

At a Glance

Applications



Freeze prevention



Temperature maintenance



Pipelines

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

Advantages

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

Design

AO Aluminium foil, TPE-O outer jacket

BO Protective braid, TPE-O outer jacket

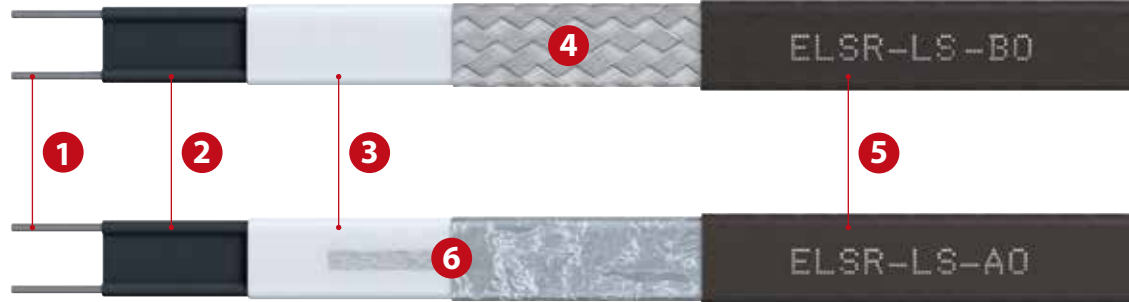
Approvals



- › Cable classification
 - EPS II 2G Ex 60079-30-1 IIC Gb
 - EPS II 2D Ex 60079-30-1 IIIC Db
- › System classification
 - IBExU II 2G Ex 60079-30-1 eb IIC T6 Gb
 - II 2D Ex 60079-30-1 tb IIIC TX Db
- › Certification
 - EPS 19 ATEX 1 215 U
 - IBExU 09 ATEX 1047 X
- › Temperature class
 - T6

Type ELSR-LS

up to 80 °C



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

Checklist ELSR-LS

Power Connection & End Termination

ELVB-SREx-25	Power connection, glued, Gland M25 x 1,5, PE	0X81PA1
ELVB-SRAL-Ex-20	Power connection, glued, Gland M20, brass	0X81PLD
EL-ECL-ex	Silicone termination cap, glued, transparent with ex marking	0X81EL1
Ex-Con-SR	Ex connection sleeve Ø 36 x 210 mm 4J	0X81125
ELVB-SRA-25	Power connection, glued, Gland M25 x 1,5, PE	091A010
ELVB-SRV-N-L-W	Connection set, shrink-fit	0911116
EL-ECL	Silicone termination cap, glued, transparent	09112L1
El-Clic P/S	El-Clic P Fast connector with integrated cold lead	09ClicP
	El-Clic S Fast connector T-splice	09ClicS

Junction Boxes

ELAK-Ex-3.5	122 x 120 x 90 mm, 1 heater, capillary thermostat, IP 66	0X80055
ELAK-Ex-3.7	122 x 120 x 90, 1-3 heaters, power supply lead max. 10 mm ² , IP66	0X80057
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-T	150 x 125 mm, twin Pt100, 3 heaters incl. mounting stand, IP 65	0920059

Temperature Sensors

ELTF-PTEx.2	Pt100 4 conductor, 3 m PTFE cable	0X70002
ELTF-PTEx.4	2x Pt100 3 conductor, 3 m cold lead	0X70030
ELTF-PT.1	Pt100, 5 x 50 mm PVC 5 m	0650001
ELTF-PT.3	Pt100, 2 conductor, 5 x 50 mm, 3 m PTFE cable	0650003
ELTF-PT.3.1	Pt100, 3 conductor, 5 x 50 mm, 3 m PTFE cable	0650002

Technical Information

Maximum ambient temperature, energized	65 °C
Maximum ambient temperature, de-energized	80 °C
Nominal voltage*	230 V
Bending radius, min.	25 mm
Installation temperature, min.	- 60 °C

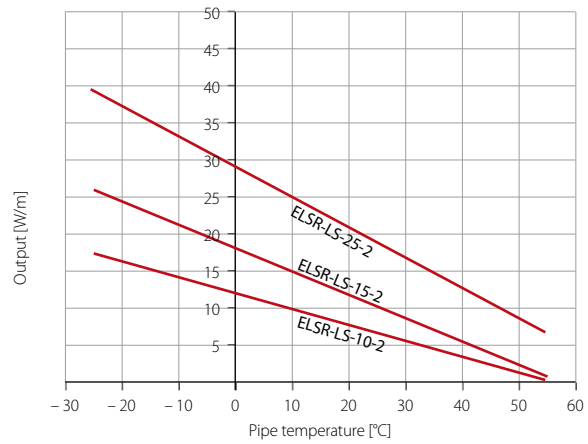
*Further power inputs on request

Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % maximum load
- Maximum 10 % line voltage drop on heating cable bus wire
- Power connection to one heater end

ELSR-LS-...-2 output

(on insulated metallic pipes in accordance with EN 62395-1)



Switch-on temperature (°C)	Nominal cutout value (A)	Heating circuit length (m) for		
		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

Type	Nominal output	Dimensions approx. (mm)	Weight approx. (g/m)	Part No.
ELSR-LS-10-2-BO	10 W/m at 10 °C	11,0 x 5,6	98	B0223102
ELSR-LS-10-2-AO	10 W/m at 10 °C	10,3 x 5,3	78	B0223104
ELSR-LS-15-2-BO	15 W/m at 10 °C	11,0 x 5,6	98	B0223152
ELSR-LS-15-2-AO	15 W/m at 10 °C	10,3 x 5,3	78	B0223154
ELSR-LS-25-2-BO	25 W/m at 10 °C	11,0 x 5,6	98	B0223252
ELSR-LS-25-2-AO	25 W/m at 10 °C	10,3 x 5,3	78	B0223254