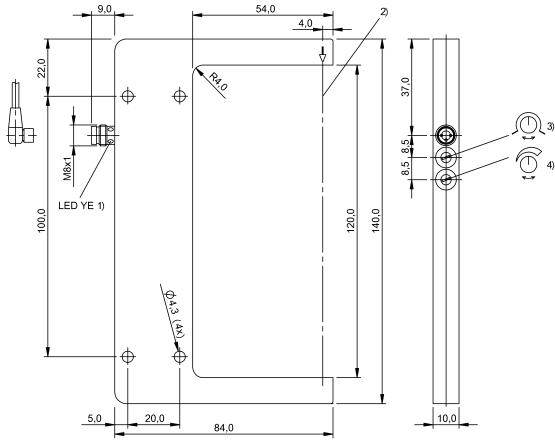
## Photoelectric Sensors BGL 120A-001-S49 Order Code: BGL0007

# BALLUFF



1) Output function, 2) Optical axis, 3) Light-on/dark-on, 4) Sensitivity





CE UKCA

#### **Basic features**

# Approval/Conformity Basic standard Principle of operation Series

#### cULus WEEE IEC 60947-5-2 Fork sensor A Fork Straight connection Global

#### **Electrical connection**

Connection	Connector, M8x1-Male, 3-pin	
Contact, surface protection	Gold plated	
Polarity reversal protected	yes	
Protection against device mix-ups	yes	
Short-circuit protection	yes	

#### **Display/Operation**

Style

Trademark

Adjuster	
Display	
Setting	

Potentiometer 270° (2x) Output function- LED yellow Sensitivity Light-on/dark-on

# **Photoelectric Sensors** BGL 120A-001-S49 Order Code: BGL0007



Electrical data		Interface	
Load capacitance max. at Ue	1 µF	Switching output	PNP normally open/normally
No-load current lo max. at Ue	35 mA		closed (NO/NC)
Operating voltage Ub	1030 VDC		
Rated insulation voltage Ui	75 V DC	Material	
Rated operating current le	200 mA	Housing material	Zinc, Die casting, Painted
Rated operating voltage Ue DC	24 V	Material sensing surface	Glass
Ready delay tv max.	200 ms	Surface protection	Painted
Residual current Ir max.	50 μΑ	Surface protection	Fainteu
Ripple max. (% of Ue)	10 %	March 1997 and also to	
Switching frequency	1500 Hz	Mechanical data	
Turn-off delay toff max.	0.333 ms	Dimension	10 x 140 x 93 mm
Turn-on delay ton max.	0.333 ms	Fork opening	120 mm
Jtilization category	DC -13	Mounting part	Screw M4
/oltage drop Ud max. at le	3 V		
		Optical features	
Environmental conditions		Ambient light max.	5000 Lux
Ambient temperature	-1060 °C	Beam characteristic	Divergent
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6	Light spot size	Ø 2.5 mm Light exit
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min	Light type	LED, red light
P rating	IP67	Principle of optical operation	Through-beam sensor
		Smallest part typ.	0.50 mm
-unctional safety		Switching function, optical	dark-on/light-on
MTTF (40 °C)	307 a	Wave length	636 nm
	667 d		
		Range/Distance	
		Hysteresis H max.	0.2 mm
		Repeat accuracy lateral max.	80 µm

#### Remarks

Order accessories separately.

For additional information, refer to user's guide.

Factory default setting for switching output: Normally open.

Reference object (target): Steel plate, 50 x 50, thickness 0.5 mm, lateral approach.

The sensor is functional again after the overload has been eliminated.

Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

### **Connector Drawings**



# Photoelectric Sensors BGL 120A-001-S49 Order Code: BGL0007



Wiring Diagrams

Opto Symbols

--