



## 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

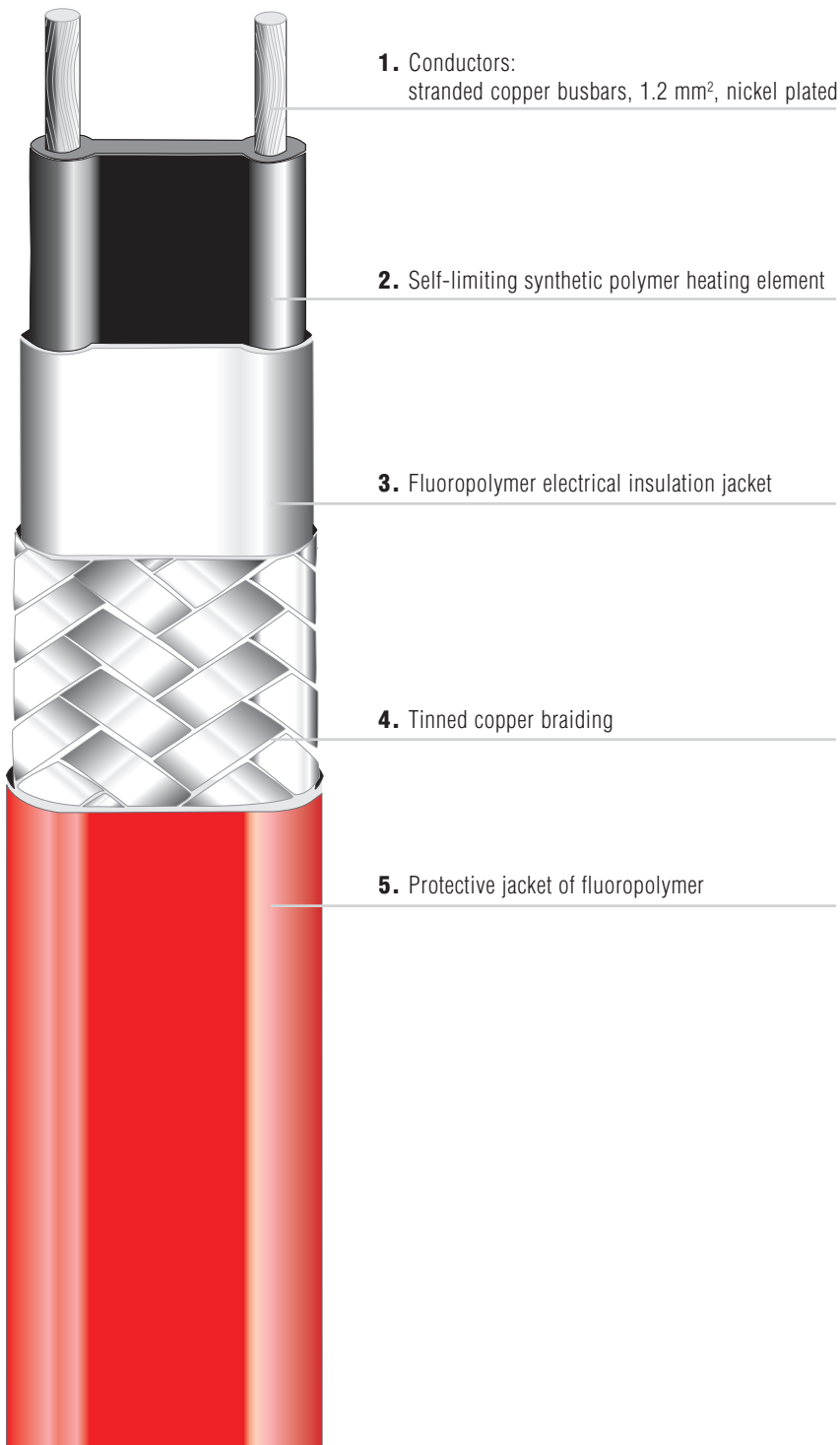
### Description

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.

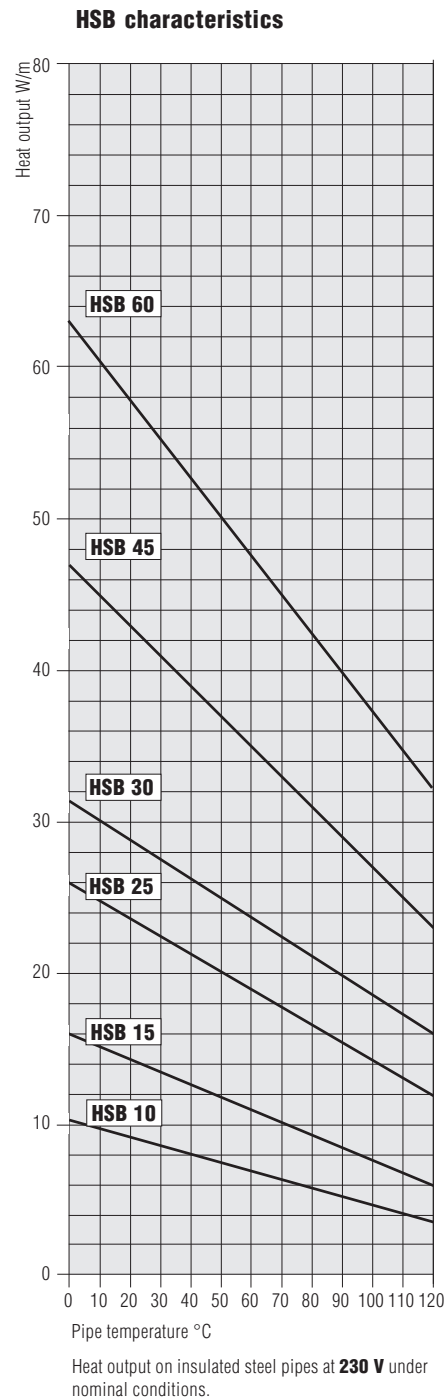




### Areas of application

#### 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.



### Explosion protection

#### Ex protection type

- ⊕ II 2G Ex e II 200 °C (T2), T3, T4
- ⊕ 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



**Selection chart HSB**

Description	Type	Heating output	➔ Order no.
<b>HSB parallel heating cable AC 254 V</b> - self-limiting - steam cleaning possible - explosion protected  - media protected 	HSB 10	10 W	<b>07-5803-210A</b>
	HSB 15	15 W	<b>07-5803-215A</b>
	HSB 25	25 W	<b>07-5803-225A</b>
	HSB 30	30 W	<b>07-5803-230A</b>
	HSB 45	45 W	<b>07-5803-245A</b>
	HSB 60	60 W	<b>07-5803-260A</b>
<b>HSB parallel heating cable AC 120 V</b> - self-limiting - steam cleaning possible - explosion protected  - media protected 	HSB 10	10 W	<b>07-5803-110A</b>
	HSB 15	15 W	<b>07-5803-115A</b>
	HSB 25	25 W	<b>07-5803-125A</b>
	HSB 30	30 W	<b>07-5803-130A</b>
	HSB 45	45 W	<b>07-5803-145A</b>
	HSB 60	60 W	<b>07-5803-160A</b>