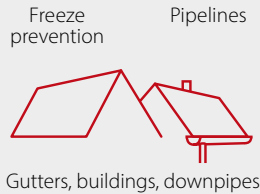
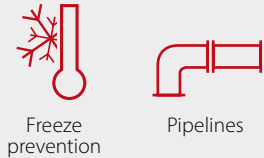


## At a Glance

### Applications



- › Building technology
- › Gutters
- › Downpipes
- › Water and sanitation utilities

### Benefits

- › Three nominal outputs
- › UV-resistant
- › Moisture proof
- › Halogen-free
- › Flame retardant

### Designs

**AHF** Aluminum foil, halogen-free insulation and outer jacket

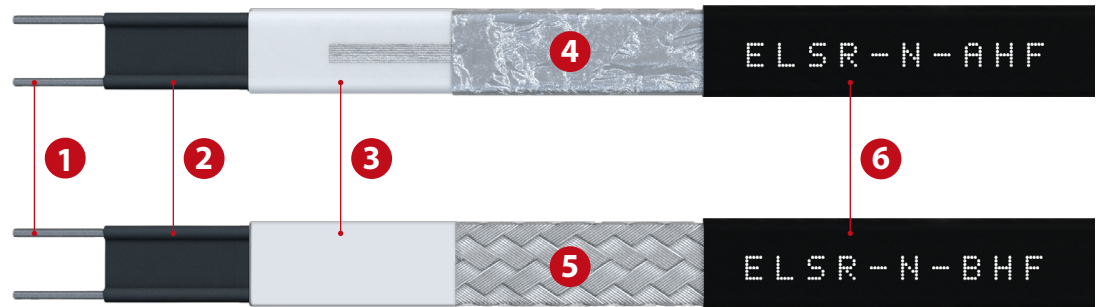
**BHF** Protective braid, halogen-free insulation and outer jacket

### Approvals



- › In particular tested according to EN 62395-1:
  - › UV resistance
  - › Water resistance
  - › Moisture resistance
  - › Flammability

# ELSR-N-Halogen free up to 80 °C



|                                          |                                                    |
|------------------------------------------|----------------------------------------------------|
| <b>1</b> Bus wire                        | Nickel plated copper, 1.23 mm <sup>2</sup>         |
| <b>2</b> Self-regulating heating element |                                                    |
| <b>3</b> Insulation                      | Halogen-free Polypropylene                         |
| <b>4</b> Protective conductor connection | see <b>5</b> or Cu, tin plated with aluminium foil |
| <b>5</b> Protection                      | Protective braid (Cu, tin plated)                  |
| <b>6</b> Outer jacket                    | Halogen-free Polypropylene                         |

## Checklist

### Power Connection & End Termination

|                |                                                      |         |
|----------------|------------------------------------------------------|---------|
| ELVB-SREx-IT   | Power connection, cold assembly, without gland       | 091AIT1 |
| ELVB-SRA-25    | Power connection, cold assembly, gland M25 x 1,5, PE | 091A010 |
| EL-ECN         | Silicone termination cap, cold assembly, transparent | 09112N1 |
| ELVB-SRV-N-L-W | Splice set, shrink-fit                               | 0911116 |
| EI-Clıc P      | Fast connector with 2.5m cold lead H05 SS-F 3 G 1,5  | 09ClıcP |
| EI-Clıc S      | Fast connector T-splice                              | 09ClıcS |

### Junction Boxes

|         |                                                                 |         |
|---------|-----------------------------------------------------------------|---------|
| ELAK-2  | 104 x 104 x 70 mm, polycarbonate, breakouts 7x M25, IP 66       | 0920030 |
| ELAK-5  | 122 x 120 x 90 mm, polyester, 3 breakouts M25, IP 66            | 0920013 |
| ELAK-RS | 150 x 125 mm, twin Pt100, 3 heaters incl. mounting stand, IP 65 | 0920050 |



## Technical Information

|                                                     |         |
|-----------------------------------------------------|---------|
| Max. continuous exposure temperature (power on)     | 65 °C   |
| Max. continuous exposure temperature (de-energized) | 80 °C   |
| Nominal voltage                                     | 230 VAC |
| Min. Bending radius                                 | 25 mm   |
| Min. Installation temperature                       | – 60 °C |

### Heating circuit length

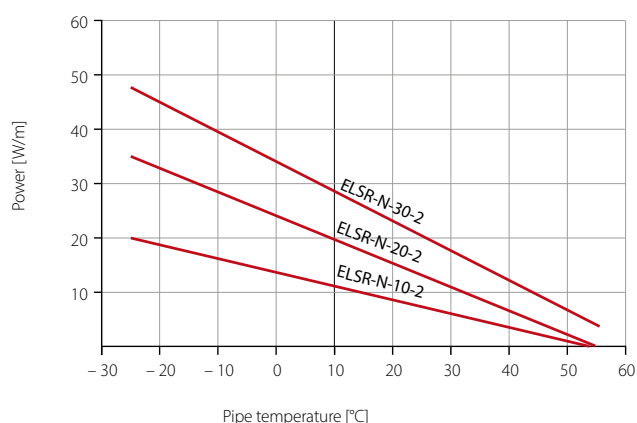
| Switch on temperature<br>[°C] | Nominal fuse rating<br>[A] | Heating circuit length* <sup>1</sup><br>[m] |             |             |
|-------------------------------|----------------------------|---------------------------------------------|-------------|-------------|
|                               |                            | ELSR-N-10-2                                 | ELSR-N-20-2 | ELSR-N-30-2 |
| 10                            | 10                         | 128.0                                       | 68.0        | 52.0        |
|                               | 16                         | 177.0                                       | 109.0       | 83.0        |
|                               | 20                         | 177.0                                       | 129.0       | 104.0       |
|                               | 25                         | 177.0                                       | 129.0       | 113.0       |
|                               | 32                         | 177.0                                       | 129.0       | 113.0       |
| 0                             | 10                         | 106.0                                       | 57.0        | 45.0        |
|                               | 16                         | 160.0                                       | 92.0        | 71.0        |
|                               | 20                         | 160.0                                       | 115.0       | 89.0        |
|                               | 25                         | 160.0                                       | 119.0       | 105.0       |
|                               | 32                         | 160.0                                       | 119.0       | 105.0       |
| -10                           | 10                         | 90.0                                        | 50.0        | 39.0        |
|                               | 16                         | 144.0                                       | 79.0        | 63.0        |
|                               | 20                         | 149.0                                       | 99.0        | 78.0        |
|                               | 25                         | 149.0                                       | 111.0       | 98.0        |
|                               | 32                         | 149.0                                       | 111.0       | 98.0        |
| -20                           | 10                         | 78.0                                        | 44.0        | 35.0        |
|                               | 16                         | 125.0                                       | 70.0        | 56.0        |
|                               | 20                         | 139.0                                       | 87.0        | 69.0        |
|                               | 25                         | 139.0                                       | 104.0       | 87.0        |
|                               | 32                         | 139.0                                       | 104.0       | 87.0        |
| -40                           | 10                         | 62.0                                        | 35.0        | 28.0        |
|                               | 16                         | 99.0                                        | 56.0        | 45.0        |
|                               | 20                         | 124.0                                       | 71.0        | 57.0        |
|                               | 25                         | 124.0                                       | 88.0        | 71.0        |
|                               | 32                         | 124.0                                       | 88.0        | 71.0        |

\*<sup>1</sup> Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % max. load
- Maximum 10 % line voltage drop on heating cable bus wire
- Power connection to one heater end
- In certain installation situations, the heating circuit length may vary. Please contact our engineers.

### Power output

ELSR-N-xx-2-xHF Power  
(on insulated metallic pipes in accordance with EN 62395-1)



## Ordering Information

| Type            | Nominal output [at 10°C] | WxH approx. [mm] | Weight approx. [g/m] | Article - No. |
|-----------------|--------------------------|------------------|----------------------|---------------|
| ELSR-N-10-2-AHF | 10 W/m                   | 13.6 x 5.5       | 91                   | B0210130      |
| ELSR-N-10-2-BHF | 10 W/m                   | 14.1 x 5.8       | 108                  | B0210110      |
| ELSR-N-20-2-AHF | 20 W/m                   | 13.6 x 5.5       | 91                   | B0210230      |
| ELSR-N-20-2-BHF | 20 W/m                   | 14.1 x 5.8       | 108                  | B0210210      |
| ELSR-N-30-2-AHF | 30 W/m                   | 13.6 x 5.5       | 91                   | B0210330      |
| ELSR-N-30-2-BHF | 30 W/m                   | 14.1 x 5.8       | 108                  | B0210310      |