

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



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Fork sensor
Series	A
Style	Fork Straight connection
Trademark	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

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

Photoelectric Sensors
BGL 10A-001-S49
Order Code: BGL0001

BALLUFF

Electrical data

Load capacitance max. at Ue	0.5 μ F
No-load current I _o max. at Ue	25 mA
Operating voltage U _b	10...30 VDC
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	200 ms
Residual current I _r max.	50 μ A
Ripple max. (% of U _e)	10 %
Switching frequency	3000 Hz
Turn-off delay t _{off} max.	0.167 ms
Turn-on delay t _{on} max.	0.167 ms
Utilization category	DC -13
Voltage drop U _d max. at I _e	3 V

Environmental conditions

Ambient temperature	-10...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	PNP normally open/normally closed (NO/NC)
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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.

Material

Housing material	Zinc, Die casting, Painted
Material sensing surface	Glass
Surface protection	Painted

Mechanical data

Dimension	10 x 30 x 54 mm
Fork opening	10 mm
Mounting part	Screw M4

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light spot size	Ø 1.2 mm Light exit
Light type	LED, red light
Principle of optical operation	Through-beam sensor
Smallest part typ.	0.30 mm
Switching function, optical	dark-on/light-on
Wave length	636 nm

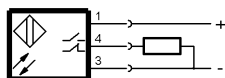
Range/Distance

Hysteresis H max.	0.1 mm
Repeat accuracy lateral max.	20 μ m

Connector Drawings



Wiring Diagrams



Opto Symbols

