

At a Glance

Applications



Freeze prevention



Temperature maintenance



Pipelines

- › Chemistry and Petrochemistry
- › Maritime and offshore
- › Food Processing Industry
- › Water and sanitation utilities

Benefits

- › Three nominal outputs
- › UV-resistant
- › Moisture proof
- › Small dimensions

Designs

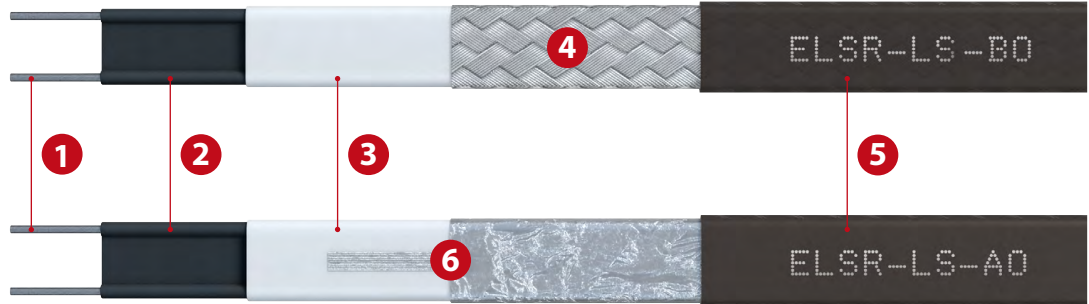
- AO** Aluminium foil, TPE-O outer jacket
- BO** Protective braid, TPE-O outer jacket

Approvals



- › Trace Heater classification
 - II 2G Ex 60079-30-1 IIC Gb
 - II 2D Ex 60079-30-1 IIIC Db
- › System classification
 - II 2G Ex 60079-30-1 eb IIC T6 Gb
 - II 2D Ex 60079-30-1 tb IIIC T85C Db
- › Certification
 - EPS 19 ATEX 1 215 U
 - EPS 21 ATEX 1070 X
 - CML 21 UKEX 3812 U
 - CML 21 UKEX 3814 X
- › Temperature class T6

ELSR-LS up to 80 °C



- | | |
|--|--|
| 1 Bus wire | Nickel plated copper, 1.23 mm ² |
| 2 Self-regulating heating element | |
| 3 Insulation | |
| 4 Protection | Protective braid (Cu, tin plated) |
| 5 Outer jacket | TPE-O |
| 6 Protective conductor connection | see 4 or Cu, tin plated with aluminium foil |

Checklist ELSR-LS

Power Connection & End Termination

ELVB-SREx-25	Power connection, cold assembly, gland M25 x 1,5, PE, Ex e	0X81PA1
ELVB-SRAL-Ex-20	Power connection, cold assembly, gland M20, brass, Ex d e	0X81PLD
EL-ECL-ex	Silicone termination cap black, cold assembly, with ex marking	0X81EL1
Ex-Con-SR	Ex connection sleeve Ø 36 x 210 mm 4J	0X81125
ELVB-SRA-25	Power connection, cold assembly, gland M25 x 1,5, PE	091A010
ELVB-SREx-It	Power connection, cold assembly, without gland	091AIT1
ELVB-SRV-N-L-W	Splice set, shrink-fit	0911116
EL-ECL	Silicone termination cap, cold assembly, transparent	09112L1
EI-Clc P	Fast connector with 2.5m cold lead H05 SS-F 3 G 1,5	09ClcP
EI-Clc S	Fast connector T-splice	09ClcS
Ex-It-L	End of line indicator light incl. mounting pos	0X8ITLG

Junction Boxes

ELAK-Ex-2.00	110 x 75 x 57 mm, polyester, IP66, 1 Trace heater, 1 Power cable	0X85200
ELAK-Ex-4.01	122 x 120 x 90 mm, polyester, IP66, 1 - 3 Trace heaters, 1 Power cable	0X85401
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-5.1	130 x 130 x 75 mm, polycarbonate, breakouts 9x M20/M25, IP 66	0920002
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. intermittent exposure temperature (de-energized)	80 °C (max. 1000 h)
Nominal voltage*	230 V
Min. Bending radius	25 mm
Min. Installation temperature	– 60 °C

* Further power inputs on request

Heating circuit length

Switch on temperature [°C]	Nominal fuse rating [A]	Heating circuit length* ¹ [m]		
		ELSR-LS-10-2	ELSR-LS-15-2	ELSR-LS-25-2
10	10	152.0	103.0	64.0
	16	196.0	160.5	103.0
	20	196.0	160.5	126.0
	25	196.0	160.5	126.0
0	10	141.0	84.0	54.0
	16	188.5	134.0	87.0
	20	188.5	145.0	108.0
	25	188.5	145.0	116.0
-10	10	119.0	71.0	47.0
	16	173.5	114.0	75.0
	20	173.5	133.0	94.0
	25	173.5	133.0	107.5
-20	10	103.0	62.0	37.5
	16	161.0	99.0	60.0
	20	161.0	124.0	75.0
	25	161.0	124.0	94.0

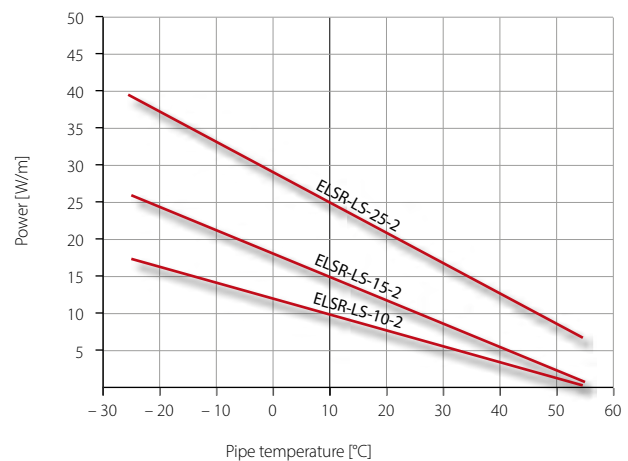
*¹ Heating circuit lengths on the following conditions

- 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-LS-xx-2-xx 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-LS-10-2-BO	10 W/m	11,0 x 5,6	98	B0223102
ELSR-LS-10-2-AO	10 W/m	10,3 x 5,3	78	B0223104
ELSR-LS-15-2-BO	15 W/m	11,0 x 5,6	98	B0223152
ELSR-LS-15-2-AO	15 W/m	10,3 x 5,3	78	B0223154
ELSR-LS-25-2-BO	25 W/m	11,0 x 5,6	98	B0223252
ELSR-LS-25-2-AO	25 W/m	10,3 x 5,3	78	B0223254