# **Mini Switch**

- OPTO.0029 -

Data sheet Mini Switch OPTO.0029

## Applications

- Manufacturing
- Cooling machines

## **Special features**

- Replaced the electronical part without opening the tank
- Screw-in part with the glass prism remains at the tank
- Operating status is monitored by an LED on the device

## Description

The Mini Switch is used for monitoring of liquid levels.

The unit contains an infrared LED and a phototransistor. The LED light is irradiated into a prism. As long as the sensor tip of the prism is in the gaseous phase, the light is reflected within the prism to the receiver. If the liquid level in the tank rises and covers the tip, the infrared light is broken at the liquid surface and only a small part reaches the receiver. This difference is evaluated by the electronics and initiates a switching process.



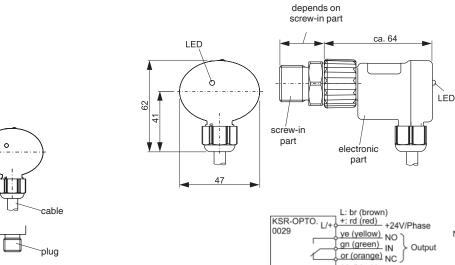
Version with srew-in part M20x1,5

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N/- bk (black) 0V/Neutral line

#### Mini Switch Material - Electronic housing PA66, fiber reinforced - Screw-in part Steel nickelized - Prisma Soda-lime glass or borosilicate glass Mounting housing Union to screw-in part Light source IR-light 930 nm Ambient light max. 500 Lux Medium temperature Ambient temperature -30 °C ... +120 °C -30 °C ... +60 °C Operating pressure (screw-in part) 42 bar Wight (without screw-in part) 80 g Horizontal Mounting direction Minimum distance sensor tip >10 mm to any opposite wall Indication Red LED Blink code to signal see manual the operating status Turn-on-time (fix, factory setting) ca. 1 s, other up to 12 s on request Supply 110 ...230 VAC ± 15 % 50 ... 60 Hz, 24 V DC ± 15 % Supply current max. ca. 22 mA SPDT Output relay 250 VAC, NC=5 A, NO=7 A, 1750 VA12/W Switch-voltage, -current,- power Cable 5x0,75 mm<sup>2</sup>, L=2 m, colour coded Mech. lifetime ca. 10<sup>5</sup> switch cycles Ingress protection acc. to EN 60529 IP 54 in mounted condition

### Subject to alterations

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