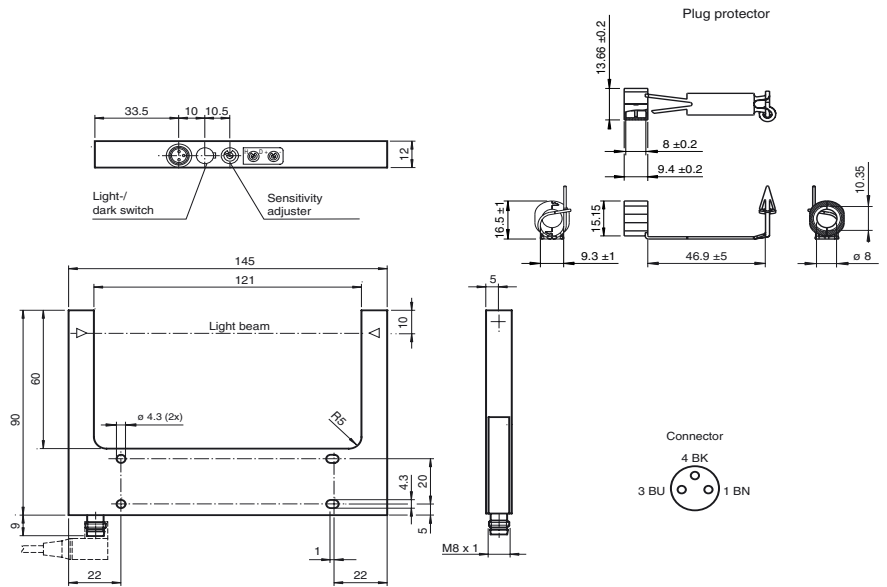




Dimensions



Model Number

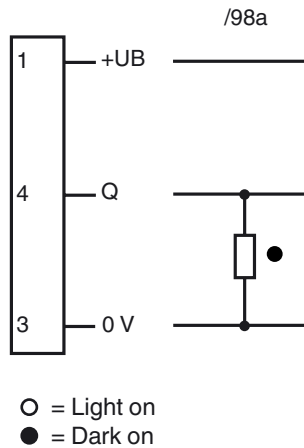
GL121-IR-EX2/32/40a/98a

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

Features

- ATEX-approval for zone 2
- Optimized for the detection of small parts
- High switching frequency
- Sensitivity adjuster and light/dark switch as standard features of this series
- Infrared light
- Protection degree IP67
- Diecast zinc housing, powder coated

Electrical connection



Pinning according



Release date: 2011-08-30 14:02 Date of issue: 2011-08-30 200898_eng.xml

Subject to modifications without notice

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Technical data**General specifications**

Light source	IRED
Light type	modulated infrared light
Approvals	CE
Tests	EN 60947-5-2 EN 60079-15 IEC 60079-0 IEC 60079-28 94/9/EG
Marking	⊕ II 3G Ex op is nA IIC T6 Gc X
Target size	0.3 mm
Fork width	121 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 display	LED red in connector
Controls	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 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

Ambient conditions

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

Mechanical specifications

Protection degree	IP67
Connection	M8 connector, 3-pin
Material	
Housing	powder coated diecast zinc
Optical face	glass
Mass	295 g

General information

Use in the hazardous area	see more details for the use in hazardous areas
Category	3G

Approvals and certificates

CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.
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ATEX 3G

Details for use in hazardous areas	Electrical apparatus for potentially explosive atmospheres
Device category 3G	for use in hazardous areas with gas, vapour and mist
Marking	⊕ II 3G Ex op is nA IIC T6 Gc X
General	The apparatus has to be operated according to the appropriate data in the data sheet and in this description. The special conditions must be adhered to.
Installation, Commissioning	Laws and/or regulations and standards governing the use or intended usage goal must be observed. Electrostatic charges on the sensor must be avoided.
Maintenance	No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.
Special conditions	
Maximum permissible ambient temperature	60 °C (140 °F)
Plug connector	The plug connector must not be disconnected under voltage. When the plug connector is disconnected the ingress of dirt into the inner areas (i.e. the areas, which are not accessible in the plugged-in condition) must be prevented. The plug connection can only be separated using a tool. This is achieved by using the unlocking protection "Plug protector" (Mounting accessory from Pepperl + Fuchs).
Protection from mechanical danger	The sensor must be provided with additional protection against mechanical damage (resistance to shock and impact).
Protection from UV light	The apparatus must be protected from damaging UV radiation. This can be achieved by mounting in an indoor area.
Protection of the connection cable	The connection cable and the plug connector must be protected from excessive and unintentional tensile and compressive loading.