

## Diffuse mode sensor

GLK18-8-200/25/161/166



- Efficient Line in a short M18 plastic housing for standard applications
- 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, 200 mm detection range, red light, light 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

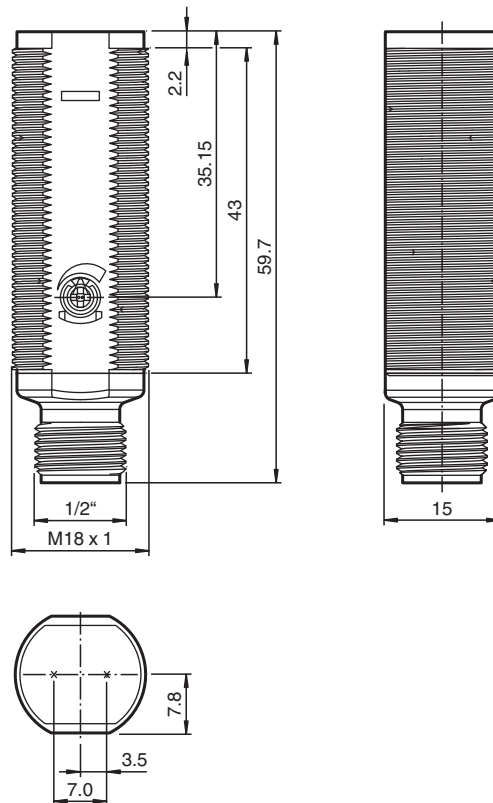
Material handling:

- 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

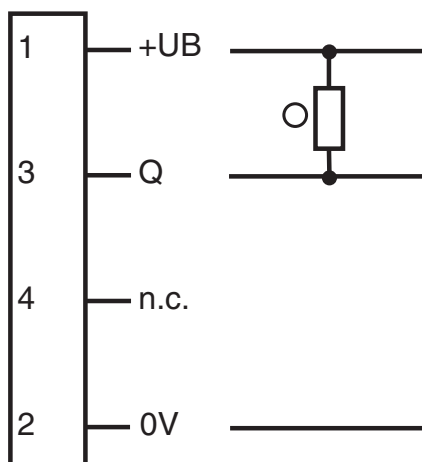
General specifications		
Detection range		20 ... 200 mm adjustable
Detection range max.		0 ... 200 mm
Reference target		100 mm x 100 mm Kodak white
Light source		LED
Light type		modulated visible red light , 640 nm
Diameter of the light spot		approx. 15 mm at 200 mm
Opening angle		approx. 4 °
Optical 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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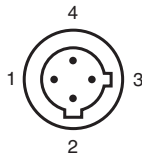
Signal output	N-channel MOSFET, short circuit protected	
Switching voltage		max. 250 V AC/DC
Switching current		max. 200 mA
Voltage drop	$U_d$	$\leq 3.5$ V AC/DC
Switching frequency	$f$	50 Hz
Response time		$\leq 10$ ms
<b>Conformity</b>		
Product standard		EN 60947-5-2
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		UL 508
<b>Approvals and certificates</b>		
Protection class		II, rated insulation voltage $\leq 250$ 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
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
<b>Mechanical specifications</b>		
Degree of protection		IP67
Connection		Micro AC connector, 1/2" V124 ; 4-pin
<b>Material</b>		
Housing		PC-PBT
Optical face		PMMA
Mass		approx. 10 g

## Connection Assignment



○ = Light on  
● = Dark on

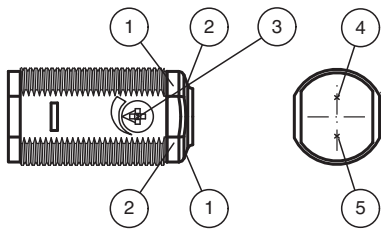
## Connection Assignment



Wire colors

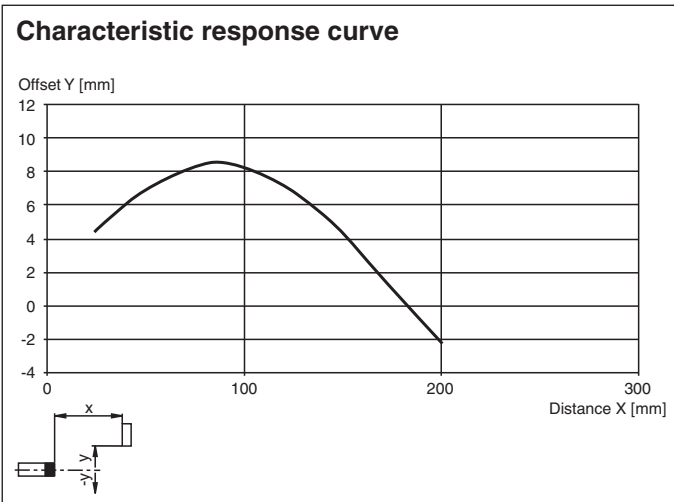
- 1 | RD/BK (red/black)
- 2 | RD/WH (red/white)
- 3 | RD (red)
- 4 | GN (green)

## Assembly



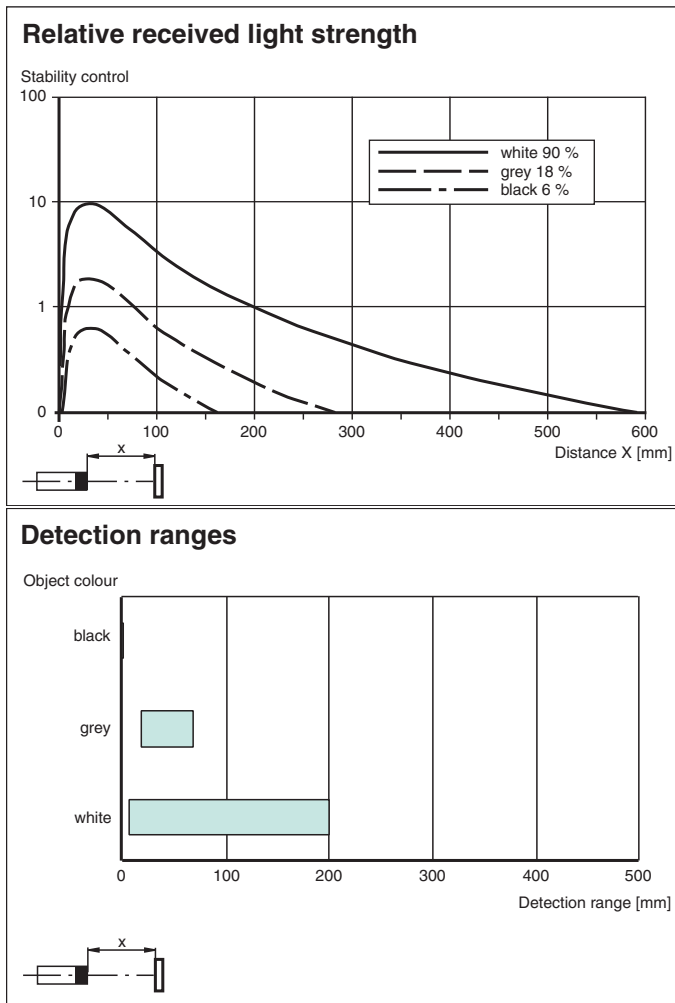
1	Operating display	green
2	Signal display	yellow
3	Sensitivity adjustment	
4	Emitter	
5	Receiver	

## Characteristic Curve









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## 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