

Leakage sensor / water ingress detector with switching output

HYGRASREG® LS leakage sensor / water ingress detector, with switching output, housing made of impact-resistant plastic with quick-locking screws, electronic monitoring system with LED status indicator for early detection of water ingress and leakage location of conductive liquids.

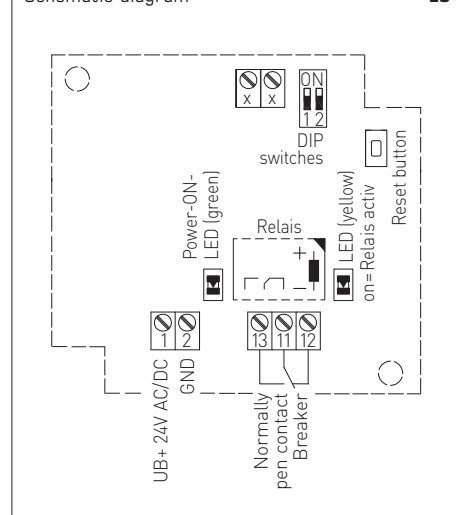
LS-2, LS-4 with stainless steel electrodes. **LS-Flex** with flexible sensor rod (fully active at 3 m/6 m), specially designed for leakage detection on pipes carrying water (e.g. heating circuit distributors). The flexible, dimensionally stable sensor rod can be installed quickly and easily without any additional aids. Several pipes in a row can also be wrapped without any problems.

TECHNICAL DATA

Power supply:	24 V AC ($\pm 20\%$) and 15...36 V DC
Power consumption:	< 1.0 VA / 24 V DC; < 2.2 VA / 24 V AC
Operating range:	0...+50 °C; 10...95 % RH (for LS-2, LS-4) or 10...85 % RH, non-permanent condensing (for LS-Flex)
Monitoring range:	conductive liquid between the electrodes (for LS-2, LS-4) or at points on the flexible sensor rod (for LS-Flex)
Switching threshold:	conductance in the monitoring range > threshold value
Output:	potential-free changeover contact (24 V), 1 A ohmic load
Sensor rod:	(only for type variant LS-Flex) flexible sensor rod, fully active on NL = 3 m / 6 m, □ = approx. 7 x 2 mm (W x H)
Housing:	plastic, UV-resistant, polyamide material, 30% glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), traffic white colour (similar to RAL 9016), housing cover is transparent!
Housing dimensions:	72 x 64 x 43.3 mm (Tyr 1)
Cable connection:	cable gland made of plastic (M 16 x 1.5; with strain relief, exchangeable, 10.4 mm inner diameter) or M12 connector as per DIN EN 61076-2-101 (optional on request)
Electrical connection:	0.14 - 1.5 mm ² , via terminal screws
Process connection:	LS-2 two lateral electrodes (permanently mounted opposite the cable gland, laid according to measuring task LS-4 upright on electrodes with insulating plastic caps (permanently mounted on the underside of the housing) LS-Flex using a flexible, dimensionally stable sensor rod, for laying around the body to be measured – do not bend or shorten the rod (short circuit/risk of breakage)!
Protection class:	III (according to EN 60 730)
Protection type:	IP65 (according to EN 60 529) housing tested, TÜV SÜD, report no. 713139052 (Tyr 1)
Standards:	CE conformity according to EMC Directive 2014 / 30 / EU
ACCESSORIES	see table
FUNCTION	The leakage sensor can be adjusted via DIP switches so that the relay is energised during normal operation. This means that the relay drops out in the event of an error (water damage, cable breakage, supply voltage failure). This also makes it possible to detect a break in the cable to the sensor.

Schematic diagram

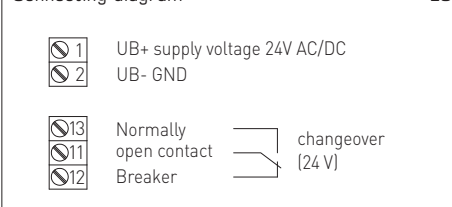
LS



Self-locking (selectable)	DIP 1
Self-locking ON	ON
Self-locking OFF	OFF
Relay status (selectable)	DIP 2
Normally open contact OPEN	ON
Normally open contact CLOSED	OFF

Connecting diagram

LS



LS-4



LS-2



LS-2
Electrode extensions
(included in the scope of delivery)
15/20/30 mm



NEW

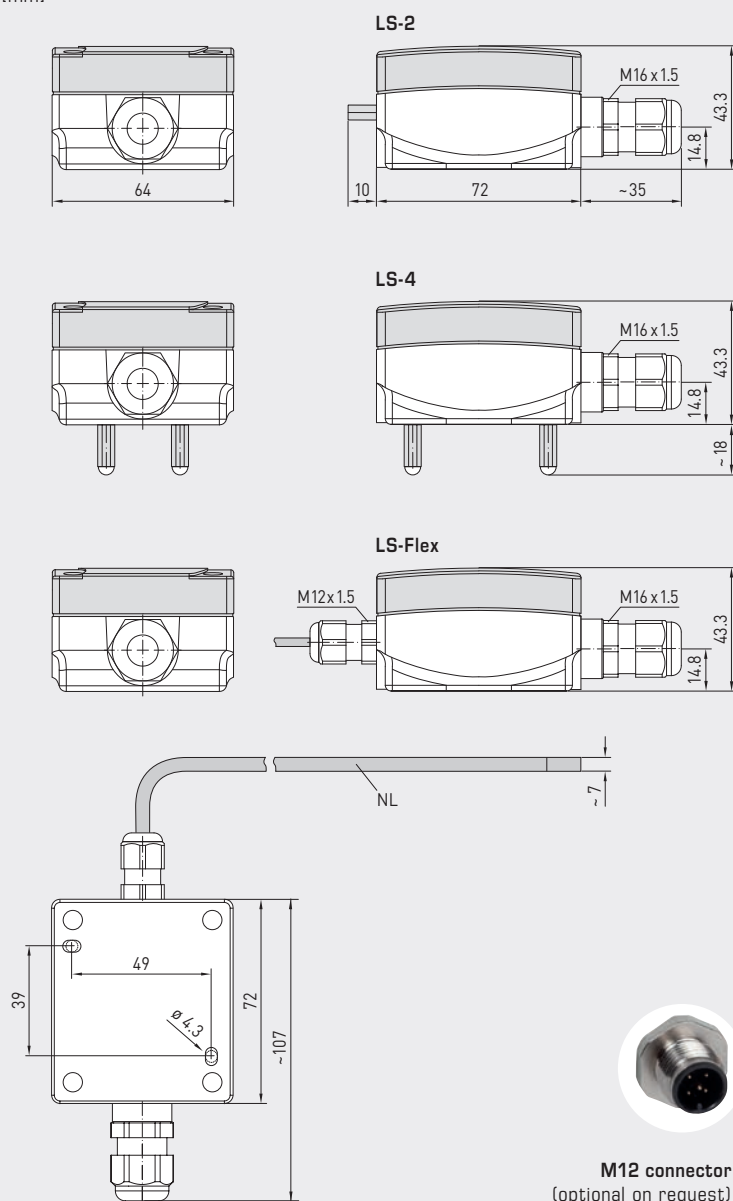
HYGRASREG® LS

S+S REGELTECHNIK

Leakage sensor / water ingress detector
with switching output

Dimensional drawing
[mm]

LS



LS-2



LS-Flex



HYGRASREG® LS Leakage sensor / water ingress detector

Type / WG01	Detection of leakage of conductive liquids	Output Humidity (relative)	Item No.	Price
LS				
LS-2	Conductance > switching threshold	Changeover contact	1202-1042-0000-000	111,63 €
LS-4	Conductance > switching threshold	Changeover contact	1202-1042-0000-100	126,37 €
LS-Flex				
LS-Flex 3m	Conductance > switching threshold	Changeover contact	1202-1042-0000-060	176,25 €
LS-Flex 6m	Conductance > switching threshold	Changeover contact	1202-1042-0000-110	232,58 €
Optional:	Cable connection with M12 connector according to DIN EN 61076-2-101		on request	
ACCESSORIES				
Optional:	LS cable sensor for type LS-2 , L = 1 m		1202-1042-0000-001	27,28 €
Note:	LS electrode extensions , made of stainless steel V2A (1.4301), L = 15/20/30 mm, 2 pieces each included in the scope of delivery of the type LS-2			