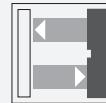


Diffuse mode sensor

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.

Application

Packaging industry:

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

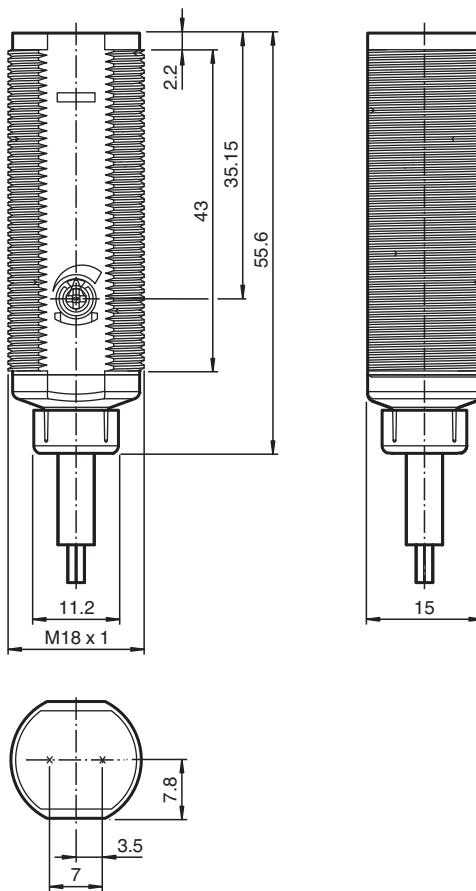
Material handling:

- 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

Dimensions



Technical Data

Release date: 2022-11-18 Date of issue: 2022-11-18 Filename: 199811_eng.pdf

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	
Opening angle	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 operating reserve	
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
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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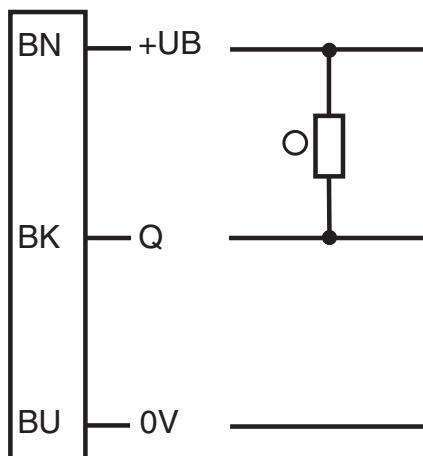
Singapore: +65 6779 9091
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 PEPPERL+FUCHS

Technical Data

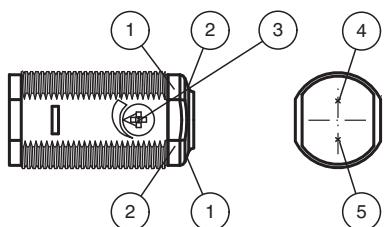
Signal output	N-channel MOSFET, short circuit protected	
Switching voltage	max. 250 V AC/DC	
Switching current	max. 200 mA	
Voltage drop	U_d	≤ 3.5 V AC/DC
Switching frequency	f	50 Hz
Response time		≤ 10 ms
Conformity		
Product standard	EN 60947-5-2	
Compliance with standards and directives		
Standard conformity		
Standards	UL 508	
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, 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

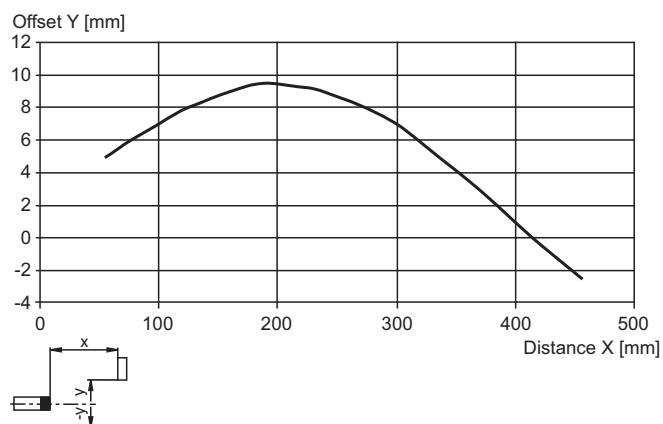
Assembly



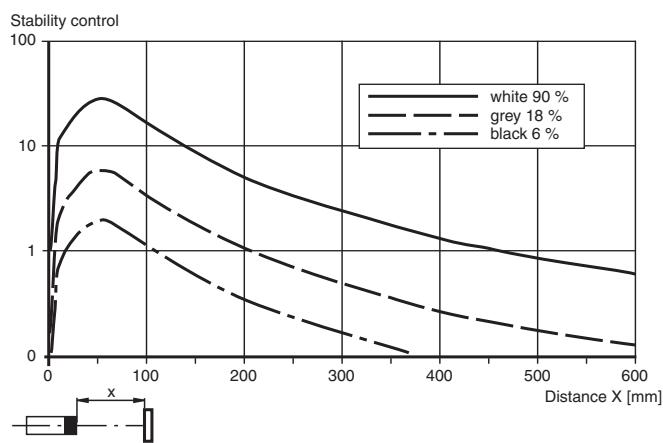
1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

Characteristic Curve

Characteristic response curve

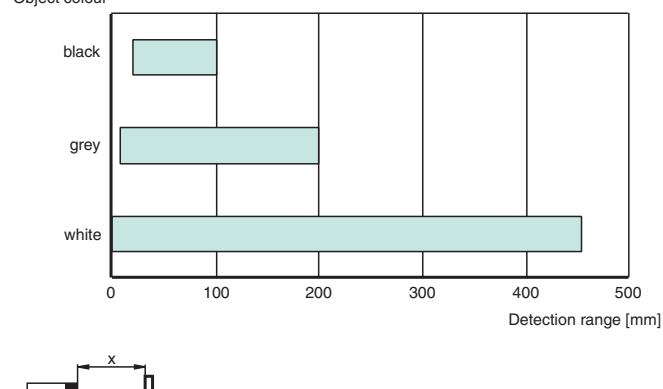


Relative received light strength



Detection ranges

Object colour



Accessories

	CPZ18B03	Mounting Bracket with swivel nut
	BF 18	Mounting flange, 18 mm
	BF 18-F	Plastic mounting adapter, 18 mm
	BF 5-30	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm