



Model Number

GL30-LAS/32/40a/98a

Photoelectric slot sensor with 3-pin, M8 x 1 connector

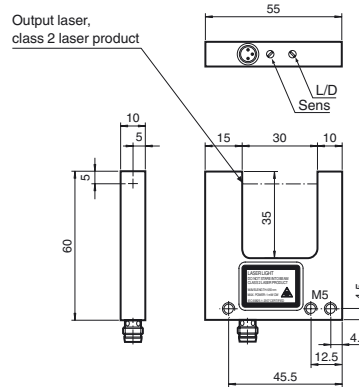
Features

- High switching frequency
- High resolution
- Sturdy aluminum housing
- Light/dark switching
- Alignable housing
- Adjustable sensitivity

Product information

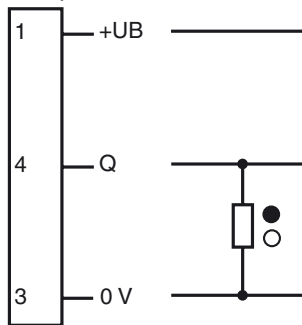
Photoelectric slot sensors with laser light can be used in applications with specific, demanding requirements and are ideal for highly precise and extremely fast applications. These eye-safe laser devices stand out through attributes that include particularly high switching frequencies of 10 kHz, maximum repeatability of 0.01 mm, automatic signal threshold adjustment, and detection of and/or light transmission through semi-transparent objects. In addition, the devices feature cross-talk protection, which enables devices to be installed adjacent to each other despite very high switching frequency.

Dimensions



Electrical connection

Option: 32/40a

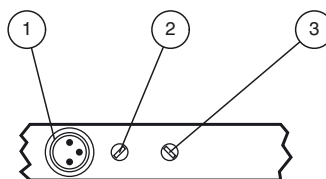


- = Light on
- = Dark on

Pinout



Indicators/operating means



| | | |
|---|----------------------|--------|
| 1 | Functional display | yellow |
| 2 | Sensitivity adjuster | |
| 3 | Light-/dark switch | |

Release date: 2013-08-26 10:28 Date of issue: 2013-09-11 190274_eng.xml

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

Technical data**General specifications**

| | |
|------------------------------|--------------------------------------|
| Light source | laser diode |
| Light type | red |
| Laser nominal ratings | |
| Note | LASER LIGHT , DO NOT STARE INTO BEAM |
| Laser class | 2 |
| Wave length | 650 nm |
| Beam divergence | 2.6 mrad |
| Maximum optical power output | < 1 mW |
| Target size | 0.05 mm |
| Fork width | 30 mm |
| Ambient light limit | 10000 Lux |
| Hysteresis | H < 0.02 mm |

Indicators/operating means

| | |
|------------------|---|
| Function display | LED yellow 4 x |
| Controls | Sensitivity adjuster, light/dark switch |

Electrical specifications

| | | |
|------------------------|-------|----------------|
| Operating voltage | U_B | 10 ... 30 V DC |
| No-load supply current | I_0 | 45 mA |

Output

| | | |
|---------------------|---|------------------|
| Switching type | light/dark on | |
| Signal output | 1 PNP output, short-circuit protected, reverse polarity protected, open collector | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 200 mA | |
| Voltage drop | U_d | 2.5 V (200 mA) |
| Switching frequency | f | 10000 Hz |
| Response time | | 50 μ s |

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -10 ... 60 °C (14 ... 140 °F) |
|---------------------|-------------------------------|

Mechanical specifications

| | |
|-------------------|-------------------------|
| Protection degree | IP65 |
| Connection | M8 connector, 3-pin |
| Material | |
| Housing | black anodized aluminum |
| Optical face | glass |
| Installation | may be mounted in rows |
| Mass | 30 g |

Compliance with standards and directives

| | |
|----------------------------|---|
| Directive conformity | EMC Directive 2004/108/EC |
| Standard conformity | |
| Product standard | EN 60947-5-2:2007 IEC 60947-5-2:2007 |
| Laser class | IEC 60825-1:2007 |

Approvals and certificates

| | |
|--------------|--|
| CCC approval | CCC approval / marking not required for products rated \leq 36 V |
|--------------|--|

Laser notice laser class 2

- The irradiation can lead to irritation especially in a dark environment. Do not point at people!
- Caution: Do not look into the beam!
- Maintenance and repairs should only be carried out by authorized service personnel!
- Attach the device so that the warning is clearly visible and readable.
- Caution – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laserlabel**Accessories****V3-GM-2M-PUR**

Cable socket, M8, 3-pin, PUR cable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

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