## Dimensions



M12 x 1
M18 x 1
2.2
27.2
43.9
15
7.8
3.5
7

## Model Number

**GLV18-6/73/120**

Retroreflective sensor
with 4-pin, M12 x 1 plastic connector

## Features

- 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
- Version with front optical face
- DC voltage version

## 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.

## Electrical connection

Option:                    /120

| 1 | +UB |
| 2 | $\overline{Q}$ |
| 3 | 0 V |
| 4 | Q |
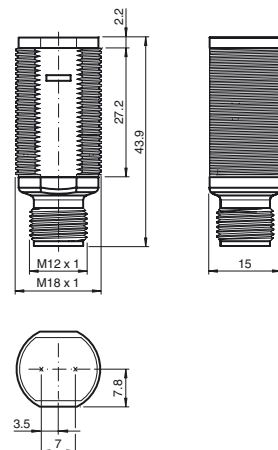


○ = Light on
● = Dark on
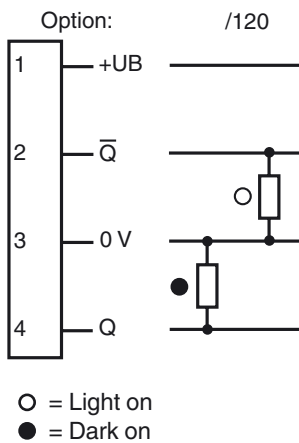
## Pinout
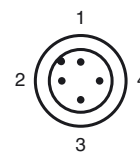


## Indicators/operating means
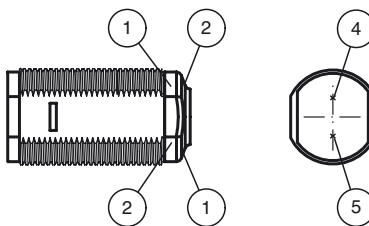


| 1 | Operating display | green |
| 2 | Signal display | yellow |
| 4 | Emitter | |
| 5 | Receiver | |

Subject to modifications without notice

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411
fa-info@pepperl-fuchs.com

Copyright Pepperl+Fuchs

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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## Technical data

### General specifications

| | |
|---|---|
| Effective detection range | 0 ... 6.5 m |
| Reflector distance | 0.05 ... 6.5 m |
| Threshold detection range | 8 m |
| Reference target | reflector C110-2 |
| Light source | LED |
| Light type | modulated visible red light , 640 nm |
| Diameter of the light spot | approx. 300 mm at 8 m |
| Angle of divergence | approx. 2 ° |
| Optical face | frontal |
| Ambient light limit | 30000 Lux |

### Functional safety related parameters

| | | |
|---|---|---|
| $MTTF_d$ | | 920 a |
| Mission Time ($T_M$) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |

### Indicators/operating means

| | |
|---|---|
| Operating display | LED green, statically lit Power on |
| Function display | 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 | $U_B$ | 10 ... 30 V DC |
| No-load supply current | $I_0$ | < 20 mA |

### Output

| | | |
|---|---|---|
| Switching type | | light/dark on |
| Signal output | | 2 PNP, complementary, short-circuit protected, open collectors |
| Switching voltage | | max. 30 V DC |
| Switching current | | max. 100 mA |
| Voltage drop | $U_d$ | ≤ 1.5 V DC |
| Switching frequency | f | 500 Hz |
| Response time | | ≤ 1 ms |

### Ambient conditions

| | |
|---|---|
| Ambient temperature | -25 ... 60 °C (-13 ... 140 °F) |
| Storage temperature | -40 ... 70 °C (-40 ... 158 °F) |

### Mechanical specifications

| | |
|---|---|
| Protection degree | IP67 |
| Connection | connector M12 x 1, 4-pin |
| Material | |
|   Housing | PC |
|   Optical face | PMMA |
|   Connector | plastic |
| Mass | approx. 10 g |

### Compliance with standards and directives

| | |
|---|---|
| Standard conformity | |
|   Product standard | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

### 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, Class 2 Power Source |
| CCC approval | Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval. |

## 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
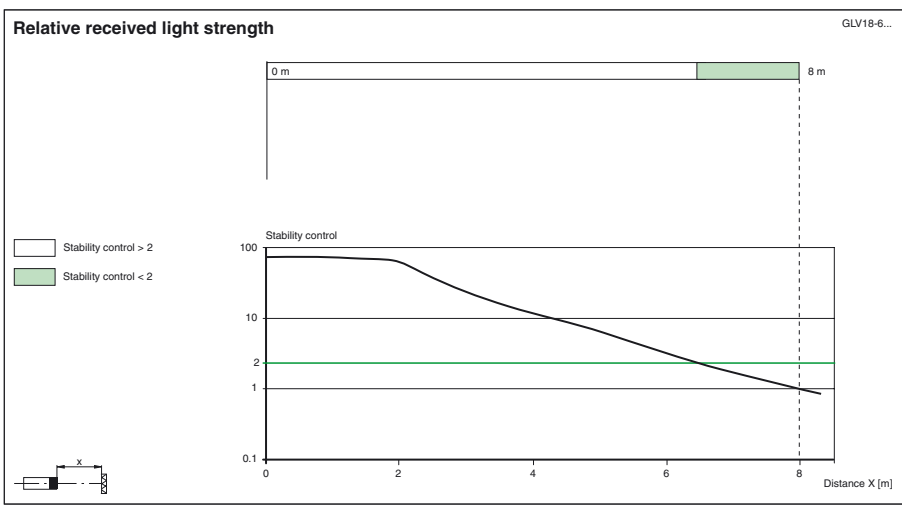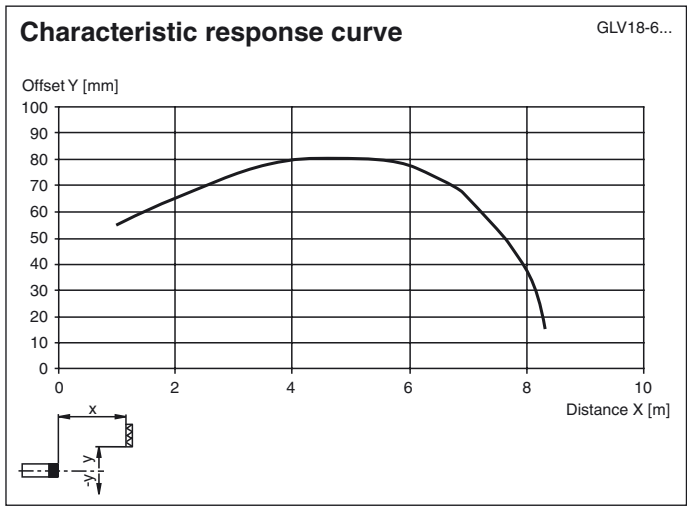
**V1-G-2M-PUR**
Cable socket, M12, 4-pin, PUR cable

**V1-W-2M-PUR**
Cable socket, M12, 4-pin, PUR cable

Other suitable accessories can be found at www.pepperl-fuchs.com

## Curves/Diagrams

### Characteristic response curve
GLV18-6...

Offset Y [mm]



Distance X [m]

### Relative received light strength
GLV18-6...

0 m                    8 m

Stability control > 2

Stability control < 2

Stability control



Distance X [m]

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