located in zones classified as explosion-hazardous areas (explosive atmospheres -ATEX). They can be cut to length on site and are therefore implemented very easily. Withstand steam sterilization rinsing.

Power connection through a cabinet certified EEx e (increased safety) or EEx d (flameproof) in compliance to European standards EN 60079.14 / EN 60079-0/07/30.



Maxi exposure temperature power on: 120°C / power OFF : 200°C

Recommended maintenance temperature = 85°C

Thermal power output determined in compliance to standard EN 62.395

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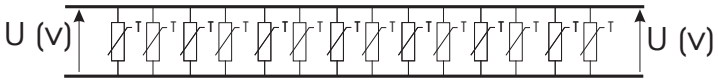
Benefits

Self-regulating heating cables CAHT/Ex are cut on-site to the requested length. Due to their design, they ensure an intrinsic maximum temperature of 120°C without the use of regulation in some cases.

They also enable branches from a single point of electrical power supply (power along the whole cable length) : use a cabinet certified EEx e (increased safety) or EEx d (flameproof)

Operational principle

Self-regulation at 120°C



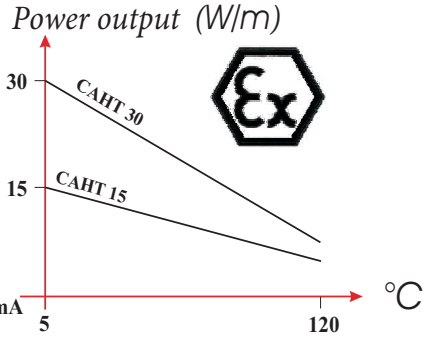
The dissipated heating power at each point of the cable varies according to the temperature of the contact point of diffusion where the cable is positionned Thermal power output determined by the manufacturer in compliance to standard EN62.395

Main features

Maximum length : 110 m

Recommended maximum maintain temp: 85°C
Maximum exposure temp power on: 120°C
Maximum exposure temp power off : 200°C

Calibration : 2 * rated current
Use at least C curve circuit-break
*** Possible peak current : 3 * rated current /300ms**
Compulsory residual-current circuit breaker : 30 mA



Dissipation curves are theoretical and solely provided for information purposes

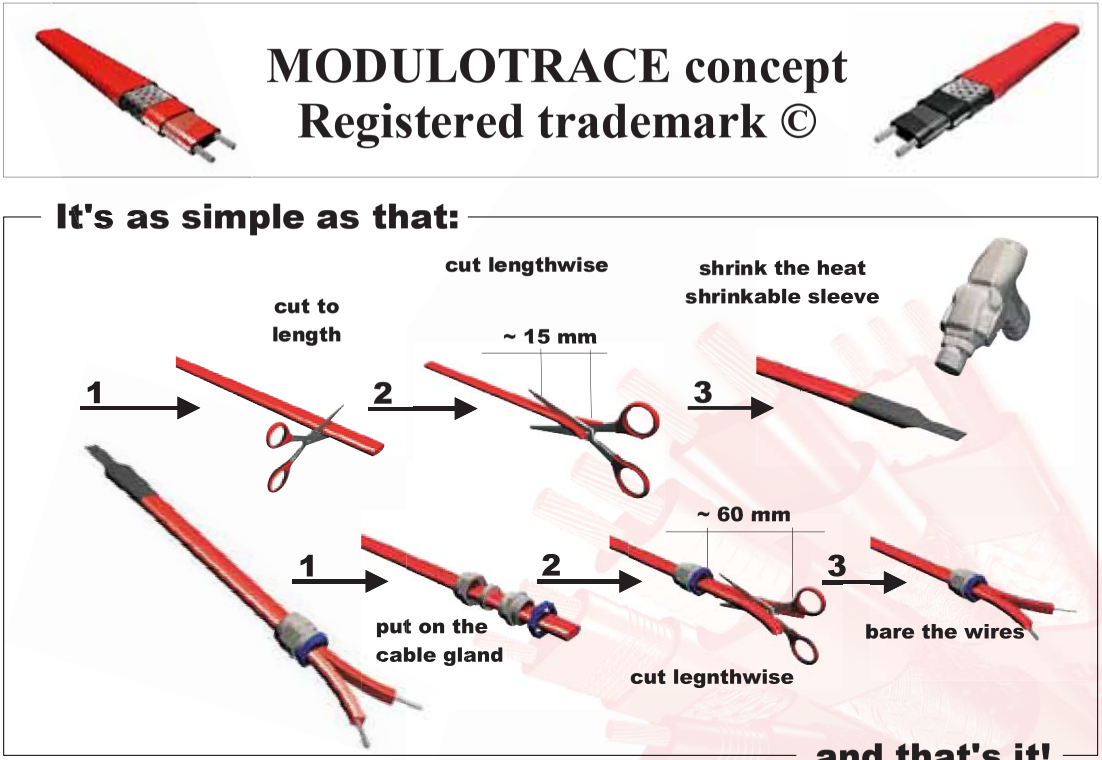
Product code CAHT/EX 30.2 + C + G f

- **CAHT/EX** — Cable intended for potentially explosive atmosphere, Insulating Fluoropolymer FEP inner jacket
- **30** — Power in W/m at 5°C
- **2** — Voltage 1=110V - 2=230V
- **C** — Tinned-copper (C) or stainless steel (S) braid
- **G** — Fluoropolymer FEP outer jacket
- **f** — Flat

Technitrace range of constant wattage heating cables

The Technitrace manufacturing process makes your work easier...

MODULOTRACE concept
Registered trademark ©



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TECHNITRACE heating cables

Constant wattage heating cable ***PCBT***

CE

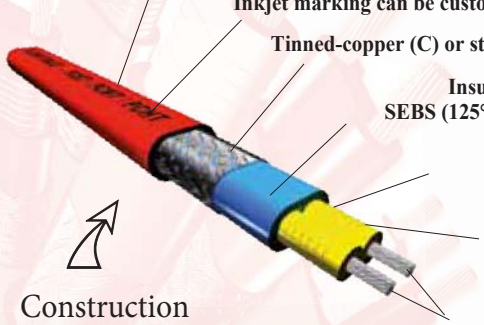
FIQ 114

PCBT/TPR - CG model

The PCBT type heating cables consist of heating zones that dissipate a constant heating power whatever the environment temperature.
Cut to length on site, they allow connecting branches from a single point of electrical power supply (power delivered along the whole cable length) and are mainly dedicated to the following surface heating applications:

Application range

- **freeze protection of water, domestic heating oil pipes (PCBT 13 W/m)**
- **freeze protection and snow clearing of waterspouts, gutters & roofs(PCBT 30 W/m)**
- **snow clearing of access ramps and outdoor stairs (PCBT 30 W/m)**
- **temperature maintenance of pipes, tanks and reservoirs...**



Construction

Max. exposure temp. power on: according to power output
Max. exposure temp. power off: 125°C
Recommended max. maintenance temperature = 35°C

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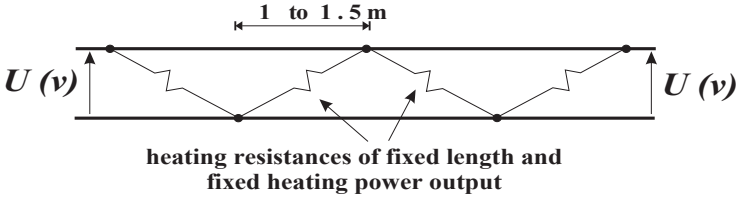
Benefits

- no thermal ageing of heating resistance wire (alloy)
- no peak inrush current enabling a good electrical protection
- build-in cold connection due to the manufacturing design
- cut to the requested length on-site (heating zones)
- allow connecting branches from a single point of electrical power supply (power delivered along the whole cable length)
- very easy to implement
- standard voltage 230 V and 400 V
- optional specific voltage 24V to 1500 V (contact us)

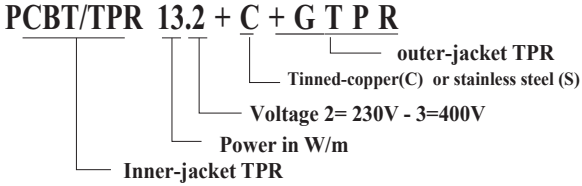
Operational principle



Main features

Thermal protection: rated current * 1.25
Compulsory residual-current circuit breaker: 30 mA
Maximum length : 110 m or 1500 W
Maximum exposure temperature power OFF: 125°C
Maximum exposure temperature power on: according to power output:
PCBT 13 W/m = 55°C, PCBT 20 W/m = 45°C, PCBT 30 W/m = 35°C

Product ID



Constant wattage heating cable **PCMT**

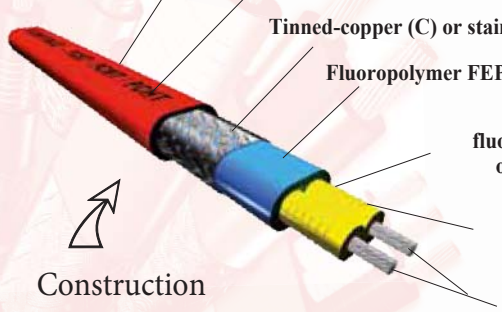
CE

FIQ 116

The PCMT type heating cables consist of heating zones that dissipate a constant heating power whatever the environment temperature.
Cut to length on site, they allow connecting branches from a single point of electrical power supply (power along the whole cable length) and are mainly dedicated to the following surface heating applications:

Application range

- **freeze protection of liquid-food pipes withstanding low pressure steam rincing.**
- **temperature maintenance of pipes, tanks and reservoirs up to 80°C.**
- **pre-heating of loading/off-loading lines or of bituminous products.**
- **temperature maintenance in chemical and industrial environments.**



Construction

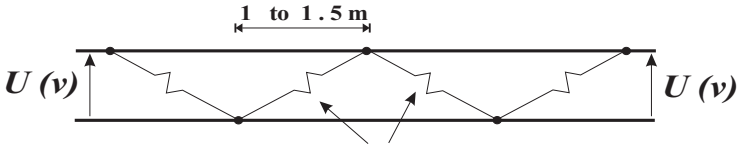
Max. exposure temp. power on: according to power output Max. exposure temp. power OFF: 200°C
Recommended max. maintenance temperature = 80°C

Benefits

- withstand superheated water sterilization or high pressure vapour sterilization
- no thermal ageing of heating resistance wire (alloy)
- no peak inrush current enabling a good electrical protection
- build-in cold connection due to the manufacturing design
- cut to the requested length on-site
- fluoropolymer insulation resistant to acids and bases and most chemical products
- temperature class T3 (200°C)
- allow connecting branches from a single point of electrical power supply (power delivered along the whole cable length)

- very easy to implement
- standard voltage 230 V and 400 V
- optional specific voltage 24V to 1500 V (contact us)

Operational principle



heating resistances of fixed length and fixed heating power output

Main features

Maximum length : 110 m or 1500 W
Maximum exposure temperature power off: 200°C
Maximum exposure temperature power on: according to power output:
PCMT 10 W/m = 100°C, PCMT 20 W/m = 90°C, PCMT 30 W/m = 80°C
Thermal protection: rated current * 1.25
Compulsory residual-current circuit breaker : 30 mA

Product ID code

PCMT/FEP 20.2 + C + G F E P

- G F E P — outer-jacket FEP (200°C)
- C — Tinned-copper(C) or stainless steel (S)
- 2 — Voltage 2= 230V - 3=400V
- 20 — Power in W/m
- PCMT/FEP — Inner-jacket fluoropolymer FEP

Constant wattage heating cable **PCHT**

CE

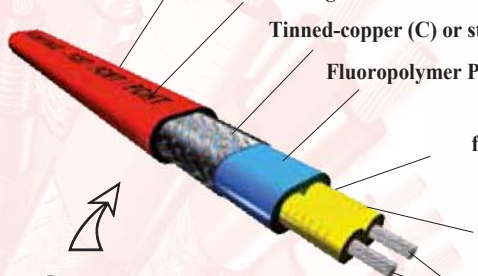
FIQ 115

PCHT/SIL model

The PCHT type heating cables consist of heating zones that dissipate a constant heating power whatever the environment temperature.
Cut to length on site, they allow connecting branches from a single point of electrical power supply (power along the whole cable length) and are mainly dedicated to the following surface heating applications:

Application range

- **freeze protection of liquid-food pipes withstanding high pressure steam rincing.**
- **temperature maintenance of pipes, tanks and reservoirs up to 120°C.**
- **pre-heating and anti-condensing of hoppers, filters, heavy fuel oil lines.**
- **pre-heating of loading/off-loading lines or of bituminous products.**
- **temperature maintenance in chemical and industrial environments.**



Construction

Max. exposure temp. power on: according to power output
Max. exposure temp. power off: 260°C
Recommended max. maintenance temperature = 120°C

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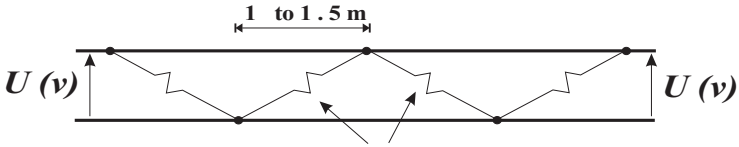
Benefits

- withstand superheated water sterilization or high pressure vapour sterilization
- no thermal ageing of heating resistance wire (alloy)
- no peak inrush current enabling a good electrical protection
- build-in cold connection due to the manufacturing design
- cut to the requested length on-site
- Fluoropolymer insulation resistant to acids, bases and most chemical products
- temperature class 260°C

- allow connecting branches from a single point of electrical power supply (power delivered all along the whole cable length)
- very easy to implement
- standard voltage 230 V and 400 V
- optional specific voltage 24V to 1500 V (contact us)

Operational principle



heating resistances of fixed length and fixed heating power output

Main features

Maximum length : 110 m or 1500 W
Maximum exposure temperature power off:260°C
Maximum exposure temperature power on: according to power output:
PCHT 10 W/m = 150°C, PCHT 20 W/m = 130°C, PCHT 30 W/m = 120°C
Thermal protection: rated current * 1.25
Compulsory residual-current circuit breaker : 30 mA

Product ID code

PCHT/PFA 20.2 + C + G P F A

- outer-jacket PFA (260°C)
- Tinned-copper(C) or stainless steel (S)
- Voltage 2= 230V - 3=400V
- Power in W/m
- Inner-jacket fluoropolymer PFA

NOVATRACE power management system

DIN version

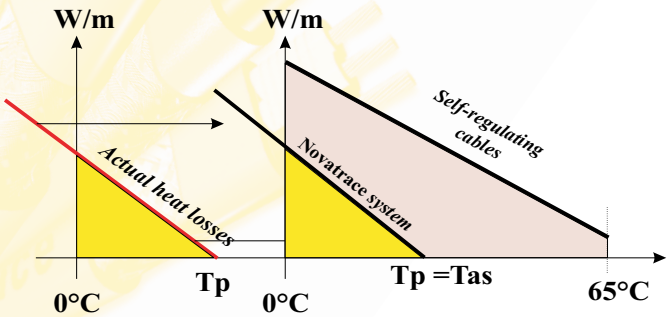
NOVATRACE board (remote probe)

Programming module

The *NOVATRACE* system is based on *a chronological and proportional ambient temperature regulation.* A temperature probe associated with a microcontroller constantly measures *the ambiance temperature and automatically switches on/off the system according to the variation of the temperature . In fact, the heating requirement of a pipe is directly related to to the ambient temperature (Q=F(Ta)) regardless of the streamflow of the pipe. The temperature measurement is made either by a probe located right onto the electronical board or by a remote probe according to the selected option. The power supply of the heating cables is regulated chrono-proportionally.*

At any time, the delivered heat power* offsets perfectly the heat losses. *Therefore, the NOVATRACE system* ensures a perfect energy management *and maintains a constant temperature along the whole length of the pipes regardless of their streamflows.

Self-regulating cable vs Novatrace



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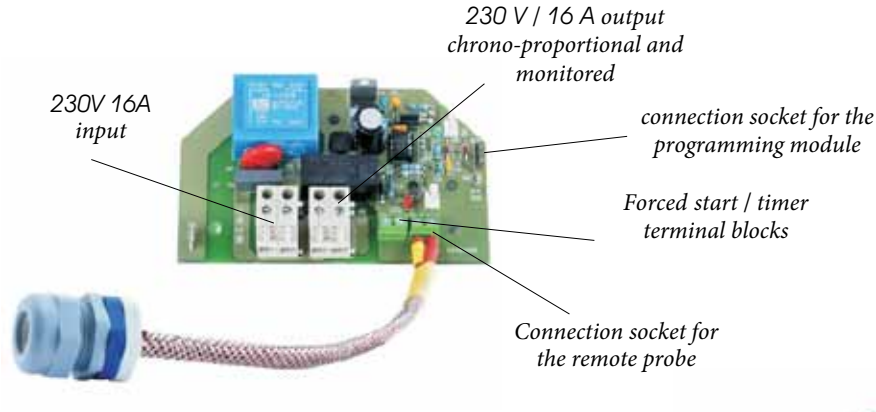

Main benefits

- **simplified programming of required power at 0°C (P0) and of self regulating temperature (SRT) through PROG/Novatrace programmer**
- **operating range : from 5°C to 120°C**
- **50% power savings for freeze protection compared to conventional ON/OFF ambient thermostat**
- **power savings through a close match of delivered heating power and actual heat requirements on the whole network length.**
- **no risk of overheating at dead-legs**
- **scalable system (by adjusting P0 et SRT parameters)**

The desired P0 and SRT parameters are set-up by connecting the Novatrace board to the ROG/Novatrace watertight connection box.

No electrical power is required as it is provided by the running Novatrace board

The NOVATRACE power management system associated with constant wattage PCBT, PCMT et PCHTcables is the ideal system to ensure constant temperature maintenance of pipe networks including numerous dead-legs, taps generating different hydraulic regimes. It is an ideal solution for chilled water systems at 5°C subject to thermal drifts with conventional tracing systems (self-regulating heating cables associated with ON/OFF ambient thermostat).

Temperature control

Ambient sensing thermostat THA/C

Halogen-free polycarbonate box - IP 66 (CEI 529)
Thermostat mechanism plate - 2 * 16 A/230V output terminals
On/Off dry contact
0°C/+50°C - dim : 150*125*75 mm

Electronic ambient sensing thermostat THA/E

Halogen-free polycarbonate box - IP 66 (CEI 529)
equipped with a NOVATRACE board
1 input 230 V - 1 controlled output 230 V/16 A
Temperature sensor on the board (remote type option available)
Possible forced operation enabled through terminal block (clock)

Electronic ambient sensing thermostat THA/E - DIN

Temperature controller NOVATRACE in its DIN plastic surface mounting box
1 input 230 V - 1 controlled output 230 V/16 A
2m remote temperature sensor provided
Possible forced operation enabled through terminal block (clock)

Temperature controller REG 150 + sensor

Temperature controller with digital display in its DIN plastic surface mounting box
Heating (HEAT) or cooling (REF) modes
Range 0-125°C / Probe PT1000 - lg 2000 mm
Breaking capacity 16A (resistive) - 4A (inductive)

Surface sensing thermostat EEx d - THD

Surface thermostat with capillary and bulb / 0-100°C or 50-250°C
Capillary protected by flexible sheath SC/FLEX / 16 A - 230 V
Explosion-proof housing IICT6 - EEx d - 140 * 140 * 89 mm
4 holes 3/4"NPT + 2 plugs + PE cable 3/4"NPT

Surface sensing thermostat THS/S

Watertight box 125*125*75 mm - IP 66
Thermostat plate 16 A / 230 V
2 temperature ranges available as standard
0 - 100°C or 50 - 250°C
Capillary protected by flexible sheath SC/FLEX

Connecting devices

Connection and junction boxes BJK/S et BJK/RR

Halogen-free polycarbonate box - IP 66 (CEI 529)
Knock-outs / temp. range - 40°C / + 80°C
BJK/S : 125*125*75 mm
BJK/RR : 150*125*75 mm

Mobile terminals + PE power supply

Quick connectors P & T CONNECT

P-CONNECT : cable extension IP 65
T-CONNECT : T-box IP 68
Temperature range -20°C / +125°C
Cable cross section area :
mini : 1.00 mm² / maxi 2.50 mm²
Shipped with glands and connection block

Connection box BJE/EEx 'e' for potentially explosive atmospheres

Increased Safety connection box II C T6 (85°C) - EEx 'e'

Graphitized polycarbonate / 4 holes PE 13 + 2 plugs with its power supply gland

DIN rail + 4 bridgable terminals
+ 2 earth terminals / 123*123*92 mm

Connection box BJD/EEx 'd' for potentially explosive atmospheres

Flameproof connection box II C T6 (85°C) - EEx 'd'
- Cast iron
3 holes 3/4" NPT + 1 plug
max. 4 drillings 3/4" NPT

Miscellaneous accessories

Aluminium adhesive tape ALU-BT or ALU-HT

Roll of aluminium-backed attachment adhesive tape
width = 50 mm / length = 50 m +/- 10%
ALU/BT : resistance 105°C - ALU/HT : resistance 150°C

Attachment adhesive tape POLY50 ou FIV 200

Roll of attachment adhesive tape for strapping
width = 19 mm / length = 50 m +/- 10%
POLY 50 : polyester tape / max 65°C FIV
200 : reinforced fiberglass/ max 200°C

Modular electrical boxes CE 001 CE 002 CE 003

Pre-assembled modular electrical boxes
CE 001 = RCB* 30mA + switch 16 A
CE 002 = RCB* + controller REG 150 + power switch Others available on request
* Residual Current Circuit Breaker

Programming box PROG/NOVA

Watertight box 125*125*75 mm - IP 66
including a board with a digital display and push buttons to program the NOVATRACE electronic board.
No external power source required (fed by Novatrace board) Provided with cord + 4-pin connector

Cable reel and drum unwinder DER/NOVA

Aluminium unwinder for reels with
300 / 500 mm outside diameter.
Can be disassembled.
Weight : 3.250 Kg - max. load 60 and 80 kg

Digital insulation controller

Insulation controller with digital display shipped with its carrying case with two
test leads and one alligator clip.
Resistance measurement at 250 / 500 & 1000 V
Data hold function

Miscellaneous accessories

Connection sets for normal areas SET/CAxt & SET/PCxT

Complete connection set
SET / CAxT - for self-regulating heating cables
CABT, CAMT & CAHT
SET / PCxT - for constant wattage heating cables
PCBT, PCMT & PCHT

Connection set EExE/CAxT

Complete connection set for potentially explosive atmospheres (increased safety) EEx 'e'

Set EExE / CAxT
for self-regulating heating cables
CABT/Ex & CAHT/Ex

Connection set EExD/CAxT

Complete connection set for potentially explosive atmospheres (flameproof) EEx 'd'

Set EExD / CAxT
for self-regulating heating cables
CABT/Ex & CAHT/Ex

End seal kit

Very high temperature silicone sleeve (260°C) to watertight and insulate PCxT et CAxT cable ends. (Silicone paste not provided - allow the recommended polymerization time).

Miscellaneous accessories

Through insulation kit SC/PCxT & SC/CAxT

Perforated stainless steel plate
Gland + gasket + nut
SC/CAxT : for self-regulating cables
SC/PCxT : for constant wattage cables

Through insulation in flexible duct kit SC/FLEX

Perforated stainless steel plate
Flexible grooved sheath length 500 mm
+ 2 end fittings + 2 nuts

Stainless steel fixing bracket EQ/FIX

Stainless steel folded fixing bracket for connecting
boxes BJK/S et BJK/RR and thermostats THS/S

Voltage indicator lamp

Voltage indicator lamp to plug on the front panel
VOY230 for 230 V or VOY400 for 400 V
opening 10 mm wide + bolt

Self adhesive warning label ETI

Potential danger warning label
black text on yellow background
TRACAGE ELECTRIQUE - ELECTRIC HEAT TRACING

Spare thermostatic insert

Printed circuit board with thermostatic insert
for the replacement of surface thermostats THS/S
Temperature ranges available : 0-100°C or 50-250°C

Cable reel unwinder DER / NOVA

Registered model ©

In order to facilitate your installations on-site, TECHNITRACE has designed and build a cable reel unwinder.

Assembled and disassembled in just a few minutes, it adapts perfectly to reels used by TECHNITRACE and its branches, and as well as commercial reels with circular flanges below 80kg.

Designed to be easily moved and installed, it is made of light materials like aluminium and plastics. It can be adapted to different reels by means of a lower movable roller.

Main features

Service temperature range : from -30°C to + 55°C
Overall dimensions when assembled: 400 * 260 * 330 mm
Unladen weight: 3.250 Kg
Max. load weight (reel): from 60 to 80 Kg
Max reel dimensions : width: 270 mm / flange: 500 mm

Components:

- 2 treated and polished aluminium flanges (TECHNITRACE laser cutting)
- 2 PVC rollers - length 300mm / diam 50 mm
- 2 threaded rods M10 length 330 mm
- 4 cap nuts M10 + 4 single nuts M10
- 2 wing nuts length 150 mm / M4

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Digital insulation controller

On site tests - REMINDER

The structural integrity of the heating cable inner insulating jacket along its whole length can be controlled with a specific device (insulation tester or megohmmeter) . For instance, this test must be carried out BEFORE the installation of the thermal insulation (shell) AND AFTER in order to check that the heating cable has not been damaged during the operation.

An insulation tester is a device producing high voltage (from 1000 to 1500 V) and high frequency current capable of generating an electrical arc.
Connect one of the tester lead to the active part of the heating cable (bus wire) and the other to the braid.
Press and hold the test knob of the tester. Any flaw or cut inside the insulating jacket will allow the high voltage high frequency current to pass between the bus wires and the braid.

This leakage (insulation flaw) will be shown on the meter of the tester. This value measures the ohmic resistance of the insulating jacket. In order to meet the test, this value must be greater than 1 Mohms and ideally above 2 Mohms.

Complete device provided with its carrying case, testing probes, batteries...

Read the articles related to on the Web site

TECHNITRACE software suite

TECHNITRACE provides its distributors and installer partners with a 3 software suite: based on the acquired entitlements, a complete and detailed proposal (pictures, price, delivery time, commercial terms...) can be made and sent to your customers with just a few clicks.

Print-outs can be customized with your logo and details in the footer on each page.

Selection

The Selection (S) software allows you to perform the complete thermal calculation to maintain the temperature of an insulated pipe.
Automatic selection of the appropriate heating cable according to the selected technology (self-regulating or constant wattage).
Other additional technical data (power, current) are provided.

Parts list

The parts list software (N) allows you to compose a list of the whole set of parts required with just a few clicks on the accessories pictures or from a selection box. This list can be extended with your own accessories.

Quotation

The quotation software (O) allows you to make a quotation from a parts list or an existing proposal.
Quotations can be printed or saved/sent as pdf files.

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TECHNITRACE FACTORY ACCEPTANCE TESTING AND QUALITY CONTROL

The heating cables manufactured by TECHNITRACE fully comply with the existing European Standards (EN 62395) and with the French manufacturing standards.

They are subject to a continuous quality control (traceability and batch number for each manufacturing step) according to the quality assurance plan AQ/ISO 9000. Great care is taken in the different monitorings and controls performed along the whole production line from raw material reception to delivery of the finished product.

During process, identification and control of :

- raw materials (traceability)
- cable dimensions during the whole design and production process (thickness of insulation jackets and finished products)
- dielectric strength through continuous AC Hipot testing at 8000-27000 Volts (27 KV High Frequency Spark Tester) during all extrusion processes
- electrical properties (resistance and insulation)

Tests and controls

- batch number for each cable reel manufactured
- power output monitoring and control of the first and last meter of cable for each reel (cyclical bench tests hot water/cold water)
- thermal ageing testing in oven
- insulation testing between braid and wires
- certificate of compliance issuance…

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MEASUREMENTS AND TEST BENCHES FOR QUALITY CONTROL

TechniTrace has several automated test benches to continuously control the thermal stability of the manufactured heating cables and the characteristics of the new semi-conductors and materials under development.

Testings and measurements during the manufacturing process of Technitrace heating cables

CSTB

CE

TECHNITRACE

heating cables

SALES REPRESENTATIVE :