

Retroreflective sensor, M18 threaded housing design, plastic housing, front optical face, 6.5 m detection range, red light, light on, DC version, NPN 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

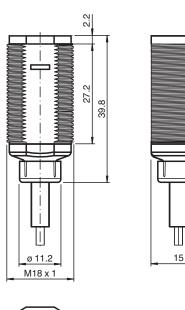
Material handling:

- · 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

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



Dimensions

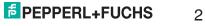




Technical Data

| Effective detection range 06.5 m Reflector distance 0.056.5 m Threshold detection range 8 m Reference target 10 effector C110-2 Light source LED Light type modulated visible red light , 640 nm Polarization filter no Diameter of the light spot approx. 300 nm at 8 m Opening angle approx. 2 ° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 20 a MTTF_d 920 a Nission Time (T _M) 0 % Diagnostic Coverage (DC) 0 % Deperation indicator LED green, statically lit Power on Function indicator LED green, statically lit Power on | | | |
|---|--------------------------------------|----------------|---|
| Reflector distance 0.05 6.5 m Threshold detection range 8 m Reference target i reflector C110-2 Light source LED Light source LED light type modulated visible red light, 640 nm Polarization filter no Diameter of the light spot approx. 300 nm at 8 m Opening angle approx. 2 ° Optical face fontal Ambient light limit 30000 Lux HTTFd MTTFd 920 a Nission Time (T _M) 20 a Diagnostic Coverage (DC) 0% LED green, statically lit Power on Function indicator LED green, statically lit Power on Light specifications LED greenver, OFF when light beam ; flashes when falling short of the operating reserve; OFF when light beam is interrupted | General specifications | | |
| Threshold detection range 8 m Reference target 9 m Light source LED Light source modulated visible red light , 640 nm Polarization filter no Diameter of the light spot approx. 300 mm at 8 m Opening angle approx. 2 ° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 920 a MTTFd 920 a Mission Time (T _M) 20 a Diangostic Coverage (DC) 0% Operation indicator LED green, statically lit Power on Function indicator LED green, statically lit Power on Function indicator LED green, statically lit Power on Electrical specifications LED yellow: lights up when receiving the light beam ; flashes when falling short of the lower and is interrupted | Effective detection range | | 0 6.5 m |
| Reference target image: reflector C110-2 Light source LED Light type modulated visible red light , 640 nm Polarization filter no Diameter of the light spot approx. 300 mm at 8 m Opening angle approx. 2° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 920 a MTTFd 920 a Diagnostic Coverage (DC) 0% Operation indicator LED green, statically lit Power on Porticional indicator LED green, statically the light beam ; flashes when falling short of the greating reserve; OFF when light beam is interrupted | Reflector distance | | 0.05 6.5 m |
| Light source LED Light source modulated visible red light , 640 nm Polarization filter no Diameter of the light spot approx. 300 nm at 8 m Opening angle approx. 2° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 920 a MTTFd 920 a Diagnostic Coverage (DC) 0% Indicators/operating means LED green, statically lit Power on Function indicator LED green, statically lit Power on Function 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 | Threshold detection range | | 8 m |
| Light type Image: Constraint of the light type modulated visible red light , 640 nm Polarization filter no Diameter of the light spot approx. 300 nm at 8 m Opening angle approx. 2 ° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters g20 a MTTF _d 920 a Diagnostic Coverage (DC) 0% Indicators/operating means LED green, statically lit Power on Vertion 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 | Reference target | | reflector C110-2 |
| Polarization filter no Diameter of the light spot approx. 300 mm at 8 m Opening angle approx. 2 ° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 30000 Lux MTTF _d 920 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means LED green, statically lit Power on Function 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 | Light source | | LED |
| Diameter of the light spot approx. 300 mm at 8 m Opening angle approx. 2° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 30000 Lux MTTF _d 920 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0% Indicators/operating means LED green, statically lit Power on 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 | Light type | | modulated visible red light , 640 nm |
| Opening angle approx. 2 ° Optical face frontal Ambient light limit 30000 Lux Functional safety related parameters 30000 Lux MTTF _d 920 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means LED green, statically lit Power on Vertication indicator LED green, statically lit Power on Function indicators LED yellow: lights up when receiving the light beam ; flashes when falling short of the operating reserve; OFF when light beam is interrupted | Polarization filter | | no |
| Optical facefrontalAmbient light limit30000 LuxFunctional safety related parametersMTTFd920 aMTTFd920 aMission Time (TM)20 aDiagnostic Coverage (DC)0%Indicators/operating meansOperation indicatorLED green, statically lit Power onSupport indicatorLED yellow: lights up when receiving the light beam ; flashes when falling short of the operating reserve; OFF when light beam is interrupted | Diameter of the light spot | | approx. 300 mm at 8 m |
| Ambient light limit 30000 Lux Functional safety related parameters Intervention MTTFd 920 a Mission Time (TM) 20 a Diagnostic Coverage (DC) 0% Indicators/operating means EED green, statically lit Power on Coperation indicator LED green, statically lit Power on Function indicators LED yellow: lights up when receiving the light beam ; flashes when falling short of the operating reserve; OFF when light beam is interrupted | Opening angle | | approx. 2 ° |
| Functional safety related parameters MTTFd 920 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means 0 % 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 | Optical face | | frontal |
| MTTFd 920 a Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0% 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 | Ambient light limit | | 30000 Lux |
| Mission Time (T _M) 20 a Diagnostic Coverage (DC) 0 % 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 | Functional safety related parameters | | |
| Diagnostic Coverage (DC) 0 % 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 | MTTF _d | | 920 a |
| 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 Electrical specifications | Mission Time (T _M) | | 20 a |
| 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 | Diagnostic Coverage (DC) | | 0 % |
| 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 | Indicators/operating means | | |
| Electrical specifications | 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 |
| Operating voltage U _B 10 30 V DC | Electrical specifications | | |
| | Operating voltage | U _B | 10 30 V DC |

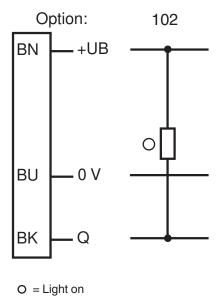
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".



GLV18-6/25/102/115

| Technical Data | | |
|----------------------------|----------------|--|
| | | |
| No-load supply current | I ₀ | < 20 mA |
| Output | | |
| Switching type | | light-on |
| Signal output | | 1 NPN, short-circuit protected open collector |
| 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 |
| Conformity | | |
| Product standard | | EN 60947-5-2 |
| Approvals and certificates | | |
| Protection class | | II, Rated insulation voltage \leq 50 V AC with pollution degree 1-2 according to IEC 60664-1 |
| UL approval | | cULus Listed, Class 2 Power Source |
| CCC approval | | CCC approval / marking not required for products rated \leq 36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 60 °C (-13 140 °F) |
| Storage temperature | | -40 70 °C (-40 158 °F) |
| Mechanical specifications | | |
| Degree of protection | | IP67 |
| Connection | | 2 m fixed cable |
| Material | | |
| Housing | | PC |
| Optical face | | PMMA |
| Cable | | PVC |
| Mass | | approx. 75 g |

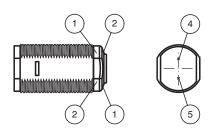
Connection Assignment



= Dark on

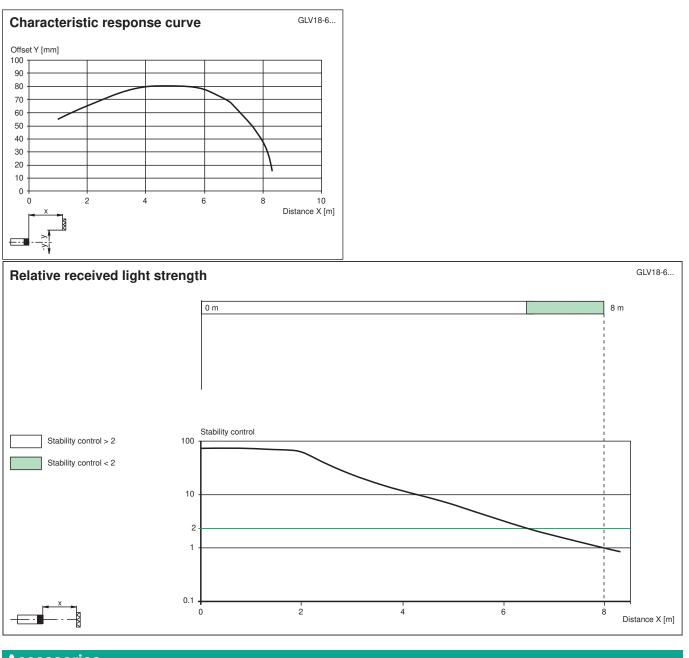
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Assembly



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

Characteristic Curve



Accessories

CPZ18B03

Mounting Bracket with swivel nut

1121

BF 18

Mounting flange, 18 mm

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



Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 188555_eng.pdf

| Accessories | | | | | |
|-------------------|---------|---|--|--|--|
| | BF 18-F | Plastic mounting adapter, 18 mm | | | |
| 000 000 000 | BF 5-30 | Universal mounting bracket for cylindrical sensors with a diameter of 5 30 mm | | | |

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

 Pepperl+Fuchs Group
 USA: +1 330 486 0001
 Get

 www.pepperl-fuchs.com
 fa-info@us.pepperl-fuchs.com
 fa-info@us.pepperl-fuchs.com

5