

# Retroreflective sensor

## GLK18-55/25/161/166



- Efficient Line in a short M18 plastic housing for standard applications
- Very high detection range
- 4 LEDs indicator for 360° visibility
- Version with front optical face
- Universal usage at different power supplies

Retroreflective sensor with polarization filter, M18 threaded housing design, plastic housing, front optical face, 4 m 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

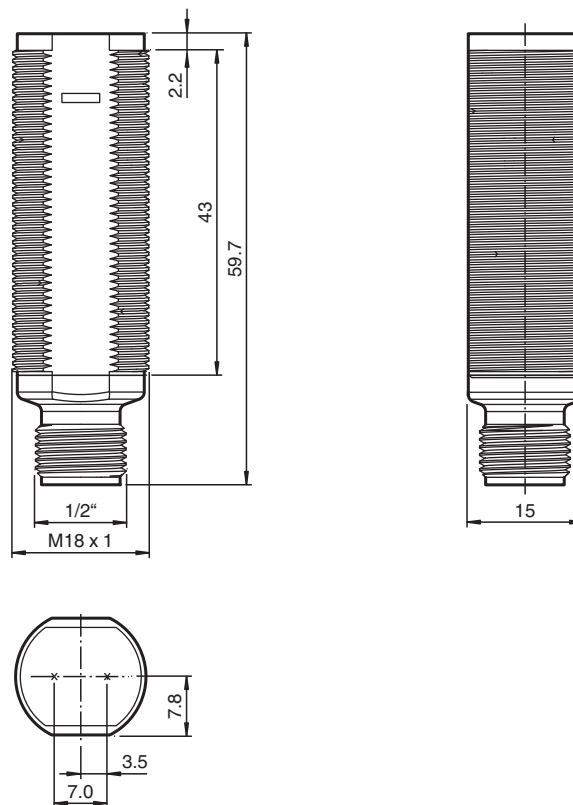
Material handling:

- 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	
Effective detection range	0 ... 4 m
Reflector distance	0.05 ... 4 m
Threshold detection range	5.5 m
Reference target	reflector C110-2
Light source	LED
Light type	modulated visible red light , 640 nm
Polarization filter	yes
Diameter of the light spot	approx. 200 mm at 5.5 m
Opening angle	approx. 2 °
Optical face	frontal
Ambient light limit	30000 Lux
Accessories provided	Mounting aids
Indicators/operating means	
Operation indicator	LED green, statically lit Power on
Function indicator	LED yellow: lights up when receiving the light beam ; flashes when falling short of the operating reserve; OFF when light beam is interrupted
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

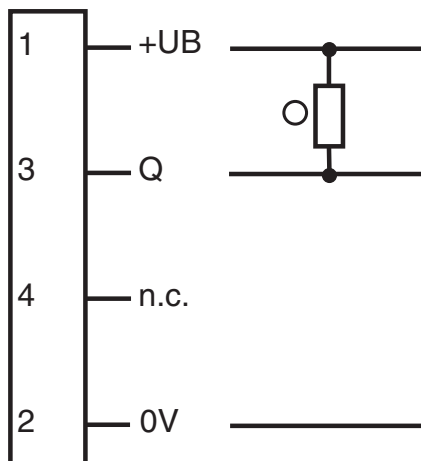
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## Technical Data

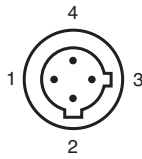
Signal output	N-channel MOSFET, short circuit protected	
Switching voltage		max. 250 V AC/DC
Switching current		max. 200 mA
Voltage drop	$U_d$	$\leq 3.5$ V AC/DC
Switching frequency	$f$	50 Hz
Response time		$\leq 10$ ms
<b>Conformity</b>		
Product standard		EN 60947-5-2
<b>Compliance with standards and 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)
<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
Material		
Housing		PC-PBT
Optical face		PMMA
Mass		approx. 10 g

## Connection Assignment



○ = Light on  
● = Dark on

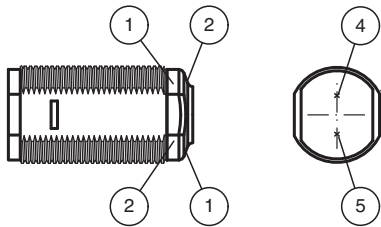
## Connection Assignment



Wire colors

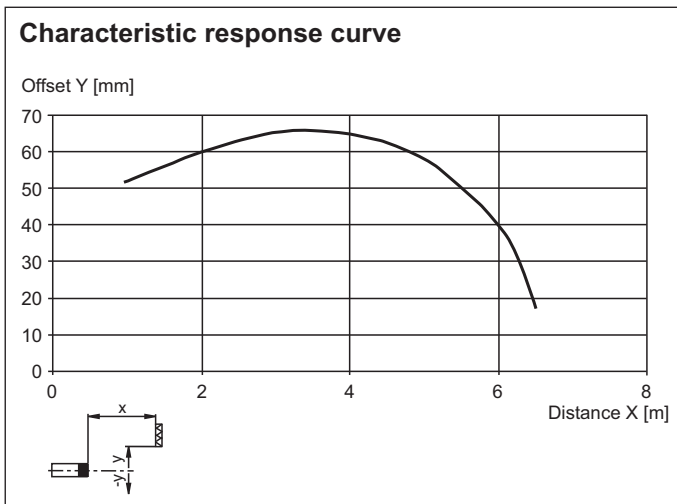
- 1 | RD/BK (red/black)
- 2 | RD/WH (red/white)
- 3 | RD (red)
- 4 | GN (green)

## Assembly



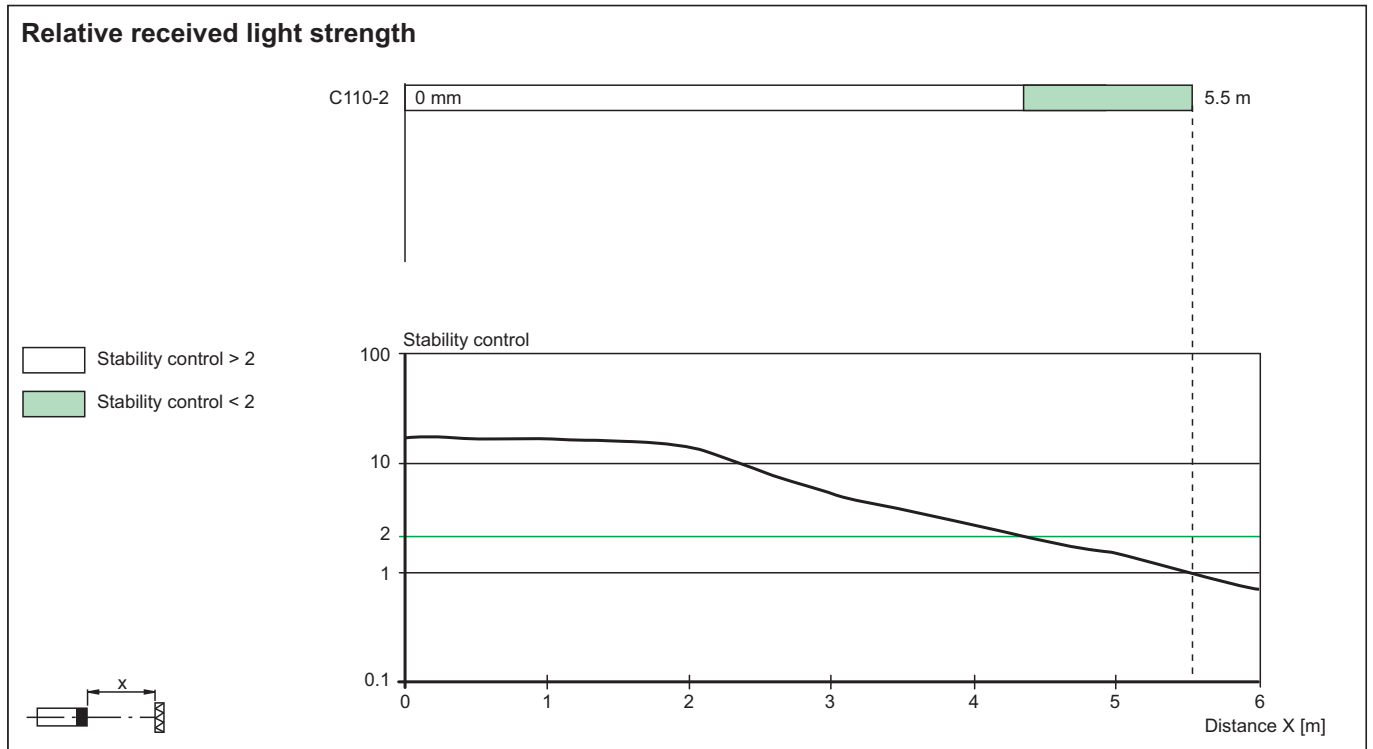
1	Operating display	green
2	Signal display	yellow
4	Emitter	
5	Receiver	

## Characteristic Curve









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## Characteristic Curve



## 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

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