

# Diffuse mode sensor

## GLK18-8-450/59/161/166



- 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
- Universal usage at different power supplies

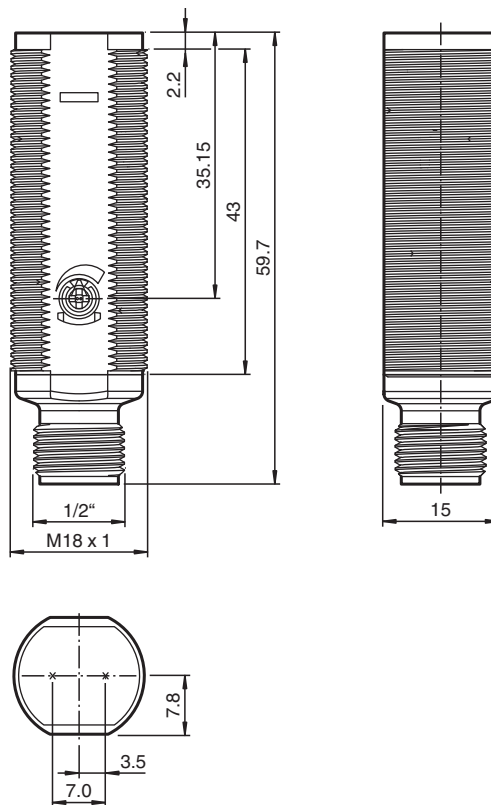
Diffuse mode sensor, M18 threaded housing design, plastic housing, front optical face, 450 mm detection range, red light, dark on, AC/DC version, NPN-FET output, micro plug



### Function

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



Release date: 2020-12-10 Date of issue: 2020-12-10 Filename: 199816\_eng.pdf

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

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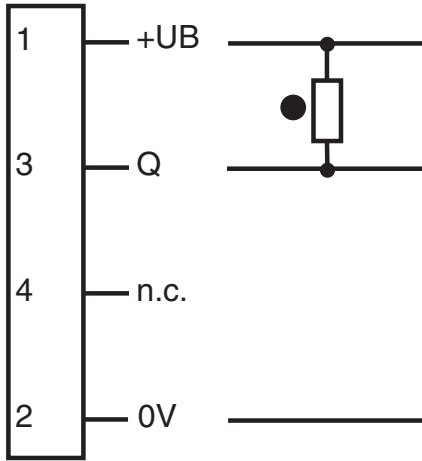
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## Technical Data

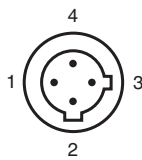
General specifications		
Detection range		50 ... 450 mm adjustable
Detection range max.		0 ... 450 mm
Reference target		100 mm x 100 mm Kodak white
Light source		LED
Light type		modulated visible red light , 640 nm
Diameter of the light spot		approx. 15 mm at 400 mm
Angle of divergence		approx. 2 °
Optical face		frontal
Ambient light limit		30000 Lux ; according to EN 60947-5-2:2007
Hysteresis	H	< 15 %
Accessories provided		Mounting aids
Indicators/operating means		
Operation indicator		LED green, statically lit Power on
Function indicator		LED yellow: lights when object is detected ; flashes when falling short of the stability control
Control elements		sensitivity adjustment
Electrical specifications		
Operating voltage	U <sub>B</sub>	20 ... 250 V AC/DC
No-load supply current	I <sub>0</sub>	< 2.5 mA
Output		
Switching type		dark on
Signal output		N-channel MOSFET, short circuit protected
Switching voltage		max. 250 V AC/DC
Switching current		max. 200 mA
Voltage drop	U <sub>d</sub>	≤ 3.5 V AC/DC
Switching frequency	f	50 Hz
Response time		≤ 10 ms
Conformity		
Product standard		EN 60947-5-2
Compliance with standards and directives		
Standard conformity		
Standards		UL 508
Approvals and certificates		
EAC conformity		TR CU 020/2011 TR CU 004/2011
Protection class		II, rated insulation voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		cULus Listed, Type 1 enclosure
CCC approval		Certified by China Compulsory Certification (CCC)
Approvals		CE
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		Micro AC connector, 1/2" V124 ; 4-pin
Material		
Housing		PC-PBT
Optical face		PMMA
Mass		approx. 10 g

**Connection Assignment**



○ = Light on  
● = Dark on

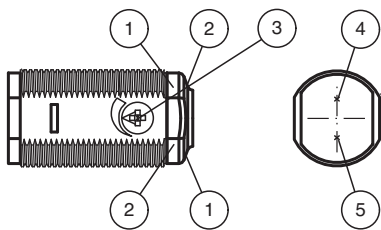
**Connection Assignment**



Wire colors

- 1 | RD/BK (red/black)
- 2 | RD/WH (red/white)
- 3 | RD (red)
- 4 | GN (green)

**Assembly**

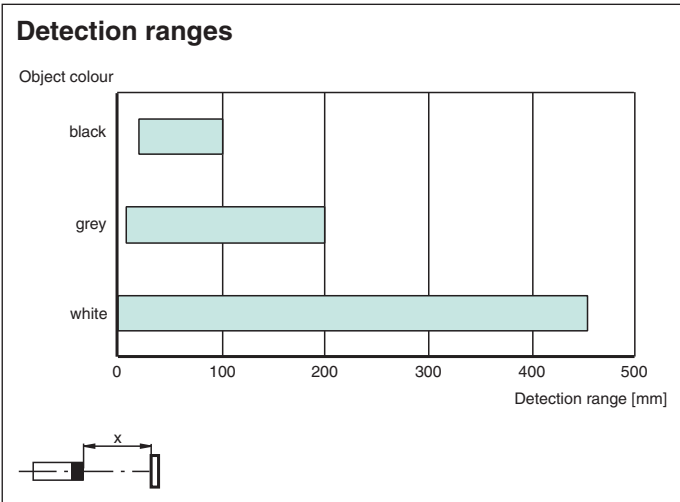
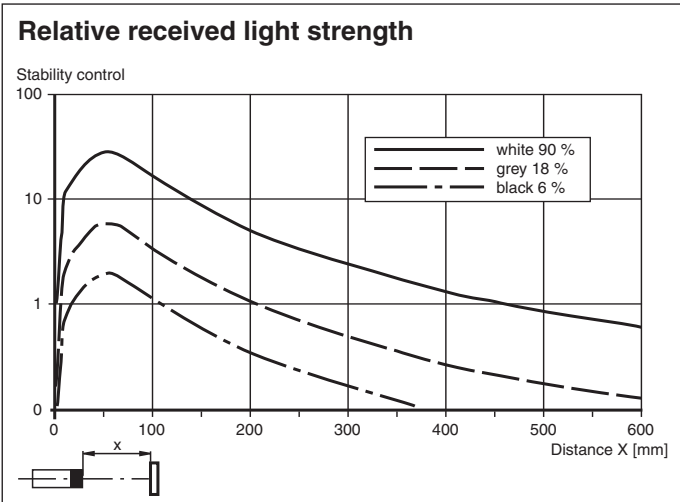
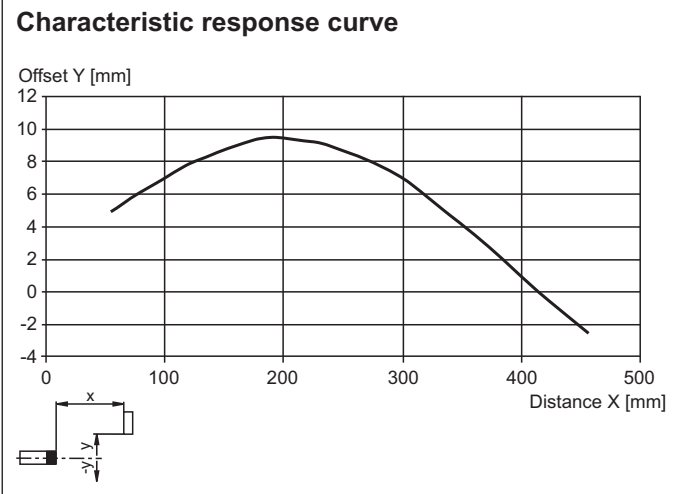


1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

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**Characteristic Curve**









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## Application



## Accessories

	<b>CPZ18B03</b>	Mounting Bracket with swivel nut
	<b>BF 18</b>	Mounting flange, 18 mm
	<b>BF 18-F</b>	Plastic mounting adapter, 18 mm
	<b>BF 5-30</b>	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm
	<b>V124-G-YE2M-PVC</b>	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable
	<b>V124-W-YE2M-PVC</b>	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable

## Accessories

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

## Application

### **Packaging industry:**

- Presence checks, track loading, completeness checks, stack height control

### **Material handling**

- Presence checks, target sensor, profile checks, trigger sensor

### **Automatic doors, gates and access systems, elevator:**

- Secure detection for automatic door and gate systems
- Monitoring function in turnstiles
- Closing edge monitoring in elevators