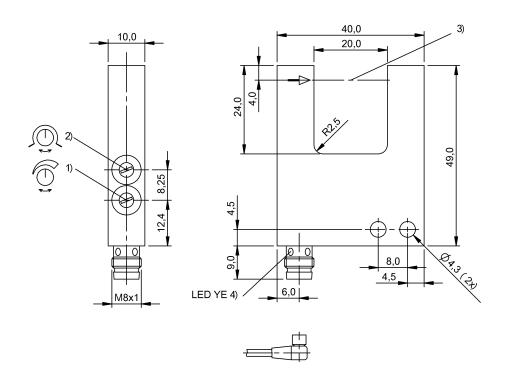
BALLUFF



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









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

Display/Operation

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

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

Photoelectric Sensors

BGL 20A-002-S49

Order Code: BGL000T



Electrical data

Load capacitance max. at Ue	1 μF
No-load current lo max. at Ue	35 mA
Operating voltage Ub	1030 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current le	200 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	200 ms
Residual current Ir max.	50 μΑ
Ripple max. (% of Ue)	10 %
Switching frequency	1500 Hz
Turn-off delay toff max.	0.333 ms
Turn-on delay ton max.	0.333 ms
Utilization category	DC -13
Voltage drop Ud max. at le	2.5 V

Interface

Switching output	NPN normally open/normally
	closed (NO/NC)

Material

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

Mechanical data

Dimension	10 x 40 x 58 mm
Fork opening	20 mm
Mounting part	Screw M4

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light spot size	Ø 1.0 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
Danga (Diatanaa	

Functional safety

Ambient temperature EN 60068-2-27, Shock

EN 60068-2-6, Vibration

IP rating

Environmental conditions

MTTF (40 °C) 316 a

Range/Distance

Hysteresis H max.	0.1 mm
Repeat accuracy lateral max	20 um

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.

-10...60 °C

IP67

Half-sinus, 30 g_n, 11 ms, 3x6

55 Hz, amplitude 1 mm, 3x30 min

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 20A-002-S49
Order Code: BGL000T



Wiring Diagrams
$ \begin{array}{c} 1 \\ 4 \\ 3 \end{array} $
Opto Symbols