

eltherm[®]
innovations in heat tracing



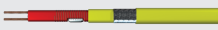







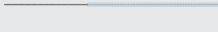

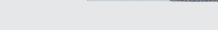

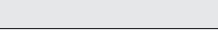

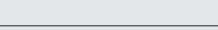

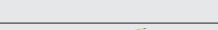






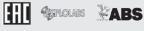
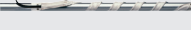







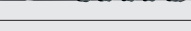

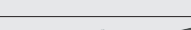

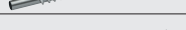










Heating Cables

Heating Tapes

innovations in heat tracing



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eltherm – Your reliable and competent partner with several years of experience in the field of electrical heat tracing. You wish to transfer heat to the media or compensate heat loss? eltherm provides the solution.

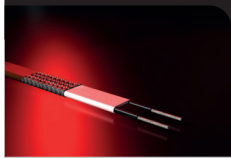
Our well-founded and expert knowledge, which is based on state-of-the-art technology, is always available to you. Quality is both produced and lived at eltherm. Moreover, we have achieved DIN ISO 9001:2008 and ISO 14001 certification.

The latest IT, planning and testing systems ensure quality and timely manufacturing processes.

In close collaboration with the customers, eltherm develops individually tailored solutions, supporting them when planning, proposing and assembling electrical heating systems. A perfected, high-quality product program enables eltherm to find the most reasonable economical solution for you.

Our results are convincing.

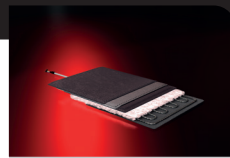
Further documents are available with information about our high-quality products:



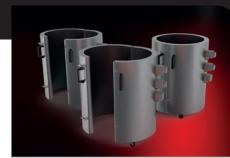
Self-regulating Heating Cables



Heated Hoses



Heating Mats Heating Jackets




Special Heating Systems



Measurement and Control

Important information

Products marked with the -symbol can be used in hazardous areas. The temperatures allocated to the products are the maximum permissible exposure temperatures. Our project engineers will be glad to assist you to design and dimension electrical heat tracing systems. Moreover, we have prepared a questionnaire which helps you to record operating data and enable correct dimensioning and allocation. We would be happy to send you the questionnaires for the respective product, to elaborate a customized solution for your application and to submit you our offer. All products listed in the catalogue are available ex stock (subject to prior sale). All products offered in this catalogue can also be manufactured by eltherm using different dimensions, outputs and voltages.

Furthermore, please note:

- All products listed in this catalogue shall only be connected and commissioned by a qualified electrician.
- All applicable local electrical and safety regulations must be observed during installation and operation.
- Normally, electrical heating systems require a temperature control unit as it is only possible to ensure that the exposure temperatures for the electrical heating and products to be heated are not exceed if such a unit is used.
- As a general rule, the following specifications of the standards EN 60519-1-2-10 and EN 62395-1 shall be respected for the operation of electrical heatings.

- We recommend to use a temperature control system in conjunction with a stabilized system design or a temperature limiter to avoid damages to persons and material.
- In accordance with EN 62395-1 and EN 60519-10, residual current devices (RCDs) are to be provided in order to disconnect from the mains in good time and to avoid consequential damages.
- Attention: heating cable and heating tape may neither intersect nor come into contact. There is the danger of burnout due reciprocal heating up (except: type ELSR).
- Our general assembly and operating instructions for this product are valid for the use of the heating cables.

Specifications and advertising messages in this products and services catalogue, irrespective of their nature, in particular descriptions, illustrations, drawings, samples, information pertaining to quality, condition, composition, performance, consumption and usability as well as dimensions and weights of the product range remain subject to change in as far as they are not expressly declared as binding. They do not denote any assurance or guarantee whatsoever. Minor deviations from the product specifications shall be deemed approved in as far as they are not unreasonable for the buyer.

We explicitly reserve the right to amend errors and alter technical data.



Coil ware



ESTI: Approval for the Swiss market



NEMKO: Approval for the Norwegian market



Suitable for contact with foodstuffs/approved for use in potable water



EAC: Approval for the Russian market



NEPSI: Hazardous Area Products for Chinese Market



Certified according to VDE standards



Approval for the French market



kti: Korean Testing Laboratory for Hazardous Area Products



Ship Classification Maritime Service



IECEx: Certified according to IECEx-scheme



Explolabs: Approval for the South-African Market (Ex, IA approval)



INMETRO: Approval for the Brazilian market



Hyg, DVGW, KTW: Certification Body, Approval for Usage in Drinking Water



ABS: American Bureau of Shipping - Product Design Assessment Certificate

Constant Wattage Heating Cable with Resistance Wire

The installation of this heating cable is highly cost-efficient with any kind of heat tracing application thanks to the single end power input. The heating cable consists of a succession of heating zones (length = contact spacing) and can be cut to length in sections of the contact distance to the required length. When cutting into lengths, the heating circuit is interrupted up to the next contact point and this non-active part can be used as a cold lead. During the design phase, one contact spacing length per planned heating circuit must be calculated additionally.

Advantages:

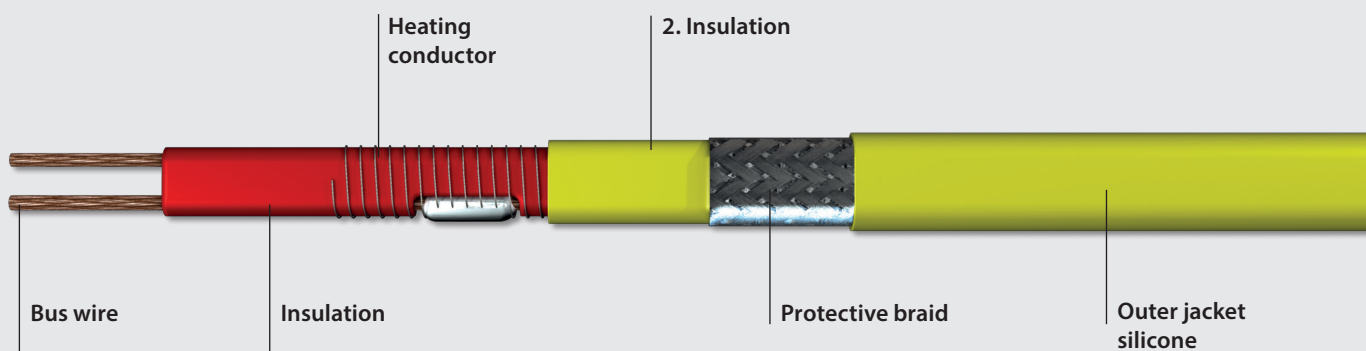
- Single end connection
- Can be cut off the roll
- Constant power output per meter
- Highly flexible

Applications:

- Vessels, piping, valves
- Food processing industry
- Frost protection and temperature maintenance on pumps, etc.



Type **ELP/Si** up to 200 °C





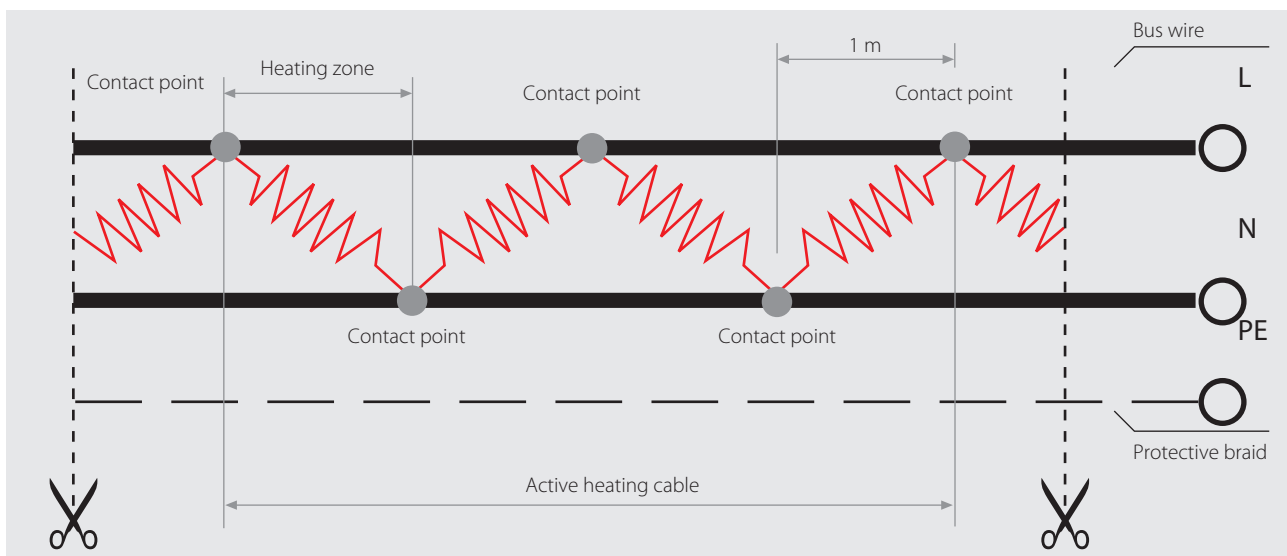
Technical Information

Type ELP/Si up to 200 °C

Data

| | |
|----------------------------|-------------------------|
| ■ Insulation | Silicone |
| ■ Protective braid | Copper |
| ■ Outer jacket | Silicone |
| ■ Nominal temperature | 200 °C |
| ■ Moisture proof | Yes |
| ■ Bending radius, min. | 30 mm |
| ■ Bus wire cross section | 2 x 1.5 mm ² |
| ■ Nominal voltage | 230 V AC/DC |
| ■ Installation temp., min. | -60 °C |
| ■ Start-up temp., min | -60 °C |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.



| Type | Nominal output | Dimensions approx. (mm) | Contact spacing (m) | Art. No. |
|------------------|----------------|-------------------------|---------------------|----------|
| ELP/Si 10 BO 230 | 10 W/m | 5.25 x 9.75 | 1.0 | 0320102 |
| ELP/Si 20 BO 230 | 20 W/m | 5.25 x 9.75 | 1.0 | 0320108 |
| ELP/Si 30 BO 230 | 30 W/m | 5.25 x 9.75 | 1.0 | 0320114 |
| ELP/Si 40 BO 230 | 40 W/m | 5.25 x 9.75 | 1.0 | 0320120 |

Constant wattage heating cables up to nominal voltages of 120 V or 400 V are available upon request. Bus wire cross section 2 x 2 mm² upon request.

| Maximum heating circuit length | | | |
|--------------------------------|-----|---------------------|----------------------|
| Type | W/m | Length (m) at 50 °C | Length (m) at 150 °C |
| ELP/Si 10 BO 230 | 10 | 198 | 147 |
| ELP/Si 20 BO 230 | 20 | 139 | 102.5 |
| ELP/Si 30 BO 230 | 30 | 98 | 82.5 |
| ELP/Si 40 BO 230 | 40 | 73.5 | 70.5 |

Heating circuit lengths ELP/Si on the following conditions

- 16 A circuit breaker, 80 % utilisation
- Max. 10 % voltage drop
- Power connection to one (1) heater end

Constant Wattage Heating Cable with Resistance Wire

These heating cables are particularly suitable for maintaining temperatures of up to +150 °C. Its great flexibility down to - 70°C means that this version is ideal for heat tracing in industrial refrigeration or in countries with very harsh climates.

The heating cable consists of a succession of heating zones (length = contact spacing) and can be cut to length in sections of the contact distance to the required length. When cutting into lengths, the heating circuit is interrupted up to the next contact point and this non-active part can be used as a cold lead. During the design phase, one contact spacing length per planned heating circuit must be calculated additionally.

Advantages:

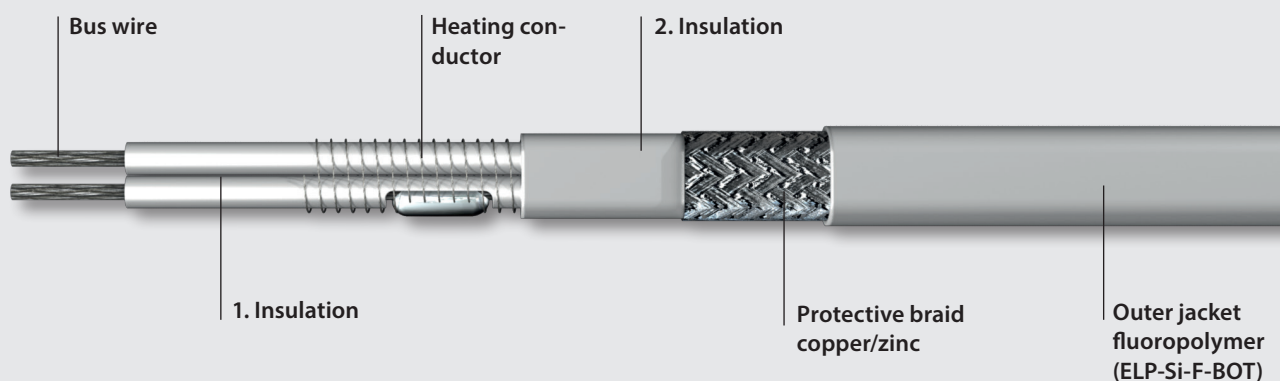
- Single end connection
- Can be cut off the roll
- Constant power output per meter
- Highly flexible

Applications:

- Vessels, piping, valves
- Food processing industry
- Frost protection and temperature maintenance on pumps, etc.
- Filter heating systems



Type ELP/Si-F up to 200 °C





Technical Information

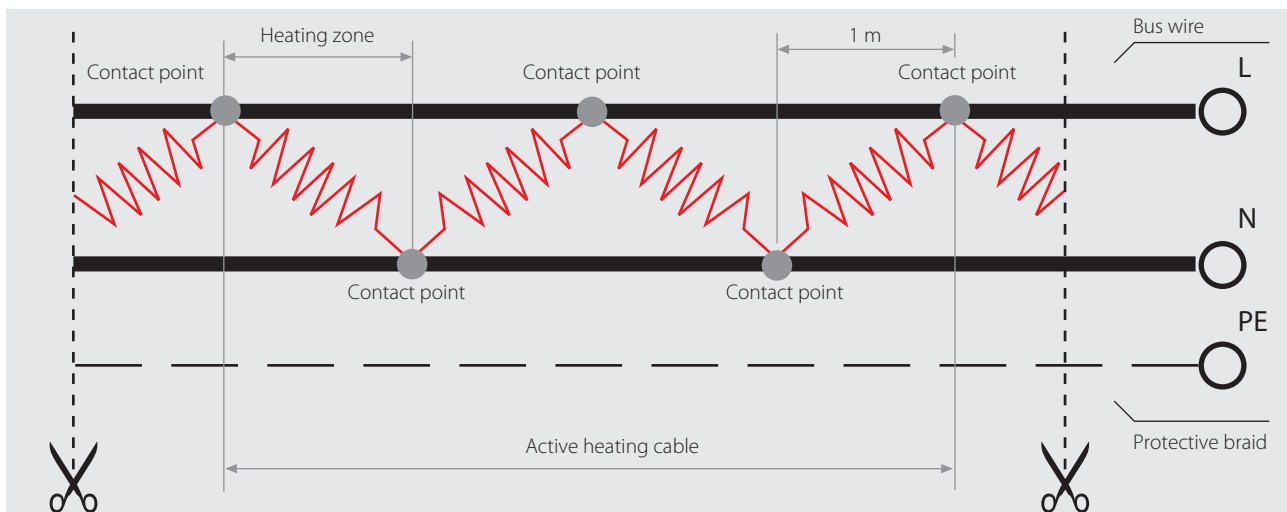
Type ELP/Si-F up to 200 °C

Data ELP/Si-F-B

| | |
|-----------------------------------|---------------------------|
| ■ Insulations | Silicone |
| ■ Protective braid | Copper/zinc |
| ■ Nominal voltage | 230 V AC/DC or 400V AC/DC |
| ■ Dimensions | 6.5 x 10.5 mm |
| ■ Permissible ambient temperature | -70...+200 °C |
| ■ Bending radius, min. | 30 mm |
| ■ Bus wire cross section | 2 mm ² |
| ■ Installation temp., min. | -70 °C |
| ■ Start-up temp., min | -70 °C |

Data ELP/Si-F-BOT

| | |
|-----------------------------------|---------------------------|
| ■ Insulations | Silicone |
| ■ Protective braid | Copper/zinc |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal voltage | 230 V AC/DC or 400V AC/DC |
| ■ Dimensions | 7 x 10.5 mm |
| ■ Permissible ambient temperature | -70...+200 °C |
| ■ Bending radius, min. | 30 mm |
| ■ Bus wire cross section | 2 mm ² |
| ■ Installation temp., min. | -70 °C |
| ■ Start-up temp., min | -70 °C |



Maximum heating circuit length

| Type | Nominal output (W/m) | Contact spacing (m) | Length (m) at 10 °C | Length (m) at 100 °C | Maximum maintenance temperature °C | Nominal voltage (V) | Art. No. |
|-----------------|----------------------|---------------------|---------------------|----------------------|------------------------------------|---------------------|----------|
| ELP/Si F 20 B | 20 | 0.7 | 147 | 141 | 150 | 230 | 0320210 |
| ELP/Si F 30 B | 30 | 0.7 | 98 | 98 | 140 | 230 | 0320211 |
| ELP/Si F 40 B | 40 | 0.6 | 73.5 | 73.5 | 120 | 230 | 0320212 |
| ELP/Si F 40 B | 40 | 1.0 | 128 | 128 | 120 | 400 | 0320312 |
| ELP/Si F 20 BOT | 20 | 0.7 | 147 | 141 | 150 | 230 | 0320220 |
| ELP/Si F 30 BOT | 30 | 0.7 | 98 | 98 | 140 | 230 | 0320221 |
| ELP/Si F 40 BOT | 40 | 0.6 | 73.5 | 73.5 | 120 | 230 | 0320222 |
| ELP/Si F 40 BOT | 40 | 1.0 | 128 | 128 | 120 | 400 | 0320322 |

Heating circuit lengths ELP/Si-F on the following conditions

- 16 A circuit breaker, 80 % utilisation
- Max. 10 % voltage drop
- Power connection to one (1) heater end

Cables shall neither intersect nor contact. Provide protection by means of circuit breaker FI 30. Please observe the standards IEC 62395-2, EN 60519-10.

Constant wattage heating cables up to nominal voltages of 120 V are available upon request.

Constant Wattage Heating Cable with Resistance Wire

These parallel heating cables 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 heating cables 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.

Advantages:

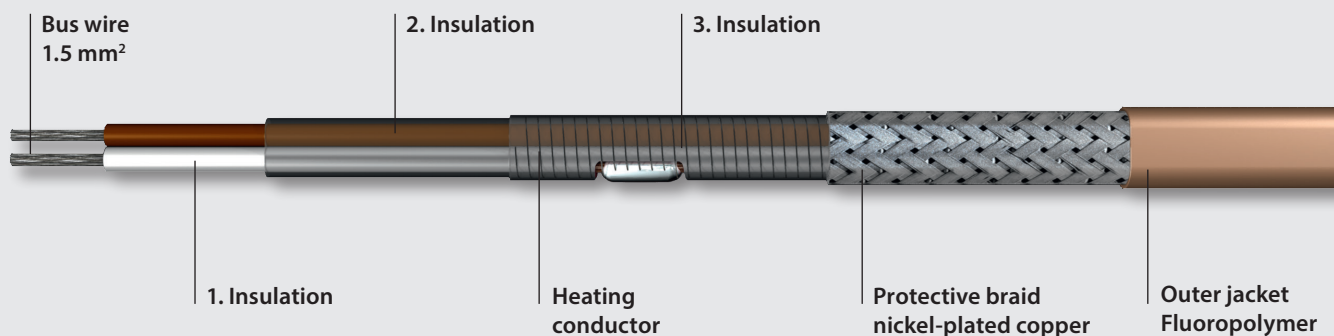
- Single end power input
- Can be cut off the roll
- Constant power output per meter
- Long life cycle
- Laying without exact measuring possible
- High chemical resistance
- UV resistance

Applications:

- Vessels, piping, valves
- Building construction
- Food processing industry
- Paper industry



Type ELP/PFA up to 260 °C





Technical Information

Type ELP/PFA up to 260 °C

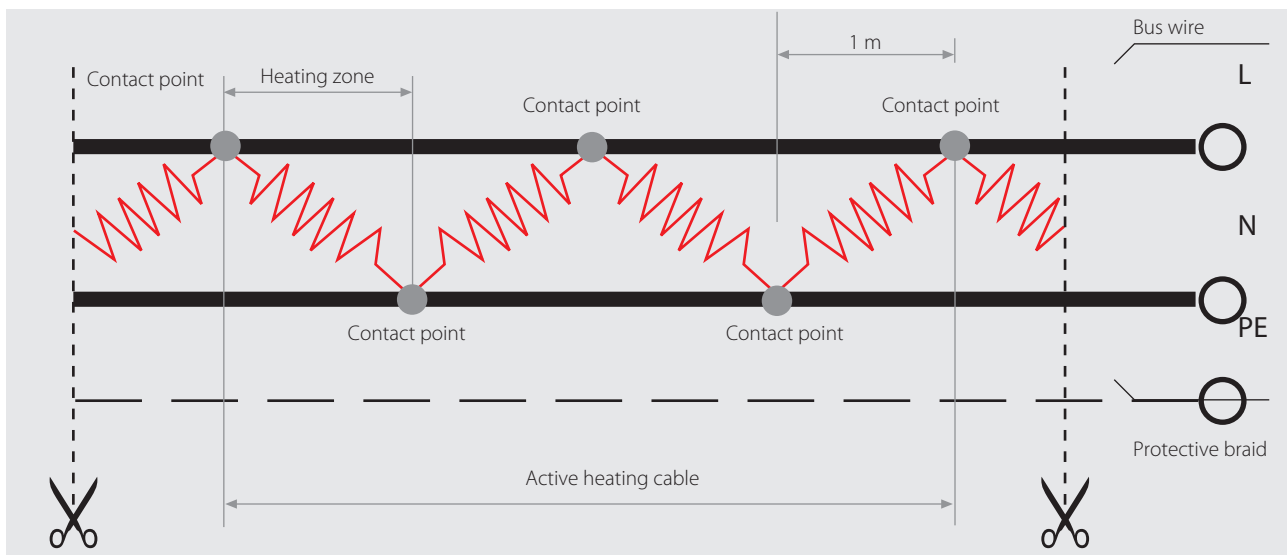
Data

| | |
|----------------------------|-------------------------|
| ■ Insulations | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal temperature | 260 °C |
| ■ Moisture proof | Yes |
| ■ Bending radius, min. | 25 mm |
| ■ Bus wire cross section | 2 x 1.5 mm ² |
| ■ Nominal voltage | 230 V AC/DC |
| ■ Installation temp., min. | -45 °C |
| ■ Start-up temp., min. | -45 °C |

Standards

| | |
|-----------------------------|--|
| ■ Manufactured according to | DIN VDE 0721-52 EN 62395-1; 2007-05 |
| ■ Certificates | 12ATEX1438U IECEX EPS 12.0009U |
| ■ Classification | II 2G Ex e IIC Gb II 2D Ex tb IIIC Db |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.



| Type | Nominal output | Working temp. max | Dimensions approx. (mm) | Contact spacing (m) | Art. No. |
|----------------|----------------|-------------------|-------------------------|---------------------|----------|
| ELP/PFA 15 BOT | 15 W/m | 205°C | 8.0 x 5.5 | 1.0 | B0332015 |
| ELP/PFA 30 BOT | 30 W/m | 190°C | 8.0 x 5.5 | 1.0 | B0332030 |
| ELP/PFA 45 BOT | 45 W/m | 175°C | 8.0 x 5.5 | 1.0 | B0332045 |
| ELP/PFA 60 BOT | 60 W/m | 160°C | 8.0 x 5.5 | 1.0 | B0332060 |

Bus wire cross section 2 x 2 mm² upon request.

Maximum heating circuit length

| Type | W/m | Length (m) at 50 °C | Length (m) at 150 °C |
|----------------|-----|---------------------|----------------------|
| ELP/PFA 15 BOT | 15 | 161 | 119 |
| ELP/PFA 30 BOT | 30 | 98 | 82.5 |
| ELP/PFA 45 BOT | 45 | 65.5 | 65.5 |
| ELP/PFA 60 BOT | 60 | 50 | 50 |

Heating circuit lengths ELP/PFA on the following conditions

- 16 A circuit breaker, 80 % utilisation
- Max. 10 % voltage drop
- Power connection to one (1) heater end

Constant Wattage Heating Cable with Resistance Wire

These parallel heating cables 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 as a result reduces cost considerably. Since output of up to 60 W/m is possible for lengths laid to piping, ELP parallel heating cables are particularly suitable for piping with high output requirements such as in industrial process technology. The particularly temperature-resistant outer shell and the high level of chemical resistance ensure a long useful life.

Advantages:

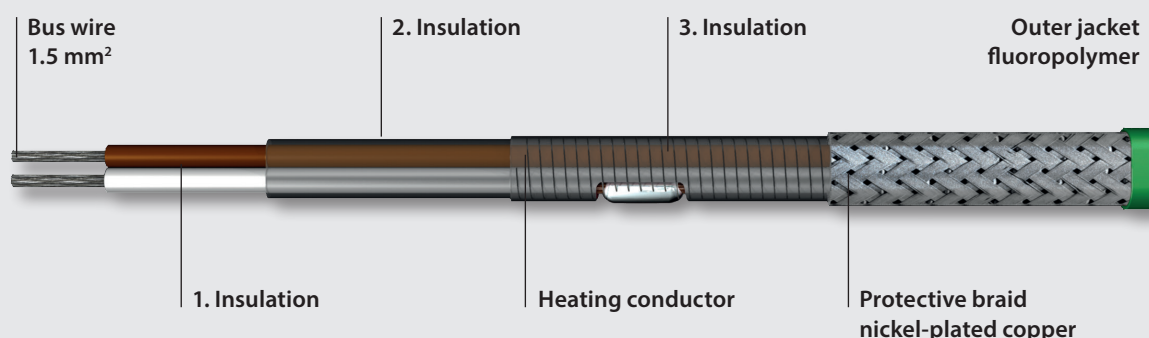
- Single end power input
- Can be cut off the roll
- Constant power output per meter
- Long life cycle
- Laying without exact measuring possible
- High chemical resistance
- UV resistance

Applications:

- Vessels, piping, valves
- Building construction
- Food processing industry
- Paper industry



Type ELP/FEP up to 200 °C





Technical Information

Type ELP/FEP up to 200 °C

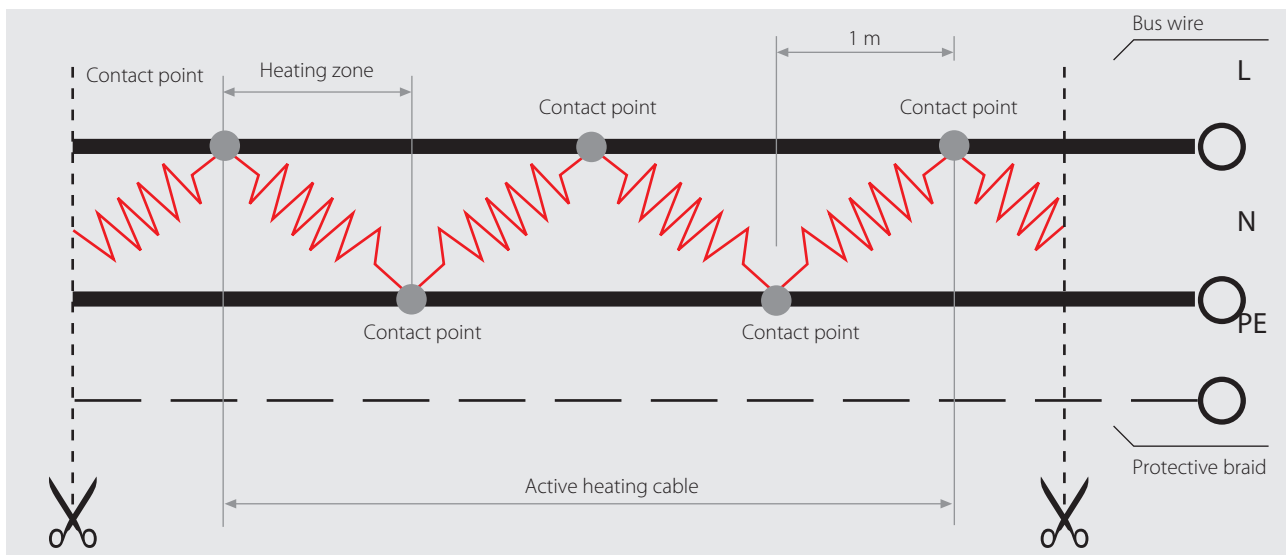
Data

| | |
|----------------------------|-------------------------|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal temperature | 200 °C |
| ■ Moisture proof | Yes |
| ■ Bending radius, min. | 25 mm |
| ■ Bus wire cross section | 2 x 1.5 mm ² |
| ■ Nominal voltage | 230 V AC/DC |
| ■ Installation temp., min. | -45 °C |
| ■ Start-up temp., min. | -45 °C |

Standards

| | |
|-----------------------------|--|
| ■ Manufactured according to | DIN VDE 0721-52 EN 62395-1; 2007-05 |
|-----------------------------|--|

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.



| Type | Nominal output | Working temp. max | Dimensions approx. (mm) | Contact spacing (m) | Art. No. |
|---------------|----------------|-------------------|-------------------------|---------------------|------------|
| ELP/FEP 15 BO | 15 W/m | 195°C | 8.0 x 5.5 | 1.0 | B033201501 |
| ELP/FEP 30 BO | 30 W/m | 180°C | 8.0 x 5.5 | 1.0 | B033203001 |
| ELP/FEP 45 BO | 45 W/m | 165°C | 8.0 x 5.5 | 1.0 | B033204501 |
| ELP/FEP 60 BO | 60 W/m | 150°C | 8.0 x 5.5 | 1.0 | B033206001 |

Bus wire cross section 2 x 2 mm² upon request.

Maximum heating circuit length

| Type | W/m | Length (m) at 50 °C | Length (m) at 150 °C |
|---------------|-----|---------------------|----------------------|
| ELP/FEP 15 BO | 15 | 161 | 119 |
| ELP/FEP 30 BO | 30 | 98 | 82.5 |
| ELP/FEP 45 BO | 45 | 65.5 | 65.5 |
| ELP/FEP 60 BO | 60 | 50 | 50 |

Heating circuit lengths ELP/FEP on the following conditions

- 16 A circuit breaker, 80 % utilisation
- Max. 10 % voltage drop
- Power connection to one (1) heater end

Fluoropolymer-insulated Heating Cable

Use on apparatus, vessels, pipes, valves, etc., in which low bending radii also allow compact tracing on small components across the entire surface.

Advantages:

- Highly flexible
- Small bending radius
- High operation temperature
- High chemical resistance
- Moisture proof

Applications:

- Vessels, pipes, valves
- Small components
- Can be used in many industrial areas
- Rotor blades
- Marble plates



Type **ELKM-A** up to 260 °C

Heating conductor
stranded or
spirally wound

Insulation
Fluoropolymer



Technical Information

Type ELKM-A up to 260 °C

Data

| | |
|----------------------------|--|
| ■ Insulation | Fluoropolymer |
| ■ Nominal voltage max. | 750 V |
| ■ Output, max. | 30 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | Yes |
| ■ Heat conductor | Stranded, spirally wound for nominal resistance > 8,000 Ω/km |

Standards

| | |
|-----------------------------|--------------|
| ■ Manufactured according to | DIN VDE 0253 |
|-----------------------------|--------------|

*Note: The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Nominal resistance Ω/km | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|----------------------------|-----------------------------------|----------------------------|---|----------|
| 1.95 | 5.8 | 112 | 4.30 | 0136002 |
| 2.90 | 4.6 | 73 | 4.30 | 0136006 |
| 4.40 | 4.2 | 54 | 4.30 | 0136004 |
| 7.20 | 3.1 | 33 | 4.30 | 0136007 |
| 10.00 | 3.0 | 31 | 4.30 | 0136008 |
| 11.70 | 2.7 | 30 | 4.30 | 0136010 |
| 15.00 | 2.6 | 19 | 4.30 | 0136012 |
| 25.00 | 2.5 | 17 | 3.00 | 0136016 |
| 31.50 | 2.9 | 23 | 1.60 | 0136020 |
| 50.00 | 2.6 | 17 | 1.60 | 0136030 |
| 65.00 | 2.4 | 14 | 1.60 | 0136032 |
| 80.00 | 2.7 | 20 | 0.90 | 0136038 |
| 100.00 | 2.5 | 17 | 0.90 | 0136042 |
| 157.00 | 2.5 | 17 | 0.45 | 0136049 |
| 180.00 | 2.2 | 12 | 0.90 | 0136052 |
| 200.00 | 2.4 | 14 | 0.45 | 0136054 |
| 260.00 | 2.2 | 12 | 0.45 | 0136058 |

Weight tolerances are possible for manufacturing reasons.
Nominal resistances up to 1,500,000 Ω/km upon request.
Resistance tolerance: +/- 5 %.

| Nominal resistance Ω/km | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|----------------------------|-----------------------------------|----------------------------|---|----------|
| 280.00 | 2.1 | 10 | 0.38 | 0136059 |
| 328.00 | 2.5 | 16 | 0.18 | 0136061 |
| 360.00 | 2.1 | 10 | 0.45 | 0136064 |
| 430.00 | 2.3 | 13 | 0.18 | 0136066 |
| 480.00 | 2.2 | 12 | 0.18 | 0136068 |
| 600.00 | 2.1 | 10 | 0.18 | 0136076 |
| 800.00 | 2.0 | 9 | 0.18 | 0136080 |
| 1000.00 | 2.1 | 10 | 0.04 | 0136082 |
| 1470.00 | 2.1 | 9 | 0.04 | 0136092 |
| 1750.00 | 2.0 | 8 | 0.04 | 0136094 |
| 1900.00 | 2.2 | 12 | 0.04 | 0136096 |
| 2900.00 | 2.1 | 9 | 0.04 | 0136104 |
| 4000.00 | 2.0 | 8 | 0.04 | 0136114 |
| 4700.00 | 1.9 | 8 | 0.15 | 0136118 |
| 6000.00 | 1.9 | 7 | 0.20 | 0136124 |
| 7000.00 | 2.0 | 7 | 0.15 | 0136126 |
| 8000.00 | 2.0 | 7 | 0.15 | 0136128 |

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable with Protective Braid Cu/Ni

Use on apparatus, vessels, pipes, valves, etc., in which low bending radii also allow compact tracing on small components across the entire surface. We recommend our heating cable ELKM-AE with protective braid AE for unprotected use in corrosive environment.

This heating cable is also available without braid under the name ELKM-A – just ask us.

Advantages:

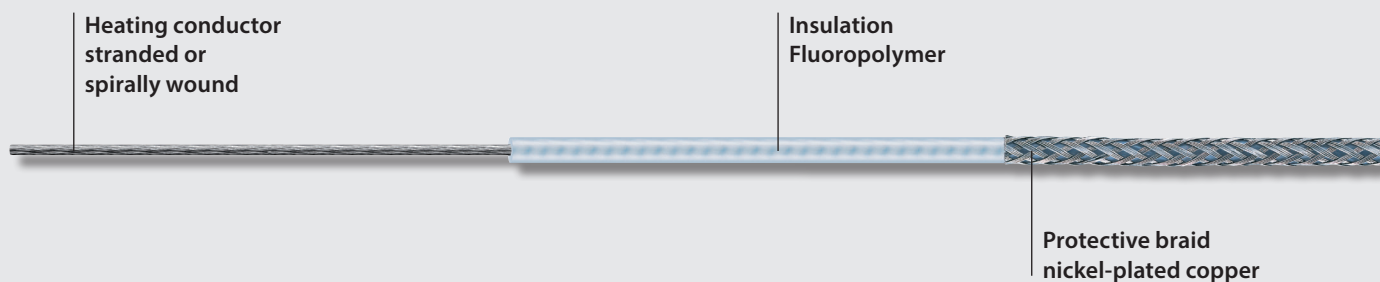
- Highly flexible
- Small bending radius
- High operation temperature
- High chemical resistance
- Moisture proof

Applications:

- Vessels, pipes, valves
- Small components
- Can be used in many industrial areas
- Rotor blades
- Marble plates



Type **ELKM-AS** up to 260 °C



Technical Information

Type ELKM-AS up to 260 °C

Data

| | |
|----------------------------|--|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Nominal voltage max. | 750 V |
| ■ Output, max. | 30 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | Yes |
| ■ Heat conductor | Stranded, spirally wound for nominal resistance > 8,000 Ω/km |

Standards

| | |
|-----------------------------|--------------|
| ■ Manufactured according to | DIN VDE 0253 |
|-----------------------------|--------------|

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Nominal resistance Ω/km | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|---------------------------------|-----------------------------|----------------------|---|----------|
| 1.95 (Cu 10 mm ²) | 7.11 | 157.0 | 4.30 | 0137000 |
| 2.90 (Cu 6 mm ²) | 5.99 | 104.9 | 4.30 | 0137002 |
| 4.40 (Cu 4 mm ²) | 4.73 | 69.8 | 4.30 | 0137004 |
| 7.20 (Cu 2.5 mm ²) | 3.89 | 48.3 | 4.30 | 0137007 |
| 10.00 | 3.62 | 40.6 | 4.30 | 0137009 |
| 11.70 (Cu 1.5 mm ²) | 3.53 | 37.6 | 4.30 | 0137010 |
| 15.00 | 3.20 | 33.6 | 4.30 | 0137012 |
| 25.00 | 3.15 | 31.1 | 3.00 | 0137016 |
| 31.50 | 3.55 | 38.6 | 1.60 | 0137020 |
| 50.00 | 3.15 | 31.3 | 1.60 | 0137030 |
| 65.00 | 3.04 | 28.6 | 1.60 | 0137032 |
| 80.00 | 3.32 | 34.5 | 0.90 | 0137038 |
| 100.00 | 3.11 | 31.0 | 0.90 | 0137042 |
| 157.00 | 3.10 | 31.2 | 0.45 | 0137045 |
| 180.00 | 2.84 | 25.8 | 0.90 | 0137052 |
| 200.00 | 2.98 | 28.2 | 0.45 | 0137054 |
| 260.00 | 2.87 | 26.3 | 0.45 | 0137058 |

Weight tolerances are possible for manufacturing reasons. Nominal resistances up to 1,500,000 Ω/km upon request. Resistance tolerance: +/- 5 %.

| Nominal resistance Ω/km | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|-------------------------|-----------------------------|----------------------|---|----------|
| 280.00 | 2.76 | 24.3 | 0.38 | 0137060 |
| 328.00 | 3.13 | 30.6 | 0.18 | 0137061 |
| 360.00 | 2.71 | 23.7 | 0.45 | 0137064 |
| 430.00 | 2.96 | 27.6 | 0.18 | 0137266 |
| 480.00 | 2.94 | 26.8 | 0.18 | 0137069 |
| 600.00 | 2.80 | 24.9 | 0.18 | 0137213 |
| 800.00 | 2.69 | 23.2 | 0.18 | 0137080 |
| 1000.00 | 2.81 | 24.9 | 0.04 | 0137082 |
| 1470.00 | 2.64 | 22.6 | 0.04 | 0137214 |
| 1750.00 | 2.66 | 22.3 | 0.04 | 0137094 |
| 1900.00 | 2.84 | 25.6 | 0.40 | 0137215 |
| 2900.00 | 2.68 | 23.1 | 0.40 | 0137219 |
| 4000.00 | 2.61 | 21.9 | 0.40 | 0137114 |
| 4700.00 | 2.55 | 21.6 | 0.15 | 0137118 |
| 6000.00 | 2.49 | 20.6 | 0.20 | 0137237 |
| 7000.00 | 2.43 | 19.9 | 0.15 | 0137126 |
| 8000.00 | 2.41 | 19.7 | 0.15 | 0137128 |

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact. Provide protection by means of circuit breaker FI 30. Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable with Protective Braid VA

Use on apparatus, vessels, pipes, valves, etc., in which low bending radii also allow compact tracing on small components across the entire surface.

This heating cable is also available without braid under the name ELKM-A – just ask us.

Advantages:

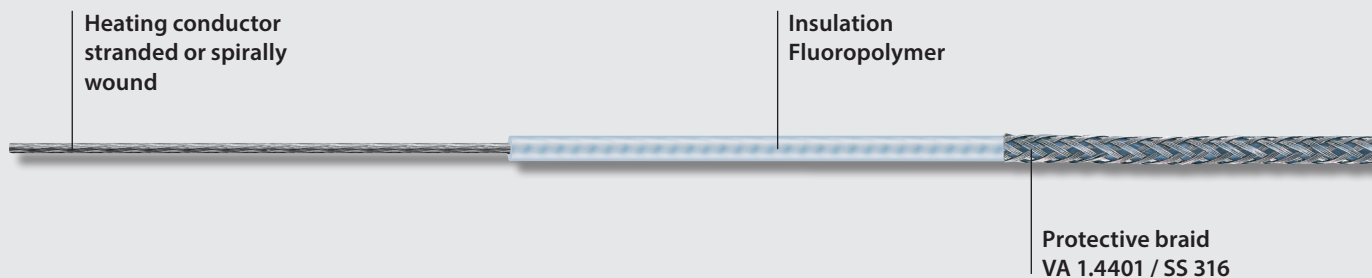
- Highly flexible
- Small bending radius
- High operation temperature
- High chemical resistance
- Moisture proof

Applications:

- Vessels, pipes, valves
- Small components
- Industrial applications
- Heat tracing on molds
- Heat tracing on antenna
- IBC's



Type **ELKM-AE** up to 260 °C





Technical Information

Type ELKM-AE up to 260 °C

Data

| | |
|----------------------------|--|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | VA 1.4401 / SS 316 |
| ■ Nominal voltage max. | 750 V |
| ■ Output, max. | 30 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | Yes |
| ■ Heat conductor | Stranded, spirally wound for nominal resistance > 8,000 Ω/km |

Standards

| | |
|-----------------------------|--------------|
| ■ Manufactured according to | DIN VDE 0253 |
|-----------------------------|--------------|

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Nominal resistance Ω/km | outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|---------------------------------|-----------------------------------|----------------------------|---|----------|
| 1.95 (Cu 10 mm ²) | 6.97 | 130 | 4.30 | 0137001 |
| 2.90 (Cu 6 mm ²) | 5.83 | 100 | 4.30 | 0137003 |
| 4.40 (Cu 4 mm ²) | 4.57 | 70 | 4.30 | 0137005 |
| 7.20 (Cu 2.5 mm ²) | 3.73 | 50 | 4.30 | 0137006 |
| 10.00 | 3.46 | 30 | 4.30 | 0137008 |
| 11.70 (Cu 1.5 mm ²) | 3.37 | 30 | 4.30 | 0137011 |
| 15.00 | 3.04 | 30 | 4.30 | 0137013 |
| 25.00 | 2.99 | 30 | 3.00 | 0137017 |
| 31.50 | 3.39 | 30 | 1.60 | 0137021 |
| 50.00 | 2.90 | 22.2 | 1.60 | 0137031 |
| 65.00 | 2.88 | 19.6 | 1.60 | 0137033 |
| 80.00 | 3.16 | 25.4 | 0.90 | 0137039 |
| 100.00 | 2.95 | 22.0 | 0.90 | 0137043 |
| 157.00 | 2.94 | 22.1 | 0.45 | 0137044 |
| 180.00 | 2.68 | 17.0 | 0.90 | 0137053 |
| 200.00 | 2.82 | 19.3 | 0.45 | 0137055 |
| 260.00 | 2.71 | 17.4 | 0.45 | 0137059 |

Weight tolerances are possible for manufacturing reasons. Nominal resistances up to 1,500,000 Ω/km upon request. Resistance tolerance: +/- 5 %.

| Nominal resistance Ω/km | outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ /K) | Art. No. |
|----------------------------|-----------------------------------|----------------------------|---|----------|
| 280.00 | 2.60 | 15.6 | 0.38 | 0137230 |
| 328.00 | 2.97 | 21.5 | 0.18 | 0137231 |
| 360.00 | 2.55 | 14.9 | 0.45 | 0137065 |
| 430.00 | 2.80 | 18.7 | 0.18 | 0137067 |
| 480.00 | 2.78 | 17.9 | 0.18 | 0137068 |
| 600.00 | 2.64 | 16.1 | 0.18 | 0137232 |
| 800.00 | 2.53 | 14.5 | 0.18 | 0137081 |
| 1000.00 | 2.65 | 16.2 | 0.04 | 0137083 |
| 1470.00 | 2.48 | 13.9 | 0.04 | 0137233 |
| 1750.00 | 2.50 | 13.6 | 0.04 | 0137234 |
| 1900.00 | 2.68 | 11.6 | 0.40 | 0137235 |
| 2900.00 | 2.52 | 14.4 | 0.40 | 0137104 |
| 4000.00 | 2.45 | 13.3 | 0.40 | 0137115 |
| 4700.00 | 2.39 | 12.6 | 0.15 | 0137119 |
| 6000.00 | 2.33 | 12.0 | 0.20 | 0137236 |
| 7000.00 | 2.27 | 11.4 | 0.15 | 0137127 |
| 8000.00 | 2.25 | 11.1 | 0.15 | 0137121 |

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact. Provide protection by means of circuit breaker FI 30. Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable with Protective Braid + Outer Jacket

This versatile, factory terminated, heating cable is used for frost protection and temperature maintenance, even under highly corrosive environmental conditions which means this heating cable can be used for an extremely wide variety of applications.

Advantages:

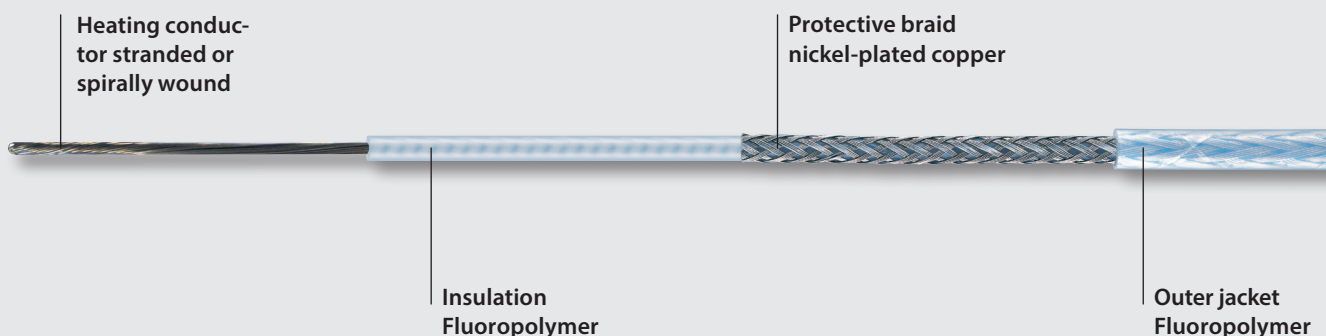
- Factory terminated
- High chemical and mechanical resistance
- Can be used in all industrial areas
- High operation temperature
- Easy to install, even on complex shapes
- Highly flexible
- Resistant to steam purging

Applications: e.g.

- Heat tracing on tanks
- Heat tracing on vessels
- Heat tracing on filters
- Heating satellite dishes
- Heat tracing on hoppers
- Pipe, valve and pump heating
- Automotive
- Tank containers
- IBC's
- Heating hoods



Type **ELKM-AG-L** up to 260°C





Technical Information

Type ELKM-AG-L up to 260 °C

Data

| | |
|----------------------------|--|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal voltage max. | 750 V |
| ■ Output, max. | 30 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | Up to -60 °C |
| ■ Moisture proof | Yes |
| ■ Heat conductor | Stranded, spirally wound for nominal resistance > 8,000 Ω/km |

Standards

| | |
|-----------------------------|--------------|
| ■ Manufactured according to | DIN VDE 0253 |
|-----------------------------|--------------|

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Nominal resistance (Ω/km) | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ / K) | Art. No. |
|---------------------------------|-----------------------------|----------------------|--|----------|
| 1.95 (Cu 10 mm ²) | 7.7 | 156 | 4.30 | 01TT002E |
| 2.90 (Cu 6 mm ²) | 6.4 | 110 | 4.30 | 01TT003E |
| 4.40 (Cu 4 mm ²) | 5.6 | 85 | 4.30 | 01TT004E |
| 7.20 (Cu 2.5 mm ²) | 4.5 | 53 | 4.30 | 01TT007E |
| 10.00 | 4.2 | 51 | 4.30 | 01TT010E |
| 11.70 (Cu 1.5 mm ²) | 4.1 | 48 | 4.30 | 01TT011E |
| 15.00 | 3.9 | 44 | 4.30 | 01TT015E |
| 25.00 | 3.8 | 43 | 3.00 | 01TT025E |
| 31.50 | 4.1 | 45 | 1.60 | 01TT031E |
| 50.00 | 3.8 | 43 | 1.60 | 01TT050E |
| 65.00 | 3.6 | 42 | 1.60 | 01TT065E |
| 80.00 | 3.9 | 55 | 0.90 | 01TT080E |
| 100.00 | 3.8 | 53 | 0.90 | 01TT110E |
| 157.00 | 3.8 | 40 | 0.45 | 01TT115E |
| 180.00 | 3.5 | 38 | 0.90 | 01TT118E |
| 200.00 | 3.6 | 39 | 0.45 | 01TT120E |
| 260.00 | 3.5 | 38 | 0.45 | 01TT126E |

| Nominal resistance (Ω/km) | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ / K) | Art. No. |
|---------------------------|-----------------------------|----------------------|--|----------|
| 280.00 | 3.4 | 35 | 0.38 | 01TT128E |
| 328.00 | 3.78 | 35.2 | 0.45 | 01TT132E |
| 360.00 | 3.3 | 33 | 0.45 | 01TT136E |
| 430.00 | 3.5 | 38 | 0.18 | 01TT143E |
| 480.00 | 3.5 | 39 | 0.18 | 01TT148E |
| 600.00 | 3.4 | 35 | 0.18 | 01TT160E |
| 800.00 | 3.3 | 34 | 0.18 | 01TT180E |
| 1000.00 | 3.4 | 35 | 0.04 | 01TT210E |
| 1470.00 | 3.2 | 40 | 0.04 | 01TT214E |
| 1750.00 | 3.2 | 38 | 0.04 | 01TT217E |
| 1900.00 | 3.5 | 39 | 0.40 | 01TT219E |
| 2900.00 | 3.3 | 32 | 0.40 | 01TT229E |
| 4000.00 | 3.2 | 31 | 0.40 | 01TT240E |
| 4700.00 | 3.2 | 31 | 0.15 | 01TT247E |
| 6000.00 | 3.2 | 38 | 0.20 | 01TT260E |
| 7000.00 | 3.2 | 36 | 0.15 | 01TT270E |
| 8000.00 | 3.2 | 33 | 0.15 | 01TT280E |

Weight tolerances are possible for manufacturing reasons. Nominal resistances up to 1,500,000 Ω/km upon request. Resistance tolerance: +/- 5 %.

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact. Provide protection by means of circuit breaker FI 30. Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable with Protective Braid + Outer Jacket

This versatile heating cable is used for frost protection and temperature maintenance, even under highly corrosive environmental conditions. The heating cable ELKM-AG-N is suited and approved for use in hazardous areas. It is highly flexible permitting its use in many fields of application.

Advantages:

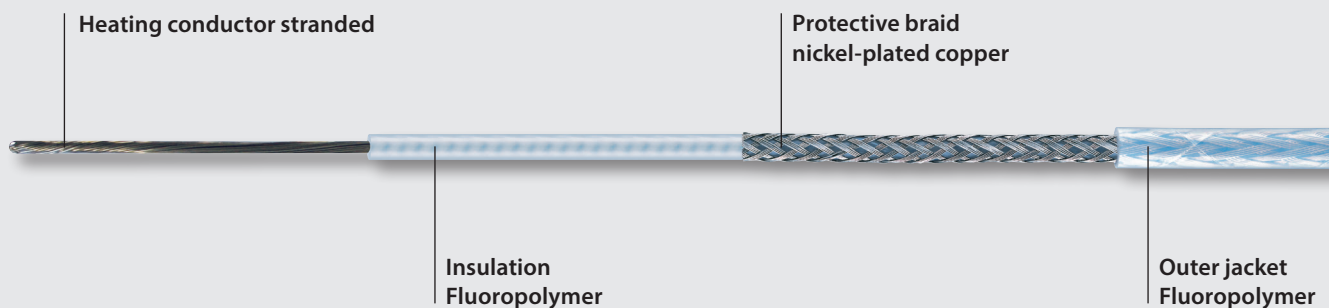
- High chemical and mechanical resistance
- Can be used in all industrial areas
- High operation temperature
- Can be used in liquids
- Easy to install, even on complex shapes
- Highly flexible
- Resistant to steam purging

Applications, especially in Hazardous Areas: e.g.

- Heat tracing on tanks
- Heat tracing on vessels
- Heat tracing on filters
- Heat tracing on hoppers
- Pipe, valve and pump heating
- Tank containers
- IBC's
- Heating hoods
- Automotive
- Varnishing plants



Type **ELKM-AG-N** up to 260°C





Technical Information

Type ELKM-AG-N up to 260 °C

Data

| | |
|----------------------------|----------------------|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal voltage max. | 550 V |
| ■ Output, max. | 30 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | IP68 |
| ■ Impact resistance | 4 Joule |
| ■ Heat conductor | Stranded |

Standards

| | |
|-----------------------------|---|
| ■ Manufactured according to | DIN VDE 0253, EN 60079-30-1 |
| ■ Certificate | EPS 19 ATEX 1 146 U |
| ■ Classification | II 2G Ex 60079-30-1 IIC Gb II 2D Ex 60079-30-1 IIIC Db |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Nominal resistance (Ω/km) | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ / K) | Art. No. |
|---------------------------------|-----------------------------|----------------------|--|----------|
| 1.95 (Cu 10 mm ²) | 8.1 | 166 | 4.30 | 01TA002E |
| 2.90 (Cu 6 mm ²) | 6.8 | 119 | 4.30 | 01TA003E |
| 4.40 (Cu 4 mm ²) | 6.1 | 96 | 4.30 | 01TA004E |
| 7.20 (Cu 2.5 mm ²) | 5.1 | 64 | 4.30 | 01TA007E |
| 10.00 | 4.8 | 59 | 4.30 | 01TA010E |
| 11.70 (Cu 1.5 mm ²) | 4.7 | 57 | 4.30 | 01TA011E |
| 15.00 | 4.5 | 50 | 4.30 | 01TA015E |
| 25.00 | 4.4 | 48 | 3.00 | 01TA025E |
| 31.50 | 4.7 | 56 | 1.60 | 01TA031E |
| 50.00 | 4.4 | 49 | 1.60 | 01TA050E |
| 65.00 | 4.2 | 46 | 1.60 | 01TA065E |
| 80.00 | 4.5 | 42 | 0.90 | 01TA080E |
| 100.00 | 4.4 | 50 | 0.90 | 01TA110E |
| 157.00 | 4.4 | 46 | 0.45 | 01TA115E |
| 180.00 | 4.1 | 42 | 0.90 | 01TA118E |
| 200.00 | 4.2 | 38 | 0.45 | 01TA120E |
| 260.00 | 4.1 | 42 | 0.45 | 01TA126E |

| Nominal resistance (Ω/km) | Outer diameter approx. (mm) | Weight approx. (g/m) | Temperature coefficient (x 10 ⁻³ / K) | Art. No. |
|---------------------------|-----------------------------|----------------------|--|----------|
| 280.00 | 4.0 | 39 | 0.38 | 01TA128E |
| 328.00 | 4.1 | 40.1 | 0.45 | 01TA132E |
| 360.00 | 3.9 | 40 | 0.45 | 01TA136E |
| 430.00 | 4.1 | 43 | 0.18 | 01TA143E |
| 480.00 | 4.1 | 44 | 0.18 | 01TA148E |
| 600.00 | 4.0 | 40 | 0.18 | 01TA160E |
| 800.00 | 3.9 | 41 | 0.18 | 01TA180E |
| 1000.00 | 4.0 | 43 | 0.04 | 01TA210E |
| 1470.00 | 3.8 | 40 | 0.04 | 01TA214E |
| 1750.00 | 3.8 | 37 | 0.04 | 01TA217E |
| 1900.00 | 3.5 | 41 | 0.40 | 01TA219E |
| 2900.00 | 3.9 | 41 | 0.40 | 01TA229E |
| 4000.00 | 3.8 | 37 | 0.40 | 01TA240E |
| 4700.00 | 3.8 | 35 | 0.15 | 01TA247E |
| 6000.00 | 3.8 | 34 | 0.20 | 01TA260E |
| 7000.00 | 3.8 | 33 | 0.15 | 01TA270E |
| 8000.00 | 3.8 | 36 | 0.15 | 01TA280E |

Weight tolerances are possible for manufacturing reasons. Nominal resistances up to 1,500,000 Ω/km upon request. Resistance tolerance: +/- 5 %.

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact. Provide protection by means of circuit breaker FI 30mA. Please observe the standards EN 60079-30-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable

Factory Terminated

Use on apparatus, vessels, pipes, valves, etc., in which low bending radii also allow compact tracing on small components across the entire surface.

The version with protective braid, nickel-plated copper, is available with the name ELK-AS. A version without protective braid is also available: ELK-A – just ask us.

Advantages:

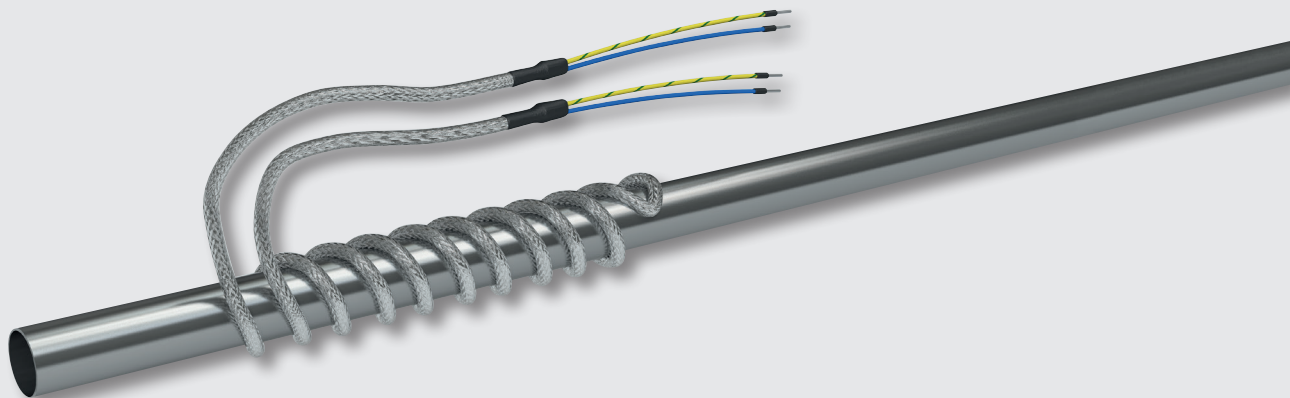
- Factory terminated
- Highly flexible
- Small bending radius
- High operating temperature
- High chemical resistance
- Moisture proof

Applications:

- Vessels, pipes, valves
- Small components
- Can be used in many industrial areas
- Heat tracing on molds
- Heat tracing on satellite dishes
- IBC's



Type **ELK-AE** up to 260 °C



Technical Information

Type ELK-AE up to 260 °C

Data

| | |
|-------------------------------|----------------------|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | VA 1.4401 / SS 316 |
| ■ Nominal voltage max. | 230 V |
| ■ Output, max. | 25 W/m |
| ■ Operating temp., max. | 260 °C |
| ■ Heating conductor diameter | 3.1 - 3.6 mm |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Cold lead length, both ends | 1.2 m, without plug |
| ■ Moisture proof | Yes |
| ■ Protection class | I |

Standards

| | |
|---------------------------------|---|
| ■ Manufactured according to | DIN VDE 0253 |
| ■ Final inspection according to | DIN VDE 0721 T 411 2.5 kV AC - 1 min EN 62395-1 |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) temperature max. 100 °C | Art. No. | Nominal output (W) temperature max. 150 °C | Art. No. | Nominal output (W) temperature max. 200 °C | Art. No. |
|-------------|-------------------|--|----------|--|----------|--|----------|
| ELK-AE 1.2 | 1.2 | 30 | 0133011 | – | – | – | – |
| ELK-AE 2.2 | 2.2 | 54 | 0133021 | – | – | – | – |
| ELK-AE 3.4 | 3.4 | 78 | 0133031 | 52 | 0133032 | 26 | 0133033 |
| ELK-AE 4.8 | 4.8 | 94 | 0133041 | 69 | 0133042 | 37 | 0133043 |
| ELK-AE 6.0 | 6.0 | 147 | 0133061 | 88 | 0133062 | 44 | 0133063 |
| ELK-AE 8.4 | 8.4 | 210 | 0133081 | 126 | 0133082 | 63 | 0133083 |
| ELK-AE 10.8 | 10.8 | 245 | 0133101 | 163 | 0133102 | 82 | 0133103 |
| ELK-AE 12.0 | 12.0 | 294 | 0133121 | 176 | 0133122 | 88 | 0133123 |
| ELK-AE 14.0 | 14.0 | 344 | 0133141 | – | – | – | – |
| ELK-AE 20.0 | 20.0 | 464 | 0133201 | 294 | 0133202 | – | – |
| ELK-AE 25.0 | 25.0 | 623 | 0133251 | 371 | 0133252 | 192 | 0133253 |
| ELK-AE 30.0 | 30.0 | 705 | 0133301 | 441 | 0133302 | 220 | 0133303 |
| ELK-AE 35.0 | 35.0 | 864 | 0133351 | 521 | 0133352 | – | – |
| ELK-AE 42.0 | 42.0 | 1.008 | 0133421 | 611 | 0133422 | 315 | 0133423 |
| ELK-AE 56.0 | 56.0 | 1.390 | 0133561 | 756 | 0133562 | 378 | 0133563 |

Other lengths upon request.
Resistance tolerance: +/- 5 %
All output figures are nominal values at +20 °C.
Lengths tolerance ± 2%, max. ± 0.25 m.

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable

Factory Terminated

This versatile, factory terminated, heating cable is used for frost protection and temperature maintenance, even under highly corrosive environmental conditions which means this heating cable can be used on an extremely wide variety of applications.

Advantages:

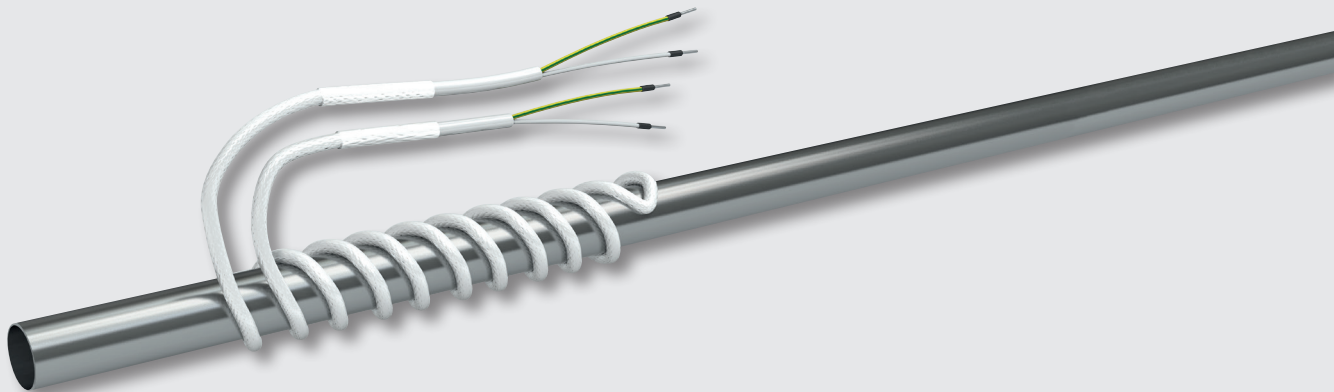
- Factory terminated
- High chemical and mechanical resistance
- Can be used in all industrial areas
- High operating temp.
- Can be used in liquids
- Easy to install, even on complex shapes
- Highly flexible
- Resistant to steam purging

Applications: e.g.

- Heat tracing on tanks
- Heat tracing on vessels
- Heat tracing on filters
- Heat tracing on satellite dishes
- Heat tracing on hoppers
- Pipes, valves and pumps
- Automotive
- Tank containers
- IBC's
- Heating hoods



Type **ELK-AG-L** up to 260 °C





Technical Information

Type ELK-AG-L up to 260 °C

Data

| | |
|-------------------------------|----------------------|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal voltage max. | 230 V |
| ■ Output | 25 W/m |
| ■ Operating temp., max. | 260 °C |
| ■ Heating conductor diameter | 4.1 - 4.8 mm |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Cold lead length, both ends | 1.2 m, without plug |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | Yes |
| ■ Protection class | I |

Standards

| | |
|-----------------------------|--------------------------|
| ■ Manufactured according to | DIN VDE 0253, EN 62395-1 |
| ■ VDE mark approval | 40001594 |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) temperature. max. 100 °C | Art. No. | Nominal output (W) temperature. max. 150 °C | Art. No. | Nominal output (W) temperature. max. 200 °C | Art. No. |
|---------------|-------------------|---|----------|---|----------|---|----------|
| ELK-AG-L 1.2 | 1.2 | 30 | 0135011 | | | | |
| ELK-AG-L 2.2 | 2.2 | 54 | 0135021 | | | | |
| ELK-AG-L 3.4 | 3.4 | 78 | 0135031 | 52 | 0135032 | 26 | 0135033 |
| ELK-AG-L 4.8 | 4.8 | 94 | 0135041 | 69 | 0135042 | 37 | 0135043 |
| ELK-AG-L 6.0 | 6.0 | 147 | 0135061 | 88 | 0135062 | 44 | 0135063 |
| ELK-AG-L 8.4 | 8.4 | 210 | 0135081 | 126 | 0135082 | 63 | 0135083 |
| ELK-AG-L 10.8 | 10.8 | 245 | 0135101 | 163 | 0135102 | 82 | 0135103 |
| ELK-AG-L 12.0 | 12.0 | 294 | 0135121 | 176 | 0135122 | 88 | 0135123 |
| ELK-AG-L 14.0 | 14.0 | 344 | 0135141 | | | | |
| ELK-AG-L 20 | 20.0 | 464 | 0135201 | 294 | 0135202 | | |
| ELK-AG-L 25 | 25.0 | 623 | 0135251 | 371 | 0135252 | 192 | 0135253 |
| ELK-AG-L 30 | 30.0 | 705 | 0135301 | 441 | 0135302 | 220 | 0135303 |
| ELK-AG-L 35 | 35.0 | 864 | 0135351 | 521 | 0135352 | | |
| ELK-AG-L 42.0 | 42.0 | 1,008 | 0135421 | 611 | 0135422 | 315 | 0135423 |
| ELK-AG-L 56.0 | 56.0 | 1,390 | 0135561 | 756 | 0135562 | 378 | 0135563 |

Other lengths upon request.

Resistance tolerance: +/- 5 %

All output figures are nominal values at +20 °C.

Lengths tolerance ± 2%, max. ± 0.25 m.

For applications with fixed external diameter, please contact our engineers first.

Cables shall neither intersect nor contact.

Provide protection by means of circuit breaker FI 30.

Please observe the standards IEC 62395-2, EN 60519-10.

Fluoropolymer-insulated Heating Cable

Factory Terminated

This versatile heating cable is used for frost protection and temperature maintenance, even under highly corrosive environmental conditions. The heating cable ELK-AG-N is suited and approved for use in potentially explosive atmospheres. It is highly flexible permitting its application in areas of use. Upon consultation of our engineers, this cable may likewise be used for inside trace heating of piping.

Advantages:

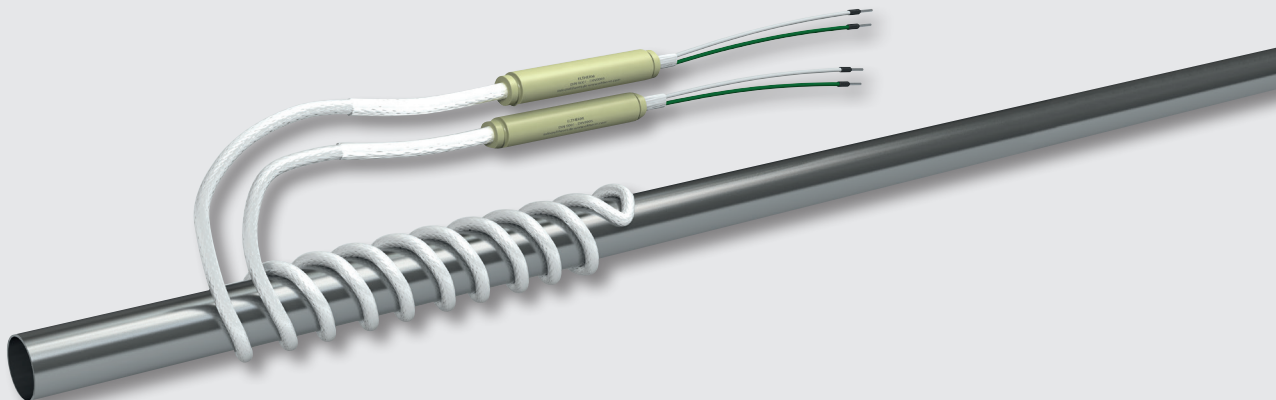
- Factory terminated
- High chemical and mechanical resistance
- Can be used in all industrial areas
- High operating temp.
- Can be used in liquids
- Easy to install, even on complex shapes
- Highly flexible
- Resistant to steam purging

Applications, especially in Hazardous Areas: e.g.

- Heat tracing on tanks
- Heat tracing on vessels
- Heat tracing on filters
- Heat tracing on hoppers
- Pipes, valves and pumps
- Tank containers
- IBC's
- Heating hoods
- Automotive
- Varnishing plants



Type **ELK-AG-N** up to 260 °C





Technical Information

Type ELK-AG-N up to 260 °C

Data

| | |
|-------------------------------|----------------------|
| ■ Insulation | Fluoropolymer |
| ■ Protective braid | Nickel-plated copper |
| ■ Outer jacket | Fluoropolymer |
| ■ Nominal voltage max. | 230 V |
| ■ Output | 25 W/m |
| ■ Operating temp., max. | 260 °C |
| ■ Heating conductor diameter | 3.8 - 4.7 mm |
| ■ Bending radius, min. | 2.5 x outer diameter |
| ■ Installation temp., min. | -60 °C |
| ■ Cold lead length, both ends | 1.2 m, without plug |
| ■ Moisture proof | Yes |
| ■ Protection class | I |
| ■ Impact resistance | 4 Joule |

Standards

| | |
|-----------------------------|--|
| ■ Manufactured according to | DIN VDE 0253, EN 60079-30-1 |
| ■ Cable | 60079-30-1 |
| ■ Pipe collar | 60079-0-7 |
| For Ex-applications: | |
| ■ Classification cable | II 2G Ex e IIC Gb II 2D Ex tb IIIC Db |
| ■ Certificate cable | EPS 12ATEX1466U |
| ■ Classification ExCon | II 2G Ex e IIC T6...T3 Gb II 2D Ex tb IIIC TX Db |
| ■ Certificate ExCon | 04ATEX1005X / 07ATEX1023X |
| ■ Standard ExCon | EN 60079-0:2009, EN 60079-7:2007, EN 60079-31:2009 |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

Heating Tape

for Sensitive Surfaces

The factory terminated heating tape ELW-GN with E-glass insulation is suitable for trace heating of apparatus, appliances and systems in a non-corrosive environment and its preferred use is for glass devices and systems with sensitive surfaces.

Advantages:

- Factory terminated
- Single end connection
- Highly flexible
- Surface-friendly
- Small bending radius
- Easy to assemble
- Moisture proof

Applications:

- Heat tracing on apparatus, appliances and systems
- Devices and systems made of glass with sensitive surfaces
- Laboratory applications



Type **ELW-GN** up to 260 °C



Technical Information

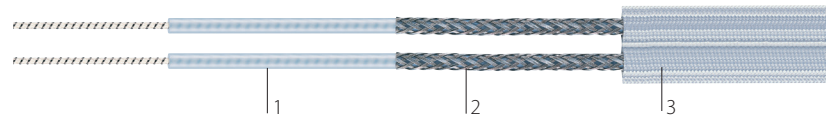
Type ELW-GN up to 260 °C

Data

| | |
|-------------------------------|----------------------|
| ■ Insulation (1) | Fluoropolymer |
| ■ Protective braid (2) | Nickel-plated copper |
| ■ Outer jacket (3) | E-glass textile |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 50 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Dimensions (wxh) | Approx. 25 x 6 mm |
| ■ Bending radius, flat, min. | 10 mm |
| ■ Installation temp., min. | -60 °C |
| ■ Moisture proof | Yes |
| ■ Cold lead length, both ends | 1.2 m, without plug |
| ■ Protection class | I |

Standards

| | |
|---------------------------------|--|
| ■ Manufactured according to | DIN VDE 0253 |
| ■ Final inspection according to | DIN VDE 0721 T411 2.5 kV AC – 1 min |



***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) temperature. max. 100 °C | Art. No. | Nominal output (W) temperature. max. 150 °C | Art. No. | Nominal output (W) temperature. max. 200 °C | Art. No. |
|-------------|-------------------|---|----------|---|----------|---|----------|
| ELW-GN 0.6 | 0.6 | 30 | 0231001 | – | | – | |
| ELW-GN 1.1 | 1.1 | 54 | 0231011 | – | | – | |
| ELW-GN 1.7 | 1.7 | 78 | 0231701 | 52 | 0231012 | 26 | 0231013 |
| ELW-GN 2.4 | 2.4 | 94 | 0231021 | 69 | 0231022 | 37 | 0231023 |
| ELW-GN 3.0 | 3.0 | 147 | 0231031 | 88 | 0231032 | 44 | 0231033 |
| ELW-GN 4.2 | 4.2 | 210 | 0231041 | 126 | 0231042 | 63 | 0231043 |
| ELW-GN 5.4 | 5.4 | 245 | 0231051 | 163 | 0231052 | 82 | 0231053 |
| ELW-GN 6.0 | 6.0 | 294 | 0231061 | 176 | 0231062 | 88 | 0231063 |
| ELW-GN 7.0 | 7.0 | 344 | 0231071 | – | | – | |
| ELW-GN 10.0 | 10.0 | 464 | 0231101 | 294 | 0231102 | – | |
| ELW-GN 12.5 | 12.5 | 623 | 0231121 | 371 | 0231122 | 192 | 0231123 |
| ELW-GN 15.0 | 15.0 | 705 | 0231151 | 441 | 0231152 | 220 | 0231153 |
| ELW-GN 17.5 | 17.5 | 864 | 0231171 | 521 | 0231172 | – | |
| ELW-GN 21.0 | 21.0 | 1,008 | 0231211 | 611 | 0231212 | 315 | 0231213 |
| ELW-GN 28.0 | 28.0 | 1,390 | 0231281 | 756 | 0231282 | 378 | 0231283 |

Other lengths upon request.

Resistance tolerance: +/- 5 %

All output figures are nominal values at +20 °C.

Lengths tolerance ± 2%, max. ± 0.25 m.

Cables shall neither intersect nor contact.

Provide protection by means of circuit breaker FI 30.

Please observe the standards IEC 62395-2, EN 60519-10.

Heating Tape

for Corrosive Environments

The factory terminated heating tape ELW-VA is suitable for trace heating of apparatus, appliances and systems in a corrosive environment. The minimal dimensions of the heating tape enable close tracing. This heating tape is not sensitive to rough surfaces.

Advantages:

- Factory terminated
- Single end connection
- Highly flexible
- Small bending radius
- Small dimensions
- Robust
- Easy to assemble
- Moisture proof

Applications:

- Heat tracing on apparatus, appliances and systems
- Laboratory applications
- Temperature maintenance on piping



Type **ELW-VA** up to 260 °C



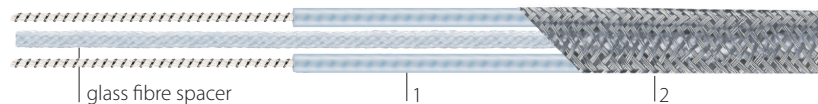
Technical Information

Data

| | |
|-------------------------------|-------------------------------------|
| ■ Insulation (1) | Fluoropolymer |
| ■ Protective braid (2) | 1.4301 / SS 304 |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 50 W/m* |
| ■ Operating temp., max. | 260 °C |
| ■ Dimensions (wxh) | Approx. 10 x 5 mm |
| ■ Dimensions, sleeve (wxhxl) | 32 x 16 x 65 mm |
| ■ Bending radius, flat, min. | 15 mm |
| ■ Installation temp., min. | -30 °C |
| ■ Moisture proof | Yes |
| ■ Cold lead length, both ends | 1.2 m, silicone cable, without plug |
| ■ Protection class | I |

Standards

| | |
|---------------------------------|--|
| ■ Manufactured according to | DIN VDE 0253 |
| ■ Final inspection according to | DIN VDE 0721 T411 2.5 kV AC – 1 min |



***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) temperature. max. 100 °C | Art. No. | Nominal output (W) temperature. max. 150 °C | Art. No. | Nominal output (W) temperature. max. 200 °C | Art. No. |
|-------------|-------------------|---|----------|---|----------|---|----------|
| ELW-VA 0.6 | 0.6 | 30 | 0232001 | – | | – | |
| ELW-VA 1.1 | 1.1 | 54 | 0232011 | – | | – | |
| ELW-VA 1.7 | 1.7 | 78 | 0232701 | 52 | 0232012 | 26 | 0232013 |
| ELW-VA 2.4 | 2.4 | 94 | 0232021 | 69 | 0232022 | 37 | 0232023 |
| ELW-VA 3.0 | 3.0 | 147 | 0232031 | 88 | 0232032 | 44 | 0232033 |
| ELW-VA 4.2 | 4.2 | 210 | 0232041 | 126 | 0232042 | 63 | 0232043 |
| ELW-VA 5.4 | 5.4 | 245 | 0232051 | 163 | 0232052 | 82 | 0232053 |
| ELW-VA 6.0 | 6.0 | 294 | 0232061 | 176 | 0232062 | 88 | 0232063 |
| ELW-VA 7.0 | 7.0 | 344 | 0232071 | – | | – | |
| ELW-VA 10.0 | 10.0 | 464 | 0232101 | 294 | 0232102 | – | |
| ELW-VA 12.5 | 12.5 | 623 | 0232121 | 371 | 0232122 | 192 | 0232123 |
| ELW-VA 15.0 | 15.0 | 705 | 0232151 | 441 | 0232152 | 220 | 0232153 |
| ELW-VA 17.5 | 17.5 | 864 | 0232171 | 521 | 0232172 | – | |
| ELW-VA 21.0 | 21.0 | 1,008 | 0232211 | 611 | 0232212 | 315 | 0232213 |
| ELW-VA 28.0 | 28.0 | 1,390 | 0232281 | 756 | 0232282 | 378 | 0232283 |

Other lengths upon request.
Resistance tolerance: +/- 5 %
All output figures are nominal values at +20 °C.
Lengths tolerance ± 2%, max. ± 0.25 m.

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Heating Cable

for Maximum Flexibility

The factory terminated heating cable ELK-H is suitable for trace heating of apparatus, appliances and systems in a dry environment with protected installation. Both the high output and the slight, flexible design provide a wide variety of applications for this heating cable.

Advantages:

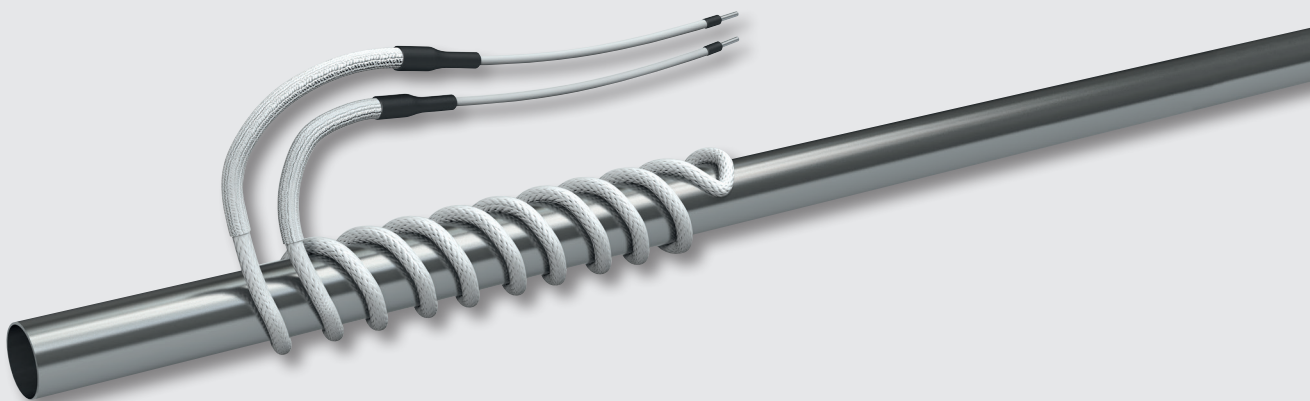
- Factory terminated
- Can be used for high temperatures
- Ready to be used instantly
- Highly flexible
- Small bending radius
- Easy to assemble

Applications:

- Heat tracing on apparatus, appliances and systems
- Glass devices and systems with high output needs
- Laboratory applications



Type **ELK-H** up to 450 °C





Technical Information

Type ELK-H up to 450 °C

Data

| | |
|------------------------------|---------------------------|
| ■ Insulation | E-glass textile |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 125 W/m* |
| ■ Operating temp., max. | 450 °C |
| ■ Diameter | 3.5 - 4.5 mm |
| ■ Bending radius, flat, min. | 8 mm |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Cold lead length | 1.2 m, without plug |
| ■ Protection class | Depending on installation |

Standards

| | |
|---------------------------------|--------------------------------------|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T2 1.5 kV AC – 1 min |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-H-0.5 | 0.5 | 60 | 0140002 |
| ELK-H-1.0 | 1.0 | 126 | 0140005 |
| ELK-H-1.4 | 1.4 | 180 | 0140008 |
| ELK-H-2.0 | 2.0 | 250 | 0140013 |
| ELK-H-3.0 | 3.0 | 375 | 0140014 |
| ELK-H-4.0 | 4.0 | 490 | 0140019 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0.25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-H-5.0 | 5.0 | 622 | 0140020 |
| ELK-H-6.5 | 6.5 | 768 | 0140024 |
| ELK-H-8.0 | 8.0 | 987 | 0140025 |
| ELK-H-10.0 | 10.0 | 1260 | 0140030 |
| ELK-H-12.6 | 12.6 | 1555 | 0140031 |
| ELK-H-16.0 | 16.0 | 1945 | 0140034 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30mA.
Please observe the standards EN 60519-1, EN 60519-2.

Heating Cable

Robust, for Higher Temperatures

This factory terminated heating cable is ideally suited for trace heating of apparatus, appliances and systems in a dry environment. Preferably used for appliances and systems with high output requirements. Small dimensions and high flexibility simplify the assembly. The outer braiding provides protection against mechanical damages and can be integrated in the electrical protection measures.

Advantages:

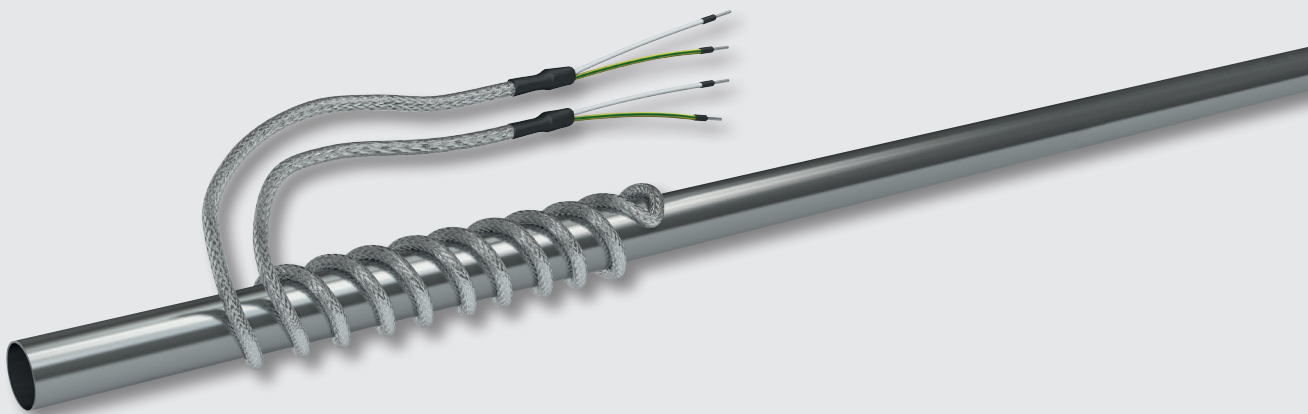
- Factory terminated
- Increased safety through protective braid
- High output
- Ready to be used instantly
- Highly flexible
- Can be used for higher temperatures
- Small bending radius
- Easy to assemble

Applications:

- Heat tracing on apparatus, appliances and systems
- Devices and systems with high output needs
- Laboratory applications



Type **ELK-HS** up to 450 °C





Technical Information

Type ELK-HS up to 450 °C

Data

| | |
|----------------------------|---------------------|
| ■ Insulation | E-glass textile |
| ■ Protective braid | 1.4301 / SS 304 |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 125 W/m* |
| ■ Operating temp., max. | 450 °C |
| ■ Diameter | 4.5 mm |
| ■ Bending radius, min. | 8 mm |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Cold lead length | 1.2 m, without plug |
| ■ Protection class | I |

Standards

| | |
|---------------------------------|--------------------------------------|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T2 1.5 kV AC – 1 min |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-HS-0.5 | 0.5 | 60 | 0140102 |
| ELK-HS-1.0 | 1.0 | 126 | 0140105 |
| ELK-HS-1.4 | 1.4 | 180 | 0140108 |
| ELK-HS-2.0 | 2.0 | 250 | 0140113 |
| ELK-HS-3.0 | 3.0 | 375 | 0140114 |
| ELK-HS-4.0 | 4.0 | 490 | 0140119 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0.25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-HS-5.0 | 5.0 | 622 | 0140120 |
| ELK-HS-6.5 | 6.5 | 768 | 0140124 |
| ELK-HS-8.0 | 8.0 | 987 | 0140125 |
| ELK-HS-10.0 | 10.0 | 1260 | 0140131 |
| ELK-HS-12.6 | 12.6 | 1555 | 0140134 |
| ELK-HS-16.0 | 16.0 | 1945 | 0140137 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Heating Tape

for Maximum Flexibility

It is used to heat up glass, quartz or ceramic devices and systems in a non-corrosive and dry environment. The tape is highly flexible, does not damage the surfaces and is suitable for high output requirements. The heating tape should be protected mechanically and adjacent metallic parts should be integrated in the electrical protection measures.

Advantages:

- Factory terminated
- Ready to be used instantly
- Single end connection
- Can be used for high temperatures
- Highly flexible
- Surface-friendly
- Small bending radius
- Easy to assemble

Applications:

- Heat tracing on apparatus, appliances and systems made of glass, quartz or ceramic material
- Glass devices and systems with high output needs
- Laboratory & research applications



Type **ELW-H** up to 450 °C





Technical Information

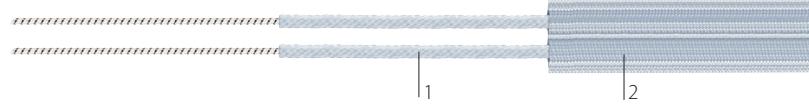
Type ELW-H up to 450 °C

Data

| | |
|------------------------------|---------------------------|
| ■ Insulation (1) | E-glass textile |
| ■ Outer jacket (2) | E-glass textile |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 250 W/m* |
| ■ Operating temp., max. | 450 °C |
| ■ Dimensions | 30 x 5 mm |
| ■ Bending radius, flat, min. | 10 mm |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Connection | 1.2 m, without plug |
| ■ Protection class | Depending on installation |

Standards

| | |
|---------------------------------|--|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T411 1.5 kV AC – 1 min |



***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-H-0.50 | 0.50 | 126 | 0240002 |
| ELW-H-0.70 | 0.70 | 180 | 0240005 |
| ELW-H-1.00 | 1.00 | 250 | 0240010 |
| ELW-H-1.50 | 1.50 | 375 | 0240011 |
| ELW-H-2.00 | 2.00 | 490 | 0240016 |
| ELW-H-2.50 | 2.50 | 622 | 0240017 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0,25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-H-3.25 | 3.25 | 768 | 0240021 |
| ELW-H-4.00 | 4.00 | 987 | 0240025 |
| ELW-H-5.00 | 5.00 | 1260 | 0240027 |
| ELW-H-6.30 | 6.30 | 1555 | 0240031 |
| ELW-H-8.00 | 8.00 | 1945 | 0240034 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30mA.
Please observe the standards EN 60519-1, EN 60519-2.

Heating Tape

Robust, for Higher Temperatures

This factory terminated heating cable is ideally suited for trace heating of apparatus, appliances and systems in a non-corrosive and dry environment. The heating tape is highly flexible, does not damage the surfaces and is suitable for high output requirements. The braiding provides protection against mechanical damages and can be integrated in the electrical protection measures.

Advantages:

- Factory terminated
- Ready to be used instantly
- Single end connection
- Increased safety through protective braid
- Can be used for higher temperatures
- Highly flexible
- Surface-friendly
- Small bending radius
- Easy to assemble

Applications:

- Heat tracing on apparatus, piping, valves and systems
- Devices and systems with high output needs
- Laboratory & research applications



Type **ELW-HS** up to 450 °C



Technical Information

Type ELW-HS up to 450 °C

Data

| | |
|-------------------------------|---------------------|
| ■ Insulation (1) | E-glass textile |
| ■ Protective braid (2) | 1.4301 / SS 304 |
| ■ Outer jacket (3) | E-glass textile |
| ■ Nominal voltage | 230 V |
| ■ Output | Approx. 250 W/m* |
| ■ Operating temp., max. | 450 °C |
| ■ Dimensions | 30 x 5 mm |
| ■ Bending radius, flat, min. | 10 mm |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Cold lead length, both ends | 1.2 m, without plug |
| ■ Protection class | I |

Standards

| | |
|---------------------------------|--|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T411 1.5 kV AC – 1 min |



***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-HS-0.5 | 0.50 | 126 | 0240102 |
| ELW-HS-0.7 | 0.70 | 180 | 0240105 |
| ELW-HS-1.0 | 1.00 | 250 | 0240110 |
| ELW-HS-1.5 | 1.50 | 375 | 0240111 |
| ELW-HS-2.0 | 2.00 | 490 | 0240116 |
| ELW-HS-2.5 | 2.50 | 622 | 0240117 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0,25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-HS-3.25 | 3.25 | 768 | 0240121 |
| ELW-HS-4.0 | 4.00 | 987 | 0240125 |
| ELW-HS-5.0 | 5.00 | 1260 | 0240127 |
| ELW-HS-6.3 | 6.30 | 1555 | 0240131 |
| ELW-HS-8.0 | 8.00 | 1945 | 0240135 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Heating Cable

for Highest Output

The preferred use of the heating cable is for glass, quartz or ceramic devices and systems with the highest output requirements in a dry environment. Small dimensions and high flexibility simplify assembly. The heating cable must be installed touch-protected. If you plan to use the heating cable on metal and at an operating temperature in excess of 650 °C, please consult our project engineers.

Advantages:

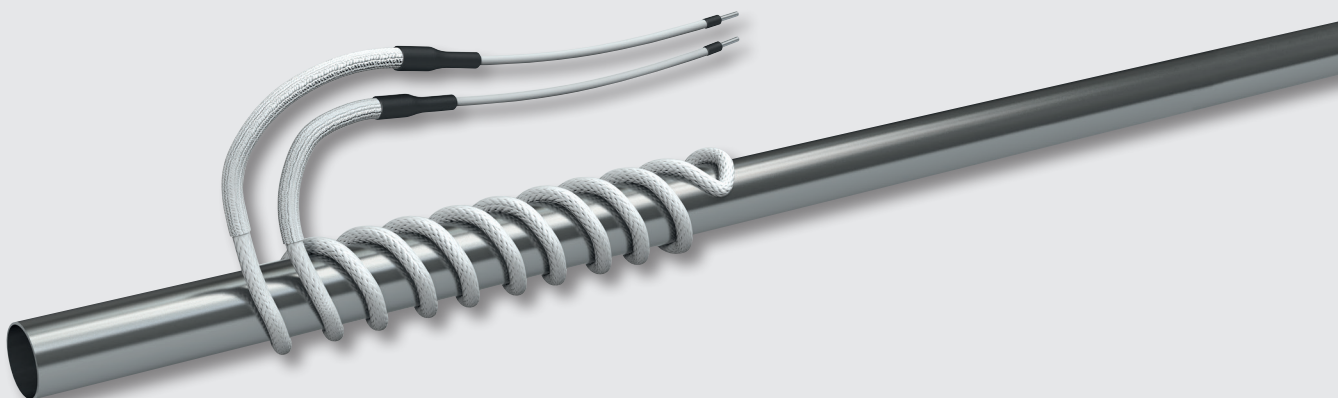
- Factory terminated
- Highest output
- Highest operating temperatures
- Ready to be used instantly
- Highly flexible
- Small bending radius
- Surface-friendly

Applications:

- Heat tracing on glass, quartz and ceramic devices
- Devices and systems with high output needs
- Laboratory & research applications



Type **ELK-Q** up to 900 °C





Technical Information

Type ELK-Q up to 900 °C

Data

| | |
|----------------------------|---------------------------|
| ■ Insulation | Quartz textile |
| ■ Nominal voltage | 230 V |
| ■ Output | ~ 175 W/m* |
| ■ Operating temp., max. | 900 °C |
| ■ Diameter | Approx. 4 mm |
| ■ Bending radius, min. | 5 x outer diameter |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Cold lead length | 1.2 m, without plug |
| ■ Protection class | Depending on installation |

Standards

| | |
|---------------------------------|--------------------------------------|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T2 1.5 kV AC – 1 min |

***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-Q 0.6 | 0.6 | 106 | 0160003 |
| ELK-Q 1.0 | 1.2 | 138 | 0160006 |
| ELK-Q 1.4 | 1.4 | 270 | 0160007 |
| ELK-Q 2.0 | 2.0 | 319 | 0160011 |
| ELK-Q 3.1 | 3.1 | 533 | 0160014 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0.25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELK-Q 4.0 | 4.0 | 696 | 0160017 |
| ELK-Q 5.0 | 5.0 | 882 | 0160020 |
| ELK-Q 6.0 | 6.0 | 1062 | 0160023 |
| ELK-Q 8.0 | 8.0 | 1438 | 0160026 |
| ELK-Q 10.0 | 10.0 | 1653 | 0160029 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Heating Tape

for Highest Output

The preferred use of the heating cable is for glass, quartz or ceramic devices and systems with the highest output requirements in a dry environment. Single end connection and high flexibility simplify assembly. The heating tape must be installed touch-protected. If you plan to use the heating cable on metal and at an operating temperature in excess of 650 °C, please consult our project engineers.

Advantages:

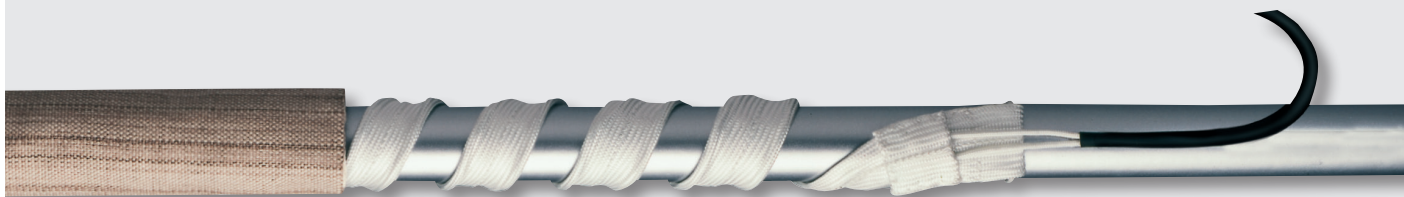
- Factory terminated
- Highest output
- Highest operating temperatures
- Ready to be used instantly
- Highly flexible
- Small bending radius
- Surface-friendly
- Single end connection

Applications:

- Heat tracing on glass, quartz and ceramic devices
- Devices and systems with highest output needs
- Laboratory & research applications



Type **ELW-Q** up to 900 °C



Technical Information

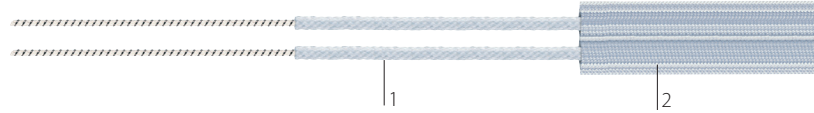
Type ELW-Q up to 900 °C

Data

| | |
|------------------------------|---------------------|
| ■ Insulation (1) | Quartz textile |
| ■ Outer jacket (2) | Quartz textile |
| ■ Nominal voltage | 230 V |
| ■ Output | 350 W/m* |
| ■ Operating temp., max. | 900 °C |
| ■ Dimensions (wxh) | Approx. 35 x 6 mm |
| ■ Bending radius, flat, min. | 20 mm |
| ■ Installation temp., min. | Not restricted |
| ■ Moisture proof | No |
| ■ Cold lead length | 1.2 m, without plug |

Standards

| | |
|---------------------------------|--------------------------------------|
| ■ Manufactured according to | DIN VDE 0721 T2 |
| ■ Final inspection according to | DIN VDE 0721 T2 1.5 kV AC – 1 min |



***Note:** The output per meter of heating cable and the maximum possible operating temperatures depend on the respective application. For individual cases, we recommend that you contact our engineers – we will be pleased to advise you.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-Q 0.6 | 0.60 | 138 | 0260003 |
| ELW-Q 0.7 | 0.70 | 270 | 0260005 |
| ELW-Q 1.0 | 1.00 | 319 | 0260008 |
| ELW-Q 1.5 | 1.55 | 533 | 0260012 |
| ELW-Q 2.0 | 2.00 | 696 | 0260014 |

Not all resistances are available ex stock – please contact us.
Other lengths upon request.
Resistance tolerance: +/- 5 %
Lengths tolerance ± 2%, max. ± 0.25 m.

| Designation | Heated length (m) | Nominal output (W) | Art. No. |
|-------------|-------------------|--------------------|----------|
| ELW-Q 2.5 | 2.50 | 882 | 0260017 |
| ELW-Q 3.0 | 3.00 | 1062 | 0260020 |
| ELW-Q 4.0 | 4.00 | 1438 | 0260023 |
| ELW-Q 5.0 | 5.00 | 1653 | 0260026 |

Cables shall neither intersect nor contact.
Provide protection by means of circuit breaker FI 30.
Please observe the standards IEC 62395-2, EN 60519-10.

Electronic Temperature Controller

The ELTC-14 is an electronic temperature controller with digital display for wall mounting. The temperature is measured by a Pt100 sensor, processed by the microcontroller and displayed. After having evaluated the actual and preset values, the appropriate output relays are switched, depending on the configuration.

Cable glands and terminals are provided for the power connection. The unit is supplied in a weather proof plastic enclosure, with a transparent cover.

Advantages:

- LED display operable down to -25 °C
- Programmable 0 °C up to +390 °C
- For switching 20 A resistive load with hybridrelay
- Signaling contact (configurable to operate either as alarm or release contact, potential-free)
- Suitable for Pt100 with 2 or 3 wires
- For connection of up to 2 heating cables
- Operating voltage:
90 - 260 VAC / 50/60 Hz

Applications:

- Industrial applications
- Mechanical, electrical and plumbing (MEP)



Type **ELTC-14**





Technical Information

Type ELTC-14

Data

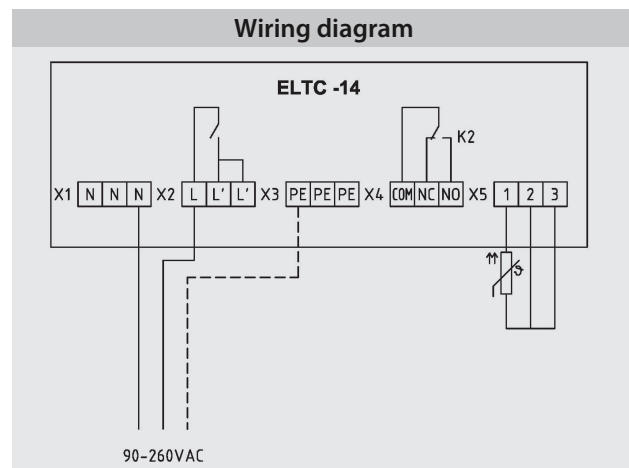
| | |
|------------------------------|--|
| ■ Operating voltage | 90-260 VAC 50/60 Hz |
| ■ Power consumption | Max. 4 mA, < 5 W |
| ■ Switching capacity relay 1 | 20 A with hybridrelay |
| ■ Switching capacity relay 2 | 8 A, changover contact (alarm) |
| ■ Operating temperature | -25 up to +55 °C |
| ■ Storage temperature | -30 up to +60 °C |
| ■ Display range | -50 up to +400 °C |
| ■ Adjustable range | 0 up to +390 °C, optional configuration |
| ■ Sensor connection | Pt100 2-wire, 3-wire, optional configuration |
| ■ Display | LED, red |
| ■ IP rating | IP 65 |
| ■ Dimensions (w x h x d) | 130 x 130 x 75 mm polycarbonate enclosure |

Sensors and display: It is possible to use two types of sensors, either Pt100/2-wire or Pt100/3-wire. Optional display of °C or °F values. In case of use of a Pt100/2-wire unit the actual temperature value can be corrected. Range +/- 10K or +/-18F, respectively. In case of use of a Pt100/3-wire unit the temperature is automatically corrected. Also suitable for use with ELTF-PTEX 1 and 2 sensor.

Relay configuration: relay 1: regulator, relay 2: alarm / temperature reached

Temperature alarm: If the actual value deviates from the preset limit values, an alarm is given and transmitted via alarm relay K2.

| Type | Designation | Art. No. |
|---------|--|----------|
| ELTC-14 | Standard: Set with cable glands, reducer and blind cover | 0620000 |



Electronic Temperature Controller

The ELTC-21 is an electronic temperature controller with digital display for top-hat rail mounting. The temperature is measured by a Pt100 sensor, processed by the microcontroller and displayed. After having evaluated the actual and preset values, the appropriate output relays are switched, depending on the configuration.

Advantages:

- LED display operable down to $-25\text{ }^{\circ}\text{C}$
- Programmable $-50\text{ }^{\circ}\text{C}$ up to $+400\text{ }^{\circ}\text{C}$
- For switching 16 A resistive load
- Alarm contact
- Pt100 with 2 or 3 wires

Applications:

- Industrial applications
- Mechanical, electrical and plumbing (MEP)

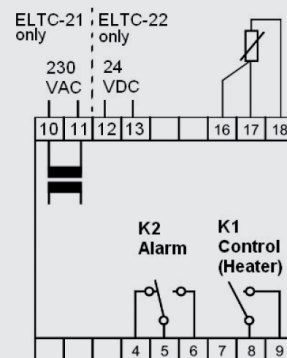
Technical Information

Data

| | |
|---------------------------------|---|
| ■ Operating voltage | 230 V |
| ■ Power consumption | Max. 4 mA, < 5 W |
| ■ Switching capacity, relay 1 | 16 A close contact (heating) |
| ■ Switching capacity, relay 2 | 8 A, changeover contact (alarm) |
| ■ Operating temperature | -25 up to $+55\text{ }^{\circ}\text{C}$ |
| ■ Storage temperature | -25 up to $+60\text{ }^{\circ}\text{C}$ |
| ■ Temperature range | 0 up to $+400\text{ }^{\circ}\text{C}$, opt. configuration |
| ■ Sensor connection | Pt100 2-wires, 3-wires, opt. configuration |
| ■ Display | LED, red |
| ■ IP rating | IP 20 |
| ■ Mounting | Top-hat rail |
| ■ Dimensions [w x h x d in mm]: | 51.5 x 87.5 x 58.0 |

Type ELTC-21

Wiring diagram



Sensors and display: It is possible to use two types of sensors, either Pt100/2-wire or Pt100/3-wire. Optional display of $^{\circ}\text{C}$ or $^{\circ}\text{F}$ values. In case of use of a Pt100/2-wire unit the actual temperature value can be corrected. Range $\pm 10\text{K}$ or $\pm 18\text{F}$, respectively. In case of use of a Pt100/3-wire unit the temperature is automatically corrected. Also suitable for use with ELTF-PTE_x 1 and 2 sensor.

Relay configuration: relay 1: regulator, relay 2: alarm

Temperature alarm: If the actual value deviates from the preset limit values, an alarm is given and transmitted via alarm relay K2.

Type ELTC-21



EIL

| Type | Art. No. |
|---------|----------|
| ELTC-21 | 0610093 |

Electronic

Temperature Controller for 24 VDC

The ELTC-22 is an electronic temperature controller with digital display for standard rail mounting. The temperature is measured by a Pt100 sensor, processed by the microcontroller and displayed. After having evaluated the actual and preset values, the appropriate output relays are switched, depending on the configuration.

Advantages:

- LED display operable down to -25 °C
- Programmable -50 °C up to +400 °C
- For switching 16 A ohm load
- Alarm contact
- Pt100 with 2 or 3 wires

Applications:

- Industrial applications
- Mechanical, electrical and plumbing (MEP)

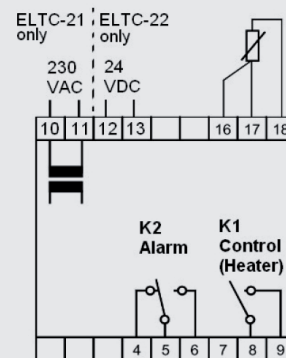
Technical Information

Data

| | |
|---------------------------------|--|
| ■ Operating voltage | 24 VDC |
| ■ Power consumption | Max. 4 mA, < 5 W |
| ■ Switching capacity, relay 1 | 16 A close contact (heating) |
| ■ Switching capacity, relay 2 | 8 A, changeover contact (alarm) |
| ■ Operating temperature | -25 up to +55 °C |
| ■ Storage temperature | -25 up to +60 °C |
| ■ Temperature range | 0 up to +400 °C, opt. configuration |
| ■ Sensor connection | Pt100 2-wires, 3-wires, opt. configuration |
| ■ Display | LED, red |
| ■ IP rating | IP 20 |
| ■ Mounting | Top-hat rail |
| ■ Dimensions [w x h x d in mm]: | 51.5 x 87.5 x 58.0 |

Type ELTC-22

Wiring diagram



Sensors and display: It is possible to use two types of sensors, either Pt100/2-wire or Pt100/3-wire. Optional display of °C or °F values. In case of use of a Pt100/2-wire unit the actual temperature value can be corrected. Range +/- 10K or +/-18F, respectively. In case of use of a Pt100/3-wire unit the temperature is automatically corrected. Also suitable for use with ELTF-PTEX 1 and 2 sensor.

Relay configuration: relay 1: regulator, relay 2: alarm

Temperature alarm: If the actual value deviates from the preset limit values, an alarm is given and transmitted via alarm relay K2.

Type ELTC-22



ELC

| Type | Art. No. |
|---------|----------|
| ELTC-22 | 0610094 |

Junction Box

Round, for Wall-mounting

This innovative junction box provides a lot of advantages. Due to the shape of the box, for instance, it is not necessary to strongly bend the inserted cable thereby avoiding cable damage.

The unique snap fit permits rapid closing of the cover without needing a special tool. A safety lock, with appropriate tool included, prevents the cover from moving. Additional features permit the attachment of sign plates facilitating easy identification of heating circuits in complex systems.

Advantages:

- Rapid closing of the cover through snap fit, no tool required
- Increased mechanical safety through round shape
- Permits fixing of customer identification plates
- Up to 3 heating cables can be connected

Applications:

- Chemical & petrochemical industries
- Power stations
- Industrial plants with a need for frost protection or temperature maintenance



Type **ELAK-R**



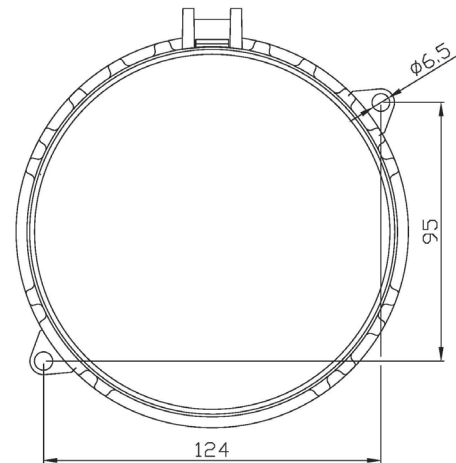


Technical Information

Data

| | |
|--------------------------------|---|
| ■ Ambient temperature | -45°C up to +50°C |
| ■ Nominal current | See type plate, max. 28 A each terminal 6 mm ² |
| ■ Nominal voltage | See type plate, max. 800 VAC |
| ■ Terminals heating cable | Max. 6 mm ² / AWG 10 |
| ■ Terminals temperature sensor | Max 1.5 mm ² / AWG 16 |
| ■ Enclosure | Polyamide, RAL 7043 traffic grey |
| ■ Dimensions (approx.): | Dia. 150 mm, height 125 mm |
| ■ Cable glands | Polyamide |
| ■ IP rating | IP65 |
| ■ Weight | Approx. 0.7 kg |

Type ELAK-R



| Type | Application | Features | Item n° |
|----------|--|---|---------|
| ELAK-R-1 | Star point for 3 heating cables ELKM-AG (L and N) | wall-mounting, 3 x M16 (3-7) | 0920051 |
| ELAK-R-2 | Connection of 1 heating cable ELK-AG (L and N) or star point for 3 heating cables ELKM-AG -... | wall-mounting, 1x M25 (9-17), 2 x M16 (3-7), 1 bore hole with thread plug M16 * | 0920052 |
| ELAK-R-3 | Connection of 1 heating cable ELW-VA | wall-mounting, 1x M25 (9-17), 1 x M20 (6-12) | 0920053 |

Note: Connection and termination kits are not included in the ELAK-R system. Please place a separate order for these items which depend on the type of heating cable used.

Junction Box, Round for Hazardous Areas



The innovative junction box ELAK-Ex-R is suitable for use in potentially explosive atmosphere in accordance with Ex-guidelines 94/9/CE (ATEX 95). Thanks to its exceptional shape it provides a number of advantages. Due to the form of the box, for instance, it is not necessary to strongly bend the inserted cable thereby avoiding cable damage.

A safety lock, with appropriate tool included, prevents the cover from moving. Additional features permitting the attachment of sign plates facilitate easy identification of heating circuits in complex systems. Suited for wall-mounting.

Advantages:

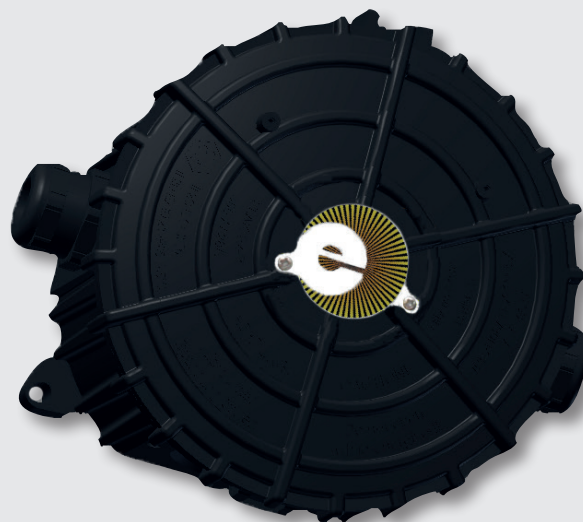
- No static charge
- Rapid closing of the cover through snap fit, no tool required
- Increased mechanical safety through round shape
- Permits fixing of customer identification plates
- Up to 3 heating cables can be connected

Applications:

- Hazardous areas
- Chemical & petrochemical industries
- Power stations
- Industrial plants with a need for frost protection or temperature maintenance



Type **ELAK-Ex-R**



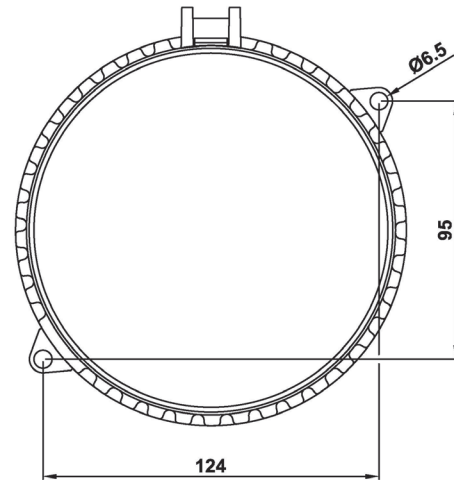


Technical Information

Type ELAK-Ex-R

Data

| | |
|---------------------------------------|---|
| ■ Classification | II 2G Ex e IIC T6 Gb II 2D Ex tb IIIC TX Db |
| ■ Standards | IEC 60079-0 ed.6, IEC 60079-7 ed.4, IEC 60079-31 ed.1 |
| ■ Ambient temperature | -40 °C up to +50 °C |
| ■ Nominal current | See type plate, max. 28 A each terminal |
| ■ Nominal voltage | See type plate, max. 550V |
| ■ Terminals heating cable | Max. 6 mm ² (optional 10 mm ²) |
| ■ Terminals temp.sensor (if required) | Max. 1.5 mm ² |
| ■ Enclosure | Polyamide, no static charge |
| ■ Dimensions (approx.) | Ø 150 mm, height 125 mm |
| ■ Impact resistance | 7 Joule |
| ■ Cable glands | Polyamide |
| ■ IP rating | IP65 |
| ■ Weight | Approx. 0.7 kg |
| ■ Type of mounting | Wall-mounting |



| Type | Application | Features | Art. No. |
|------------|--|---|----------|
| ELAK-Ex-R1 | Star point for ELK-AG-... | 3 x M16 (4-9 mm), 1 x threaded plug M20, 1 x threaded plug M25 | 0X80071 |
| ELAK-Ex-R2 | Two-phase heating circuit or as star-supply box for ELK-AG-... | 2 x M16 (4-9 mm), 1 x M25 (8-17 mm), 1 x threaded plug M16, 1 x threaded plug M20 | 0X80072 |
| ELAK-Ex-R4 | Supply: 1 heating cable ELK-AG-... + EL-CT | 2 x M16 (4-9 mm), 2 x M25 (8-17 mm) | 0X80074 |

Note: Connection and termination kits are not included in the ELAK-Ex-R-system. Please place a separate order for these items which depend on the type of heating cable used.

Junction Box

for Hazardous Areas



This junction box ELAK-Ex-3 in conventional design is suitable for use in potentially explosive atmosphere in accordance with Ex-guidelines 94/9/CE (ATEX 95). Moreover, the unit ELAK-Ex-3 covers a significantly wide range of ambient temperatures as shown on the data sheet. The junction box can be wall-mounted and is also available with stands for mounting on pipes.

Advantages:

- Covers a wide range of temperatures
- Suited for mounting on pipes

Applications:

- Hazardous areas
- Chemical & petrochemical industries
- Power stations
- Industrial plants with a need for frost protection or temperature maintenance



Type **ELAK-Ex-3**



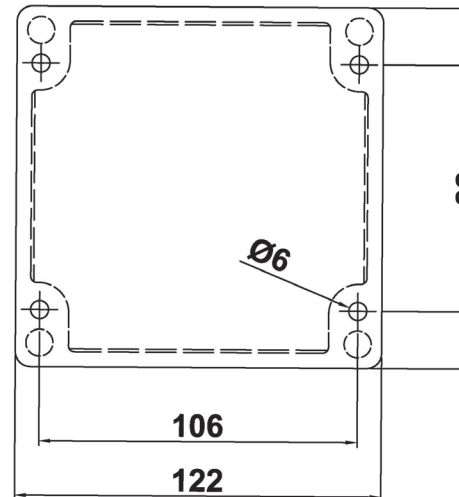


Technical Information

Type ELAK-Ex-3

Data

| | |
|------------------------|--|
| ■ Classification | II 2G Ex e IIC T6...T4 Gb II 2D Ex tb IIIC T80 °C Db |
| ■ Certificate | EPS13 ATEX 1506X, IECEx EPS 13.0002 |
| ■ Standards | EN 60079-0:2009, EN 60079-7:2007, EN 60079-31:2009 |
| ■ Ambient temperature | -40 °C up to +50 °C (T6, T85 °C) -40 °C up to +55 °C (T5, T100 °C) -40 °C up to +60 °C (T4, T100 °C) |
| ■ Nominal current | See type plate, max. 36 A |
| ■ Nominal voltage | See type plate, max. 550V |
| ■ Terminals | Min. 0.5 mm ² , max. 10 mm ² (except ELAK-Ex-3.8) |
| ■ Enclosure | Polyester |
| ■ Dimensions (approx.) | l x h x d 122 x 120 x 90 mm |
| ■ Impact resistance | 7 Joule |
| ■ Cable glands | Polyamide |
| ■ IP rating | IP65 / 66 depending on design |
| ■ Weight | Approx. 1 kg |
| ■ Type of mounting | Wall-mounting |


















The ELAK-Ex-3 unit fitted with the mounting stand ELMW-9 (122 x 120 – Art. No. 0941009) is also suited for mounting on pipes. The mounting stand is 100 mm high.

| Type | Application | Features | Art. No. |
|-------------|--|---|----------|
| ELAK-Ex-3.1 | Star point for ELK-AG-... | 3 x M12 (3-6 mm), 35 A, 1 x threaded plug M25 | 0X80051 |
| ELAK-Ex-3.2 | Two-phase heating circuit or as star-supply box for ELK-AG-... | 1 x M25 (9-17 mm), 2 x M12 (3-6 mm), 1 x sealing plug M12 | 0X80052 |
| ELAK-Ex-3.4 | Supply: 1 heating cable ELK-AG-...+ EL-CTB | 2 x M25 (9-17 mm), 2 x M12 (3-6 mm) | 0X80054 |

Note: Connection and termination kits are not included in the ELAK-Ex-3-system. Please place a separate order for these items which depend on the type of heating cable used. Appertaining screws are specified in chapter 'Accessories'.



Heating Cables / Heating Tapes

Accessories

| Designation | Description | Art. No. |
|--|---|----------|
| 1 |  Connection and Termination Kits | |
| ELVB-ELPA1-25 | Connection kit for ELP/PFA, with cable gland M25x1,5 IP66 | 091A050 |
| ELVB-ELPA2-25 | Connection kit for ELP/Si, with cable gland M25x1,5 IP66 | 091A052 |
| EL-ECP1 | Termination kit for ELP/PFA, silicone end cap (6 mm, transparent) with glue | 09112P1 |
| EL-ECP2 | Termination kit for ELP/Si, silicone end cap (9 mm, transparent) with glue | 09112P3 |
| EL-ECP+ | Termination kit for ELP/PFA up to 260 °C, silicone end cap (6 mm, red) with glue | 09112PP |
|  EL-ECP-Ex | Termination kit for ELP/PFA, for Ex area, up to 210 °C, silicone end cap (red) with glue | 0X81EP1 |
|  ELVB-ELPEx-25 | Connection kit for ELP/PFA, for Ex area, with cable gland M25 | 0X81PA2 |
|  Ex-Con-25/7 | Coupling sleeve for Ex area ELKM-AG-N, conductor section up to 2.5 mm ² , 7J, Ex e | 0X81115 |
|  Ex-Con-22/4-Si | Coupling sleeve for Ex area ELKM-AG-N, conductor section up to 2.5 mm ² , 4J, Ex e | 0X81140 |
|  Ex-Con-36/4 | Coupling sleeve for Ex area ELKM-AG-N, conductor section between 2.5 and 35 mm ² , 4J, Ex e | 0X81120 |
| ELVB22 | Connection kit for heating cable ELKM-A for 1.5 mm ² cold lead | 0911048 |
| ELVB26 | Connection kit for heating cable ELKM-AS+AE for 1.5 mm ² cold lead | 0911052 |
| ELVB30 | Connection kit for heating cable ELKM-AG-N/L for 1.5 mm ² cold lead | 0911056 |
| ELVB30-1 | Connection kit for heating cable ELKM-AG-N/L up to 6 mm ² cold lead | 0911059 |
| 2 |  Junction Boxes | |
|  ELAK-Ex 3.1 | Junction box, polyester enclosure, for neutral wire connection ELK-AG-N, Ex e | 0X80051 |
|  ELAK-Ex 3.2 | Junction box, 122 x 120 x 90 mm, polyester enclosure, for ELK-AG, Ex e | 0X80052 |
|  ELAK-Ex 3.4 | Junction box, 122 x 120 x 90 mm, polyester enclosure, for AG + EL-CT, Ex e | 0X80054 |
|  ELAK-Ex 3.8 | Junction box, 122 x 120 x 90 mm, polyester enclosure, for Pt100, Ex e | 0X80058 |
|  ELAK-Ex-R1 | Junction box, dia. 150 mm, height 125 mm, polyamide enclosure, for neutral wire connection, Ex e | 0X80071 |
|  ELAK-Ex-R2 | Junction box, dia. 150 mm, height 125 mm, polyamide enclosure, for ELK-AG, Ex e | 0X80072 |
|  ELAK-Ex-R4 | Junction box, dia. 150 mm, height 125 mm, polyamide enclosure, for AG + EL-CT, Ex e | 0X80074 |
|  ELAK-Ex-R8 | Junction box, dia. 150 mm, height 125 mm, polyamide enclosure, for Pt100, Ex e | 0X80078 |
| ELAK-2 | Junction box, 98 x 98 x 58 mm, thermoplastic enclosure | 0920001 |
| ELAK-5 | Junction box, 122 x 120 x 90 mm, polyester enclosure | 0920013 |
| ELAK-5.1 | Junction box, 130 x 130 x 75 mm, polycarbonate enclosure | 0920002 |
| ELAK-7 | Junction box, 260 x 190 x 90 mm, polyester enclosure | 0920019 |
| ELAK-R-1 | Junction box, dia. 150 mm, height 125 mm, thermoplastic enclosure, for neutral wire connection ELK-AG-N/L | 0920051 |
| ELAK-R-2 | Junction box, dia. 150 mm, height 125 mm, thermoplastic enclosure, for ELK-AG (N or L) | 0920052 |
| ELAK-R-3 | Junction box, dia. 150 mm, height 125 mm, thermoplastic enclosure, for ELW-VA | 0920053 |
| ELAK-R-8 | Junction box, dia. 150 mm, height 125 mm, thermoplastic enclosure, for 1 to 2 Pt100, 2-4-wires & up to 2 sensor connecting cables max. 2.5 mm ² | 0920058 |
| ELAK-RS-Pt | Junction box, with mounting feet, round, dia. 150 mm, height 125 mm, thermoplastic enclosure, max. temperature 200 °C, to connect 1 double-Pt100, 1 sensor cable, insulating thickness max.100 mm | 0920060 |



Accessories


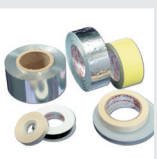

| Designation | Description | Art. No. |
|-------------|---|------------|
| 3 |  <p>Pipe Mounting Fittings</p> | |
| ELMW-5 | Pipe mounting bracket for ELAK-2, mat. 1.4301/SS 304, max. insulating thickness 80 mm | 0941005 |
| ELMW-9 | Pipe mounting bracket for ELTh-1, ELAK-Ex-3 and ELAK-5, mat. 1.4301/SS 304, max. insulating thickness 80 mm | 0941009 |
| ELMW-11 | Pipe mounting bracket for ELAK 5.1, ELTC-14 and 05, mat. 1.4301/SS 304, max. insulating thickness 80 mm | 0941011 |
| ELMW-13 | Pipe mounting bracket for ELAK-6, ELTh-2, mat. 1.4301/SS 304, max. insulating thickness 80 mm | 0941013 |
| ELMW-15 | Pipe mounting bracket for ELAK-7, ELTh-3, mat. 1.4301/SS 304, max. insulating thickness 80 mm | 0941015 |
| ELMW-Ex-Box | Pipe mounting plate 185 x 185, mat.: 1.4301/SS 304 | 0941072 |
| ELB-15.04 | Hose band clip mat. 1.4301/SS 304, outer hose diameter 25/40 mm, (up to max. DN 25, 1") | 2723001025 |
| ELB-15.06 | Hose band clip mat. 1.4301/SS 304, outer hose diameter 40/60 mm, (up to max. DN 40, 1.5") | 2723001040 |
| ELB-15.09 | Hose band clip mat. 1.4301/SS 304, outer hose diameter 70/90 mm, (up to max. DN 65, 2.5") | 2723001070 |
| ELB-15.11 | Hose band clip mat. 1.4301/SS 304, outer hose diameter 90/110 mm, (up to max. DN 80, 3") | 2723001090 |
| ELMW-CT | Pipe mounting bracket, mat. 1.4301/SS 304 used for EL-CT..., max. insulating thickness 80 mm | 0941025 |
| ELMW-GP1 | Pipe mounting fitting 175 x 125 mm | 941020 |
| 4 |  <p>Insulation Bushings</p> | |
| ELISD-1.12 | 1 x M12, plate dimensions (alu) 70 x 70 mm, insulated area for cable 3,5 ... 7 mm (for connecting cables only) | 0921011 |
| ELISD-1.16 | 1 x M16, plate dimensions (alu) 70 x 70 mm, insulated area for cable 4,5 ... 10 mm (for connecting cables only) | 0921015 |
| ELISD-1.20 | 1 x M20, plate dimensions (alu) 70 x 70 mm, insulated area for cable 7 ... 13 mm (for connecting cables only) | 0921019 |
| ELISD-1.25 | 1 x M25, plate dimensions (alu) 70 x 70 mm, insulated area for cable 9 ... 17mm (for connecting cables only) | 0921023 |
| ELISD-P1 | Insulation bushing for heating cable ELP/PFA, plate dimensions (alu) 70 x 70 mm, suited for the cold section of constant wattage heating cables | 0921101 |
| ELISD-P2 | Insulation bushing for heating cable ELP/Si, plate dimensions (alu) 70 x 70 mm, suited for the cold section of constant wattage heating cables | 0921031 |
| ELISD-2.12 | 2 x M12 x 1.5, plate dimensions (alu) 100 x 40 mm, insulated area for cable 3.5...7 mm (for connecting cables only) | 0921069 |
| ELISD-2.16 | 2 x M16 x 1.5, plate dimensions (alu) 100 x 40 mm, insulated area for cable 4.5...10 mm (for connecting cables only) | 0921071 |
| ELISD-3.12 | 3 x M12 x 1.5, plate dimensions (alu) 100 x 40 mm, insulated area for cable 3.5...7 mm (for connecting cables only) | 0921067 |
| ELISD-3.16 | 3 x M16 x 1.5, plate dimensions (alu) 100 x 40 mm, insulated area for cable 4.5...10 mm (for connecting cables only) | 0921070 |

Measuring, controlling and monitoring technology, electronic temperature controllers, electronic heating circuit monitoring device temperature sensors and thermocouples

Please refer to our wide product portfolio 'Measurement and Control'


Heating Cables / Heating Tapes


Accessories


| Designation | Description | Art. No. |
|-------------|--|------------|
| 5 |  Temperature Sensors | |
| ELTF-PTEx.2 | Pt100, Ex e, 4 wires, 3 m Fluoropolymer cable, Ex e | 0X70002 |
| ELTF-PTEx.4 | Double-Pt100, 3 wires, 3 m Fluoropolymer cable, Ex e | 0X70030 |
| ELTF-PT.1 | Pt100 2-wires, 5 m PVC cable | 0650001 |
| ELTF-PT.3 | Pt100 2-wires, 3 m Fluoropolymer cable | 0650003 |
| ELTF-PT.3.1 | Pt100 3-wires, 3 m Fluoropolymer cable | 0650002 |
| 6 |  Self-adhesive Tapes and Foil | |
| ELB-02 | 20 m adhesive glass fibre tape, 12 mm, max. working temperature 140 °C | 2486800125 |
| ELB-02A | 33 m adhesive glass fibre tape, 12 mm, max. working temperature 180 °C | 2486800126 |
| ELB-03 | 50 m textile adhesive tape, 12 mm, max. working temperature 160 °C | 2481800120 |
| ELB-06C | 50m self-adhesive aluminium foil, 45 mm, reinforced grid, max. working temperature -40...+130 °C | 2701900051 |
| ELB-06D | 100 m self-adhesive aluminium foil, 75 mm, max. working temperature 140 °C | 2701900076 |
| ELB-06E | 50m self-adhesive aluminium foil, 536 mm, max. working temperature 150 °C | 2701900500 |
| ELB-06 | 50 m self-adhesive aluminium foil, 75 mm wide, max. working temperature 140 °C | 942200 |
| 7 |  Mechanical Fasteners | |
| ELB-16.10 | Plastic strap retainers, length 102 mm, UV resistant, packaged as 100 units, max. working temperature 85 °C | 2796000001 |
| ELB-16.20 | Plastic strap retainers, length 200 mm, UV resistant, packaged as 100 units, max. working temperature 85 °C | 2796000002 |
| ELB-16.36 | Plastic strap retainers, length 360 mm, UV resistant, packaged as 100 units, max. working temperature 85 °C | 2796000003 |
| ELB-11 | Glass-cloth hose 2 mm, max. working temperature 450 °C, for attaching textile glass products | 2446000201 |
| ELB-21 | Quartz-cloth hose 3,0 mm, max. working temperature 1000 °C, for attaching textile quartz products | 2447000350 |
| ELB-13V1 | Threaded strap retainer, 11mm, packaged unit = 30 m, mat.: 1.4301/SS 304 For fastening the mounting brackets on the pipeline. | 2723001010 |
| ELB-13V2 | Tension jack for ELB-13V1, packaged unit = 10 pcs., mat.: 1.4301/SS 304 For fastening the mounting brackets on the pipeline. | 0930042 |
| ELB-12 | Pre-punched metal fixing strip, grid: 25 mm, mat. 1.4301/SS 304, for attaching heating cables on receptacles | 2723001005 |
| ELB-09 | Metallic gaze tape 50 mm x 10 m, mat. 1.4301/SS 304 | 2793000050 |



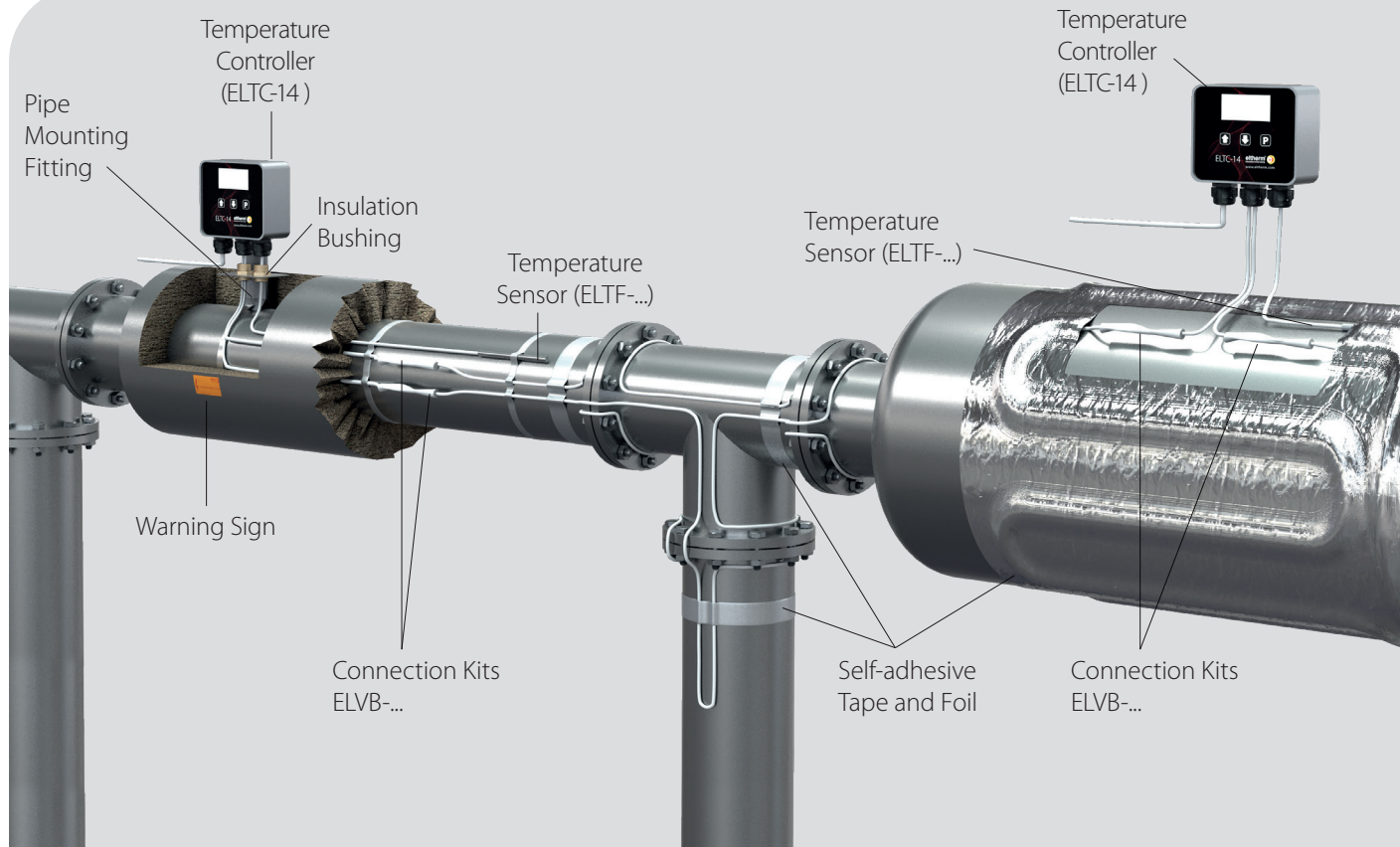
Accessories

| 8 | Designation | Description | Art. No. |
|--|---|--|------------|
| |  | Warning Signs | |
| | EL-WS01D | German warning sign „Elektrische Begleitheizung“ * | 2986900002 |
| | EL-WS01E | English warning sign „Electric Heat Tracing“ * | 2986900012 |
| | EL-WS01F | French warning sign „Tracage Electrique“ * | 2986900032 |
| * also available in other languages upon request | | | |

| 9 | | Description | Art. No. |
|---|---|---|------------|
| |  | Thermal Compound | |
| | ELWZ 5 | Thermal compound, 10 kg bucket, max. working temperature 1.000 °C | 2979002952 |
| | ELWZ-5 | Thermal compound, 18.3 kg bucket, max. working temperature 1.000 °C | 2979002951 |

| 10 | | Description | Art. No. |
|--|---|---|------------|
| |  | Heat Resistant Cables / Temperature Resistant Cold Ends | |
| | ELVB-L25 | Cold cable 2.5 mm ² for ELKM-AG-N/L* | 2045511250 |
| | ELVB-OT | Hose 3G1,5, Fluoropolymer, conductors: green/yellow, brown, blue | 2255503016 |
| | ELVB-OS | Hose 3G1,5, silicone, red, conductors: green/yellow, brown, blue | 2253330150 |
| | ELVB-L01 | Ni conductor 1.5 mm ² , glass fibre insulated, max. working temperature 450 °C, 550 °C transient | 2216301500 |
| | ELVB-L02 | Ni conductor 2.5 mm ² , glass fibre insulated, max. working temperature 450 °C, 550 °C transient | 2216302500 |
| | ELKM-AG-L 0,0072 | Applicable as cold end 2.5 mm ² up to 32 A | 01TT007E |
| | ELKM-AG-L 0,0117 | Applicable as cold end 1.5 mm ² up to 24 A | 01TT011E |
| | ELKM-AG-N 0,0072 | Applicable as cold end 2.5 mm ² up to 32 A | 01TA007E |
| | ELKM-AG-N 0,0117 | Applicable as cold end 1.5 mm ² up to 24 A | 01TA011E |
| * other cables and conductors available upon request | | | |

Electrical Heat Tracing System



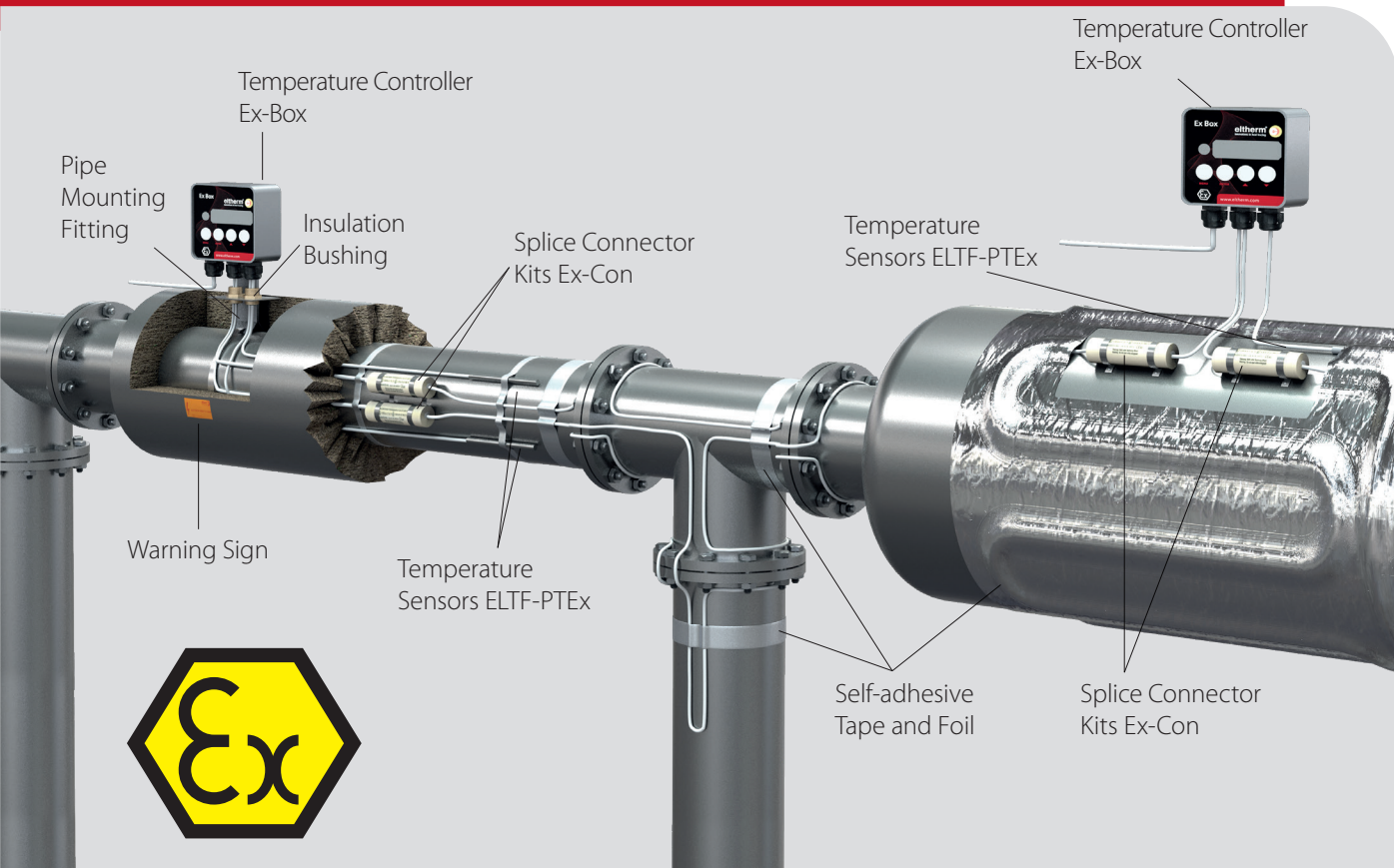
Products:

- Resistance Heating Cable ELK-...
- Measurement and Control, e. g. ELTC-14 Temperature Controller
- Temperature Sensors ELTF-...
- Connection Kits ELVB-...
- Insulation Bushings ELISD-...
- Mechanical Fasteners and/or Self-adhesive Tapes and Foil ELB-...
- Pipe Mounting Fittings ELMW-..., ELB-...
- Warning Signs EL-WS...

Remark: This is just a schematic overview, not an installation instruction. For detailed information, please contact our engineers.



EHT in Hazardous Areas



Products:

- Resistance Heating Cable ELK-...
- Temperature Controller Ex-Box
- Temperature Sensor ELTF-PTEX
- Splice Connector Kits Ex-Con-...
- Insulation Bushings ELISD-...
- Mechanical Fasteners and/or Self-adhesive Tapes and Foil ELB-...
- Pipe mounting Fittings ELMW-..., ELB-...
- Warning Signs EL-WS...

Remark: This is just a schematic overview, not an installation instruction. For detailed information, please contact our engineers.

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