

At a Glance

Applications



Freeze prevention



Silos, vessels, tanks

- › Cryogenic Storage Tanks

Advantages

- › Highly robust
- › Suitable for harsh installed environment
- › Flexible mounting
- › Waterproof

Approvals



- › Cable classification
EPS II 2G Ex 60079-30-1 IC Gb
EPS II 2D Ex 60079-30-1 IIIC Db
- › System classification
II 2G Ex 60079-30-1 eb IIC Gb
II 2D Ex 60079-30-1 tb IIIC Db
- › Certification
EPS 14 ATEX 1 653 X
EPS IECEx 14.0021U

Type ELSR-FHP up to 110 °C



1 Bus wire Nickel plated copper

2 Self-regulating heating element

3 Insulation

4 Protection Protective braid (Cu, tin plated)

5 Outer jacket Fluoropolymer

Checklist ELSR-FHP

Power Connection & End Termination

EL-ECFHP-Ex	End termination kit for ELSR-FHP	OX81FH1
ELVB-SREx-25	Power connection, glued, Gland M25 x 1,5, PE	OX81PA1
EL-ECFHP	End termination kit for ELSR-FHP	09112F1
ELVB-SRA-25	Power connection, glued, Gland M25 x 1,5, PE	091A010

Junction Boxes

ELAK-Ex-3.5	122 x 120 x 90 mm, 1 heater, capillary thermostat, IP 66	OX80055
ELAK-Ex-3.7	122 x 120 x 90, 1-3 heaters, power supply lead max. 10 mm ² , IP66	OX80057
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

Temperature Sensors

ELTF-PTEx.2	Pt100 4 conductor, 3 m PTFE cable	OX70002
ELTF-PTEx.4	2x Pt100 3 conductor, 3 m cold lead	OX70030
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

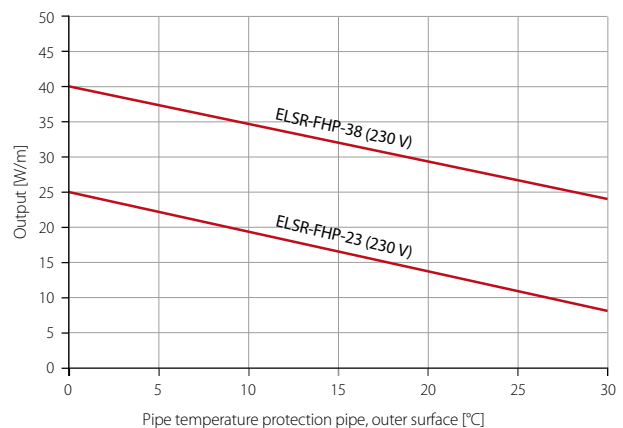
Maximum ambient temperature, energized	80 °C (ELSR-FHP-38)
	65 °C (ELSR-FHP-23)
Maximum ambient temperature, de-energized	110 °C (ELSR-FHP-38)
	80 °C (ELSR-FHP-23)
Nominal voltage	230 V
Bending radius, min.	50 mm
Installation temperature, min.	- 45 °C

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, in 25 mm/1" conduit

ELSR-FHP-...-2 output

(in empty metallic protection pipes 1")



Switch-on temperature (°C)	Nominal cutout value (A)	Heating circuit length (m) for	
		ELSR-FHP-23	ELSR-FHP-38
-5	10	30.0	23.0
	16	48.5	36.5
	20	60.5	45.5
	25	75.5	57.5
	32	97.0	72.5
	40	121.0	91.5
-15	10	23.0	21.5
	16	37.0	34.5
	20	46.0	43.0
	25	57.5	54.0
	32	74.5	68.5
	40	92.0	85.5

Type	Nominal output	Dimensions approx. (mm)	Weight approx. (g/m)	Part No.
ELSR-FHP-23	23 W/m at 5 °C	14,0 x 5,5	155	B02FHP23
ELSR-FHP-38	38 W/m at 5 °C	14,0 x 5,5	155	B02FHP38

Heating circuit lengths may vary in specific installation situations. Please contact our engineers for more details.