Retroreflective sensor with polarization filter
GLK18-55-S/59/115/161

**Dimensions**

<table>
<thead>
<tr>
<th>ø</th>
<th>16.8</th>
<th>13.1</th>
<th>ø</th>
<th>11.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M18 x 1</td>
<td>15</td>
<td>15</td>
<td>M18 x 1</td>
<td>15</td>
</tr>
<tr>
<td>3.5</td>
<td>3.5</td>
<td>2.2</td>
<td>15.6</td>
<td>45.2</td>
</tr>
</tbody>
</table>

**Electrical connection**

- **BN** +UB
- **BK** Q
- **BU** 0V

**Indicators/operating means**

1. Operating display green
2. Signal display yellow
3. Emitter
4. Receiver

**Model Number**

GLK18-55-S/59/115/161
Retroreflective sensor
With 2 m fixed cable

**Features**

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

**Product information**

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.
Retroreflective sensor with polarization filter

GLK18-55-S/59/115/161

Technical data

**General specifications**
- Effective detection range: 0 ... 3.5 m
- Reflector distance: 0.05 ... 3.5 m
- Threshold detection range: 4.5 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. 160 mm at 4.5 m
- Angle of divergence: approx. 2°
- Optical face: lateral
- 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 stability control; OFF when light beam is interrupted

**Electrical specifications**
- Operating voltage: $U_B = 20 \ldots 250$ V AC/DC
- No-load supply current: $I_0 < 2.5$ mA
- Switching type: dark on
- 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: $f \leq 50$ Hz
- Response time: $\leq 10$ ms

**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 mm², PVC cable
- Material:
  - Housing: PC-PBT
  - Optical face: PMMA
- Mass: approx. 100 g

**Compliance with standards and directives**
- Standards: UL 508

**Approvals and certificates**
- 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
  - 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)

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

Other suitable accessories can be found at www.pepperl-fuchs.com
### Curves/Diagrams

#### Characteristic response curve

- Offset Y (mm)
- Distance X (m)

#### Relative received light strength

- Stability control > 2
- Stability control ≤ 2
- Distance X (m): 4.5 m
- Relative received light strength (C110-2)