











# **Model Number**

#### GLV18-55-G/59/102/115

Retroreflective sensor with 2 m fixed cable

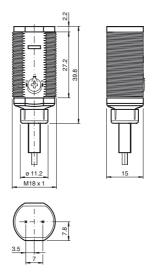
## **Features**

- Efficient Line in a short M18 plastic housing for standard applications
- Two devices in one: choice of either clear object detection or retroreflective operating mode with a large detection range
- · 4 LEDs indicator for 360° visibility
- Optimized potentiometer design for a clear control button layout in the application
- · DC voltage version

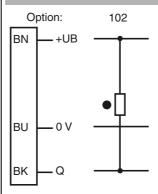
## **Product information**

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**

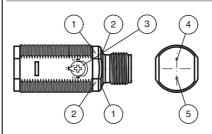


## **Electrical connection**



- O = Light on
- = Dark on

## Indicators/operating means



	Operating display	green	
2	Signal display	yellow	
3	Potentiometer Teach-In and Mode selection  N Normal mode  T Teach-In Mode  G Glas mode		
4	Emitter		
5	Receiver		



Technical data		
General specifications		
Effective detection range		0 2.5 m in glass mode;
=ooo uotoonetage		0 5 m in normal mode
Reflector distance		0 2.5 m in glass mode;
		0 5 m in normal mode
Threshold detection range		6.5 m
Reference target		reflector C110-2
Light source		LED
Light type Polarization filter		modulated visible red light , 640 nm
Diameter of the light spot		yes approx. 370 mm at 6.5 m; 50 mm at 1 m
Angle of divergence		approx. 2 °
Optical face		frontal
Ambient light limit		30000 Lux
Functional safety related param	eters	
MTTF <sub>d</sub>		1260 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green, statically lit Power on,
		blinking with 2 Hz or 4 Hz in Teach-In mode
Function indicator		LED yellow: In retro-reflective mode: Lights up when light beam is free; flashing if signal is short of function reserve, off when light beam is interrupted In glass-mode: Lights up when light beam is free; flashing if further compensation is impossible; off when light beam is interrupted
Control elements		potentiometer for Teach-In and Mode selection
Contrast detection levels		18 % - clear glass bottles
Electrical specifications		
Operating voltage	U <sub>B</sub>	10 30 V DC
No-load supply current	I <sub>0</sub>	< 15 mA
Output		
Switching type		dark on
Signal output		1 NPN, short-circuit protected open collector
Signal output Switching voltage		max. 30 V DC
Signal output Switching voltage Switching current		max. 30 V DC max. 100 mA
Signal output Switching voltage Switching current Voltage drop	U <sub>d</sub>	max. 30 V DC max. 100 mA ≤ 1.5 V DC
Signal output Switching voltage Switching current Voltage drop Switching frequency	U <sub>d</sub>	max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time		max. 30 V DC max. 100 mA ≤ 1.5 V DC
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms EN 60947-5-2
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F)
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms EN 60947-5-2
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material Housing		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable PC
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material Housing Optical face		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable  PC PMMA
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material Housing		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable PC
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material Housing Optical face Cable Mass		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable  PC PMMA PVC
Signal output Switching voltage Switching current Voltage drop Switching frequency Response time Conformity Product standard Ambient conditions Ambient temperature Storage temperature Mechanical specifications Degree of protection Connection Material Housing Optical face Cable		max. 30 V DC max. 100 mA ≤ 1.5 V DC 1 kHz ≤ 0.5 ms  EN 60947-5-2  -25 60 °C (-13 140 °F) -40 70 °C (-40 158 °F)  IP67 2 m fixed cable  PC PMMA PVC

## **Accessories**

## CPZ18B03

Mounting Bracket with swivel nut

#### **BF 18**

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

### REF-C110-2

Reflector, round ø 84 mm, central mounting hole

#### REF-H60

Reflector, rectangular 40.5 mm x 60 mm, mounting holes

#### REF-H85

Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes

Reflector, rectangular 51 mm x 61 mm, mounting holes, fixing strap

### **ORR50**

Reflector, rectangular 50.9 mm x 50.9 mm, mounting holes, fixing strap

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

CCC approval

CCC approval / marking not required for products rated  $\leq$ 36 V

