eltherm®

ELSR-SHH
up to 250 °C

At a Glance

Applications

Freeze prevention

Temperature maintenance

Valves, pumps

Silos, vessels, tanks

- Chemistry &Petrochemistry
- Oil and Gas Industry
- Power plants

Benefits

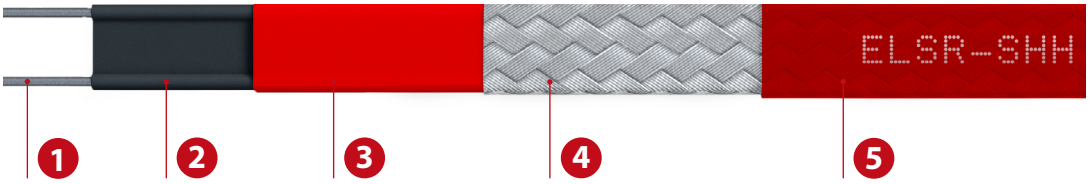
- Temperature classification
- Five nominal outputs
- Moisture proof
- Resistant to chemicals
- Use in hazardous areas

Design

BOT Protective braid, Fluoropolymer 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 T3 Gb
II 2D Ex 60079-30-1 tb IIIC T200°C Db
- Certification
  EPS 17 ATEX 1169 X
  CML 20 ATEX 3171
  IECEx EPS 17.0064 X
  IECEx CML 20.0106
  CML 21 UKEX 3806 U
  CML 21 UKEX 3807
- Temperature class T3



1	Bus wire	Nickel plated copper, 1.23 mm²
2	Self-regulating heating element	
3	Insulation	
4	Protection	Protective braid (Cu, tin plated)
5	Outer jacket	Fluoropolymer

Checklist ELSR-SHH

Power Connection & End Termination		
ELVB-SREx-25	Power connection, glued, Gland M25 x 1,5, PE, Ex e	0X81PA1
EL-ECSH-Ex	Silicone termination cap, red, glued, with ex marking	0X81EH2
Ex-Con-SR	Ex connection sleeve Ø 36 x 210 mm 4J	0X81125
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-5	122 x 120 x 90 mm, polyester, 3 breakouts M25, IP 66	0920013
Ex-it-R	ø 150 x 125 mm, 3 Trace heaters, 1 Pt100, incl. mounting stand	0X80070

Technical Information

Max. continuous exposure temperature (power on)	250 °C
Max. exposure temperature (de-energized)	250 °C
Nominal voltage*	230 V
Min. Bending radius	35 mm
Min. Installation temperature	– 40 °C

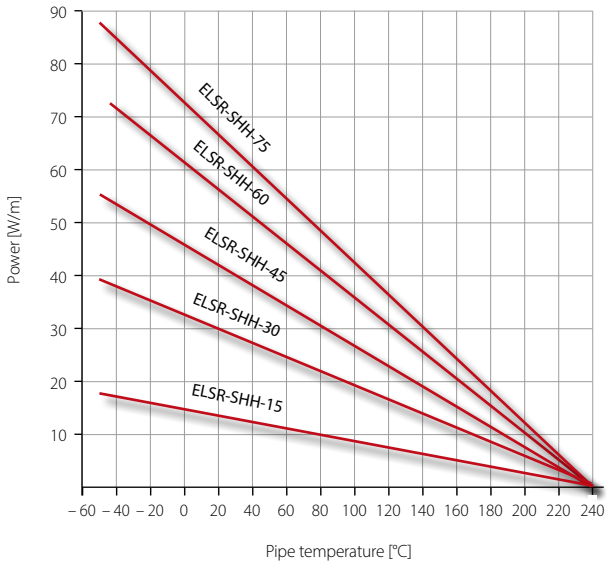
* Further power inputs on request

Heating circuit length

Switch on temperature	Nominal fuse rating	Heating circuit length*[1] [m]				
[°C]	[A]	ELSR-SHH-15-2	ELSR-SHH-30-2	ELSR-SHH-45-2	ELSR-SHH-60-2	ELSR-SHH-75-2
10	10	76.0	52.0	38.0	24.0	14.0
	16	122.0	82.0	62.0	38.0	24.0
	20	154.0	102.0	76.0	46.0	28.0
	32	154.0	108.0	88.0	76.0	46.0
0	10	70.0	46.0	32.0	18.0	12.0
	16	112.0	74.0	52.0	30.0	18.0
	20	140.0	92.0	66.0	36.0	22.0
	32	146.0	104.0	84.0	58.0	36.0
-20	10	62.0	40.0	24.0	12.0	8.0
	16	98.0	66.0	38.0	20.0	12.0
	20	122.0	82.0	46.0	26.0	16.0
	32	138.0	98.0	76.0	42.0	24.0
-40	10	52.0	30.0	14.0	8.0	4.0
	16	82.0	50.0	24.0	12.0	8.0
	20	102.0	62.0	28.0	16.0	10.0
	32	126.0	88.0	46.0	24.0	14.0

Power output

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



*[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.

Ordering Information

Type	Nominal output [at 10°C]	WxH approx. [mm]	Weight approx. [g/m]	Article - No.
ELSR-SHH-15-2-BOT	15 W/m	12,1 x 5,4	146	B0HH1153
ELSR-SHH-30-2-BOT	30 W/m	12,1 x 5,4	146	B0HH1303
ELSR-SHH-45-2-BOT	45 W/m	12,1 x 5,4	146	B0HH1453
ELSR-SHH-60-2-BOT	60 W/m	12,1 x 5,4	146	B0HH1603
ELSR-SHH-75-2-BOT	75 W/m	12,1 x 5,4	146	B0HH1753

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