

Heating Cables DATASHEET

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Features

- Self-limiting
- Can be used in explosive atmospheres without temperature limiter
- Can be cut to any length due to parallel power circuit configuration
- External protective sheath for resistance to corrosion and chemical influences
- Tin-coated copper braiding for electrical and mechanical protection
- Easy installation due to high level of flexibility
- Easy on-site cutting and terminating, with silicone cold applied technology even in Ex areas

Description

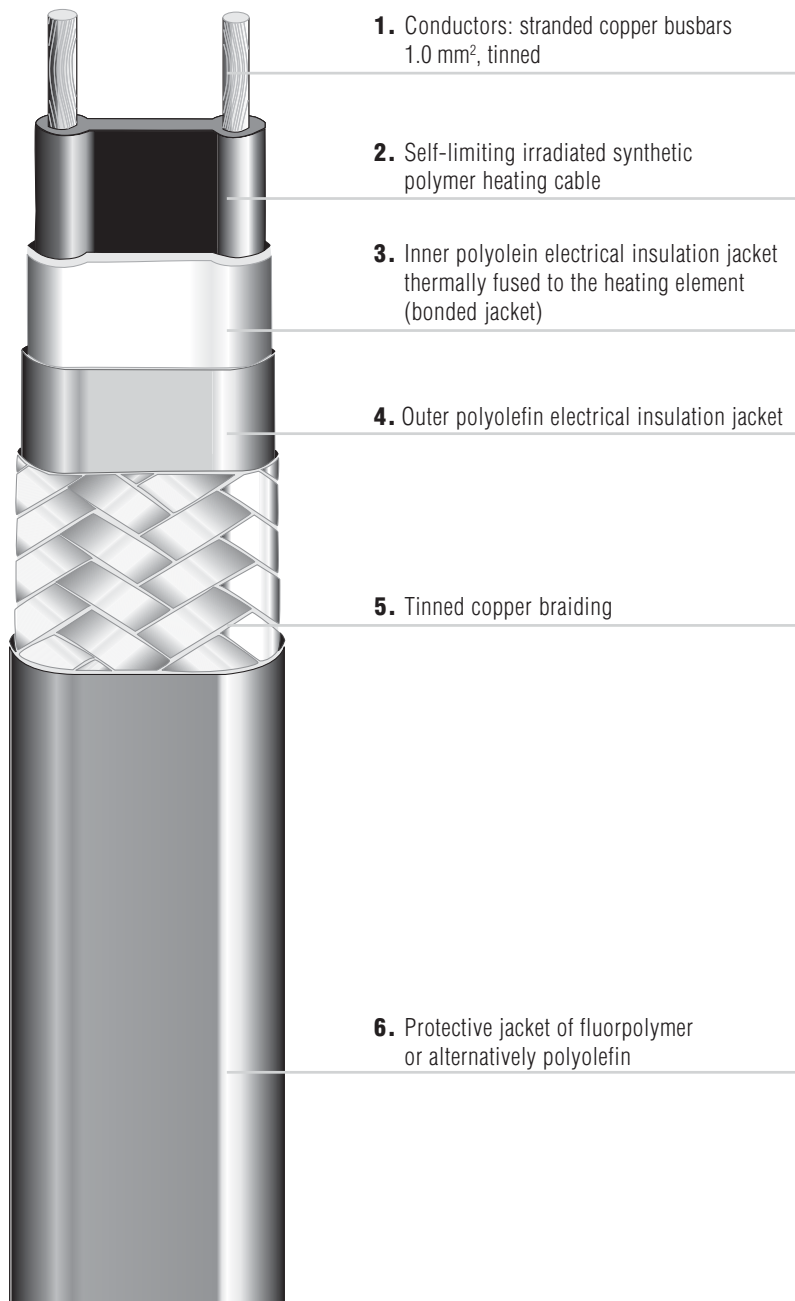
Via two tin-coated stranded copper wires with a cross-section of 1 mm² each which are positioned in parallel, an irradiated electrically conducting plastic is extruded.

This electrically conducting plastic matrix responds to changes of the ambient temperature with a respective increase or decrease of the heating output.

Electrical strength as well as protection against humidity and mechanical stress is ensured by two surrounding insulation jackets, whereas the first jacket is permanently bonded to the heating matrix (bonded jacket).

Additional electrical and mechanical protection is achieved by means of the following copper braiding.

A flame-retardant, UV-resistive plastic jacket protects the braiding against humidity and offers further protection against major mechanical stress.





Areas of application

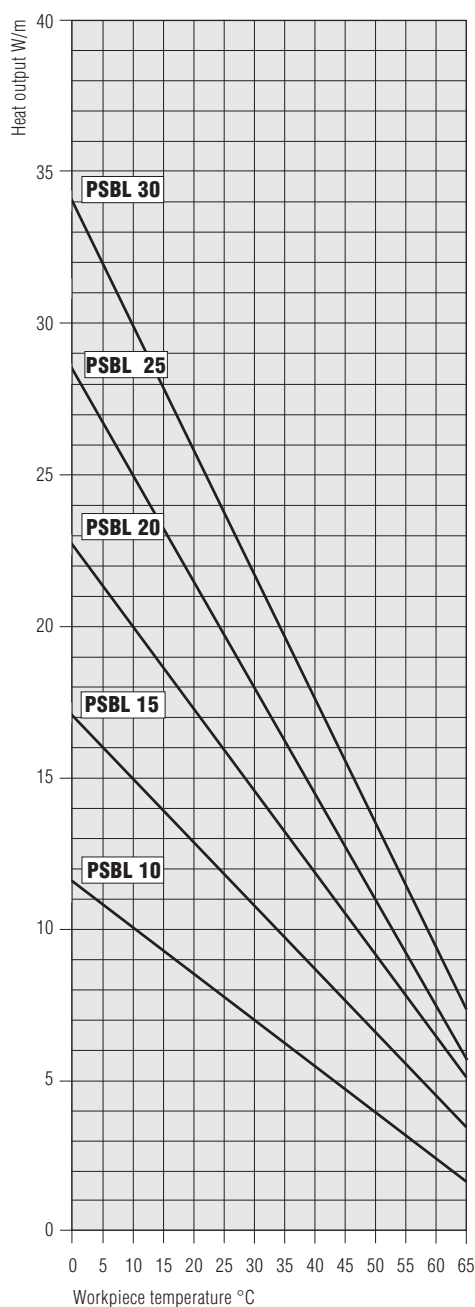
PSBL with polyolefin insulation jacket

- if the heating cable is exposed to aqueous, inorganic chemicals.
- if high mechanical requirements are set for the cable.

PSBL with fluoropolymer protective jacket

- if the heating cable is exposed to high levels of humidity organic chemicals such as hydrocarbons or solvents.
- where the cable must meet high mechanical requirements.

PSBL characteristics



Heat output on insulated steel pipes at **230 V** under nominal conditions.

➔ Explosion protection

Ex protection type

- Ex II 2G Ex e II T5, T6
- Ex II 2D Ex tD A21 T 95 °C, T 80 °C

Certification System

- KEMA 08 ATEX 0112
- IECEX KEM 09.0085

Certification Components

- KEMA 02 ATEX 2326 U
- IECEX KEM 07.0047 U
- CSA 1862457

➔ Technical data

Structure

- with CU braiding
- protective TFE outer jacket

Dimension

- 10.5 x 6.0 mm

Minimum bend radius

- 25 mm

Permissible ambient temperature

- Cut-in heating cable +65 °C
- Cut-off (cumulative 1000 h) +85 °C

Min. installation temperature

- 55 °C

Min. cut-in temperature

- 30 °C

Min. storage temperature

- 55 °C

■ Electrical data

Supply voltage

- AC 208 V up to 254 V
- AC 110 V up to 120 V

Protective braid resistance

- < 18.2 Ω/km



Power setting at +10 °C					
Heating output	PSBL 10	PSBL 15	PSBL 20	PSBL 25	PSBL 30
at AC 230 V	10 W/m	15 W/m	20 W/m	25 W/m	30 W/m
at AC 120 V	10.6 W/m	15.7 W/m	20.8 W/m	25.8 W/m	30.6 W/m

Max. length of heating circuit at AC 230 V for automatic circuit-breakers with C characteristic					
Fuse	PSBL 10	PSBL 15	PSBL 20	PSBL 25	PSBL 30
10 A, cut-in temperature +10 °C	118 m	104 m	79 m	60 m	45 m
10 A, cut-in temperature -15 °C	90 m	69 m	49 m	39 m	24 m
10 A, cut-in temperature -30 °C	77 m	56 m	40 m	30 m	16 m
16 A, cut-in temperature +10 °C	154 m	139 m	110 m	83 m	-
16 A, cut-in temperature -15 °C	136 m	89 m	71 m	56 m	-
16 A, cut-in temperature -30 °C	118 m	78 m	58 m	47 m	-

Max. length of heating circuit at AC 120 V for automatic circuit-breakers with C characteristic					
Fuse	PSBL 10	PSBL 15	PSBL 20	PSBL 25	
10 A, cut-in temperature +10 °C	49 m	43 m	33 m	25 m	
10 A, cut-in temperature -15 °C	45 m	35 m	25 m	20 m	
10 A, cut-in temperature -30 °C	39 m	28 m	20 m	15 m	
16 A, cut-in temperature +10 °C	77 m	58 m	46 m	35 m	
16 A, cut-in temperature -15 °C	68 m	45 m	36 m	28 m	
16 A, cut-in temperature -30 °C	59 m	39 m	29 m	24 m	



Self-limiting parallel heating cable PSB

Features

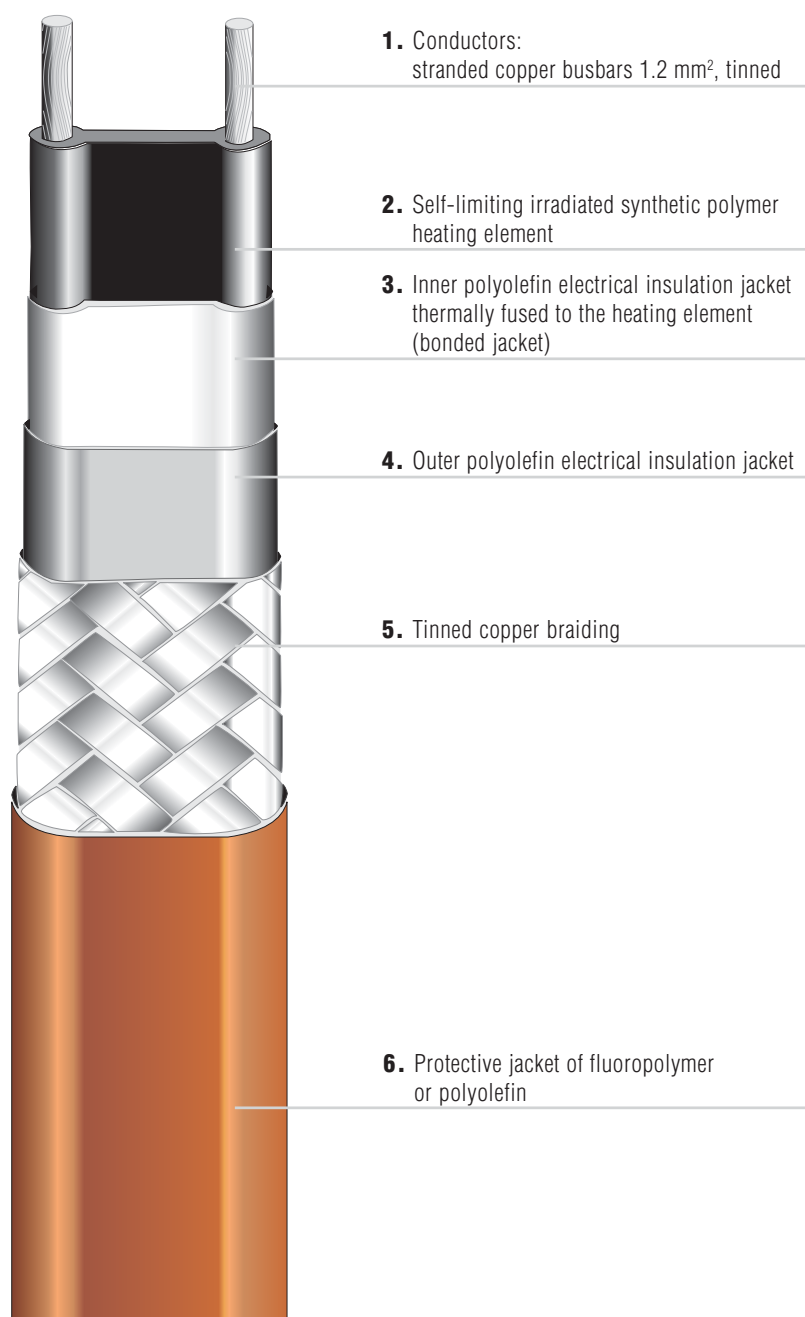
- Self-limiting
- Can be used in explosive atmospheres without temperature limiter (subject to 'T' class)
- Can be cut at random length thanks to its parallel circuit configuration
- Corrosion-proof and resistant to effects of chemicals thanks to its protective outer sheath
- Electrically and mechanically protected by a tinned copper braid
- Simple installation thanks to its high flexibility and favourable dimensions
- Easy on-site cutting and terminating, even in Ex areas

Description

A temperature-dependant resistive element between two parallel copper conductors regulates and limits the heat output of the heating cable according to the ambient temperature. If the ambient temperature rises, the heat output of the heating cable is reduced. This self-limiting property prevents overheating even when the cables are overlapped. A temperature limiter is not generally necessary not even for Ex areas (also not in explosion hazard zones).

Thanks to the parallel power-supply over the entire heating circuit the heating cable can be cut and installed to any required length. BARTEC self-limiting heating cable is available with different power output range and protective insulation. The protective outer jacket of either fluoropolymer or polyolefin protects the inner copper braiding from corrosion and chemical attack.

The copper braiding serves as an earth conductor in accordance with VDE 0100 and also increases the mechanical stability of the cable. Under the protective braiding are two synthetic jackets providing electrical insulation. The inner of the two jackets is thermally fused to the heating element (bonded jacket).





Areas of application

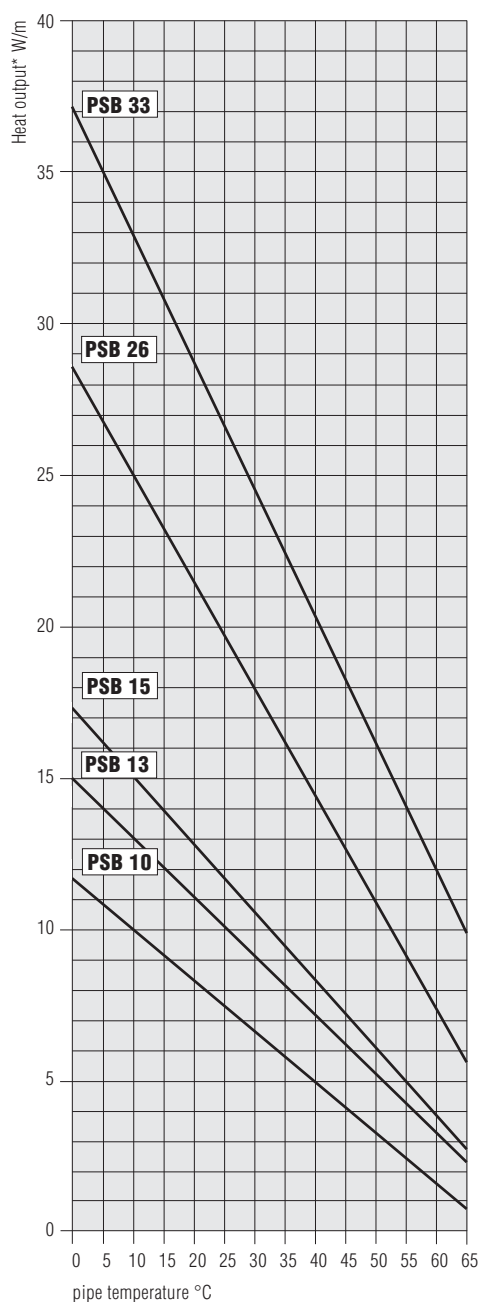
PSB with polyolefin insulation jacket

- if the heating cable is exposed to aqueous, inorganic chemicals.
- if high mechanical requirements are set for the cable.

PSB with fluoropolymer protective jacket

- if the heating cable is exposed to high levels of humidity organic chemicals such as hydrocarbons or solvents.
- where the cable must meet high mechanical requirements.

PSB characteristics



* Heat output on insulated steel pipes at **230 V** under nominal conditions.

Explosion protection

Ex protection type

- Ex II 2G Ex e II T5, T6
- Ex II 2D Ex tD A21 T 95 °C, T 80 °C

Certification System

- KEMA 08 ATEX 0111
- IECEx KEM 09.0084

Certification Components

- KEMA 02 ATEX 2326 U
- IECEx KEM 07.0047 U
- CSA 1862457

Max. resistance of protective braid

< 18.2 Ω /km

Dimensions

- with protective braid and protective outer jacket of fluoropolymer 11.6 x 5.6 mm
- with protective braid and protective outer jacket of polyolefin 11.8 x 5.8 mm

Min. bending radius

25 mm

**Technical data****Nominal voltage**AC 208 V to 254 V
AC 110 V to 120 V**Power setting at +10 °C**

Heating output	PSB 10	PSB 13	PSB 15	PSB 26	PSB 33
at AC 230 V	10 W/m	13 W/m	15 W/m	25 W/m	33 W/m
at AC 120 V	10.6 W/m	13.7 W/m	15.8 W/m	25.8 W/m	33.6 W/m

Permissible ambient temperatureCut-in heating cable +65 °C
Cut-off heating cable (cumulative 1000 h) +85 °C**Minimum installation temperature** -55 °C**Minimum cut-in temperature** -40 °C**Max. length of heating circuit at 254 V** (for automatic circuit-breakers with C characteristic)

Fuse	PSB 10	PSB 13	PSB 15	PSB 26	PSB 33
16 A, cut-in temperature +10 °C	205 m	169 m	145 m	88 m	70 m
16 A, cut-in temperature -15 °C	139 m	111 m	93 m	58 m	49 m
16 A, cut-in temperature -30 °C	120 m	94 m	77 m	45 m	43 m
20 A, cut-in temperature +10 °C	205 m	179 m	162 m	117 m	90 m
20 A, cut-in temperature -15 °C	186 m	149 m	125 m	75 m	64 m
20 A, cut-in temperature -30 °C	150 m	124 m	106 m	74 m	52 m
32 A, cut-in temperature +10 °C	195 m	174 m	160 m	126 m	108 m
32 A, cut-in temperature -15 °C	195 m	174 m	160 m	117 m	95 m
32 A, cut-in temperature -30 °C	195 m	174 m	160 m	100 m	82 m

Max. length of heating circuit at 120 V (for automatic circuit-breakers with C characteristic)

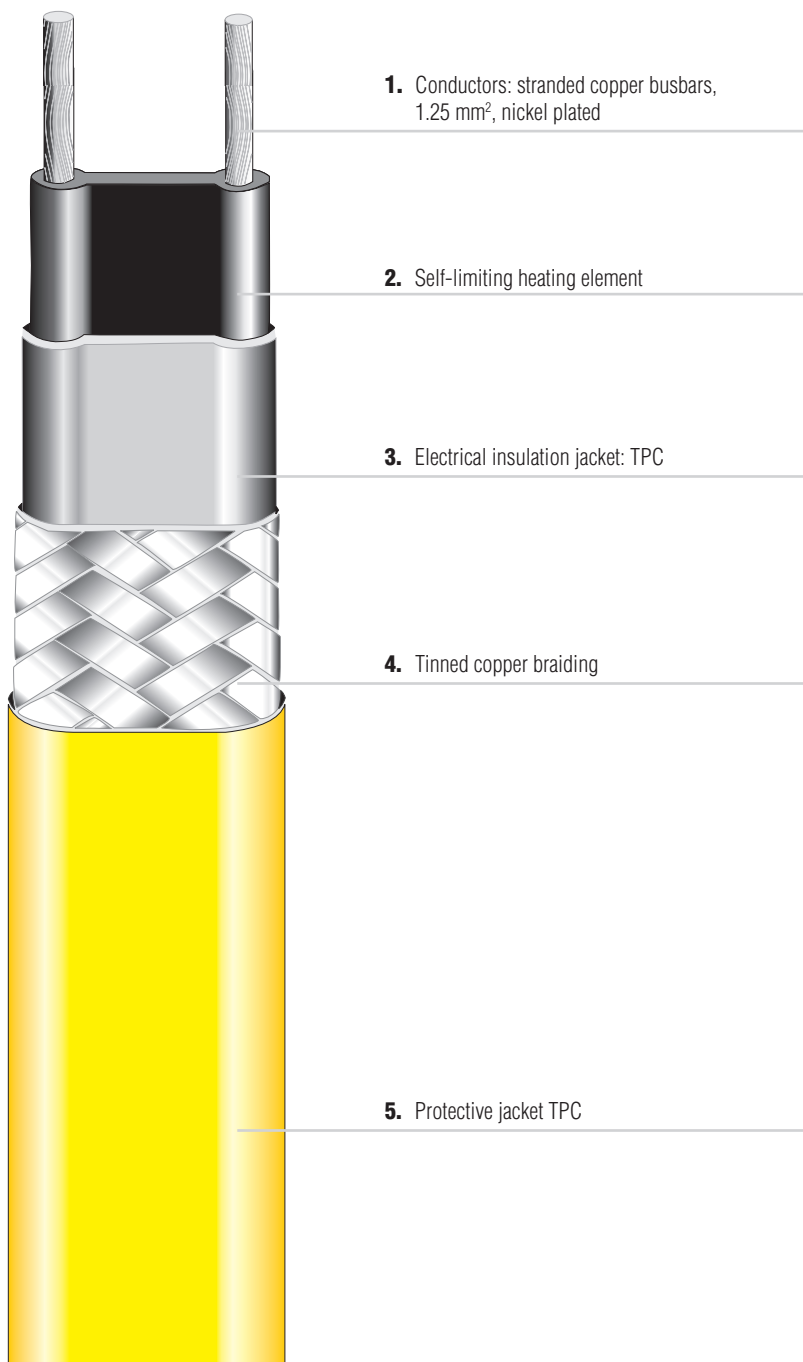
Fuse	PSB 10	PSB 13	PSB 15	PSB 26	PSB 33
16 A, cut-in temperature +10 °C	95 m	78 m	67 m	43 m	33 m
16 A, cut-in temperature -15 °C	69 m	55 m	45 m	30 m	25 m
16 A, cut-in temperature -30 °C	58 m	47 m	39 m	26 m	21 m
20 A, cut-in temperature +10 °C	95 m	86 m	80 m	58 m	45 m
20 A, cut-in temperature -15 °C	90 m	72 m	60 m	38 m	32 m
20 A, cut-in temperature -30 °C	75 m	59 m	49 m	31 m	26 m
32 A, cut-in temperature +10 °C	95 m	86 m	80 m	63 m	54 m
32 A, cut-in temperature -15 °C	95 m	86 m	80 m	55 m	45 m
32 A, cut-in temperature -30 °C	95 m	86 m	80 m	53 m	43 m



Features

- Self-limiting
- Can be used in temperature class T4 in Ex area
- Can be cut to length at random thanks to its parallel circuit configuration
- Simple installation thanks to its high flexibility and favourable dimensions
- Corrosion-proof and resistant to chemical attack thanks to its protective TPC outer jacket

Self-limiting parallel heating cable MSB TPC



Description

A temperature-dependant resistive element between two parallel copper conductors regulates and limits the heat output of the heating cable. This output regulation is carried out automatically along the entire length of the heating cable according to the prevailing ambient temperature. As the ambient temperature rises, the heat output of the cable is reduced. This self-limiting property prevents overheating.

The heating tape shall not be mounted crossed or overlapped to keep in the temperature class. The heating tape shall not be in operation over the maximum work-piece temperature to ensure the temperature class. A safety temperature limiter is required.

Thanks to the parallel power supply the heating cable can be cut to any required length. This feature considerably simplifies project planning and installation. The heating cable is cut and terminated in accordance with the local requirements directly on the construction site. In cases where the cable may become damaged, it is not necessary to replace the whole circuit but only the affected part.

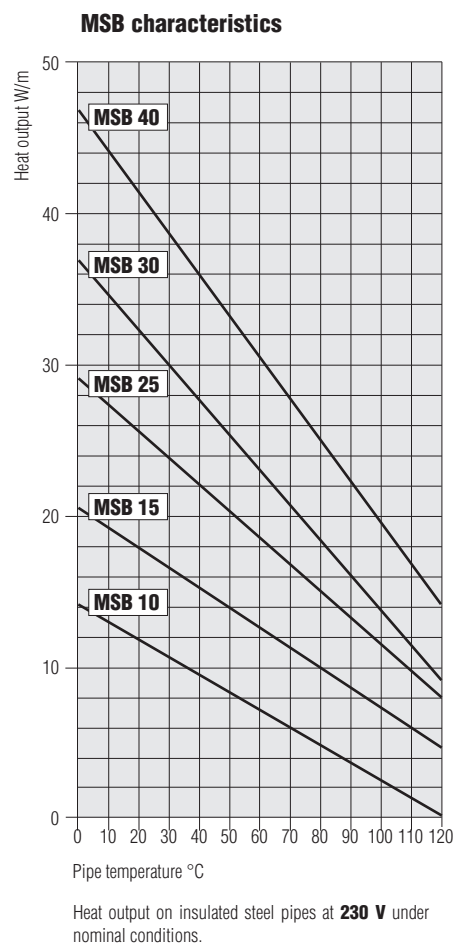
BARTEC MSB is available in different versions and with different power outputs.



Areas of application

MSB with thermoplastic elastomere protective jacket

- fatigue resistance for long life time at low and high temperatures
- resistance to oil, greases and many chemicals



➤ Explosion protection

Ex protection type heating tape

Ex II 2G Ex e IIC 150 °C (T3), T4 Gb

Ex II 2D Ex tb IIIC T 150 °C, T 130 °C Db

Verification certification system

KEMA 08 ATEX 0110

IECEx KEM 09.0083

Prüfbescheinigung heating cable

DEKRA 12 ATEX 0044 U

IECx DEK 12.0004 U

Max. resistance of protective braid

< 18.2 Ω/km (10.6 Ω/km)

Dimensions

with protective braid and protective outer jacket of TPC 10.2 mm x 4.8 mm

**➔ Technical data****Nominal voltage** AC 208 V up to 254 V**Power setting** at +10 °C

Heating output	MSB 10	MSB 15	MSB 25	MSB 30	MSB 40
at AC 230 V	13 W/m	19.5 W/m	27.5 W/m	34.5 W/m	44 W/m

Permissible ambient temperature

Nominal voltage	Heating cable	Maximum workpiece temperature	T class
at AC 254 V	all	+110 °C	150 °C (T3)
	MSB 10	+100 °C	T4
	MSB 15	+90 °C	T4
	MSB 25	+80 °C	T4
	MSB 30	+70 °C	T4
	MSB 40	+60 °C	T4

Max. permissible heating cable temperature

Cut-in heating cable +110 °C

Cut-off heating cable +130 °C

Min. installation temperature -40 °C**Min. cut-in temperature** -40 °C**Min. workpiece temperature** -40 °C**Min. bending radius** 25 mm**Max. length of heating circuit at ≤ 254 V** (for automatic circuit-breakers with C characteristic)

Fuse	MSB 10	MSB 15	MSB 25	MSB 30	MSB 40
16 A, cut-in temperature +10 °C	200 m	165 m	120 m	85 m	70 m
16 A, cut-in temperature -25 °C	175 m	117 m	88 m	69 m	49 m
16 A, cut-in temperature -50 °C	165 m	110 m	80 m	65 m	45 m
20 A, cut-in temperature +10 °C	235 m	189 m	140 m	114 m	82 m
20 A, cut-in temperature -25 °C	235 m	152 m	120 m	92 m	66 m
20 A, cut-in temperature -50 °C	225 m	144 m	114 m	86 m	62 m
32 A, cut-in temperature +10 °C	235 m	189 m	140 m	114 m	82 m
32 A, cut-in temperature -25 °C	235 m	189 m	140 m	114 m	82 m
32 A, cut-in temperature -50 °C	235 m	189 m	136 m	110 m	78 m



Self-limiting parallel heating cable HSB

Features

- Steam cleaning possible
- Self-limiting
- Can be used in explosive atmospheres without temperature limiter
- Can be cut to length at random thanks to its parallel circuit configuration
- Simple installation thanks to its high flexibility and favourable dimensions
- Easy on-site cutting and terminating, even in Ex areas
- Corrosion-proof and resistant to chemical attack thanks to its protective outer jacket

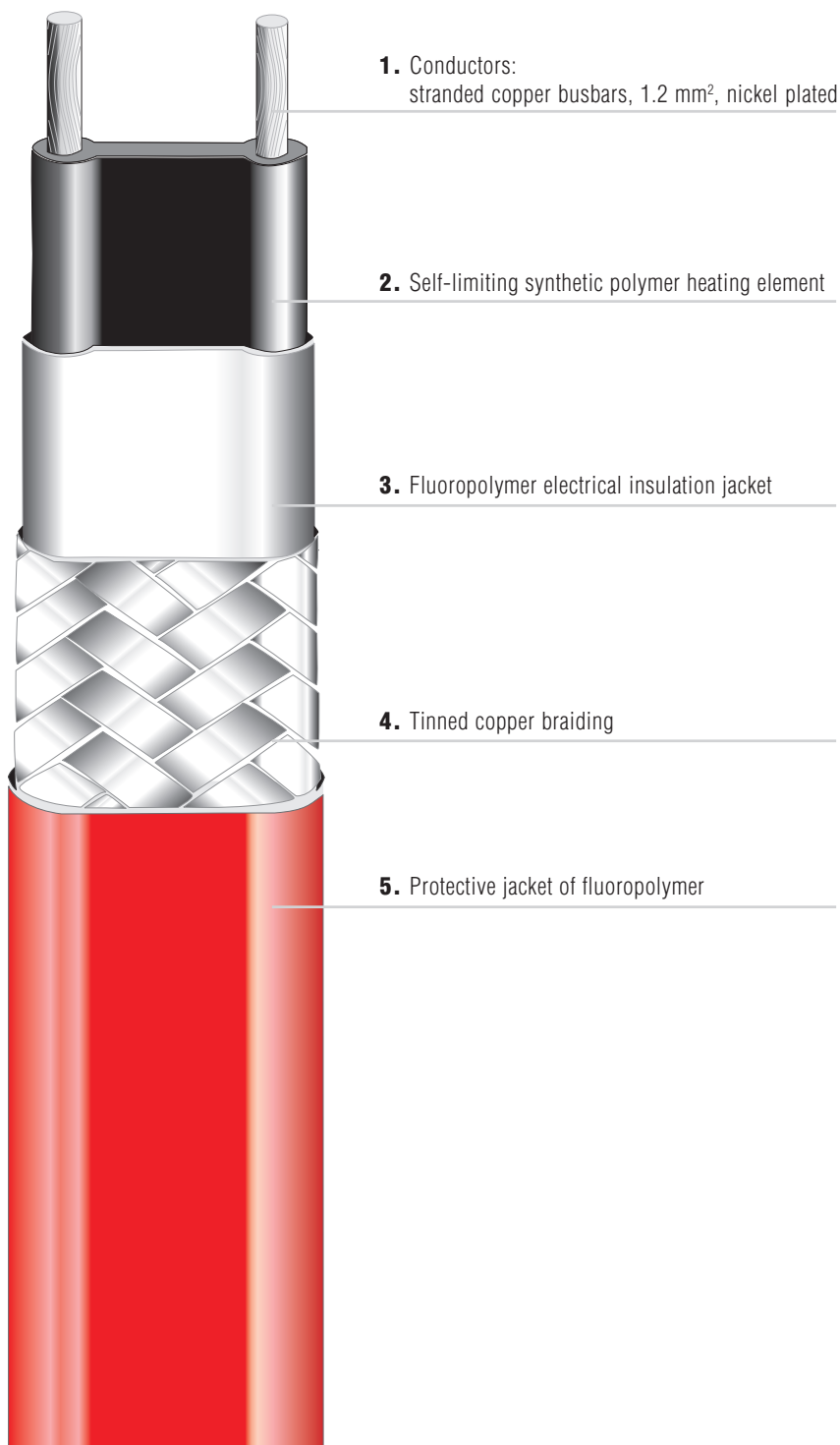
Description

A temperature-dependant resistive element between two parallel copper conductors regulates and limits the heat output of the heating cable. This output regulation is carried out automatically along the entire length of the heating cable according to the prevailing ambient temperature.

As the ambient temperature rises, the heat output of the cable is reduced. This self-limiting property prevents overheating even when the cable are overlapped. A temperature limiter is not required (not even in explosion hazard zones).

Thanks to the parallel power supply the heating cable can be cut to any required length. This feature considerably simplifies project planning and installation. The heating cable is cut and terminated in accordance with the local requirements directly on the construction site. In cases where the cable may become damaged, it is not necessary to replace the whole circuit but only the affected part.

BARTEC-HEAT HSB is available in different versions and with different power outputs.



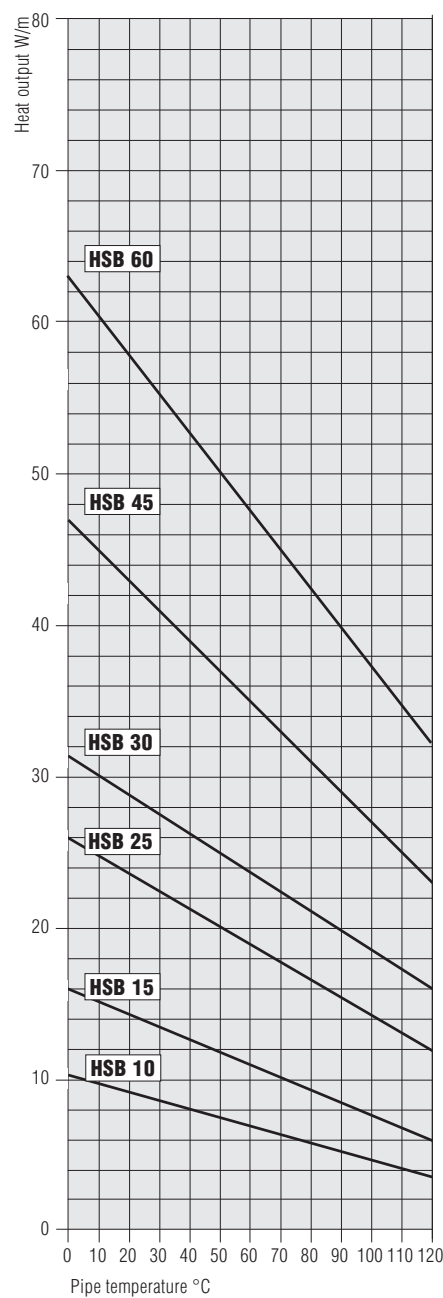


Areas of application

HSB with fluoropolymer protective jacket

- if the heating cable is exposed to high levels of humidity organic chemicals such as hydrocarbons or solvents.
- where the cable must meet high mechanical requirements.

HSB characteristics



Pipe temperature °C

Heat output on insulated steel pipes at **230 V** under nominal conditions.

Explosion protection

Ex protection type

Ex II 2G Ex e II 200 °C (T2), T3, T4
Ex II 2D Ex tD A21 IP 65 T 200 °C,
T 195 °C, T 130 °C

Verification Certification System

KEMA 08 ATEX 0110
IECEx KEM 09.0083

Verification Certification Components

KEMA 02 ATEX 2327 U
IECEx KEM 07.0048 U
CSA 1862457

Max. resistance of protective braid

< 18.2 Ω/km

Dimensions

with protective braid
and protective outer jacket of fluoropolymer
10.2 x 4.8 mm

Min. bending radius

25 mm



➔ Technical data

Nominal voltage

AC 208 V up to 254 V
AC 110 V up to 120 V

Power setting at +10 °C

Heating output	HSB 10	HSB 15	HSB 25	HSB 30	HSB 45	HSB 60
at AC 230 V	10 W/m	15 W/m	25 W/m	30 W/m	45 W/m	60 W/m
at AC 120 V	10.8 W/m	16.1 W/m	26.6 W/m	31.8 W/m	47.1 W/m	62.0 W/m

Permissible ambient temperature

Cut-in heating cable +120 °C
Cut-off heating cable +190 °C

Minimum installation temperature

-60 °C

Minimum storage temperature

-60 °C

Minimum cut-in temperature

-60 °C

Max. length of heating circuit at 254 V (for automatic circuit-breakers with C characteristic)

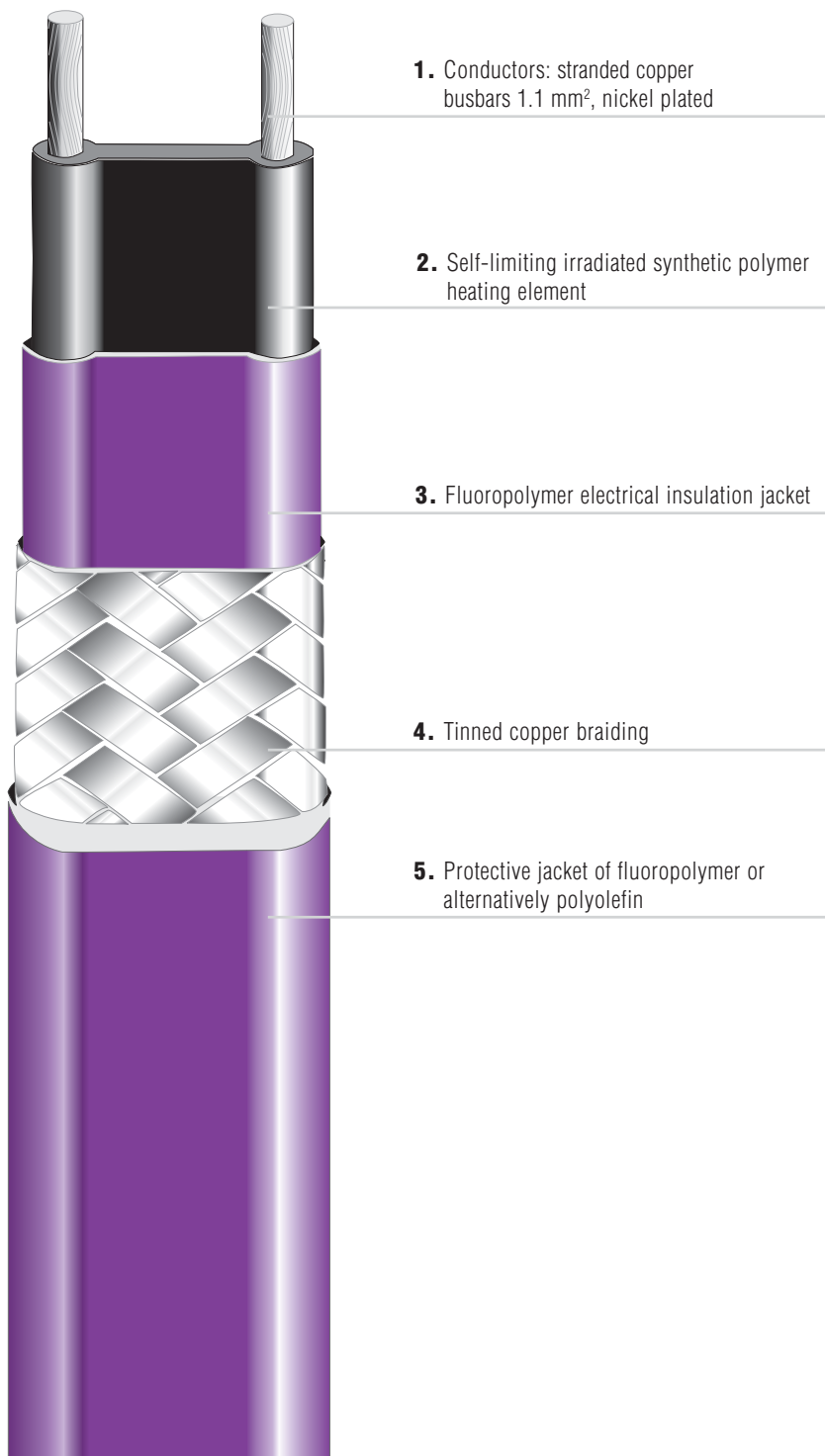
Fuse	HSB 10	HSB 15	HSB 25	HSB 30	HSB 45	HSB 60
16 A, cut-in temperature +10 °C	200 m	165 m	110 m	85 m	70 m	50 m
16 A, cut-in temperature -25 °C	175 m	117 m	88 m	69 m	49 m	38 m
16 A, cut-in temperature -60 °C	165 m	110 m	80 m	65 m	45 m	35 m
20 A, cut-in temperature +10 °C	235 m	189 m	140 m	114 m	82 m	64 m
20 A, cut-in temperature -25 °C	235 m	152 m	120 m	92 m	66 m	52 m
20 A, cut-in temperature -60 °C	225 m	144 m	114 m	86 m	62 m	48 m
32 A, cut-in temperature +10 °C	235 m	189 m	140 m	114 m	82 m	64 m
32 A, cut-in temperature -25 °C	235 m	189 m	140 m	114 m	82 m	64 m
32 A, cut-in temperature -60 °C	235 m	189 m	136 m	110 m	78 m	60 m

Max. length of heating circuit at 120 V (for automatic circuit-breakers with C characteristic)

Fuse	HSB 10	HSB 15	HSB 25	HSB 30	HSB 45	HSB 60
16 A, cut-in temperature +10 °C	100 m	80 m	60 m	44 m	35 m	25 m
16 A, cut-in temperature -25 °C	89 m	56 m	44 m	35 m	24 m	20 m
16 A, cut-in temperature -60 °C	82 m	52 m	40 m	32 m	22 m	17 m
20 A, cut-in temperature +10 °C	120 m	95 m	69 m	58 m	41 m	32 m
20 A, cut-in temperature -25 °C	120 m	75 m	59 m	45 m	33 m	25 m
20 A, cut-in temperature -60 °C	120 m	75 m	55 m	41 m	26 m	21 m
32 A, cut-in temperature +10 °C	120 m	95 m	69 m	58 m	41 m	32 m
32 A, cut-in temperature -25 °C	120 m	95 m	69 m	58 m	41 m	32 m
32 A, cut-in temperature -60 °C	120 m	95 m	69 m	58 m	41 m	32 m



Self-limiting parallel heating cable HTSB



Features

- Level of steam cleaning is possible
- Self-limiting
- Can be used in explosive atmospheres without temperature limiter (subject to 'T' class)
- Can be cut to length at random thanks to its parallel circuit configuration
- Simple installation thanks to its high flexibility
- Easy on-site cutting and terminating
- Corrosion-proof and resistant to effects of chemicals thanks to its protective outer sheath

Description

A temperature-dependent resistive element between the parallel copper conductors regulates and limits the heating cable's heat output. This power setting occurs automatically at every point of the heating cable depending on the ambient temperature prevailing there. If the ambient temperature increases, the cable's heating output is reduced. This self-limitation prevents the heating cables overheating even where cables overlap.

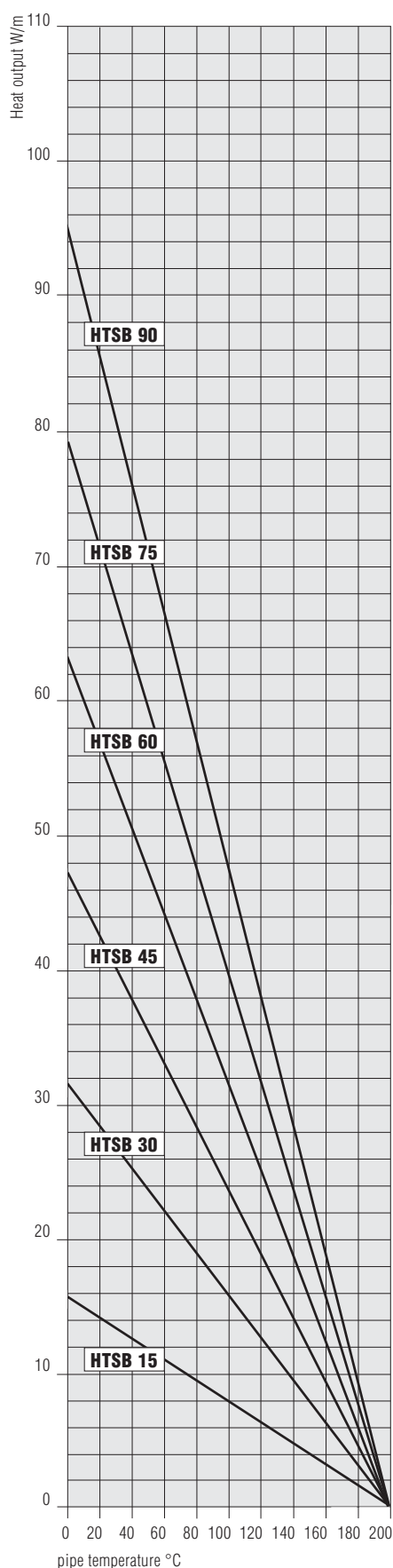
A temperature limiter only may be needed to protect the heated medium. (Thermal safety is ensured by the division into temperature classes.)

The parallel supply of power allows the heating cable to be cut to any length. This makes planning and installation easier. The heating cable is cut from the roll on the construction site according to the local conditions. If the cable gets damaged, only the part concerned has to be replaced, not the entire heating cable.

BARTEC HTSB is available in various power ratings and versions.



HTSB-characteristics



Heat output on insulated steel pipes at **230 V** under nominal conditions.

Applications

Construction

The cable is used with Cu braiding and an insulation jacket made of fluoropolymer if it is exposed to excessive humidity, aggressive chemical influences or additional mechanical stresses.

Chemical resistance

with insulation fluoropolymer jacket resistant to: acids, alkalis, salts, seawater, oils and other hydrocarbon liquids.

Explosion protection

Ex protection type

Ex II 2GD IP 6x Ex e IIC T2 Gb
Ex t IIIIC T 300 °C Db

Certification

Sira 10ATEX3268

Temperature class

(according to EN 60079-0)

HTSB 15 up to HTSB 60	T3
HTSB 75 up to HTSB 90	T2

Max. resistance of protective braid

< 18.2 Ω/km

Dimensions

with protective braid and protective outer jacket of fluoropolymer
HTSB 15 up to HTSB 90 12.2 x 5.2 mm

Min. bending radius

30 mm

Flexible wire

HTSB 15 up to HTSB 90	1.1 mm ²
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**➔ Technical data****Nominal voltage**AC 220 V up to 277 V
AC 110 V up to 120 V**Power setting at +10 °C**

Heating voltage	HTSB 15	HTSB 30	HTSB 45	HTSB 60	HTSB 75	HTSB 90
at AC 230 V	15 W/m	30 W/m	45 W/m	60 W/m	75 W/m	90 W/m
at AC 120 V	15 W/m	30 W/m	45 W/m	60 W/m	75 W/m	90 W/m

Permissible ambient temperature

Cut-in heating cable +200 °C

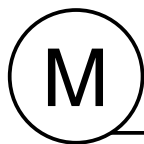
Cut-off heating cable +240 °C

Min. installation temperature -40 °C**Min. ambient temperature** -40 °C**Min. cut-in temperature** -20 °C**Max. length of heating circuit at 230 V** (for automatic circuit-breakers with C characteristic)

Fuse	HTSB 15	HTSB 30	HTSB 45	HTSB 60	HTSB 75	HTSB 90
6 A, cut-in temperature +10 °C	48 m	30 m	24 m	18 m	16 m	12 m
6 A, cut-in temperature 0 °C	46 m	30 m	22 m	18 m	14 m	12 m
6 A, cut-in temperature -20 °C	40 m	26 m	20 m	16 m	14 m	10 m
10 A, cut-in temperature +10 °C	78 m	52 m	38 m	30 m	26 m	22 m
10 A, cut-in temperature 0 °C	76 m	48 m	36 m	30 m	24 m	20 m
10 A, cut-in temperature -20 °C	68 m	44 m	34 m	26 m	22 m	18 m
16 A, cut-in temperature +10 °C	126 m	82 m	62 m	50 m	42 m	34 m
16 A, cut-in temperature 0 °C	120 m	78 m	58 m	46 m	40 m	32 m
16 A, cut-in temperature -20 °C	108 m	70 m	52 m	42 m	36 m	30 m
20 A, cut-in temperature +10 °C	154 m	102 m	78 m	62 m	52 m	42 m
20 A, cut-in temperature 0 °C	150 m	96 m	74 m	58 m	48 m	40 m
20 A, cut-in temperature -20 °C	136 m	88 m	66 m	52 m	44 m	36 m
25 A, cut-in temperature +10 °C	-	108 m	88 m	76 m	64 m	54 m
25 A, cut-in temperature 0 °C	154 m	108 m	88 m	72 m	60 m	50 m
25 A, cut-in temperature -20 °C	154 m	108 m	82 m	66 m	54 m	46 m
32 A, cut-in temperature +10 °C	-	-	-	-	82 m	68 m
32 A, cut-in temperature 0 °C	-	-	-	76 m	78 m	64 m
32 A, cut-in temperature -20 °C	-	-	88 m	76 m	70 m	58 m



Max. length of heating circuit at 120 V (for automatic circuit-breakers with C characteristic)						
Fuse	HTSB 15	HTSB 30	HTSB 45	HTSB 60	HTSB 75	HTSB 90
6 A, cut-in temperature +10 °C	24 m	15 m	12 m	9 m	8 m	6 m
6 A, cut-in temperature 0 °C	23 m	15 m	11 m	9 m	7 m	6 m
6 A, cut-in temperature -20 °C	20 m	13 m	10 m	8 m	7 m	5 m
10 A, cut-in temperature +10 °C	39 m	26 m	19 m	15 m	13 m	11 m
10 A, cut-in temperature 0 °C	38 m	24 m	18 m	15 m	12 m	10 m
10 A, cut-in temperature -20 °C	34 m	22 m	17 m	13 m	11 m	9 m
16 A, cut-in temperature +10 °C	63 m	41 m	31 m	25 m	21 m	17 m
16 A, cut-in temperature 0 °C	60 m	39 m	29 m	23 m	20 m	16 m
16 A, cut-in temperature -20 °C	54 m	35 m	26 m	21 m	18 m	15 m
20 A, cut-in temperature +10 °C	77 m	51 m	39 m	32 m	26 m	21 m
20 A, cut-in temperature 0 °C	75 m	48 m	37 m	39 m	24 m	20 m
20 A, cut-in temperature -20 °C	68 m	44 m	33 m	26 m	22 m	18 m
25 A, cut-in temperature +10 °C	-	54 m	44 m	38 m	32 m	27 m
25 A, cut-in temperature 0 °C	77 m	54 m	44 m	36 m	30 m	25 m
25 A, cut-in temperature -20 °C	77 m	54 m	41 m	33 m	27 m	23 m
32 A, cut-in temperature +10 °C	-	-	-	-	41 m	34 m
32 A, cut-in temperature 0 °C	-	-	-	38 m	39 m	32 m
32 A, cut-in temperature -20 °C	-	-	44 m	38 m	35 m	29 m



EKL Light Flexible Single-Core Heating Cable

Features

- Consistent heat output per meter
- Resistant to steam purging, suitable for high temperatures up to +260 °C
- Easy installation, very flexible
- Highly resistant to almost all industrial chemicals and solvents

Description

EKL light is a serial resistant heating cable for use in industrial and commercial areas. It is suitable for anti-freeze applications and temperature maintenance on pipes and tanks and it is also extremely flexible. This makes EKL light easy to install, even on irregular shapes such as on pumps, valves and flanges.

The PFA protective jacket gives the EKL light a high degree of chemical and mechanical resistance, even at high temperatures.

In economical terms, EKL light is a genuine alternative to SLHBs when the latter's maximum heating circuit lengths are exceeded.

With pre-assembled cold leads and our connection technology, complete heating circuits can be set up quickly and flexibly.

Technical Data

Nominal voltage

500 V

Working temperature

-60 °C to +260 °C

Minimum installation temperature

-60 °C

Minimum bending radius

5 x external diameter

Minimum installation spacing

20 mm

Mechanical strength

4 joules (in conformance to EN 62395-1)

Maximum heating power

25 W/m

Resistance tolerance

-5 % / +10 %

Resistance of protective braid

< 18.2 Ω/km

Resistance levels

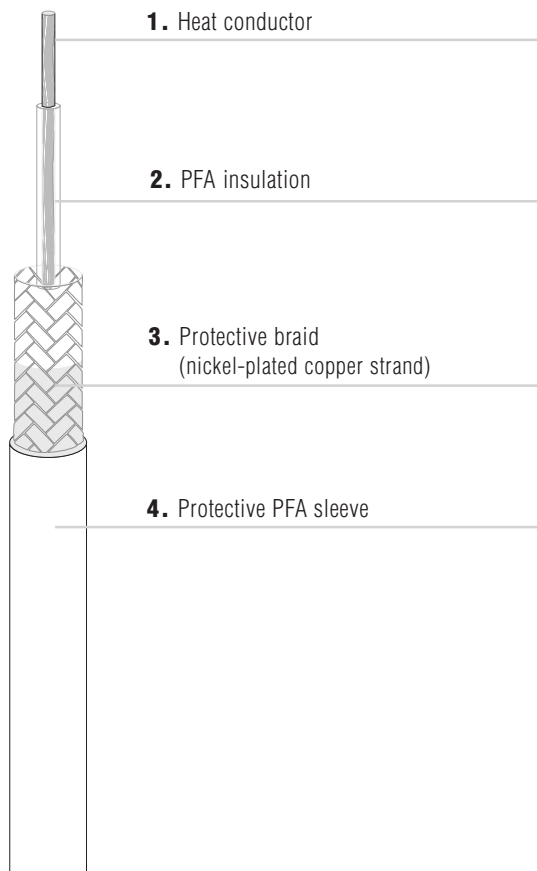
0.8 Ω/km to 8000 Ω/km

Applied standards

Electrical safety

EN 62395-1

Flexible single-core heating cable EKL premium



Features

- Stable heat output per meter
- Resistant to steampurging, high resistant to chemicals
- Simple installation, simple tailoring on site
- ATEX approval in conformance to EN 60079
- Suitable for applications in explosive area (7J impact resistance)

Description

EKL premium is a flexible heating cable with a fixed specific resistance. Its small external dimensions make the heating cable easy to install, even on irregularly shaped surfaces such as on pumps, valves and flanges. Assembly on building sites is simple and made even easier by the imprinted metre markings.

The reinforced structure facilitates applications of the EKL premium heating cable even under increased mechanical stress (7 Joule).

Explosion protection

Ex protection type

■ II 2G Ex e II
■ II D Ex tD A21

Certification

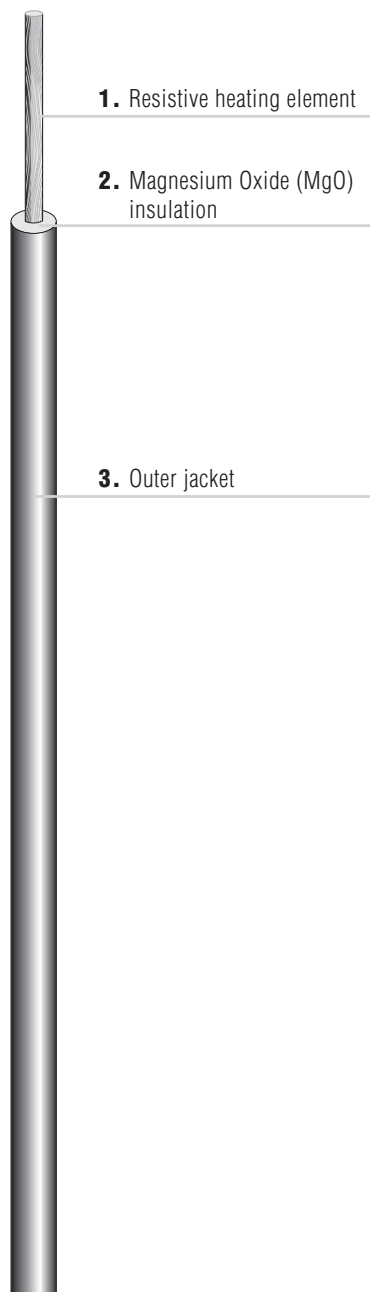
KEMA10ATEX0035 U

Technical data

Rated voltage	450/750 V (U_0/U)
Test voltage	2.5 kV (lead/braid)
Resistance of the protective braid	< 18.2 Ω /km
Working temperature	-60 °C up to +260 °C
Min. installation temperature	-60 °C
Bending radius	min. 15 mm, min. 25 mm for 1R08 and 1R71
Shock resistance	7 joules (in conformance to EN60079)



Single-core mineral-insulated heating cable EMK



Features

- High constant power output per metre
- Extremely high mechanical strength
- Temperature-resistant up to +650 °C
- Highly resistant to chemicals
- Supply voltage of up to 500 V
- Suitable for Ex areas
- Outer jacket of Incoloy
 - highly resistant to stress corrosion cracking
 - high power output (up to 230 W/m)
 - extremely high chemical resistance

Description

A distinguishing feature of our BARTEC EMK heating cables is that they are extremely robust and require no additional protection against mechanical influences.

Function

The application of a supply voltage to the resistance cable generates heat. The quantity of heat is dependent on the resistance value of the heating cable and the supply voltage.

Explosion protection

Ex protection type

II 2G EEx e II

Certification

PTB 99 ATEX 1080 U

SIRA 05 ATEX 3008

Technical data

Structure

heating element	copper, chromium nickel, constantan
insulation	magnesium Oxide (MgO)
outer jacket	Incoloy, stainless steel no. 1.4541 or CuNi

Heating circle with EMK

Type 27-3621-02../....

Type 27-3621-04../....

Type 27-3623-02../....

Type 27-3623-04../....

Nominal voltage

up to 500 V

Test voltage

1.5 kV

Min. installation temperature

-20 °C

Bend radius

3 x OD (Standard version)

5 x OD (Ex version)

Weight

100 to 180 g/m²

Max. jacket withstand temperature

Incoloy +650 °C*

S/S +600 °C

CuNi +400 °C

* on request

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