



## Retroreflective sensor GLK18-55/59/115/161



- 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, dark 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

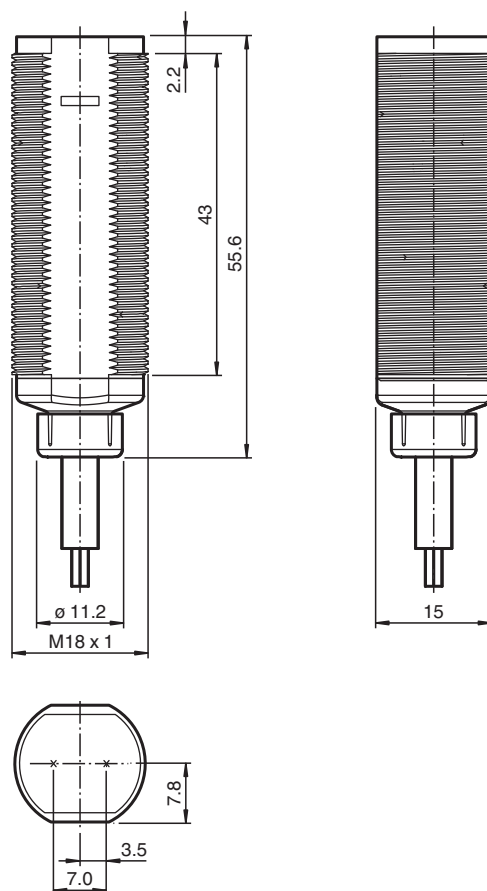
Material handling:

- 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

### 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 | dark-on |
|----------------|---------|

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

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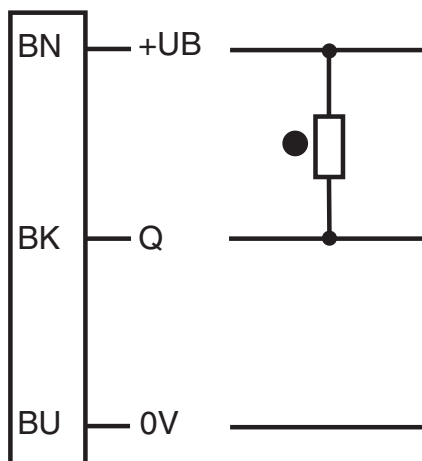
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## Technical Data

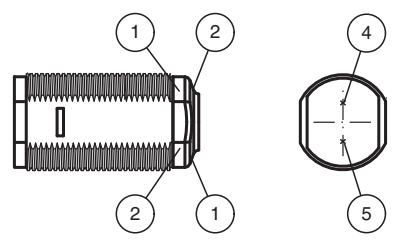
|                                                 |                                           |                                                                                                                           |
|-------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Signal output                                   | N-channel MOSFET, short circuit protected |                                                                                                                           |
| Switching voltage                               |                                           | max. 250 V AC/DC                                                                                                          |
| Switching current                               |                                           | max. 200 mA                                                                                                               |
| Voltage drop                                    | $U_d$                                     | $\leq 3.5$ 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<br>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)                                                                         |
| <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                                      |                                           | 2 m, 3 x 0.34 mm <sup>2</sup> , PVC cable                                                                                 |
| Material                                        |                                           |                                                                                                                           |
| Housing                                         |                                           | PC-PBT                                                                                                                    |
| Optical face                                    |                                           | PMMA                                                                                                                      |
| Mass                                            |                                           | approx. 100 g                                                                                                             |

## Connection Assignment



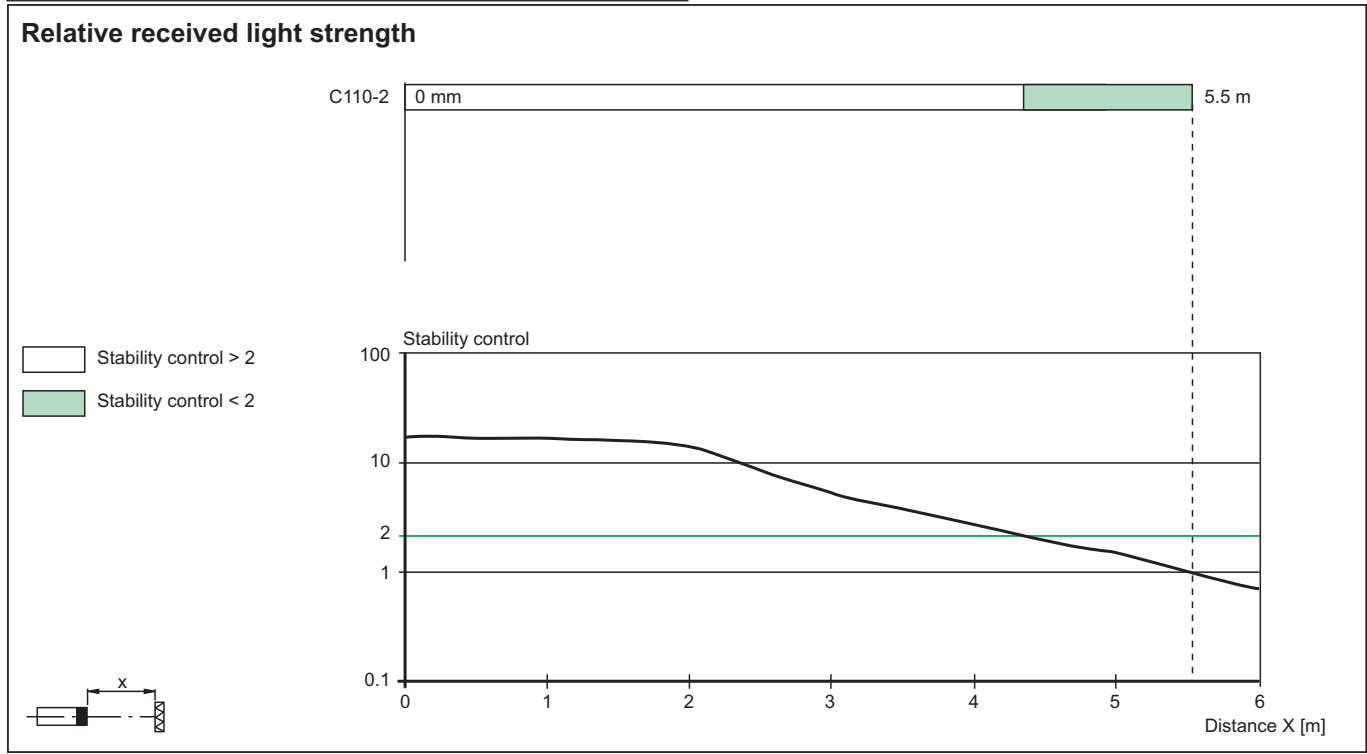
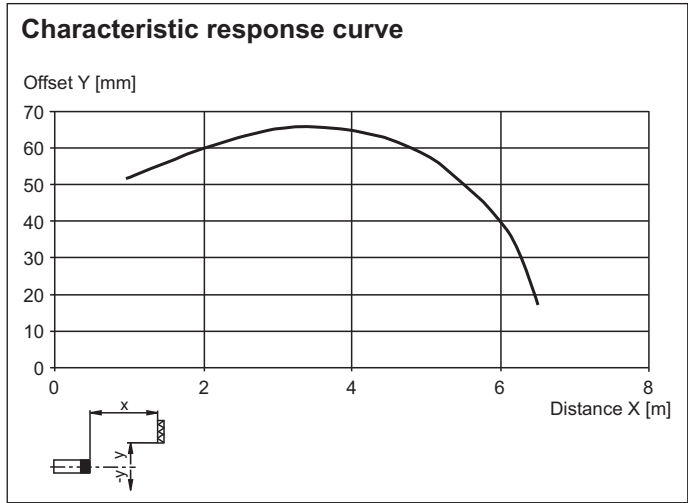
○ = Light on  
● = Dark on

Assembly



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

Characteristic Curve



Accessories

|                                                                                     |                 |                                  |
|-------------------------------------------------------------------------------------|-----------------|----------------------------------|
|  | <b>CPZ18B03</b> | Mounting Bracket with swivel nut |
|  | <b>BF 18</b>    | Mounting flange, 18 mm           |

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Accessories

|                                                                                   |                |                                                                                   |
|-----------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------|
|  | <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 |

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