



Model Number

GL80-LAS/32/40a/98a

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

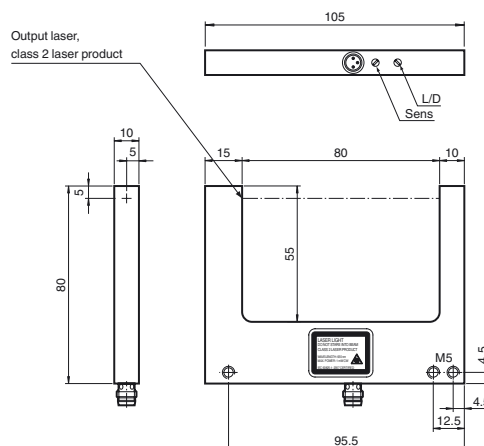
Features

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

Product information

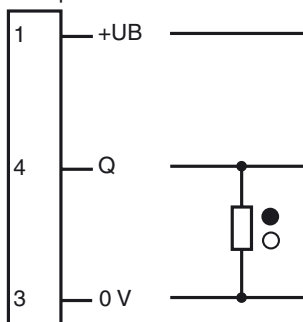
Photoelectric slot sensors with laser light can be used in applications with specific, demanding requirements and are ideal for highly precise and extremely fast applications. These eye-safe laser devices stand out through attributes that include particularly high switching frequencies of 10 kHz, maximum 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

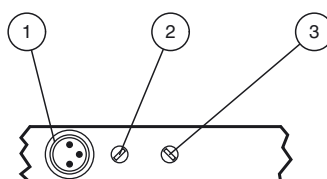


○ = Light on
● = Dark on

Pinout



Indicators/operating means



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

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	80 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 μs	

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 ≤ 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