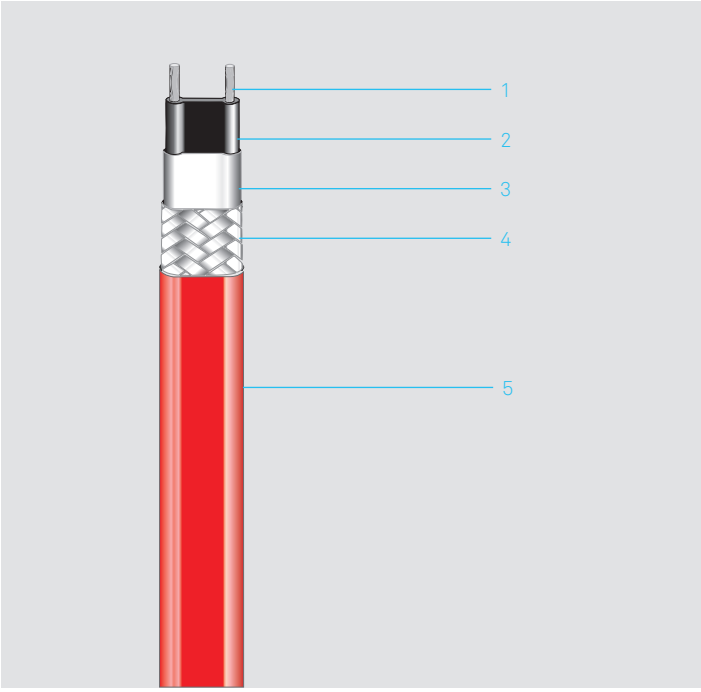
BARTEC

Self-regulating heating cable MSB

Mid temperature, self-regulating parallel heating cable



1	Conductors: stranded copper wire, 1.25 mm², nickel-plated
2	Self-regulating polymer heating element
3	Fluoropolymer electrical insulation jacket
4	Nickel plated copper braiding
5	Fluoropolymer protective jacket

- Can be cut to length at random thanks to its parallel current supply
- Resistant to chemical influences thanks to its protective Fluoropolymer protective jacket
- Simple installation thanks to its high flexibility

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. If the ambient temperature rises, the power output of the cable is reduced. Thanks to the parallel design 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 directly on the construction site according to the circumstances. If the cable will be damaged, it is not necessary to replace the whole cable. BARTEC MSB is available with different power outputs. The heating system must be designed to ensure that the maximum exposure temperature of +110 °C will not be exceeded when it is energized.

Areas of application

The MSB heating cable is suitable for electric trace heating in the industrial area and can be exposed to a temperature of up to 130 °C (power off). With the fluoropolymer-protective jacket, the heating cable is resistant to oil, greases and most chemicals. For questions regarding the chemical resistance please contact your BARTEC sales representative.

Explosion protection

Marking	Ⓔx II 2G Ex 60079-30-1 IIC T3, T4, T5, T6 Gb Ⓔx II 2D Ex 60079-30-1 IIIC T170°C, T130°C, T95 °C, T 80 °C Db
Certification	DEKRA 17ATEX0007 U IECEx DEK 17.0004U

Other approvals and certificates, see **www.bartec.com**

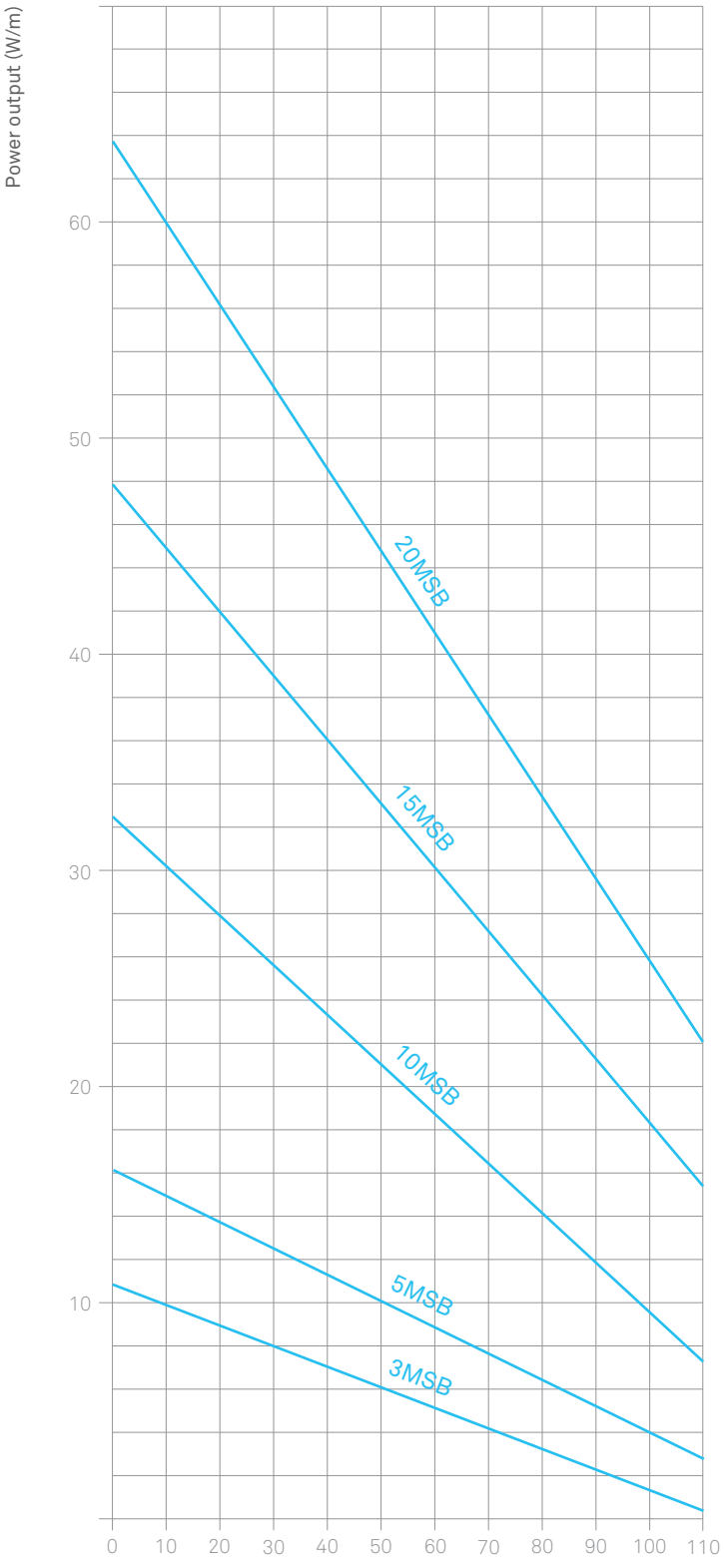
Technical data

Nominal voltage	AC 208 V bis 277 V, 120V on request
Max. continuous operating temperature, energized	+110 °C
Max. continuous exposure temperature, de-energized	+130 °C
Min. installation temperature	-60°C
Min. start-up temperature	-60°C
Temperature class	T4: 3MSB2, 5MSB2 T3: 10MSB2, 15MSB2, 20MSB2
Temperature class - System approach*	T3-T6 *stabilized Design
Max. braid resistance	<18.2 Ω/km
Dimensions with braiding and jacket	10,2 mm x 4,8 mm
Min. bending radius	10 mm

Power output at +10 °C and 230 V

3MSB2	10 W/m
5MSB2	15 W/m
10MSB2	30 W/m
15MSB2	45 W/m
20MSB2	60 W/m

MSB characteristics



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

Max. length of heating circuit at 230 V

for automatic circuit-breakers with C characteristic

Circuit breaker size	start-up temp-erature	3MSB2	5MSB2	10MSB2	15MSB2	20MSB2
16 A	+10 °C	230 m	164 m	92 m	67 m	52 m
	0 °C	217 m	155 m	87 m	64 m	49 m
	-20 °C	195 m	141 m	79 m	58 m	45 m
20 A	+10 °C	231 m	188 m	115 m	82 m	65 m
	0 °C	231 m	188 m	109 m	79 m	61 m
	-20 °C	231 m	177 m	98 m	72 m	56 m
25 A	+10 °C	231 m	188 m	133 m	82 m	75 m
	0 °C	231 m	188 m	133 m	82 m	75 m
	-20 °C	231 m	188 m	133 m	82 m	70 m
32 A	+10 °C	231 m	188 m	133 m	82 m	75 m
	0 °C	231 m	188 m	133 m	82 m	75 m
	-20 °C	231 m	188 m	133 m	82 m	75 m

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

Ordering information

Type	Heating output	Order no.
3MSB2-CT	10 W/m	07-5854-710F
5MSB2-CT	15 W/m	07-5854-715F
10MSB2-CT	30 W/m	07-5854-730F
15MSB2-CT	45 W/m	07-5854-745F
20MSB2-CT	60 W/m	07-5854-760F