



**Model Number**

**GLV18-8-H-120/59/102/159**

Background suppression sensor with 3-pin, M12 x 1 plastic connector

**Features**

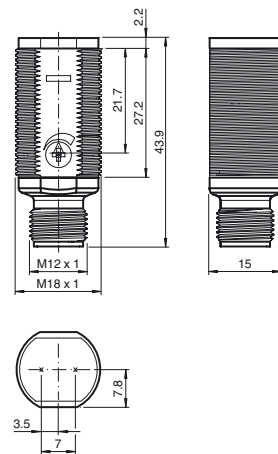
- Efficient Line in a short M18 plastic housing for standard applications
- Best background suppressor in its class
- Minimal black-white difference
- 4 LEDs indicator for 360° visibility
- Optimized potentiometer design for a clear control button layout in the application

**Product information**

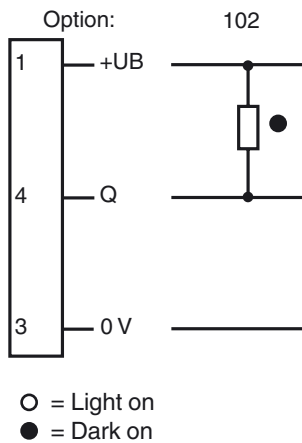
The GLV/GLK18 series sensors help improve the efficiency of machines and systems. The design of the M18 plastic housing, the connection technology, and sensor properties are highly standardized. Concentrating on the key sensor requirements has produced a robust and reliable product series for DC and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

Release date: 2014-12-17 08:01 Date of issue: 2014-12-17 212926\_eng.xml

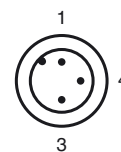
**Dimensions**



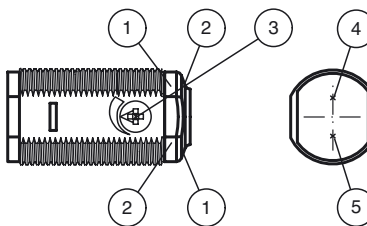
**Electrical connection**



**Pinout**



**Indicators/operating means**



1	Operating display	green
2	Signal display	yellow
3	Detection range adjuster	
4	Emitter	
5	Receiver	

**Technical data****General specifications**

Detection range	10 ... 120 mm
Detection range min.	10 ... 40 mm
Detection range max.	15 ... 120 mm
Adjustment range	40 ... 120 mm
Reference target	100 mm x 100 mm Kodak white
Light source	LED
Light type	modulated visible red light , 640 nm
Black/White difference (6%/90%)	< 6 %
Diameter of the light spot	approx. 6 mm at detection range 120 mm
Angle of divergence	approx. 2 °
Optical face	frontal
Ambient light limit	30000 Lux
Hysteresis	H < 2 %

**Functional safety related parameters**

MTTF <sub>d</sub>	1340 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	LED yellow: lights when object is detected
Control elements	Detection range adjuster

**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	500 Hz
Response time		≤ 1 ms

**Ambient conditions**

Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)
Storage temperature	-30 ... 70 °C (-22 ... 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

**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	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**

Mounting flange with dead stop, 18 mm

**BF 5-30**

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

**V11-G-2M-PUR**

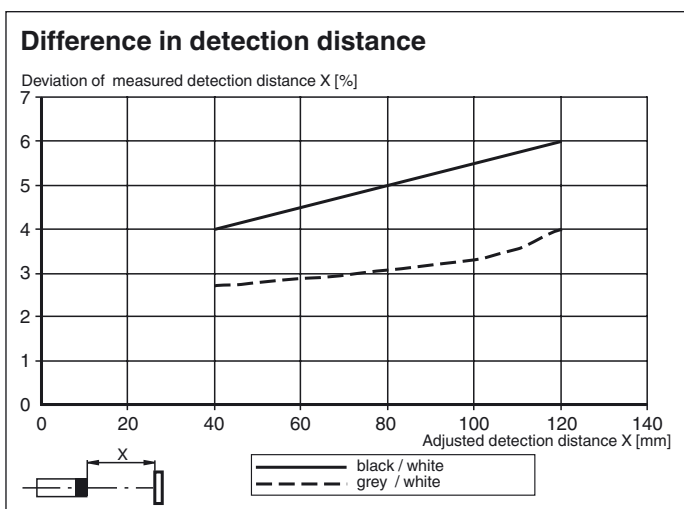
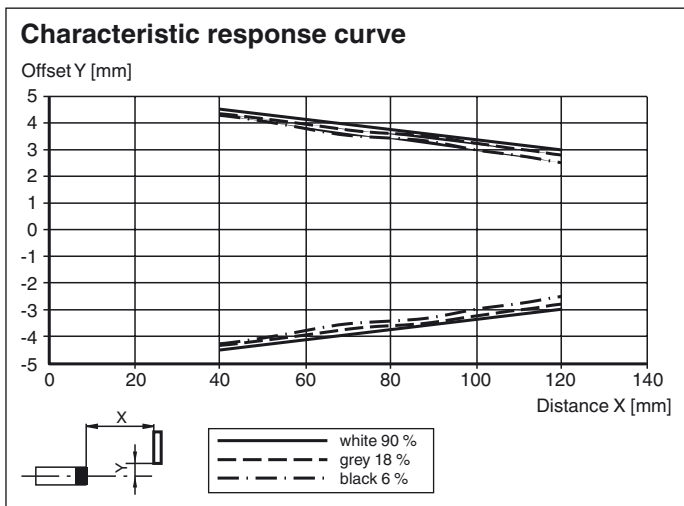
Female cordset, M12, 3-pin, PUR cable

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

Female cordset, M12, 3-pin, PUR cable

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

**Curves/Diagrams**



Release date: 2014-12-17 08:01 Date of issue: 2014-12-17 212926\_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 4411  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com