



Model Number

GLV18-8-450/25/102/115

Diffuse mode sensor
with 2 m fixed cable

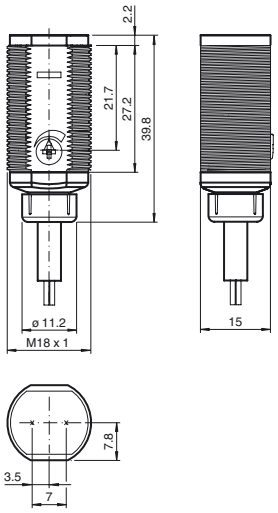
Features

- 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

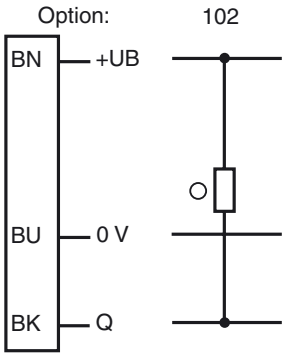
Product information

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

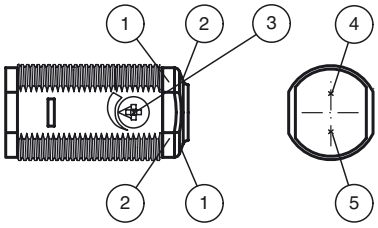


Electrical connection



○ = Light on
● = Dark on

Indicators/operating means



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

Release date: 2012-12-17 08:01 Date of issue: 2013-01-09 188569_eng.xml

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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		
Operating display		LED green, statically lit Power on
Function display		LED yellow: lights when object is detected ; flashes when falling short of the stability control
Controls		sensitivity adjustment
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
No-load supply current	I_0	< 20 mA
Output		
Switching type		light 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	500 Hz
Response time		≤ 1 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		2 m fixed cable
Material		
Housing		PC
Optical face		PMMA
Cable		PVC
Mass		approx. 75 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

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

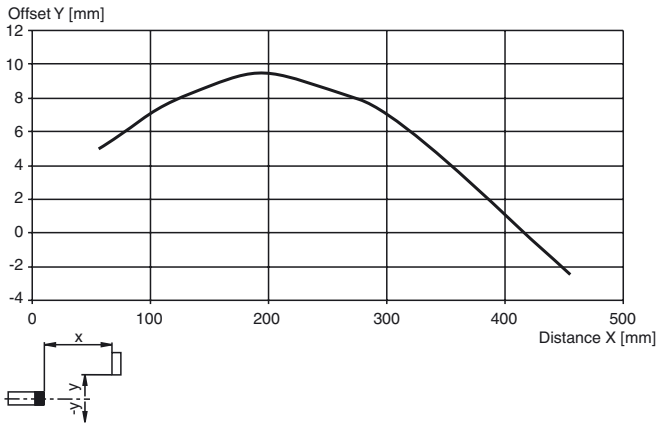
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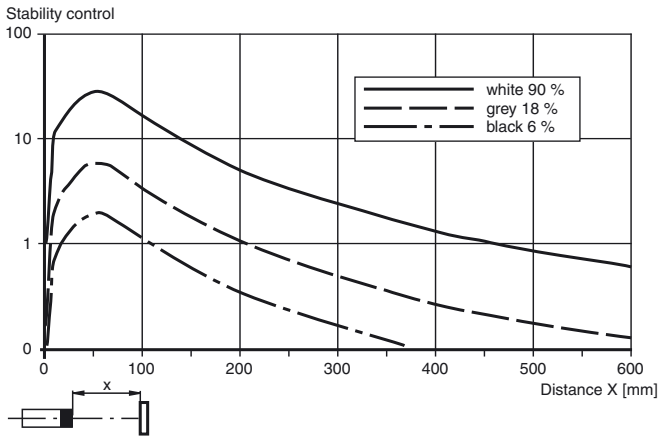
Curves/Diagrams

Characteristic response curve

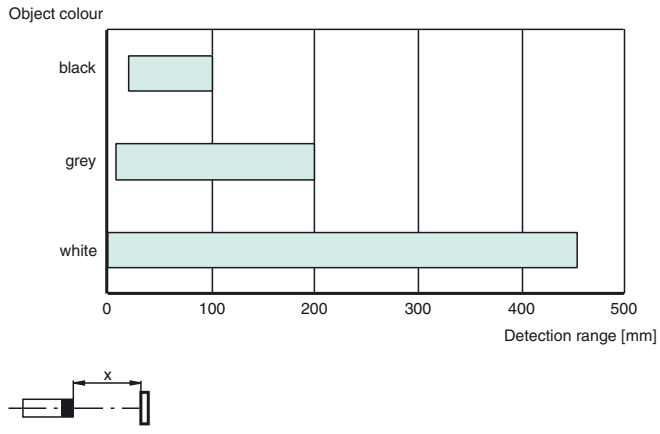
GLV18-8-450...



Relative received light strength



Detection ranges



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