



## Model Number

**GLV18-8-450/115/120**

Diffuse mode sensor
with 2 m fixed cable

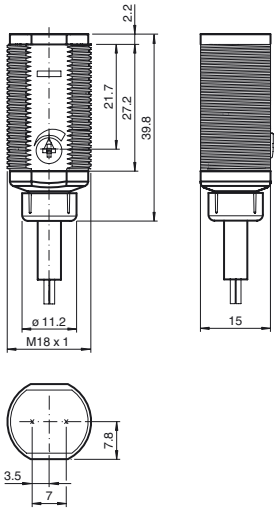
## Features

- Efficient Line in a short M18 plastic housing for standard applications
- Very high detection range
- 4 LEDs indicator for 360° visibility
- Optimized potentiometer design for a clear control button layout in the application
- Version with front optical face
- DC voltage version

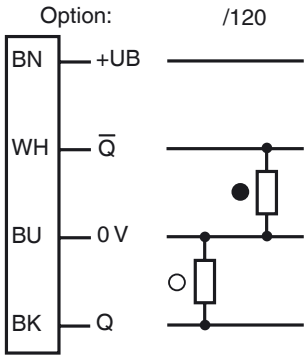
## Product information

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 over-engineering. The mounting set included in the scope of delivery and the optimized potentiometer design ensure fast assembly and easy configuration.

## Dimensions

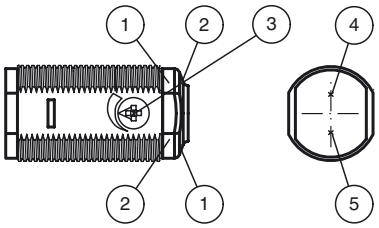



## Electrical connection




○ = Light on
● = Dark on

## Indicators/operating means



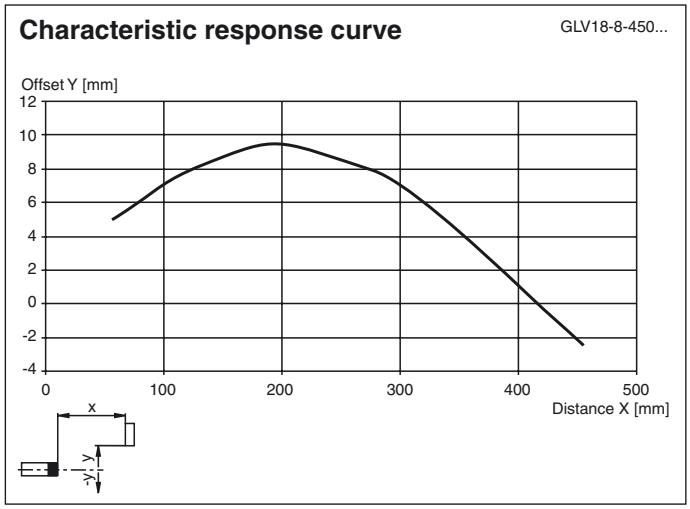

| | | |
|---|---|---|
| 1 | Operating display | green |
| 2 | Signal display | yellow |
| 3 | Sensitivity adjustment | |
| 4 | Emitter | |
| 5 | Receiver | |

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## Technical data

| | | |
|---|---|---|
| **General specifications** | | |
| Detection range | | 50 ... 450 mm adjustable |
| Detection range max. | | 0 ... 450 mm |
| Reference target | | 100 mm x 100 mm Kodak white |
| Light source | | LED |
| Light type | | modulated visible red light , 640 nm |
| Diameter of the light spot | | approx. 30 mm at 400 mm |
| Angle of divergence | | approx. 4 ° |
| Optical face | | frontal |
| Ambient light limit | | 30000 Lux |
| Hysteresis | H | < 15 % |
| **Functional safety related parameters** | | |
| $MTTF_d$ | | 920 a |
| Mission Time ($T_M$) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| **Indicators/operating means** | | |
| Operation indicator | | LED green, statically lit Power on |
| Function indicator | | LED yellow: lights when object is detected ; flashes when falling short of the stability control |
| Control elements | | sensitivity adjustment |
| **Electrical specifications** | | |
| Operating voltage | $U_B$ | 10 ... 30 V DC |
| No-load supply current | $I_0$ | < 20 mA |
| **Output** | | |
| Switching type | | light/dark on |
| Signal output | | 2 PNP, complementary, short-circuit protected, open collectors |
| Switching voltage | | max. 30 V DC |
| Switching current | | max. 100 mA |
| Voltage drop | $U_d$ | ≤ 1.5 V DC |
| Switching frequency | f | 500 Hz |
| Response time | | ≤ 1 ms |
| **Conformity** | | |
| Product standard | | EN 60947-5-2 |
| **Ambient conditions** | | |
| Ambient temperature | | -25 ... 60 °C (-13 ... 140 °F) |
| Storage temperature | | -40 ... 70 °C (-40 ... 158 °F) |
| **Mechanical specifications** | | |
| Degree of protection | | IP67 |
| Connection | | 2 m fixed cable |
| Material | | |
| Housing | | PC |
| Optical face | | PMMA |
| Cable | | PVC |
| Mass | | approx. 75 g |
| **Approvals and certificates** | | |
| Protection class | | II, rated insulation voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1 |
| UL approval | | cULus Listed, Class 2 Power Source |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |

## Curves/Diagrams




## Accessories

**CPZ18B03**
Mounting Bracket with swivel nut

**BF 18**
Mounting flange, 18 mm

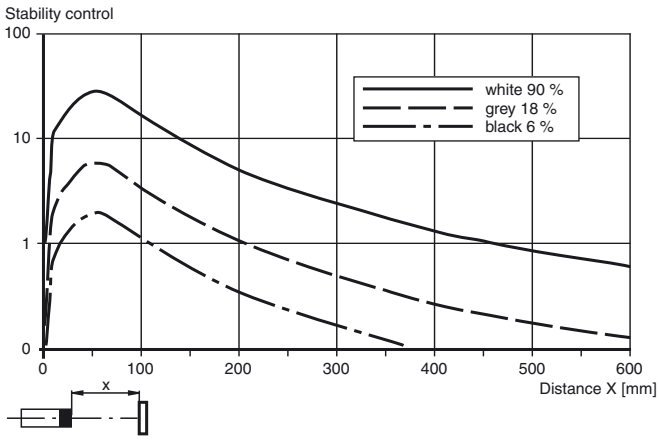
**BF 18-F**
Plastic mounting adapter, 18 mm

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

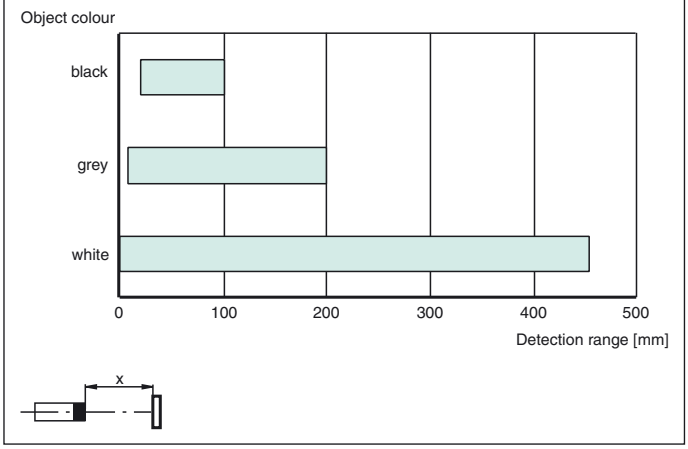
Other suitable accessories can be found at www.pepperl-fuchs.com

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## Relative received light strength




## Detection ranges




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