

Diffuse mode sensor

GLK18-8-450/25/115/161



- 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

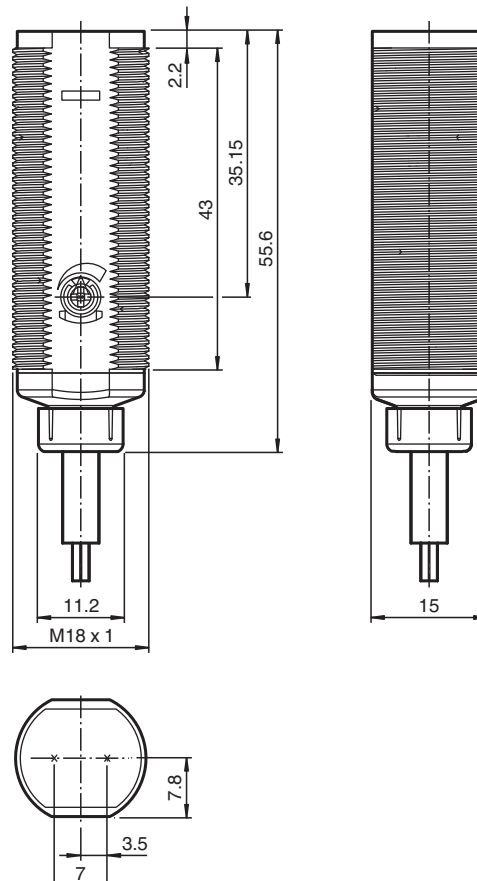
Diffuse mode sensor, M18 threaded housing design, plastic housing, front optical face, 450 mm detection range, red light, light on, AC/DC version, NPN-FET output, fixed cable



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



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_B	20 ... 250 V AC/DC
No-load supply current	I_0	< 2.5 mA

Output

Switching type		light-on
Signal output		N-channel MOSFET, short circuit protected
Switching voltage		max. 250 V AC/DC
Switching current		max. 200 mA
Voltage drop	U _d	≤ 3.5 V AC/DC
Switching frequency	f	50 Hz
Response time		≤ 10 ms

Conformity

Product standard	EN 60947-5-2
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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 For overcurrent protection, install a fuse with a rated current of max. 3 A 250 V AC/DC
CCC approval	Certified by China Compulsory Certification (CCC)
Approvals	CE

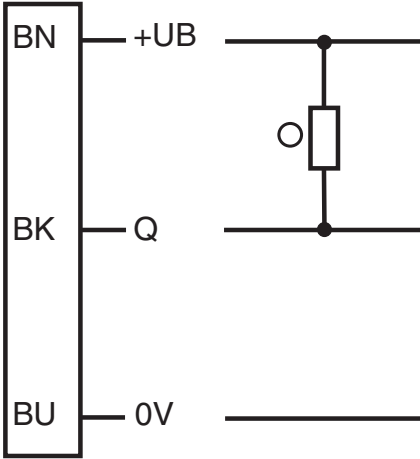
Ambient conditions

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

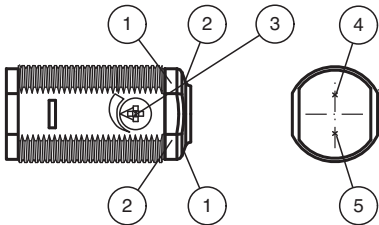
Degree of protection	IP67
Connection	2 m, 3 x 0.34 mm ² , PVC cable
Material	
Housing	PC-PBT
Optical face	PMMA
Mass	approx. 100 g

Connection Assignment



○ = Light on
● = Dark on

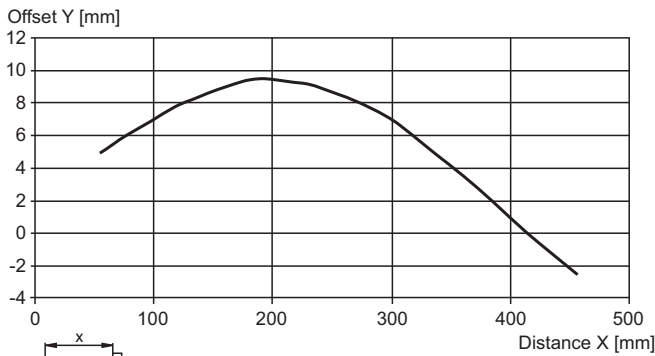
Assembly



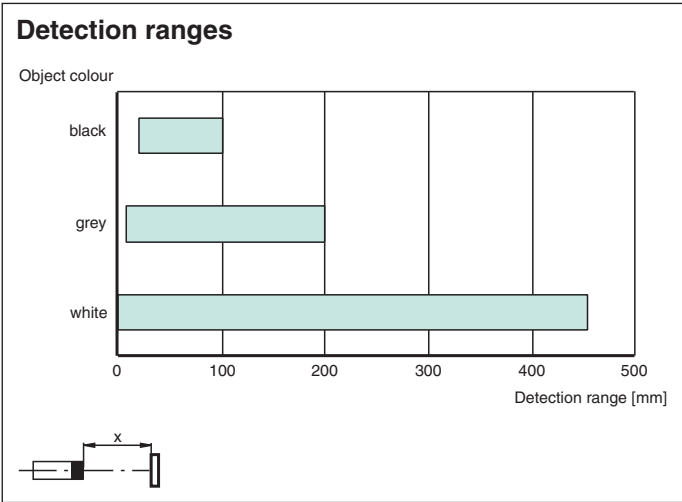
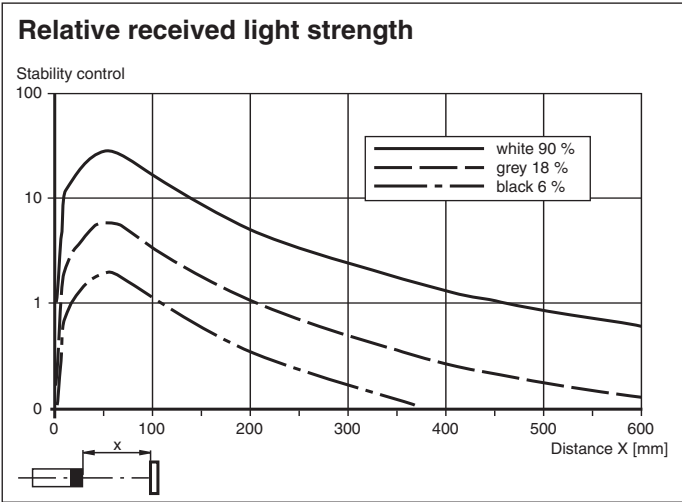
1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

Characteristic Curve

Characteristic response curve



Release date: 2020-12-10 Date of issue: 2020-12-10 Filename: 199811_eng.pdf



Application



Accessories

	CPZ18B03	Mounting Bracket with swivel nut
	BF 18	Mounting flange, 18 mm

Accessories

	BF 18-F	Plastic mounting adapter, 18 mm
	BF 5-30	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

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Accessories

Other suitable accessories can be found at 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