

# **Optical Level Switch**





Compact design

Temperature:

max. -20...+90°C (medium), max. -20...+60°C (ambient)

Pressure: max. 40 bar

Material: stainless steel, PSU

● Connection: ¾ NPT



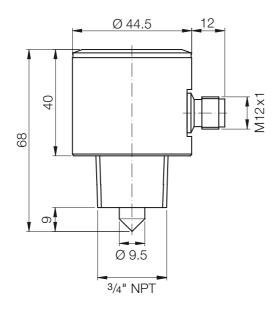




### **Description**

Series TL-4 optical level switch serves to monitor all kinds of low viscous liquid levels. In particular it was designed to monitor liquid levels at compressors and oil seperators with it's special requirements. The level is detected by an optical sensor. The electrical signal will then be forwarded to a fully digital working evaluating electronic. With it's two output signals the liquid level of compressors and oil seperators can be monitored by pulsing e.g. a downstream solinoid valve. As a safety device the unit provides a second transistor output with which the connected system can be switched off to avoid damage.

#### **Electrical connection**



#### The TL-4 consists of 3 functions:

- Monitoring liquid levels
- Regulating liquid levels by pulsing a solinoid valve
- Safety switch off by time if no level is beeing detected

# **Applications**

Monitoring and regulating oil levels

- of compressors
- of oil seperators
- in Getriebeboxen

## **Technical Details**

Measuring principle: optical Media temperature: -20...+90°C -20...+60°C Ambient temperature: Operating pressure: max. 40 bar

Materials: housing: stainless steel 1.4404

> sensor: Polysulfon gasket: NBR

Process connection: 3/4 NPT

Power supply:  $24 V_{DC/AC} 50-60 Hz \pm 20 \%$ Electrical connection: M12 plug socket, 5-pin (counter-plug is not enclosed

in the delivery)

max. 70 mA (DC) Power consumption:

max. 100 mA (AC)

Output signal: 1 relay output

1 transistor output

max. 125  $V_{DC/AC}$ , Relay output:

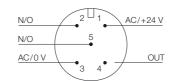
max. 4 A, max. 500 W/VA

Transistor output: PNP, 24 V<sub>DC/AC</sub>,

max. 20 mA, max. 0,5 W/VA

Protection: IP 65

# Wiring Diagram



- 1 + 3 Power +24  $V_{DC/AC}$
- 2+5 Relay Contact N/O, max. 4 A
- Signal Output, max. 20 mA 4 + 3

# **Order Details**

Model	Description
TL-4	Optical level switch for low viscous liquids
ZUB-KAB-12D500*	Counterplug M12x1 with compression fitting, 5-pin

<sup>\*</sup>Counterplug is not enclosed in the delivery of the TL-4