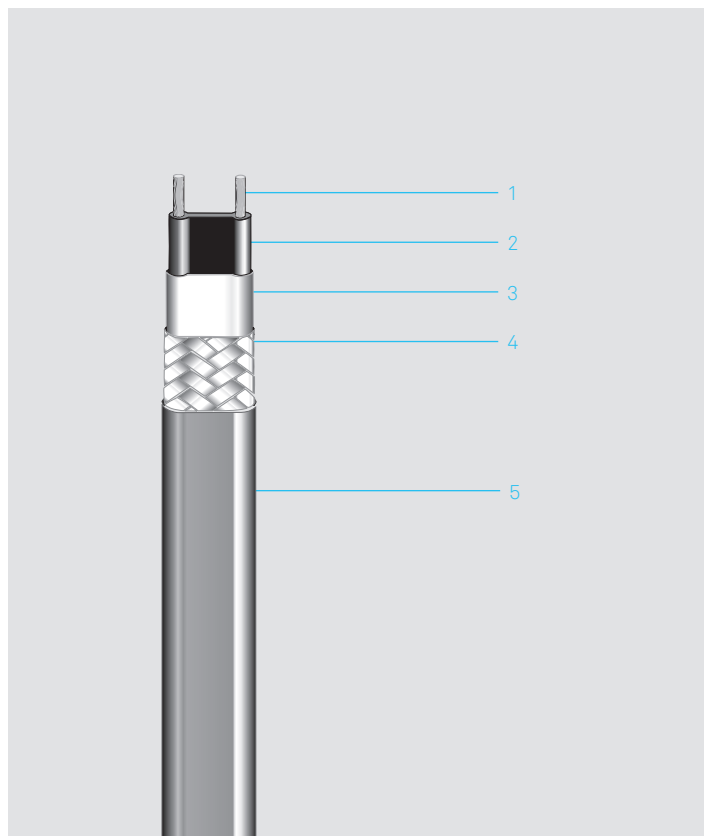


Self-regulating heating cable PSB



1	Conductors: stranded copper wire 1.2 mm ² , nickel plated
2	Self-regulating polymer heating element
3	Insulation jacket, polyolefin
4	Tinned copper braiding
5	Polyolefin or fluoropolymer protective jacket

- Can be cut at random length thanks to its parallel current supply
- Electrically and mechanically protected by a tinned copper braiding
- Simple installation thanks to its high flexibility and favourable dimensions

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 power output of the heating cable is reduced. This self-regulating property prevents overheating even when the cables are crossed. A temperature limiter is not necessary (also not in hazardous areas). Thanks to the parallel design the heating cable can be cut and installed to any required length. The self-limiting heating cable is available with different power outputs and protective jackets. The protective outer jacket of either fluoropolymer or polyolefin protects the copper braiding from corrosion and chemical impact. The heating system must be designed to ensure that the maximum exposure temperature of 65 °C will not be exceeded when it is energized.

Areas of application

The PSB heating cable is suitable for electric trace heating for frost protection of pipelines and vessels. While the polyolefin protective jacket is used where there are aqueous, inorganic chemicals, the fluoropolymer protective jacket is suitable for organic chemicals. For questions regarding the chemical resistance please contact your BARTEC sales representative.

Explosion protection

Marking	II 2G Ex 60079-30-1 IIC T5, T6 Gb II 2D Ex 60079-30-1 IIIC T95 °C, T 80 °C Db
Certification	DEKRA 17ATEX0007 U IECEX DEK 17.0004U
	Other approvals and certificates, see bartec.com

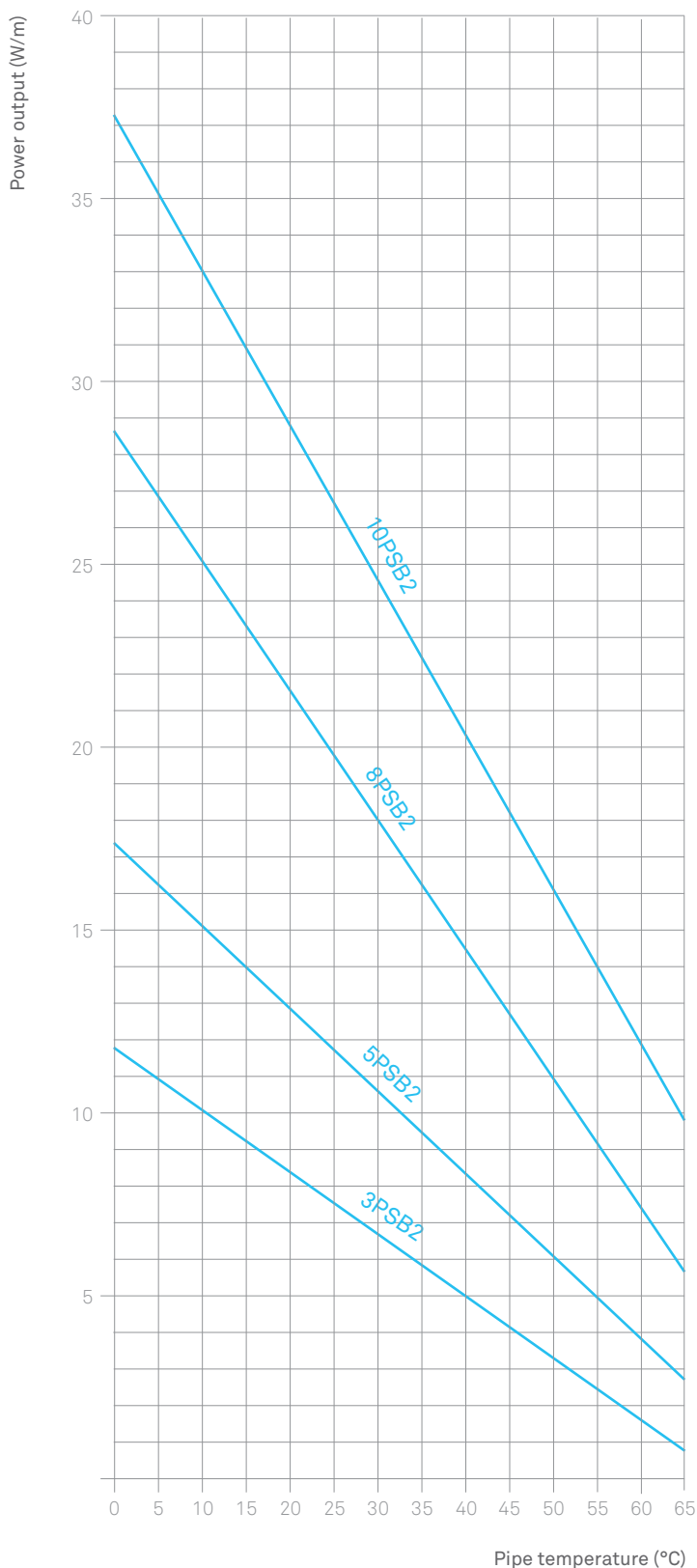
Technical data

Nominal voltage	AC 208 V to 277 V, 120V on request
Max. continuous operating temperature, energized	+65 °C
Max. continuous exposure temperature, de-energized	+85 °C
Min. installation temperature	-55°C
Min. start-up temperature	-55°C
Temperature class	T6: 3PSB2, 5PSB2 T5: 8PSB2, 10PSB2
Max. braid resistance	<18,2 Ω/km
Dimensions with braiding and jacket	11.8 x 5.8 mm with polyolefin protective jacket 11.6 x 5.6 mm with fluoropolymer protective jacket
Min. bending radius	25 mm

Power output at 10 °C and 230 V

3PSB2	10 W/m
5PSB2	15 W/m
8PSB2	25 W/m
10PSB2	33 W/m

PSB characteristics



Max. length of heating circuit at 230 V

for automatic circuit-breakers with C characteristic

Circuit breaker size	start-up temperature	3PSB2	5PSB2	8PSB2	10PSB2
16 A	+10 °C	202 m	153 m	91 m	57 m
	0 °C	202 m	144 m	86 m	54 m
	-20 °C	163 m	115 m	70 m	44 m
20 A	+10 °C	202 m	165 m	120 m	76 m
	0 °C	202 m	165 m	107 m	67 m
	-20 °C	202 m	144 m	87 m	55 m
25 A	+10 °C	202 m	165 m	128 m	95 m
	0 °C	202 m	165 m	128 m	84 m
	-20 °C	202 m	165 m	128 m	69 m
32 A	+10 °C	202 m	165 m	128 m	97 m
	0 °C	202 m	165 m	128 m	97 m
	-20 °C	202 m	165 m	128 m	88 m

These circuit lengths may be exceeded dependat on specific design parameters.

Ordering information

Protective jacket fluoropolymer

Type	Heating output	Order no.
3PSB2-CT	10 W/m	07-5853-710F
5PSB2-CT	15 W/m	07-5853-715F
8PSB2-CT	25 W/m	07-5853-725F
10PSB2-CT	33 W/m	07-5853-733F

Protective jacket polyolefin

Type	Heating output	Order no.
3PSB2-CR	10 W/m	07-5853-710P
5PSB2-CR	15 W/m	07-5853-715P
8PSB2-CR	25 W/m	07-5853-725P
10PSB2-CR	33 W/m	07-5853-733P