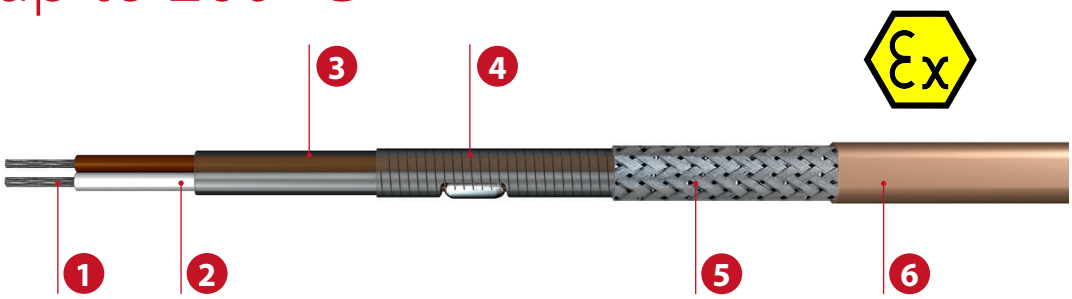
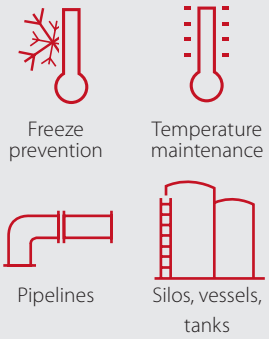
eltherm®

ELP-PFA
up to 260 °C



At a Glance

Applications



- Chemistry and Petrochemistry
- Building construction
- Food Processing Industry
- Paper industry

Benefits

- Single end power input
- Can be cut to length
- Constant power output per meter
- High chemical resistance
- UV-resitance
- flexible

Approvals

- Trace Heater classification
  II 2G Ex 60079-30-1 IIC Gb
  II 2D Ex 60079-30-1 IIIC Db
- System classification
  II 2G Ex 60079-30-1 IIC T6..T2 Gb
  II 2D Ex 60079-30-1 IIIC Txx°C Db
- Certification
  IECEx EPS 12.0009 U
  IECEx EPS 21.0062 X
  EPS 12 ATEX 1438 U
  EPS 21 ATEX 1198 X

1	Bus wire	Copper
2	1st insulation	Fluoropolymer
3	Heating conductor	Heating conductor alloy
4	2nd insulation	Fluoropolymer
5	Protective braid	Copper, nickel-plated
6	Outer jacket	Fluoropolymer

Constant wattage trace heater with resistance wire

These parallel trace heaters offer tremendous flexibility in use, as they can easily be cut to the required length off the roll, with the assurance of constant power output. There is no need for a connecting cable and input can be unilateral. It is quick and easy to assemble; this saves a lot of time, and reduces costs considerably as a result. Since output of up to 60 W/m is possible for lengths laid to piping, ELP parallel trace heaters are particularly suitable for piping with high output requirements such as in industrial process technology.

The particularly temperature-resistant outer shell in Fluoropolymer and the high level of chemical resistance of the Fluoropolymer ensure a long useful life.

Checklist

Connection & end termination set

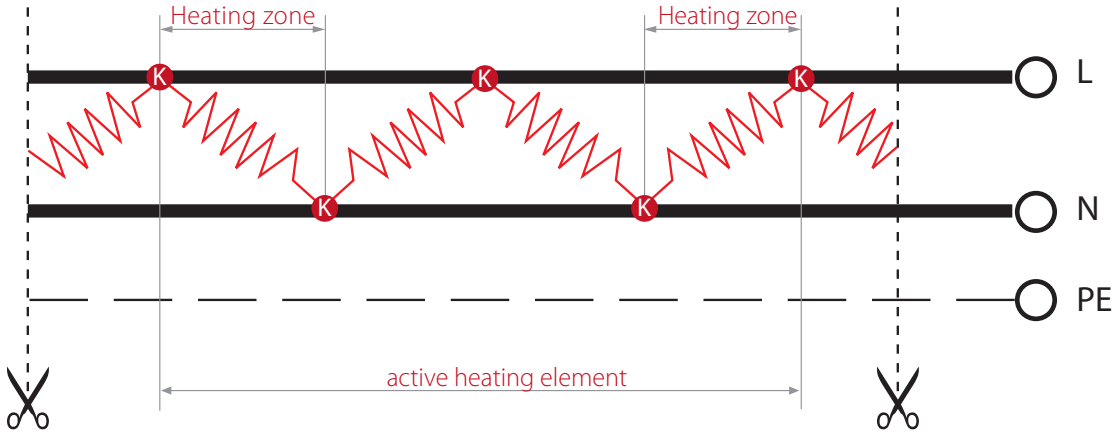
ELVB-ELPEx-25	Connection-Set ELP/PFA, M25	0X81PA2
EL-ECP+	Silicone termination cap, red; for ELP/PFA up to 260 °C	09112PP
M25 KV	Plastic Ex-e cable gland IBExU 05 ATEX 1154 U (or equivalent)	2576025050
M20 KV	Brass Ex-d cable gland SIRA 01 ATEX 2170 X (or equivalent)	2570200003

Technical Information

Maximum withstand temperature	260 °C
Nominal voltage	230 VAC up to 277 VAC*
Max. Current	40 A
Min. Bending radius	25 mm
Min. installation temperature	– 60 °C
Min. start up temperature	– 60 °C
Cross section bus wire	2 x 1.5 mm²; (2 x 4.0 mm² on request)
Moisture proof	Yes

› * 277 VAC operation only approved for ELP/PFA 15W/m, 30 W/m and 45 W/m!

Nominal output factor 230 V vs. 277 V = 1,45



K contact point

Heating circuit length

Type	Power [W/m]	Length @ start up temp. [m]
ELP/PFA 15 BOT	15.0	184.0
ELP/PFA 30 BOT	30.0	100.0
ELP/PFA 45 BOT	45.0	66.0
ELP/PFA 60 BOT	60.0	50.0

Heating circuit lenght factor 230 V vs. 277 V = 0,83

NOTE

- Heating circuit lengths ELP/PFA on the following conditions:
  - 16 A circuit breaker, 80 % utilisation, start up temp. +10°C
  - Max. 10% voltage drop
  - Power connection to one (1) heater end
- Greater lengths are possible with higher rated circuit breakers, please contact eltherm
- Cables shall neither intersect nor contact.
- Provide protection by means of circuit breaker RCD 30 mA.
- Please observe the standards:
  - IEC 62395-2, EN 60519-10, EN 62395-2.

Ordering information

Type	Nominal power	Maintain temperature * max.	Dimmensions for 1,5 mm² [mm]	Contact spacing [m]	Weight (1,5mm²) approx. [g/m]	Article - No.
ELP/PFA 15 BOT	15 W/m	200 °C	8.0 x 5.5	1.0	120	B0332015
ELP/PFA 30 BOT	30 W/m	200 °C	8.0 x 5.5	1.0	120	B0332030
ELP/PFA 45 BOT	45 W/m	200 °C	8.0 x 5.5	1.0	120	B0332045
ELP/PFA 60 BOT	60 W/m	180 °C	8.0 x 5.5	1.0	120	B0332060

› * The maximum maintain temperature depends on the respective installation situation and must be considered on a case-to-case basis.