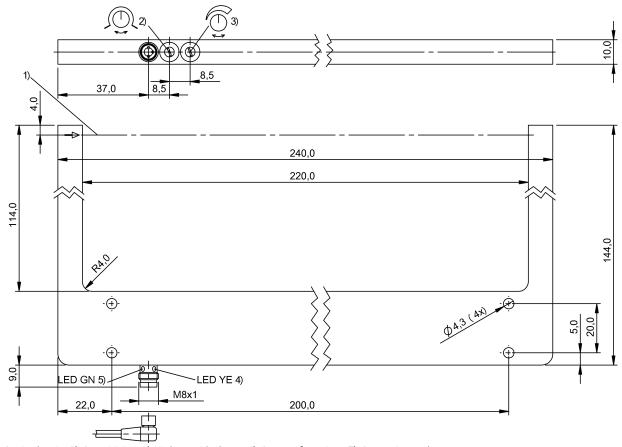
BALLUFF



1) Optical axis, 2) Sensitivity, 3) Light-on/dark-on, 4) Output function, 5) Operating voltage









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

Display/Operation

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

Electrical connection

Subject to change without notice: 158438

Connection Connector, M8x1-Male, 3-pin Gold plated Contact, surface protection Polarity reversal protected yes Short-circuit protection yes

Photoelectric Sensors

BGL 220A-007-S49 Order Code: BGL0014



Electrical data

Load capacitance max. at Ue 1μF No-load current lo max. at Ue 35 mA 10...30 VDC Operating voltage Ub Rated insulation voltage Ui 75 V DC Rated operating current le 200 mA 24 V Rated operating voltage Ue DC 200 ms Ready delay tv max. Residual current Ir max. 50 µA Ripple max. (% of Ue) 10 % Switching frequency 2000 Hz Turn-off delay toff max. 0.25 ms Turn-on delay ton max. 0.25 ms Utilization category DC -13 Voltage drop Ud max. at le 3 V

Interface

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

Material

Housing materialZinc, Die casting, PaintedMaterial sensing surfaceGlassSurface protectionPainted

Mechanical data

 Dimension
 10 x 240 x 153 mm

 Fork opening
 220 mm

 Mounting part
 Screw M4

Optical features

Ambient light max. 5000 Lux Beam characteristic Divergent Light spot size Ø 2.5 mm Light exit Light type Infrared Principle of optical operation Through-beam sensor Smallest part typ. 1.50 mm Switching function, optical dark-on/light-on Wave length 880 nm

Range/Distance

Hysteresis H max. 0.5 mm Repeat accuracy lateral max. 200 µm

Functional safety MTTF (40 °C)

Ambient temperature

EN 60068-2-27, Shock

IP rating

EN 60068-2-6, Vibration

TF (40 °C) 300 a

Environmental conditions

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 220A-007-S49 Order Code: BGL0014



| Wiring Diagrams |
|-----------------|
| |
| |
| Opto Symbols |
| |