

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.

Application

Packaging industry:

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

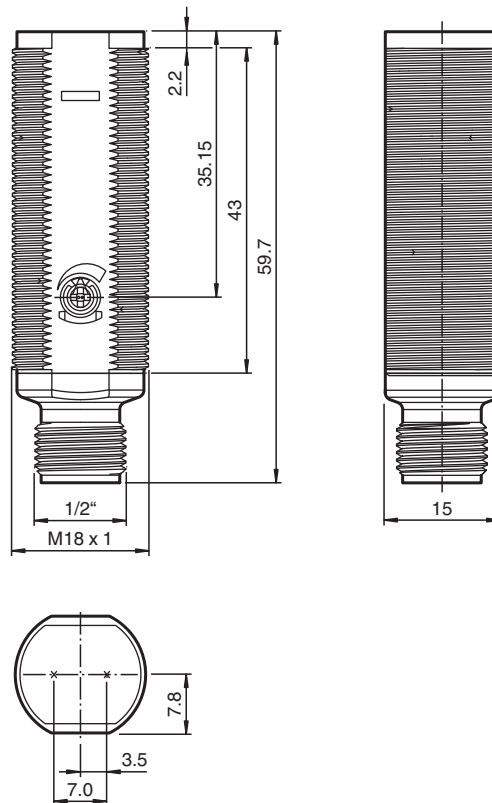
Material handling:

- 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

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

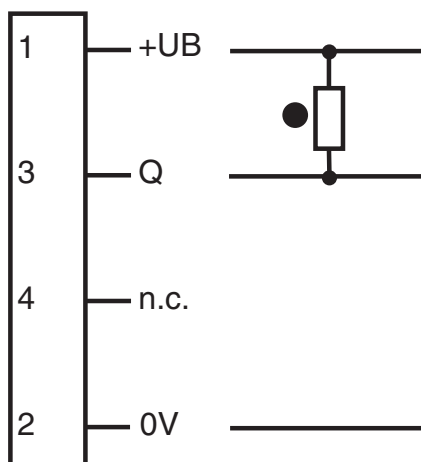
Output

Switching type	dark-on
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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
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

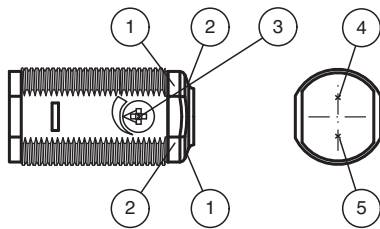
Connection Assignment



Wire colors

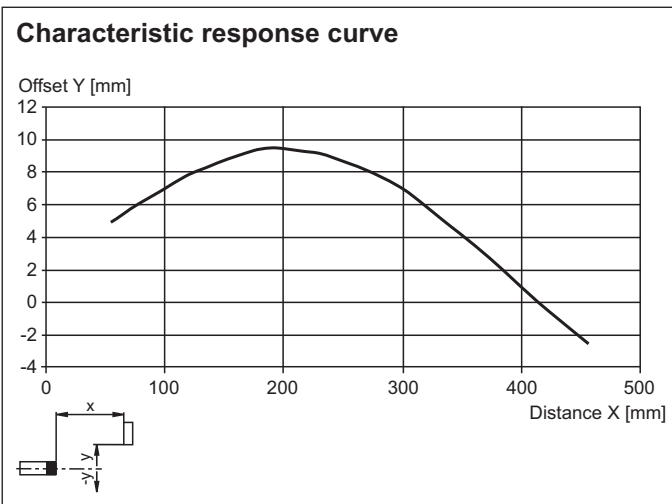
- 1 | RD/BK (red/black)
- 2 | RD/WH (red/white)
- 3 | RD (red)
- 4 | GN (green)

Assembly



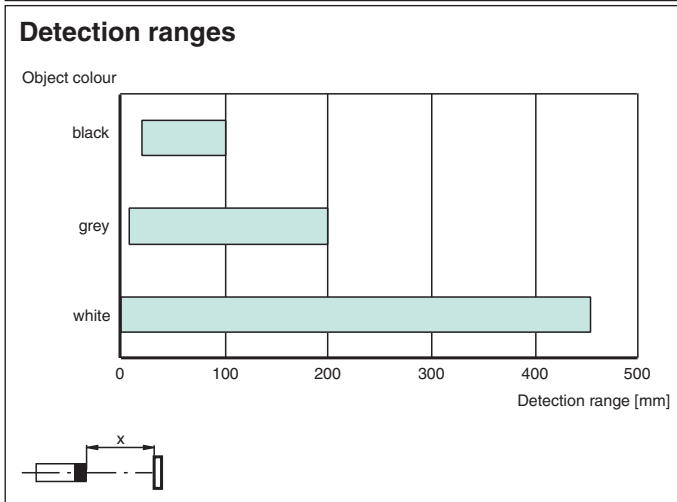
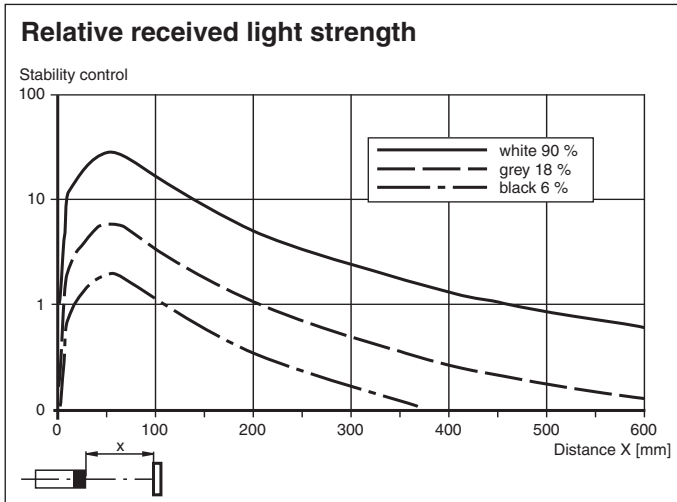
1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

Characteristic Curve









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Characteristic Curve



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
	V124-G-YE2M-PVC	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable
	V124-W-YE2M-PVC	Connecting cable, 1/2" - 20 UNF, 4-pin, PVC cable

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