



# ELTRACE

## SELF LIMITING HEATING CABLE



## SELF-REGULATING HEAT CABLES - OPERATING PRINCIPLE

A self-regulating heat cable consists of a semi-conducting matrix fitted between two conductors to which an electrical current is applied.

The electrical resistance of the matrix increases as its temperature rises, until the cable reaches thermal equilibrium with its environment.

When the temperature stabilises, the cable's resistance is at its maximum and power consumption is minimal.

The cable is similar to many heating elements supplied in parallel: its heating power is therefore unrelated to its length.

### AVANTAGES

Energy savings

Watt/metre output unrelated to cable length

### APPLICATIONS

The two main applications for ELTRACE self-regulating heat cables are frost protection and temperature control.

### FROST PROTECTION

Frost protection for pipes and containers.

Gutter and drainpipe de-icing.

Walk-in freezer door seal de-icing.

Roof-edge snow clearance.

### TEMPERATURE CONTROL

Temperature control for pipes and containers. Temperature Maintenance

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## SELF LIMITING HEATING CABLE

### TRACECO®

FROST PROTECTION AGAINST ICE AND LOW TEMPERATURE MAINTENANCE FOR PIPE, TANK, RECEPTACLES, VALVES, GUTTERS...

By using our tracers TRACECO® type, you ensure the best heat-tracing system. They are designed to prevent any risk of burst pipes due to freezing.

Self Limiting or Self Regulating Technology allows easy operation safely. The power changes depending on the temperature and prevents overheating.

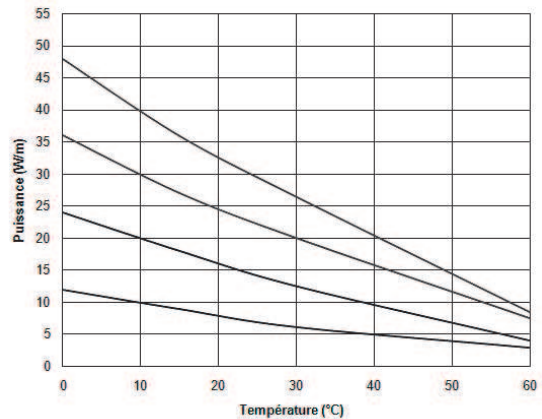
When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

The CableBox storage system on coil allows easy handling, quick and convenient. This product is in stock and can be used with the fast connector system DomoClick®

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2x1.25mm<sup>2</sup>)
2. Self limiting heating element
3. Insulation
4. Tin-plated copper protective earth wires with Protective aluminium foil
5. Thermoplastique (TPE-O) outer jacket (Black)



Reference	Designation	Power	Dimension (naked)	Dimension
TRACECO-10	TRACECO ESR-10-AO	10 W/m at 10°C	11.2 X 3.4 (mm)	12.6 x 4.8 (mm)
TRACECO-20	TRACECO ESR-20-AO	20 W/m at 10°C	11.2 X 3.4 (mm)	12.6 x 4.8 (mm)
TRACECO-30	TRACECO ESR-30-AO	30 W/m at 10°C	13.2 X 3.4 (mm)	14.6 x 4.8 (mm)
TRACECO-40	TRACECO ESR-40-AO	40 W/m at 10°C	13.2 X 3.4 (mm)	14.6 x 4.8 (mm)

#### DATASHEET

Nominal Voltage 230V  
 Tolerance -0/+5 W  
 Maximum exposure temperature (energised) 65°C  
 Maximum exposure temperature (deenergised) 80°C  
 Temperature Class T6  
 Minimum Bending Radius 25 mm  
 Minimum installation temperature -35°C  
 Résistance maxi du conducteur à 20 °C 15.29 Ω/km

Maximum length circuit:  
 TRACECO-10..... 215 m  
 TRACECO-20..... 170 m  
 TRACECO-30..... 140 m  
 TRACECO-40..... 120 m

Weight approx. 90-105 kg/km (aluminum foil)  
 Weight approx. 105-126 kg/km (braid)

#### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, FIMKO, CE



### CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
TRACECO-10	-20	155	190	-
	0	215	-	-
	10	215	-	-
TRACECO-20	-20	105	130	170
	0	150	170	-
	10	170	-	-
TRACECO-20	-20	75	90	140
	0	97	120	-
	10	115	140	-
TRACECO-40	-20	55	70	110
	0	70	90	120
	10	80	100	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

### PACKAGING

Standard length on rolls : 500m / CableBox® : 100m

### PRINTING

All ELTRACE Self limiting cable are printed in order to ensure quality and tracability.

### INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of CSTB, NF C 15-100, VDE ...) for the points where they apply, and that the recommendations of use.

### ADDITIONAL PRODUCTS

Reference	No-ATEX	ATEX
<b>Connexion</b>	Domoclick® ELKSR-1, ELKSR	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET

## SELF LIMITING HEATING CABLE

### TRACECO®-W

FOR TEMPERATURE MAINTENANCE, FOR DOMESTIC HOT WATER, WARM WATER PIPE, OILY WASTEWATER, TANK, VALVES, ALSO TO AVOID THE RISK OF LEGIONELLA, ...

By using our heat tracer type TRACECO you get the best heat tracing system. They are designed to maintain networks of warm water temperature and avoid the risk of legionella.

Self Limiting or Self Regulating Technology allows easy operation safely. The power changes depending on the temperature and prevents overheating.

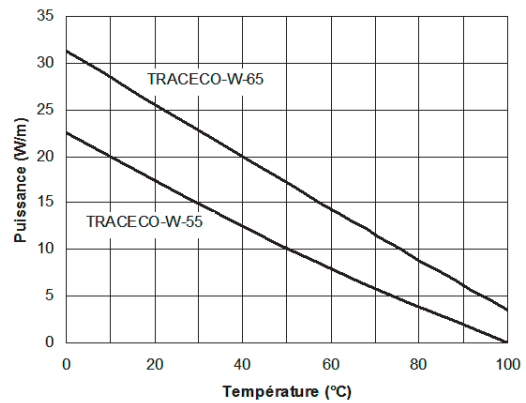
When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

The CableBox storage system on coil allows easy handling, quick and convenient. This product is in stock and can be used with the fast connector system DomoClick®

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2x1.25mm<sup>2</sup>)2..
2. Self limiting heating element
3. Insulation
4. Tin-plated copper protective earth wires with Protective aluminium foil
5. Thermoplastique outer jacket



Reference	Désignation	Power	Dimension (naked)	Dimension
TRACECO-W-55	TRACECO ESR-W-55-AO	9 W/m at 55°C	11.20 x 3.40 (mm)	11.70 x 4.70 (mm)
TRACECO-W-65	TRACECO ESR-W-65-AO	13 W/m at 65°C	11.20 x 3.40 (mm)	11.70 x 4.70 (mm)

#### DATASHEET

Nominal Voltage 230V  
 Tolerances -0/+5 W  
 Maximum exposure temperature (energised) 80°C  
 Maximum exposure temperature (deenergised) 100°C  
 Minimum Bending Radius 27 mm  
 Minimum installation temperature -20°C

Maximum length circuit:  
 TRACECO-W-55..... 130 m  
 TRACECO-W-65..... 110 m

Weight approx 90 kg/km

CERTIFICATION  
 CSTB, VDE, GOST-R, FIMKO, CE



## CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
TRACECO-W-55	20	130	-	-
	55	130	-	-
TRACECO-W-65	20	110	-	-
	65	110	-	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

## PACKING

Standard length stored on reel: 500m / CableBox® : 100m

## PRINTING

All cables are printed in order to ensure the product tracability.

## INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of NF C 15-100, VDE ...) where they apply, and the recommendations of use.

## ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
<b>Connexion</b>	Domoclick ELKSR-1	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET

## SELF LIMITING HEATING CABLE

### TRACECO<sup>®</sup>-15

FROST PROTECTION AGAINST ICE AND LOW TEMPERATURE MAINTENANCE FOR PIPE, TANK, RECEPTACLES, VALVES, GUTTERS...

By using our tracers TRACECO<sup>®</sup> type, you ensure the best heat-tracing system. They are designed to prevent any risk of burst pipes due to freezing.

Self Limiting or Self Regulating Technology allows easy operation safely. The power changes depending on the temperature and prevents overheating.

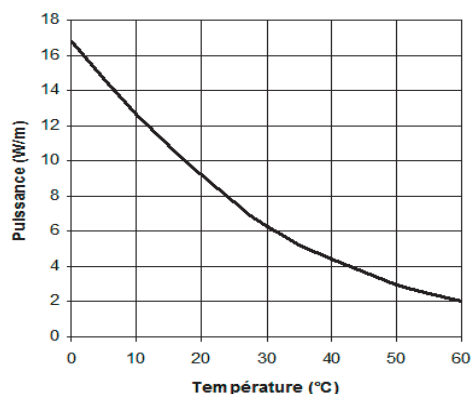
When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

The CableBox storage system on coil allows easy handling, quick and convenient.

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2 x 0.55mm<sup>2</sup>)
2. Self limiting heating element
3. Insulation
4. Tin-plated copper protective earth wires with Protective aluminium foil
5. Thermoplastique (TPE-O) outer jacket (Black)



Reference	Désignation	Power	Dimension (naked)	Dimension
TRACECO-15	TRACECO ESR-S-15-AO	12 W/m àat10°C	6,40 x 3,80 (mm)	7,30 x 5,10 (mm)

#### DATASHEET

Nominal Voltage 230V

Tolerances -0/+5 W

Maximum exposure temperature (energised) 65°C

Maximum exposure temperature (deenergised) 80°C

Temperature Class T6

Minimum Bending Radius 27 mm

Minimum installation temperature -35°C

Maximum length circuit:

TRACECO-15..... 110 m

Weight approx (alufoil) 66 kg/km

Weight approx (Braided) 72 kg/km

#### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, FIMKO, CE



## CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
TRACECO-15	-20	100	-	-
	0	100	-	-
	10	100	-	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

## PACKAGING

Standard length on rolls : 500m / CableBox® : 100m

## MARQUAGE

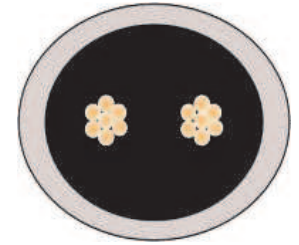
Tous les câbles autorégulants ELTRACE sont marqués afin d'assurer la traçabilité du produit.

## INSTALLATION

Les câbles autorégulants ELTRACE doivent être installés suivant les normes en vigueur au jour de l'installation (cahier des prescriptions techniques communes de mise en œuvre du CSTB, NF C 15-100, VDE...) pour les points où elles s'appliquent, ainsi que les préconisations d'utilisation.

## ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
<b>Connexion</b>	ELKSR-1	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET



## SELF LIMITING HEATING CABLE

**ESR<sup>®</sup>-R**

TO PROTECT SLIDING DOORS AND OPENING DOORS FROM FREEZING UP - SPECIAL COLD ROOM

By using our self-regulating electric heat tracing ESR-R, you make sure that you get the best defrosting system for negative cold room door.

Through its unique "self regulating" matrix, it is easier and safer to use. you freed from the problems of door sizes.

A single cable replaces all your references, all you resistances, whatever the length of the doors.

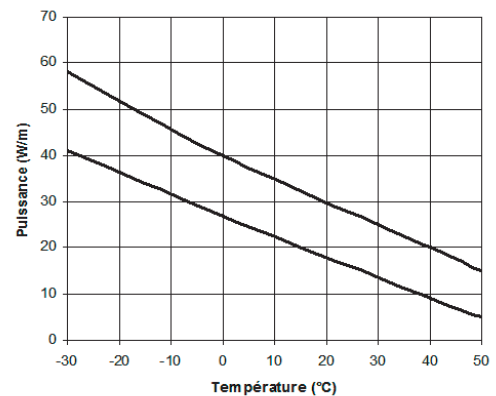
Furthermore, the self-regulating heating cable is varying according to its temperature. This avoid overheating especially at the corners of doors (no dysfunction).

Finally, thanks to his "Self limiting" technology called "parallel". You can connect the heating cable ESR-R to the exact length you want. Also you can connect directly into the junction box. Then you do not have to prepare any cold end and thus saving time and substantial cost.

Its storage system on coil type CableBox or bobbins allows easy handling, quick and convenient. This product is available on stock.

### DESCRIPTION

1. Bus wire Cu nickel-plated (2x0.55mm<sup>2</sup>) 19 x 0,287 mm
2. Self limiting heating element (matrix)
3. Insulation (polyolefine)



Reference	Designation	Power	Dimension
ESR-R-30	ESR-R-30	27 W/m at 0°C	6,10 x 5,60 (mm)
ESR-R-40	ESR-R-40	38 W/m at 0°C	6,10 x 5,60 (mm)

### DATASHEET

Nominal Voltage 230V  
 Tolerances -0/+5 W  
 Maximum exposure temperature (energised) 50°C  
 Maximum exposure temperature (deenergised) 55°C  
 Minimum Bending Radius 30 mm  
 Minimum installation temperature -35°C

Maximum length circuit:  
 ESR-R-30..... 110 m  
 ESR-R-40..... 110 m

Weight approx. 41,5 kg/km

CERTIFICATION  
 GOST-R Certificate



#### CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTHS (m)		
		16A	20A	32A
ESR-R-30	-20	90	-	-
	0	100	-	-
	10	100	-	-
ESR-R-40	-20	80	-	-
	0	95	-	-
	10	100	-	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

#### PACKING

Standard length stored on reel: 500m / CableBox® : 100m

#### PRINTING

All cables are printed in order to ensure the product tracability.

#### INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of NF C 15-100, VDE ...) where they apply, and the recommendations of use.

#### ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
<b>Connexion</b>	ELKSR-1, ELKA-1, ELKS-1	
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	
<b>Fixing tape</b>	ELAA ELTV	
<b>Heat Lagging Output</b>	ELSC, ELSC-E	
<b>Adhesive Label</b>	ELET	

## SELF LIMITING HEATING CABLE

### ESR<sup>®</sup>-BOT

POUR LA PROTECTION CONTRE LE GEL ET LE MAINTIEN EN BASSE TEMPÉRATURE DE TUYAUTERIES, RÉSERVOIRS, CHÉNEAUX, VANNES, EN ATMOSPHÈRE CORROSIVE...

The ESR-BOT tape is a self-limiting heating tape for applications for general protection against freezing in pipes. An additional layer connected to the heating element (bonded jacket) increases the effect of the electrical insulation and provides additional protection against moisture.

Fluoropolymer is used as an outer jacket, this material offers increased protection against chemicals and abrasion. Fluoropolymers are also UV-resistant.

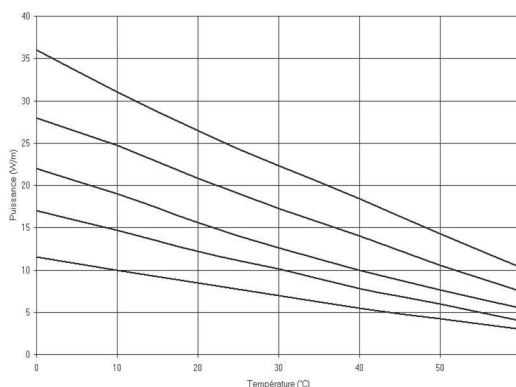
When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

The CableBox storage system on coil allows easy handling, quick and convenient. This product is in stock and can be used with the fast connector system DomoClick<sup>®</sup>

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2x1.25mm<sup>2</sup>)
2. Self limiting heating element, Matrix
3. Insulation
4. Braid
5. Fluoropolymer overjacket



Reference	Designation	Power	Dimension
ESR-10-BOT	ESR-2-BOT-10	10 W/m at 10°C	11,50 x 5,50 (mm)
ESR-15-BOT	ESR-2-BOT-15	15 W/m at 10°C	11,50 x 5,50 (mm)
ESR-20-BOT	ESR-2-BOT-20	20 W/m at 10°C	11,50 x 5,50 (mm)
ESR-25-BOT	ESR-2-BOT-25	25 W/m at 10°C	11,50 x 5,50 (mm)
ESR-30-BOT	ESR-2-BOT-33	33 W/m at 10°C	11,50 x 5,50 (mm)

#### DATASHEET

Nominal Voltage 230V  
 Tolerances -0/+5 W  
 Maximum exposure temperature (energised) 65°C  
 Maximum exposure temperature (deenergised) 80°C  
 Temperature Class T6 (T5 for 33W/m)  
 Minimum Bending Radius 25 mm  
 Minimum installation temperature -35°C

Maximum length circuit:  
 ESR-10-BOT..... 205 m  
 ESR-15-BOT..... 160 m  
 ESR-20-BOT..... 140 m  
 ESR-25-BOT..... 130 m  
 ESR-30-BOT..... 110 m  
 Weight approx 119kg/km

#### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, CE



#### CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
ESR-10-BOT	-20	123	165	195
	-15	140	186	195
	10	205	-	-
ESR-15-BOT	-20	82	111	160
	-15	93	125	160
	10	145	162	-
ESR-20-BOT	-20	62	85	115
	-15	75	93	140
	10	116	140	-
ESR-25-BOT	-20	50	70	105
	-15	60	75	117
	10	88	117	126
ESR-30-BOT	-20	45	58	85
	-15	50	65	95
	10	70	90	108

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100. The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

#### PACKING

Standard length stored on reel: 500m / CableBox® : 100m

#### PRINTING

All cables are printed in order to ensure the product tracability.

#### INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of NF C 15-100, VDE ...) where they apply,

#### ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
Connexion	ELKSR-1	ELKSR-1-e ELKSR-1-d
Junction Boxes	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
Pipe bracket	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
Thermostats	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
Fixing tape	ELAA ELTV	ELAA ELTV
Heat Lagging Output	ELSC, ELSC-E	ELSC-E
Adhesive Label	ELET	ELET

## SELF LIMITING HEATING CABLE

### ESR<sup>®</sup>-H-BOT

HIGH TEMPERATURE HEATING CABLE (120°C / 200°C) FOR PIPE, TANK, CORROSIVE ATMOSPHERE...

The ESR<sup>®</sup>-H-BOT serie is a self-limiting heating tape that is suitable for freeze protection and for temperature maintenance in applications up to 120 °C.

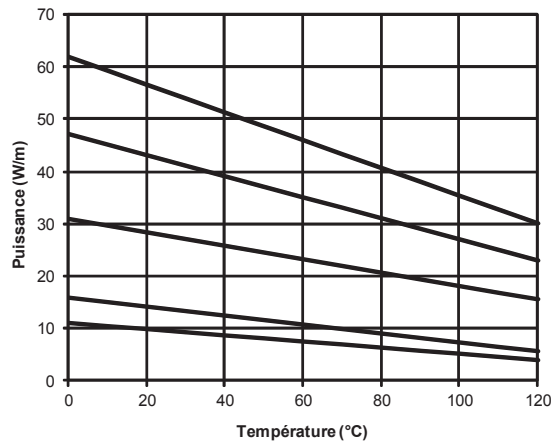
It allows steam cleaning in pipes. The heating element, the insulation and the outer jacket of the ESR-H-BOT are made of fluoropolymers.

The Fluoropolymer is Used as an outer jacket, this material offers increased protection against chemicals and abrasion.

The heating power of the conductive heating element increases or decreases depending on the ambient temperature. The self-limitation takes effect at every point along the heating tape. The heating power adapts to the varying ambient temperatures.

#### DESCRIPTION

- 1- Copper, nickel-coated 1.25 mm<sup>2</sup>
- 2- Heating element : Conductive fluoropolymer
- 3- Fluoropolymer
- 4- Braid
- 5- Fluoropolymer Overjacket



Référence	Désignation	Power	Dimension
ESR-H-BOT-10	ESR-H-2-BOT-10	10 W/m at 10°C	10,20 x 4,80 (mm)
ESR-H-BOT-15	ESR-H-2-BOT-15	15 W/m at 10°C	10,20 x 4,80 (mm)
ESR-H-BOT-30	ESR-H-2-BOT-30	30 W/m at 10°C	10,20 x 4,80 (mm)
ESR-H-BOT-45	ESR-H-2-BOT-45	45 W/m at 10°C	10,20 x 4,80 (mm)
ESR-H-BOT-60	ESR-H-2-BOT-60	60 W/m at 10°C	10,20 x 4,80 (mm)

#### DATASHEET

Nominal Voltage 230V  
 Tolerances -2.5/+2.5 W  
 Maximum exposure temperature (energised) 120°C  
 Maximum exposure temperature (deenergised) 200°C  
 Temperature Class T3 (T2 for 60w/m)  
 Minimum Bending Radius 25 mm  
 Minimum installation temperature -40°C

Maximum length circuit:  
 ESR-H-2-BOT-10..... 205 m  
 ESR-H-2-BOT-15..... 190 m  
 ESR-H-2-BOT-30..... 115 m  
 ESR-H-2-BOT-45..... 85 m  
 ESR-H-2-BOT-60..... 65 m  
 Weight approx 120 kg/km

#### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, CE



#### CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
ESR-H-BOT-10	-25	175	205	-
	10	200	205	-
ESR-H-BOT-15	-20	120	152	190
	10	165	190	-
ESR-H-BOT-30	-20	70	92	115
	10	85	114	-
ESR-H-BOT-45	-20	50	66	80
	10	70	80	-
ESR-H-BOT-60	-20	38	52	65
	10	50	65	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

#### PACKING

Standard length stored on reel: 500m / CableBox® : 100m

#### PRINTING

All cables are printed in order to ensure the product tracability.

#### INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of NF C 15-100, VDE ...) where they apply, and the recommendations of use.

#### ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
<b>Connexion</b>	ELKSRH-1	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET

## SELF LIMITING HEATING CABLE

### ESR<sup>®</sup>-S - Food Compatibility

#### FOR FROST PROTECTION INSIDE PIPE

Self-regulating heating cables ESR-S-BOA have been developed to meet standards food. You can safely place them inside the pipes. They allow you prevent freezing and the risk of bursting pipes.

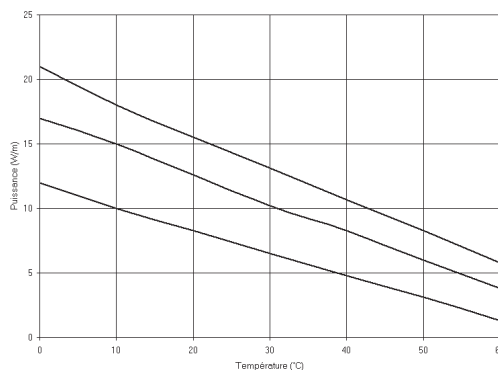
The parallel technology "self regulating" allows easy operation safely. Self-regulated power cable varies with the ambient temperature and prevents overheating. When it's cold the polymer shrinks and facilitates the flow of current, thereby increasing the temperature cable.

As it gets warmer, the polymer expands and prevents the passage of current: the cable cooler. Finally, with a technology called "parallel" you can cut the heating cables directly to the desired length on the site, to precisely fit the length of heating cable for your needs.

The storage system on coil type Cablebox<sup>®</sup> allows easy handling, quick and convenient.

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2 x 0.55mm<sup>2</sup>)
2. Self limiting heating element
3. Insulation
4. Tin-plated copper protective earth wires with Protective aluminium foil
5. Food compatibility outer jacket



Référence	Désignation	Puissance	Section totale
ESR-S-BOA-10	Self Limiting Cable Food Compatibility	10 W/m à 10°C	7,6 x 5,2 (mm)
ESR-S-BOA-15	Self Limiting Cable Food Compatibility	15 W/m à 10°C	7,6 x 5,2 (mm)
ESR-S-BOA-18	Self Limiting Cable Food Compatibility	18 W/m à 10°C	7,6 x 5,2 (mm)

#### DATASHEET

Nominal Voltage 230V  
 Tolerances -0/+5 W  
 Maximum exposure temperature (energised) 65°C  
 Maximum exposure temperature (deenergised) 65°C  
 Minimum Bending Radius 35 mm  
 Minimum installation temperature -35°C

Maximum length circuit:  
 ESR-S-BOA-10..... 100 m  
 ESR-S-BOA-15..... 72 m  
 ESR-S-BOA-18..... 60 m

#### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, FIMKO, CE



CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	10 A
ESR-S-10-BOA	10°C	100 / 60**
	0°C	95
	-20°C	77
ESR-S-15-BOA	10°C	72
	0°C	66
	-20°C	52
ESR-S-18-BOA	10°C	60
	0°C	58
	-20°C	41

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

PACKING

Standard length stored on reel: 500m / CableBox® : 100m

PRINTING

All cables are printed in order to ensure the product tracability.

INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of NF C 15-100, VDE ...) where they apply, and the recommendations of use.

ADDITIONAL PRODUCTS

Reference	Non-ATEX	ATEX
<b>Connexion</b>	ELKSR-1, ELKSR	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET

## SELF LIMITING HEATING CABLE

### GELTRACE®

FROST PROTECTING TAPE IS A RELIABLE AND ECONOMICAL SOLUTION TO YOUR PROBLEMS OF FROST PROTECTION

#### Applications:

GELTRACE® range is used for the frost protection of pipes. In the protigel®+ version, the thermostat automatically switches on the tape when the temperature falls under +5°C. It enables substantial energy savings and offers in complement the advantages and the safety of a self-regulating tape.

Avoids drainings and permanent use of hydraulic networks. Easy to implement. Available on stock.

Adjustable length according to the network size. Tape finished and controlled in the factory.

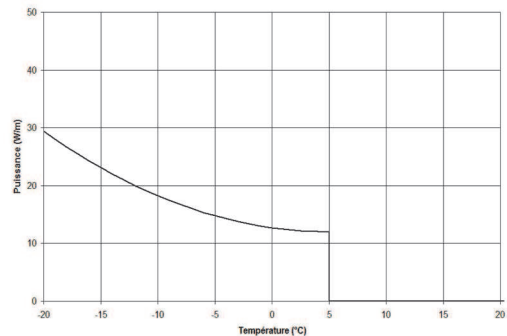
No overheating risk thanks to its self regulating system.

When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

#### DESCRIPTION

1. Bus wire Cu nickel-plated (2 x 0.55mm<sup>2</sup>)
2. Self limiting heating element
3. Insulation
4. Tin-plated copper protective earth wires with Protective aluminium foil
5. Thermoplastique (TPE-O) outer jacket (Black)
6. Thermostat 5°C
7. Cold lead (1m 3x1.5mm<sup>2</sup>)



Reference	Designation	Power
GELTRACE-1	Self Limiting cable, 1m lenght, with 5°C thermostat and 1m cold lead	15 W at 10°C
GELTRACE-xx	Self Limiting cable, 1m to 35m lenght, with 5°C thermostat, 1m cold lead	15 W/m at 10°C
GELTRACE-35	Self Limiting cable, 35m lenght, with 5°C thermostat, 1m cold lead	450 W à 10°C

#### DATASHEET

Nominal Voltage 230V  
 Tolérances sur la puissance -0/+5 W  
 Maximum exposure temperature (energised) 65°C  
 Maximum exposure temperature (deenergised) 80°C  
 Temperature Class T6  
 Minimum Bending Radius 27 mm  
 Minimum installation temperature -35°C

Maximum length circuit:  
 GELTRACE-35..... 35 m

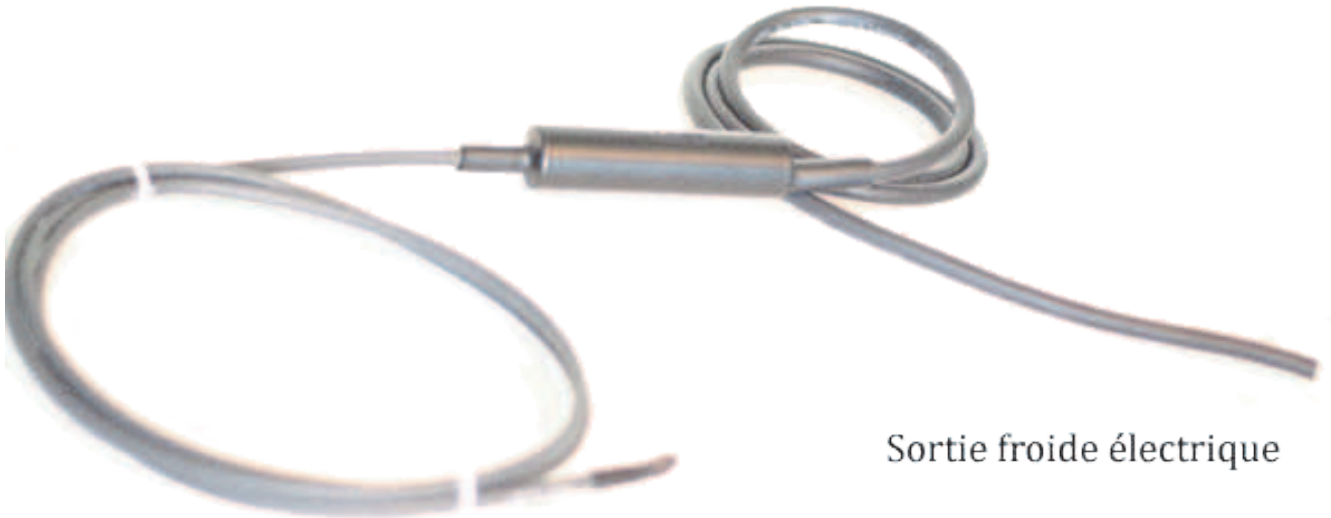
Weight approx 66 kg/km

CERTIFICATION  
 CE



Câble chauffant

Thermostat 5°C



Sortie froide électrique

#### COMPOSITION

A Self Regulating Tape, An integrated thermostat limiting the temperature, a cable of connection two phases + ground, collars, fixing Adhesive, Cap of adjustment.

#### ADVANTAGES

GELTRACE® as a Self Regulating tape it can be superimposed without any risk of destruction.

GELTRACE® can be cut in order to be adapted to the pipe length. A termination kit including a heat-retractable cap is provided for this purpose.

The lagging thickness of insulator (rockwool or synthetic insulator) can rank above 13 mm. The Self Regulating Tapes avoids every overheating risk.

The combination of a thermostat and a self-regulation enables important energy savings in comparison with other tracing systems.

#### PRECAUTIONS

The Tapes must be used along the under generator of piping.

Do not install GELTRACE® on pipes whose temperature can reach 65°C.

#### INSULATION

Measure the length of piping.

Choose the closest length of tape.

Thanks to the self-regulation system of GELTRACE®, it is possible to cut the cable to the desired length. You just have to fix the cap provided at the end of the cable

#### INSTALLATION

Pipe must be clean and dry.

Fix the GELTRACE® cable on piping using a PVC or aluminium adhesive tape. We advise the use of the standard aluminium adhesive tape ELAA-50. It enables a better distribution of heat in plastic pipes.

Install the heat insulation. Thickness recommended is 13 mm of polyurethane foam.

#### CONNECTION

The connecting cable is composed of 3 wires (2 live wires + ground).

Check your installation is correctly grounded to ensure a maximum protection.

#### POSITION OF THE THERMOSTAT

The thermostat (black shrink sleeve marking eltherm) will be placed and fixed on by the provided collars. It will be covered with insulation in order to control the pipe temperature and to save the maximum energy.

The thermostat will take care of the powering when the temperature of piping is lower than +5°C, and will cut off the supply if it goes over +9°C.

**Product conforms to the Directive EMC 89/336/E6 EN 55014.93**

## EDITO

TOUTE LA PROTECTION CONTRE LE GEL ET LE MAINTIEN EN TEMPÉRATURE D'EAU CHAUDE SANITAIRE

Face à toutes les contraintes économiques et techniques, comment faire le bon choix ?

En privilégiant la Qualité, l'Innovation et le Service.

ELTRACE, un des leaders du traçage électrique s'engage à vous proposer les solutions les plus favorables en matière de protection contre le gel et de maintien en température. Présent dans le bâtiment, l'énergie, la pétrochimie, l'agroalimentaire, l'acier, ... avec des produits fabriqués en France, ELTRACE conduit votre bien-être...

## CONSTRUCTION MARKET

### THE KNOW-HOW

From ice & frost protection for pipes, gutters, roofs, hot water temperature maintenance to a complete range of underfloor heating, ELTRACE provides you with all its know-how, its range of self-regulating heater tapes TRACECO® and its innovative fast connection system DOMOCLICK®.



Prior diagnosis of your requirements, preventative maintenance programmes, full implementation of projects ...ELTRACE designs and manufactures all types of trace heating systems – self regulating, hazardous area approved equipment, and other heating systems at constant power.

### FOR FROST PROTECTION OF YOUR PIPES

Easy to use, quick to implement, ELTRACE self regulating heating tapes protect your pipes from damage caused by frost & ice. They can be cut to the desired length on site and provide exceptional strength and durability. .re le gel de vos tuyauteries

### FOR HOT WATER TEMPERATURE MAINTENANCE

With its self regulating heaters, ELTRACE offers the comfort and control you need. ELTRACE brings you the ideal temperature for your well-being, including disinfection and Legionella prevention, while preserving the environment of wasteful energy. In addition ELTRACE guarantee the security of its installations against all risks of overheating thanks to its innovative system of self-regulation.

### DEFROST GUTTER

Ice causes considerable damage to your roofs and gutters. ELTRACE answer for this is a well proven economical and reliable solution. ELTRACE self regulating heaters provide the perfect response to climate change. Energy efficient and a simple electrical installation, roofs and gutters are safe and free from blockages caused by snow and ice.

### UNDERFLOOR HEATING

A floor heating system from Eltrace will ensure a uniform distribution of heat in your home or office and a comfortable warmth which is easy to control room by room.. The ELTRACE wide range of cables and heating mats are designed for both renovation & New Build applications.

## INDUSTRY

THE DIVERSITY OF THE RANGE FOR EXTREME TEMPERATURES OF -50°C TO 800°C

Thanks to its experience, knowledge and products, ELTRACE provide solutions for your industrial processes. With a full range of heating tapes, heating cables, jackets, hoses, heater mats, and other industrial products, ELTRACE and its engineers will offer the best products in line with the requirements of your installation.



### SELF REGULATING HEATING TAPES

The ELTRACE range of self regulating heater tapes, low and high temperature, ATEX certified, help you to solve all your problems in the temperature range of -50°C to +200°C.



### CONSTANT POWER HEATING TAPES AND CABLES

Our wide range of cables and heater tapes with silicone rubber insulation, FEP, PFA, PTFE, fiberglass or even quartz, guarantee maximum safety in safe and explosive atmospheres.

### JACKETS AND HEATING PANELS

ELTRACE designs and tailor makes heater mats and jackets, to fit perfectly around any kind of equipment - pumps, valves, filters, tanks etc..

## SERVICES

THE INTEGRITY OF A GROUP, THE RESPONSE OF A TEAM.

True to our vocation, Service is a priority of our business. From the design of the installation until the maintenance, you have a warranty "turnkey" incorporating the main study, system design, thermal insulation, performance guarantee and training.

Our team of specialists advises you and accompanies you throughout your project.



# eltraceSERVICES

The integrity of a group, the response of a team. True to our vocation, Service is a priority of our business. From the design of the installation until the maintenance, you have a warranty "turnkey" incorporating the main study, system design, thermal insulation, performance guarantee and training. Our team of specialists advises you and accompanies you throughout your project.

## ELTRACE COMMITS

A genuine code of practice is based on seven commitments which are testament to the reliability and integrity of our services and our products



### 1- LISTENING

With regular involvement in your industry and a good knowledge of the applications, our specialists make an accurate diagnosis of your installation.



### 2- COST CONTROL

We are looking for technical solutions to comply with your requirements and at the same time helping to control your costs within the expected budget.



### 3- RESPONSE

Response to any unexpected design modifications or changes to the planned work schedule ... our teams are adapting to these constraints.



### 4- DELIVERY COMPLIANCE

We are committed to meeting deadlines for the receipt of goods or work.



### 5- QUALITY

We guarantee the products to be tested in accordance with the latest standards and to meet your demands and regulations in force.



### 6- ENVIRONMENT

All our process incorporates the requirements of the Environment both human and technical.



### 7- PERFORMANCE GUARANTEE

Once the project is designed, we guarantee the performance in accordance with our installation and operating instructions.

# eltracePARTNER

## YOUR TRACE HEATING PARTNER

**Available**

## ELTRACE

56, Bld de Courcerin  
Z.I. Pariest  
F-77183 Croissy-Beaubourg  
France

Tel: +33 (0)1 64 62 04 40  
Fax: +33 (0) 1 64 62 00 54  
email: [info@eltrace.com](mailto:info@eltrace.com)  
web: [www.eltrace.com](http://www.eltrace.com)



## SELF LIMITING HEATING CABLE

**ESR®**

FROST PROTECTION AGAINST ICE AND LOW TEMPERATURE MAINTENANCE FOR PIPE, TANK, RECEPTACLES, VALVES, GUTTERS...

By using our tracers ESR® type, you ensure the best heat-tracing system. They are designed to prevent any risk of burst pipes due to freezing.

Self Limiting or Self Regulating Technology allows easy operation safely. The power changes depending on the temperature and prevents overheating.

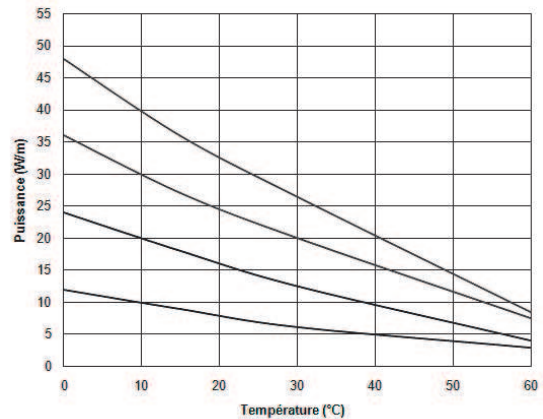
When it is cold, the polymer shrinks and facilitates the flow of current, thereby increasing the temperature of the cable. As it gets warmer, the polymer expands and prevents the current: the Self Regulating cable heats less than before.

Finally, a « parallel » technology allows the cable to be cut to desired length directly on the site. Exact fit the length of heating cable for your needs.

The CableBox storage system on coil allows easy handling, quick and convenient. This product is in stock and can be used with the fast connector system DomoClick®

### DESCRIPTION

1. Bus wire Cu nickel-plated (2x1.25mm<sup>2</sup>)
2. Self limiting heating element
3. Insulation
4. Braid
5. Thermoplastique (TPE-O) outer jacket (Black)



Reference	Designation	Power	Dimension (naked)	Dimension
ESR-10-BO	Self Limiting cable ESR-10-BO	10 W/m at 10°C	11.2 x 3.4 (mm)	13.1 x 4.9 (mm)
ESR-20-BO	Self Limiting cable ESR-20-BO	20 W/m at 10°C	11.2 x 3.4 (mm)	13.1 x 4.9 (mm)
ESR-30-BO	Self Limiting cable ESR-30-BO	30 W/m at 10°C	13.2 x 3.4 (mm)	15.1 x 4.9 (mm)
ESR-40-BO	Self Limiting cable ESR-40-BO	40 W/m at 10°C	13.2 x 3.4 (mm)	15.1 x 4.9 (mm)

### DATASHEET

Nominal Voltage 230V  
 Tolerance -0/+5 W  
 Maximum exposure temperature (energised) 65°C  
 Maximum exposure temperature (deenergised) 80°C  
 Temperature Class T6  
 Minimum Bending Radius 25 mm  
 Minimum installation temperature -35°C  
 Résistance maxi du conducteur à 20 °C 15.29 Ω/km

Maximum length circuit:  
 ESR-10-BO..... 215 m  
 ESR-20-BO..... 170 m  
 ESR-30-BO..... 140 m  
 ESR-40-BO..... 120 m

Weight approx. 105-126 kg/km (braid)

### CERTIFICATION

CSTB, ATEX, VDE, GOST-R, FIMKO, CE



### CIRCUIT LENGTH\*

DESIGNATION	STARTING TEMPERATURE (°C)	MAXIMUM LENGTH (m)		
		16A	20A	32A
TRACECO-10	-20	155	190	-
	0	215	-	-
	10	215	-	-
TRACECO-20	-20	105	130	170
	0	150	170	-
	10	170	-	-
TRACECO-20	-20	75	90	140
	0	97	120	-
	10	115	140	-
TRACECO-40	-20	55	70	110
	0	70	90	120
	10	80	100	-

\*Maximum Circuit lengths with ELCB curve C

The protection of each circuit shall be in accordance with NF C 15-100.

The protection of persons is ensured by a residual current of 30 mA maximum for each 7.5 kilowatts maximum. The heaters are supplied at 230 volts.

### PACKAGING

Standard length on rolls : 500m / CableBox® : 100m

### PRINTING

All ELTRACE Self limiting cable are printed in order to ensure quality and tracability.

### INSTALLATION

ELTRACE self-regulating cables must be installed according to standards prevailing at the date of installation (technical requirements specification for implementation of CSTB, NF C 15-100, VDE ...) for the points where they apply, and that the recommendations of use.

### ADDITIONAL PRODUCTS

Reference	No-ATEX	ATEX
<b>Connexion</b>	Domoclick® ELKSR-1, ELKSR	ELKSR-1-e ELKSR-1-d
<b>Junction Boxes</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	ELBA-5-e, ELBA-6-e ELBA-4-d, ELBA-6-d
<b>Pipe bracket</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	ELSP-2, ELSP-3, ELSP-4, ELSP-5, ELSP-PU
<b>Thermostats</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	ELTH-Athf-Ex ELBSTW
<b>Fixing tape</b>	ELAA ELTV	ELAA ELTV
<b>Heat Lagging Output</b>	ELSC, ELSC-E	ELSC-E
<b>Adhesive Label</b>	ELET	ELET

## SELF LIMITING HEATING CABLE

**Middle size**

### ESR<sup>®</sup>-M

ELECTRICAL HEATING TAPE FOR FROST PROTECTION OR LOW TEMPERATURE MAINTENANCE OF PIPEWORK AND VESSELS

The ELTRACE ESR-M is a self regulating heating tape designed for frost protection, for pipes, gutters, sprinkler installations and storage tanks, indoors and outdoors, and also temperature maintenance of pipes. The black TPE outer jacket ensures the required UV resistance.

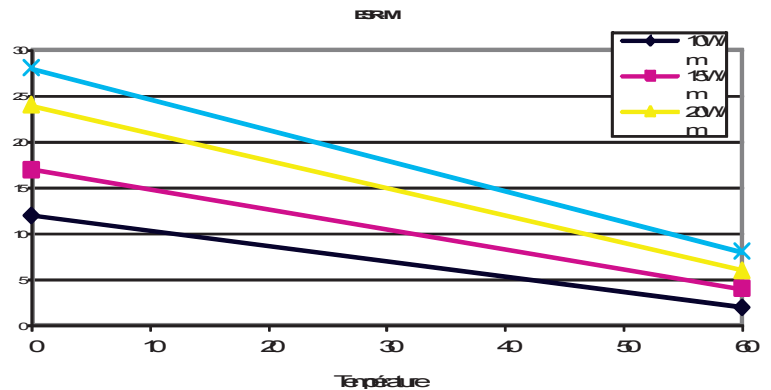
ELTRACE Self regulating tapes can be cut to length on site and stored in rolls. The power output of the conductive heating element increases or decreases in response to ambient temperature changes. This self-regulating effect occurs at every point along the length of the cable thereby adjusting the power output to the varying ambient temperature condition. ELTRACE ESR-M is available in stock.

The Thermoplastic elastomer (TPE) insulation provides excellent electrical resistance and protects the heating tape against moisture.

As an overjacket the Fluoropolymer offers increased chemical and abrasion resistance and good compatibility with potable water.

#### DESCRIPTION

1. Nickel Plated Copper Bus wires 1mm<sup>2</sup>
2. Semi-conductive self-limiting matrix
3. First insulation TPE
4. Nickel copper braid
5. Optional outerjacket (Thermoplastic or Fluoropolymer)



Reference	Designation	Power	First Insulation	TPE	Fluoropolymer
ESR-M-10	ESR-M-10-(B/BO/BOT)	10 W/m at 10°C	8.5 x 4.0 (mm)	10.5 x 6.0 (mm)	10.3 x 5.8 (mm)
ESR-M-15	ESR-M-15-(B/BO/BOT)	15 W/m at 10°C	8.5 x 4.0 (mm)	10.5 x 6.0 (mm)	10.3 x 5.8 (mm)
ESR-M-20	ESR-M-20-(B/BO/BOT)	20 W/m at 10°C	8.5 x 4.0 (mm)	10.5 x 6.0 (mm)	10.3 x 5.8 (mm)
ESR-M-25	ESR-M-25-(B/BO/BOT)	25 W/m at 10°C	8.5 x 4.0 (mm)	10.5 x 6.0 (mm)	10.3 x 5.8 (mm)

#### TECHNICAL DATASHEET

Nominal Voltage: 230V  
 Maximum temperature (energised): 65°C  
 Max permissible exposure temp. 85°C  
 Minimum installation temp. -30°C  
 Minimal Bending Radius: 25 mm

#### Maximum length circuit:

ESR-M-10..... 155 m  
 ESR-M-15..... 140 m  
 ESR-M-20..... 110 m  
 ESR-M-25..... 85 m

CERTIFICATION  
 Certifications CE



DESIGNATION	STARTUP TEMPERATURE (°C)	MAXI LENGTH (m)		
		16A	20A	32A
ESR-M-10	-20	118	-	-
	0	136	-	-
	10	155	-	-
ESR-M-15	-20	78	-	-
	0	89	-	-
	10	140	-	-
ESR-M-18	-20	58	-	-
	0	71	-	-
	10	110	-	-
ESR-M-25	-20	47	-	-
	0	56	-	-
	10	85	-	-

\* For use with Type C circuit breakers

CONDITIONNEMENT

Standard length : 500m / 100m

PRINTING

ACCESSORIES

Référence	No-ATEX	ATEX
<b>Raccordement</b>	ELKSR-1	
<b>Boîte de Jonction</b>	ELBE-3, ELBE-6, ELBE-8, ELBE-10	
<b>Support de Boîte / Support de Thermostat</b>	ELSP-x, ELSP-P1/F, ELSP-P2/F	
<b>Thermostat</b>	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	
<b>Adhésif de Fixation</b>	ELAA ELTV	
<b>Sortie de Calorifuge</b>	ELSC, ELSC-E	
<b>Étiquettes de repérage</b>	ELET	

## SELF LIMITING HEATING CABLE

Low size

### ESR<sup>®</sup>-L

ELECTRICAL HEATING TAPE FOR FROST PROTECTION OR LOW TEMPERATURE MAINTENANCE OF PIPEWORK AND VESSELS

The ELTRACE ESR-L is a self regulating heating tape designed for frost protection of pipes, gutters and storage tanks, indoors or outdoors, and also low temperature maintenance of pipes. Due to the small dimension, it is particularly suited for use with small diameter pipes.

ELTRACE Self regulating tapes can be cut to length on site and exact piping lengths can be matched without any complicated design considerations.

The power output for the conductive heating element increases or decreases in response to ambient temperature changes. This self-regulating effect occurs at every point along the length of the cable thereby adjusting the power output to the varying ambient temperature condition. ELTRACE ESR-L is available in stock.

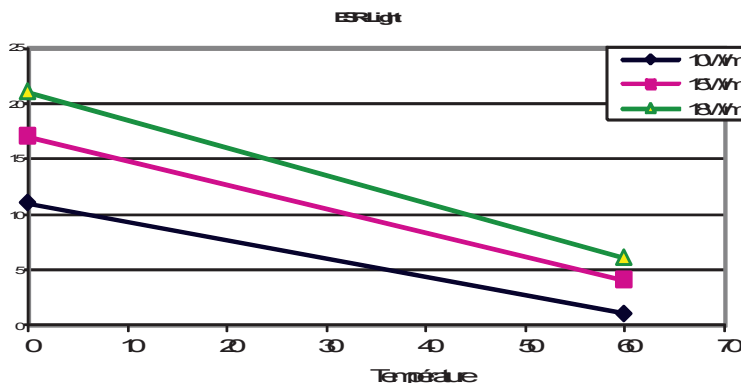
Fluoropolymer outerjacket over nickel plated braid provides additional protection where corrosive chemical solutions may be present.

The Thermoplastic Elastomer (TPE) insulation provides excellent dielectric strength and, in combination with the overjackets, excellent moisture resistance and protection from impact and abrasion damage.

As an overjacket the Fluoropolymer offers increased chemical and abrasion resistance and good compatibility with potable water.

#### DESCRIPTION

1. Nickel Plated Copper Bus wires 0.55mm<sup>2</sup>
2. Semi-conductive self-limiting matrix
3. First insulation TPE
4. Nickel copper braid
5. Optional outerjacket (Thermoplastic or Fluoropolymer)



Reference	Designation	Power	TPE Section	Fluoropolymer Section
ESR-L-10	ESR-L-10-(B/BO/BOT)	10 W/m at 10°C	7.7 x 5.3 (mm)	7.6 x 5.2 (mm)
ESR-L-15	ESR-L-15-(B/BO/BOT)	15 W/m at 10°C	7.7 x 5.3 (mm)	7.6 x 5.2 (mm)
ESR-L-18	ESR-L-18-(B/BO/BOT)	18 W/m at 10°C	7.7 x 5.3 (mm)	7.6 x 5.2 (mm)

#### TECHNICAL DATASHEET

Nominal Voltage: 230V  
 Maximum temperature (energised): 65°C  
 Max permissible exposure temp. 65°C  
 Minimum installation temp. -30°C  
 Minimal Bending Radius: 35 mm

#### Maximum length circuit:

ESR-L-10..... 100 m  
 ESR-L-15..... 72 m  
 ESR-L-18..... 60 m

CERTIFICATION  
 Certifications CE



DESIGNATION	START UP TEMPERATURE (°C)	MAXI LENGTH (m)		
		10A	20A	32A
ESR-L-10-BO(T)	-20	77	-	-
	0	95	-	-
	+10	100	-	-
ESR-L-15-BO(T)	-20	55	-	-
	0	66	-	-
	+10	72	-	-
ESR-L-18-BO(T)	-20	41	-	-
	0	58	-	-
	+10	60	-	-

\* For use with Type C circuit breakers

CONDITIONNEMENT

Standard length : 500m / 100m

PRINTING

ACCESSORIES

Référence	No-ATEX	ATEX
Raccordement	ELKSR-1	
Boîte de Jonction	ELBE-3, ELBE-6, ELBE-8, ELBE-10	
Support de Boîte / Support de Thermostat	ELSP-x, ELSP-P1/F, ELSP-P2/F	
Thermostat	ELTE-x, ELTH-A2, ELTH-A3, ELTH-A4	
Adhésif de Fixation	ELAA ELTV	
Sortie de Calorifuge	ELSC, ELSC-E	
Étiquettes de repérage	ELET	