



Model Number

GL30-RT/30/40a/98a

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

Features

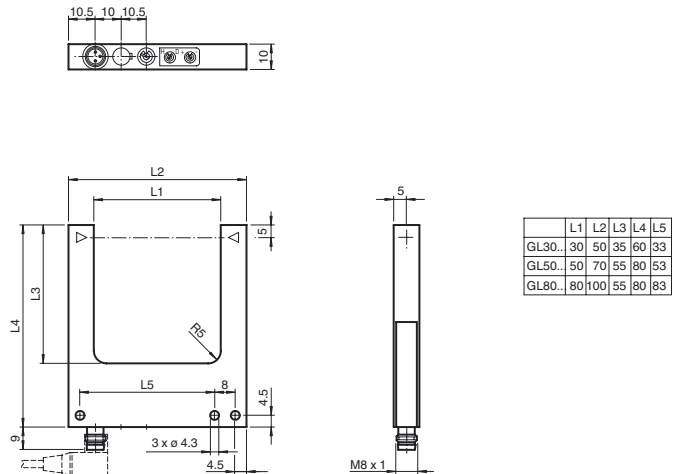
- Optimized for the detection of small parts
- High switching frequency
- Multiple device installation possible, no mutual interference (no cross-talk)
- Sensitivity adjuster and light/dark switch as standard features of this series
- Visible red light
- Degree of protection IP67
- cULus approval
- Diecast zinc housing, powder coated

Product information

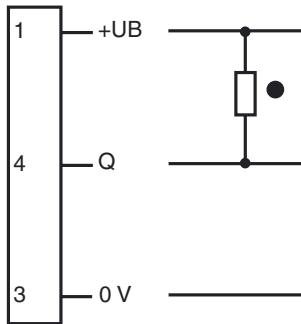
Photoelectric slot sensors offer vast installation benefits thanks to their housing design. When it comes to operation, these new generation devices boast features such as high resolution, high repeatability, automatic signal threshold adjustment, ambient light resistance, and detection of and/or light transmission through transparent objects. Cross-talk protection enables parallel installation of devices despite extremely high switching frequency. These characteristics guarantee reliable detection of small parts, from 0.3 mm, across the entire detection range, even in very fast moving applications.

Release date: 2015-02-27 09:18 Date of issue: 2015-02-27 201766_eng.xml

Dimensions



Electrical connection

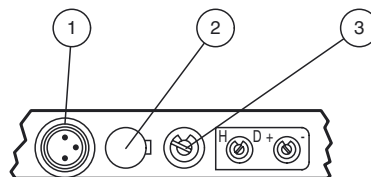


- = Light on
- = Dark on

Pinout



Indicators/operating means



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

Technical data**General specifications**

| | |
|---------------------|-----------------------------|
| Light source | LED |
| Light type | modulated visible red light |
| Target size | 0.3 mm |
| Slot width | 30 mm |
| Ambient light limit | 100000 Lux |

Functional safety related parameters

| | |
|--------------------------------|--------|
| MTTF _d | 1290 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Indicators/operating means

| | |
|--------------------|---|
| Function indicator | LED red in connector |
| Control elements | Sensitivity adjuster, light/dark switch |

Electrical specifications

| | | |
|------------------------|----------------|----------------|
| Operating voltage | U _B | 10 ... 30 V DC |
| Ripple | | 10 % |
| No-load supply current | I ₀ | ≤ 15 mA |

Output

| | | |
|---------------------|---|----------|
| Switching type | light/dark on | |
| Signal output | 1 NPN, short-circuit protected open collector | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 100 mA | |
| Repeat accuracy | 0.05 mm | |
| Switching frequency | f | 3 kHz |
| Response time | | ≤ 160 μs |

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -20 ... 60 °C (-4 ... 140 °F) |
| Storage temperature | -20 ... 75 °C (-4 ... 167 °F) |

Mechanical specifications

| | |
|----------------------|----------------------------|
| Degree of protection | IP67 |
| Connection | M8 connector, 3-pin |
| Material | |
| Housing | powder coated diecast zinc |
| Optical face | glass |
| Mass | 60 g |

Compliance with standards and directives

| | |
|---------------------------|-------------------|
| Directive conformity | |
| EMC Directive 2004/108/EC | EN 60947-5-2:2007 |

Approvals and certificates

| | |
|---------------|--|
| CE conformity | CE |
| UL approval | cULus Listed, Class 2 Power Source, Type 1 enclosure |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |

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