



**Model Number**

**GLV18-55-G/59/102/159**

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

**Features**

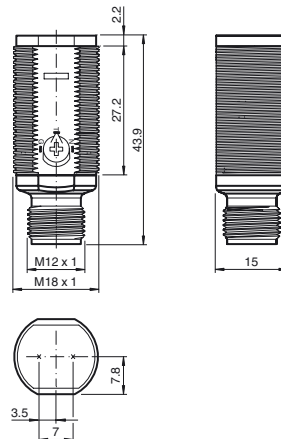
- Efficient Line in a short M18 plastic housing for standard applications
- Two devices in one: choice of either clear object detection or retroreflective operating mode with a large detection range
- 4 LEDs indicator for 360° visibility
- Optimized potentiometer design for a clear control button layout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

**Product information**

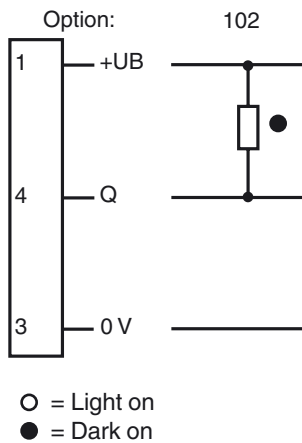
The GLV/GLK18 series sensors help improve the efficiency of machines and systems. The design of the M18 plastic housing, the connection technology, and sensor properties are highly standardized. Concentrating on the key sensor requirements has produced a robust and reliable product series for DC and 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.

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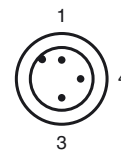
**Dimensions**



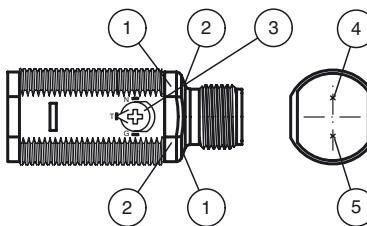
**Electrical connection**



**Pinout**



**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	Glau 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
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 <sub>d</sub>	1260 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

Operating display	LED green, statically lit Power on, blinking with 2 Hz or 4 Hz in Teach-In mode
Function display	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
Controls	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	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	U <sub>d</sub>	≤ 1.5 V DC
Switching frequency	f	1 kHz
Response time		≤ 0.5 ms

**Ambient conditions**

Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

**Mechanical specifications**

Protection degree	IP67
Connection	Connector M12 x 1, 3-pin
Material	
Housing	PC
Optical face	PMMA
Connector	plastic
Mass	approx. 10 g

**Compliance with standards and directives**

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

**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	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

**Accessories****CPZ18B03**

Mounting Bracket with swivel nut

**BF 18**

Mounting flange, 18 mm

**BF 18-F**

Mounting flange with dead stop, 18 mm

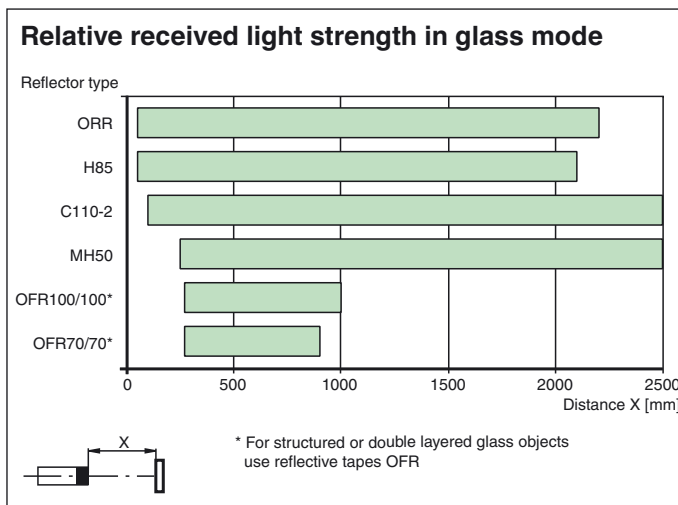
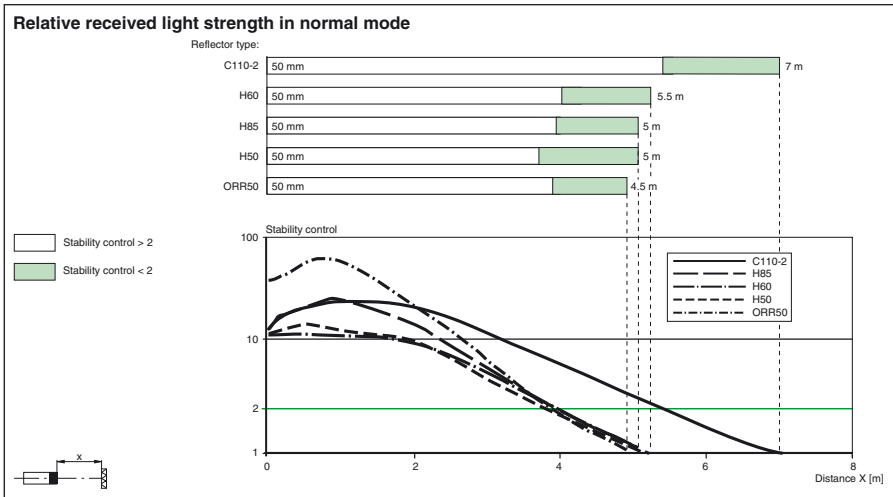
**BF 5-30**Universal mounting bracket for cylindrical  
sensors with a diameter of 5 ... 30 mm**REF-C110-2**Reflector, round ø 84 mm, central moun-  
ting hole**REF-H60**Reflector, rectangular 40.5 mm x 60 mm,  
mounting holes**REF-H85**Reflector, rectangular 84.5 mm x  
84.5 mm, mounting holes**REF-H50**Reflector, rectangular 51 mm x 51 mm,  
mounting holes, fixing strap**ORR50**Reflector, rectangular 50.9 mm x 50.9  
mm, mounting holes, fixing strap**V11-G-2M-PUR**

Cable socket, M12, 3-pin, PUR cable

**V11-W-2M-PUR**

Cable socket, M12, 3-pin, PUR cable

Other suitable accessories can be found at  
[www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)



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