

Model Number

GL50-RT/32/40a/98a

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

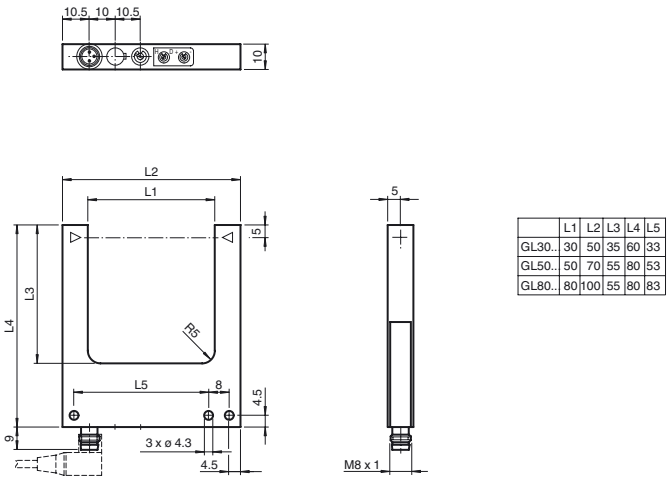
Features

- 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
- Visible red light
- Degree of protection IP67
- cULus approval
- Diecast zinc housing, powder coated

Product information

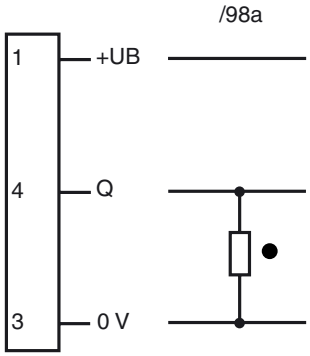
Photoelectric slot sensors offer vast installation benefits thanks to their housing design. When it comes to operation, these new generation devices boast features such as high resolution, high repeatability, automatic signal threshold adjustment, ambient light resistance, and detection of and/or light 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.

Dimensions



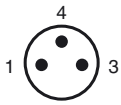
	L1	L2	L3	L4	L5
GL30..	30	50	35	60	33
GL50..	50	70	55	80	53
GL80..	80	100	55	80	83

Electrical connection

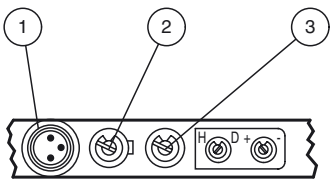


○ = Light on
● = Dark on

Pinout



Indicators/operating means



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

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Technical data

General specifications		
Light source		LED
Light type		modulated visible red light
Tests		EN 60947-5-2
Target size		0.3 mm
Slot width		50 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, class 2
Ripple		10 %
No-load supply current	I_0	≤ 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	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		90 g
Approvals and certificates		
CE conformity		CE
UL approval		cULus
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

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Refer to “General Notes Relating to Pepperl+Fuchs Product Information”.
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