



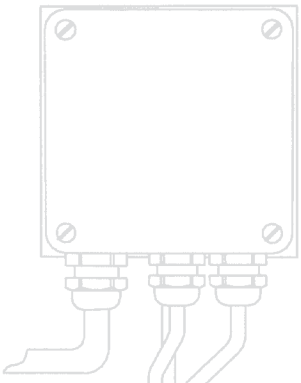
Heating technology

Protection against Frost Temperature Maintenance Heating

Our knowledge about products, engineering and processes forms the basis of innovative and economical trace heating systems, in particular in hazardous (potentially explosive) areas. We develop future-proof trace heating for customer-specific tasks and application areas.

BARTEC is a competent and solid partner for temperature maintenance, heating and protection against frost. BARTEC's electric trace heating has been used for many years in these areas with a convincing reliability day after day.

Applications: pipe systems, containers, bins/silos, cabinets, instruments, analysis systems.



BARTEC
Your partner for
Electric
Heating

The experts
at BARTEC
have many
years of
experience in
heating
technology.
They create
solutions
you can rely on:
economical,
dependable and
future-proof.



Trace heating systems

Control units

Heaters

Full Service

A specialist knowledge of safety technology and experienced, committed service personnel guarantee that your plant will operate reliably and support you from partial services to the realisation of turn-key projects in

- budget-preparation
- basic/detailed engineering
- installation, commissioning after-sales service

We regularly hold specialised seminars and we shall also be happy to train your staff on site too.

All-round safety – that's what we mean by full service.



Self-limiting parallel heating cables

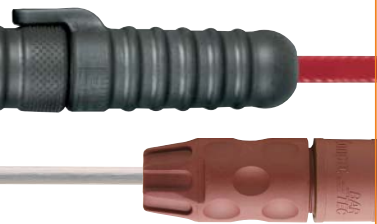
Single-core plastic heating cables

Mineral-insulated heating cables

Heating cable



Connection system



Junction box



Heating cables

The heating cable is the heart of a system. The emission of heat from the heating cable keeps pipes and surfaces at the desired temperature constantly and the heating output is increased or decreased in response to changes in the ambient temperature.

- Self-limiting parallel heating cables PSBL, PSB, HSB and HTSB
- Single-core plastic heating cables EKL light, EKL medium, EKL premium
- Mineral-insulated heating cables EMK

Connecting systems

To suit the varying heating cables and areas of applications, you have a choice of different connecting systems:

- Simply ingenious and flexible: PLEXO, TWISTO, CONPAC
- Exceptionally economical: silicone cold-applied connection technology and heat-shrink technology
- Large selection of junction boxes made of: plastic, aluminium or stainless steel

Control units and temperature sensors

- Electromechanical and electronic regulating and control units for use in Ex areas and for industrial applications
- Ambient thermostats, two-position controllers, proportional devices, PID control units
- Single-channel and multi-channel control systems
- Pt100 temperature sensors for use in Ex areas and for industrial applications

Heaters

- Heater plates for use in Ex areas
- Control cabinet heaters
- Mini heaters
- Anti-condensation motor heaters

Project engineering software

We have developed efficient and easy-to-operate project engineering software HELOC specially for users. It is ideal for designing heating circuits, calculating heat loss, selecting heating cables etc.

Summary of heating systems

Heating systems	System PSBL	System PSB	System HSB	System HTSB
	Self-limiting parallel heating cables	Self-limiting parallel heating cables	Self-limiting parallel heating cables	Self-limiting parallel heating cables
➔ Explosion protection	yes	yes	yes	no
➔ Technical data				
Heating power ¹⁾	10 up to 30 W/m	10 up to 33 W/m	10 up to 60 W/m	10 up to 98 W/m
Max. operating temperature ²⁾ heating cable energised (power on)	+65 °C	+65 °C	+120 °C	+190 °C
Resistant to steam cleaning	-	-	ja	ja
Max. length of heating circuit ⁴⁾ per feed point	154 m	198 m	200 m	163 m
Max. operating voltage	120 V/254 V	120 V/254 V	120 V/254 V	120 V/254 V
Suitable for corrosive atmospheres ⁵⁾	yes	yes	yes	yes

Heating systems	System EKL	System EMK CuNi	System EMK VA
	Single-core plastic insulated heating cables	Mineral-insulated heating cables Outer jacket CuNi	Mineral-insulated heating cables Outer jacket VA or Incoloy
➔ Explosion protection	yes	yes	yes
➔ Technical data			
Heating power	approx. 25 W/m	100 W/m	230 W/m
Max. operating temperature ³⁾ heating cable energised (power on)	Standard Version: +220 °C Ex Version: +200 °C (PTFE/PFA +260 °C)	+400 °C	+650 °C
Resistant to steam cleaning	yes	yes	yes
Max. length of heating circuit ⁴⁾ per feed point	1000 m	1000 m	1000 m
Max. operating voltage	500 V	500 V	500 V
Suitable for corrosive atmospheres ⁵⁾	yes	yes	yes

¹⁾ different nominal powers available

²⁾ Maximum ambient temperature during operation

³⁾ Reference value: each case will depend on conductor/surface temperature of the heating cable and the application itself

⁴⁾ Reference value: depending on application, depend on ambient temperature

⁵⁾ to be tested for individual cases

BARTEC protects
people and
the environment
by the safety

of components,
systems
and plants.

