Dimensions

Model Number

GL120-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.
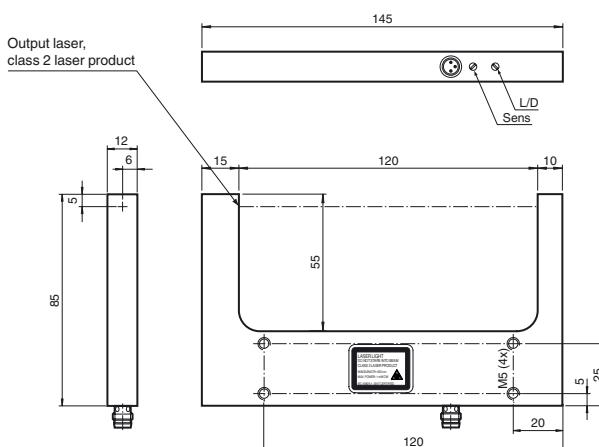
Electrical connection

Option: 32/40a
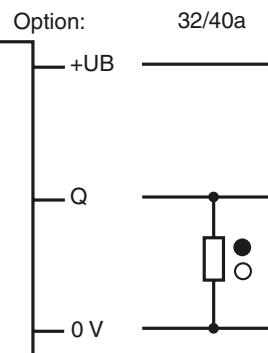
○ = Light on
● = Dark on

Pinout
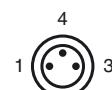
Indicators/operating means
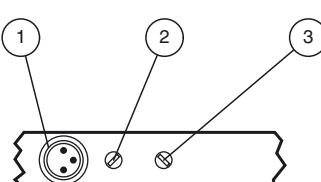
1	Functional display	yellow
2	Sensitivity adjuster	
3	Light-/dark switch	

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS
SENSING YOUR NEEDS

1

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		120 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

LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

WAVELENGTH: 650 nm
MAX. POWER: 1 mW CW

IEC 60825-1: 2007 CERTIFIED

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

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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