



Model Number

GLV18-55-G/59/102/159

Retroreflective sensor
with 3-pin, M12 x 1 plastic connector

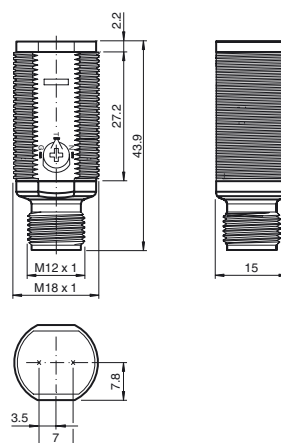
Features

- 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

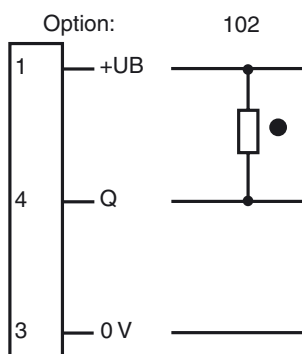
Product information

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

Dimensions

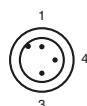


Electrical connection



○ = Light on
● = Dark on

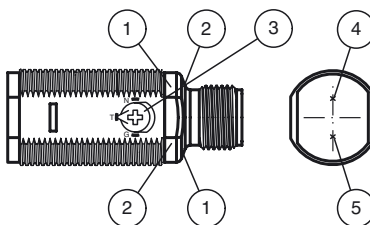
Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Indicators/operating means



1	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; 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	modulated visible red light, 640 nm
Polarization filter	yes
Diameter of the light spot	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 parameters

MTTF _d	1260 a
Mission Time (T _M)	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 _B	10 ... 30 V DC
No-load supply current	I ₀	< 15 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
Voltage drop	U _d ≤ 1.5 V DC
Switching frequency	f 1 kHz
Response time	≤ 0.5 ms

Conformity

Product standard	EN 60947-5-2
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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	3-pin, M12 x 1 connector
Material	
Housing	PC
Optical face	PMMA
Connector	plastic
Mass	approx. 10 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

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

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

REF-H50

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

V11-G-2M-PUR

Female cordset, M12, 3-pin, PUR cable

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

