











# **Model Number**

## GD18-S/GV18-S/59/102/115

Thru-beam sensor with 2 m fixed cable

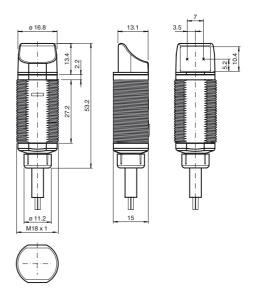
# **Features**

- Efficient Line in a short M18 plastic housing for standard applications
- Very high detection range
- 4 LEDs indicator for 360° visibility
- Sidelookerversion
- DC voltage version

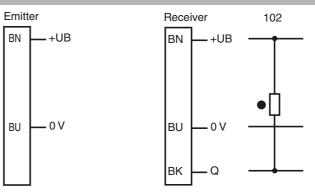
# **Product information**

The GLV/GLK18 series sensors help improve the efficiency of machines and systems. The design of the M18 plastic housing, the connection technology, and sensor properties are highly standardized. Concentrating on the key sensor requirements has produced a robust and reliable product series for DC and AC/DC voltage systems without any overengineering. The mounting set included in the scope of delivery and the optimized potentiometer design ensure fast assembly and easy configuration.

# **Dimensions**

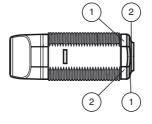


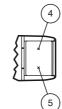
# **Electrical connection**



- O = Light on
- = Dark on

# **Indicators/operating means**

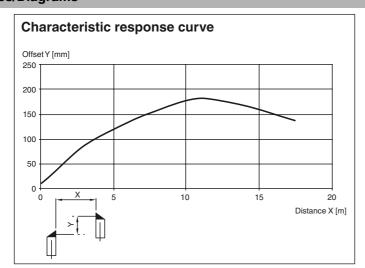




1	Operating display	green
2	Signal display	yellow
4	Emitter	
5	Receiver	

### **Technical data** System components Emitter GD18-S/115 GV18-S/59/102/115 Receive **General specifications** Effective detection range 0 12 m Threshold detection range 17.5 m Light source LED modulated visible red light, 640 nm Light type Diameter of the light spot approx. 650 mm at 17.5 m Angle of divergence approx. 2 Optical face lateral 30000 Lux Ambient light limit Functional safety related parameters $MTTF_d$ 630 a Mission Time (T<sub>M</sub>) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means Operation indicator LED green, statically lit Power on Function indicator Receiver: LED yellow, lights up when light beam is free, flashes when falling short of the stability control; OFF when light beam is interrupted **Electrical specifications** 10 ... 30 V DC Operating voltage $U_{\mathsf{B}}$ No-load supply current < 20 mA Output Switching type dark on Signal output 1 NPN, short-circuit protected open collector Switching voltage max. 30 V DC Switching current max. 100 mA ≤ 1.5 V DC Voltage drop $U_{d}$ Switching frequency 500 Hz Response time ≤ 1 ms Conformity Product standard EN 60947-5-2 **Ambient conditions** -25 ... 60 °C (-13 ... 140 °F) Ambient temperature Storage temperature -40 ... 70 °C (-40 ... 158 °F) **Mechanical specifications** Degree of protection IP67 2 m fixed cable Connection Material PC Housing Optical face **PMMA** Mass approx. 75 g per device Approvals and certificates Protection class II, rated insulation voltage $\leq$ 250 V AC with pollution degree 1-2 according to IEC 60664-1 cULus Listed, Class 2 Power Source, Type 1 enclosure **UL** approval CCC approval CCC approval / marking not required for products rated ≤36 V

# **Curves/Diagrams**



## Accessories

## CPZ18B03

Mounting Bracket with swivel nut

Mounting flange, 18 mm

## **BF 18-F**

Plastic mounting adapter, 18 mm

Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

Other suitable accessories can be found at www.pepperl-fuchs.com

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