



## Model Number

GL30-LAS/32/40a/98a

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

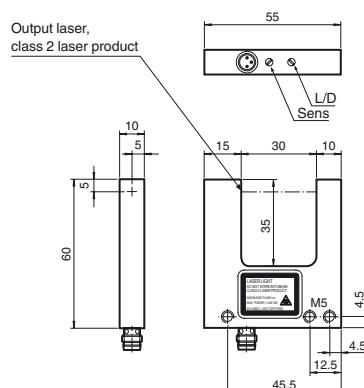
## Features

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

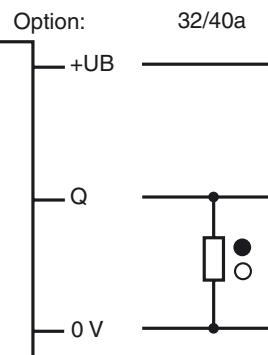
## Product information

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

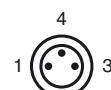


## Electrical connection

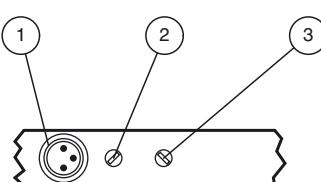


○ = Light on  
● = Dark on

## Pinout



## Indicators/operating means



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

## 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 $\mu$ 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<br>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](http://www.pepperl-fuchs.com)