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# **Model Number**

#### GL40-IR/32/40a/98a

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

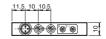
#### **Features**

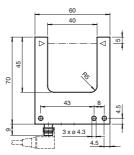
- Optimized for the detection of small parts
- · High switching frequency
- Multiple device installation possible, no mutual interference (no cross-talk)
- Sensitivity adjuster and light/dark switch as standard features of this series
- · Infrared light
- Degree of protection IP67
- · cULus approval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

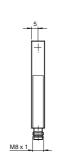
## **Product information**

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.

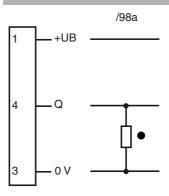
## **Dimensions**







### **Electrical connection**



- O = Light on
- = Dark on

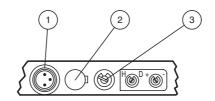
### **Pinout**

Wire colors in accordance with EN 60947-5-2



1 BN (brown 3 BU (blue) 4 BK (black)

## Indicators/operating means



- 1 Functional display red
- 2 Light-/dark switch3 Sensitivity adjuster

Technical data		
General specifications		
Light source		IRED
Light type		modulated infrared light
Tests		EN 60947-5-2
Target size		0.3 mm
Slot width		40 mm
Slot depth		45 mm
Ambient light limit		100000 Lux
Indicators/operating means		
Function indicator		LED red in connector
Control elements		Sensitivity adjuster, light/dark switch
Electrical specifications		
Operating voltage	U <sub>B</sub>	10 30 V DC, class 2
Ripple		10 %
No-load supply current	I <sub>0</sub>	≤ 15 mA
Output		
Switching type		light/dark on
Signal output		1 PNP, short-circuit protected, open collector
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Repeat accuracy		0.05 mm
Switching frequency	f	2 kHz
Response time		≤ 250 μs
Conformity		
Product standard		EN 60947-5-2
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		black anodized aluminum
Optical face		glass
Mass		45 g
Annuarala and cautificates		
Approvals and certificates CE conformity		CE
•		cULus
UL approval		
CCC approval		CCC approval / marking not required for products rated ≤3

# **Operating principle**

Photoelectric slot sensors are photoelectric sensors that operate according to the thru-beam sensor principle. The transmitter sends signals directly to the receiver. If an object breaks the light beam, the switching element function is triggered. The special U-shaped design means the transmitter and receiver can be accommodated in one housing, which ensures high resistance to vibrations. In contrast to standard thru-beam sensors, photoelectric slot sensors have the added advantage of not requiring complex electrical installation, as only one device needs to be connected. Also, adjustment of the optical axes is not necessary.

## **Accessories**

## V3-WM-2M-PUR

Female cordset single-ended, M8, 3-pin, PUR cable

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

