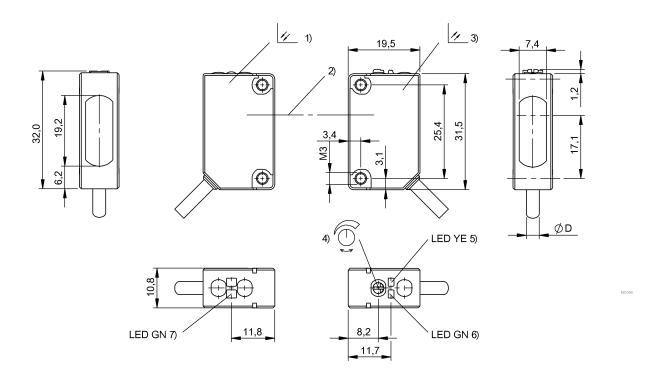
BALLUFF



1) Emitter, 2) Optical axis, 3) Receiver, 4) Sensitivity, 5) Output function, 6) stability, 7) Operating voltage







US 31MY
for use in the secondary of
a class 2 source of supply

Display/Operation

Adjuster Potentiometer 270° Output function- LED yellow Display LED green: Power Stability - LED green Setting Sensitivity (Sn)

Electrical connection

Cable diameter D 3.50 mm Cable length L 2 m Conductor cross-section 0.20 mm² Connection Cable, 2.00 m, PVC Number of conductors 3 2 Polarity reversal protected yes Short-circuit protection yes

Electrical data

10...30 VDC Operating voltage Ub Rated operating current le 100 mA Rated operating voltage Ue DC 24 V Ready delay tv max. 100 ms Ripple max. (% of Ue) 10 % 500 Hz Switching frequency Turn-off delay toff max. 1 ms Turn-on delay ton max. 1 ms Voltage drop Ud max. at le 2 V

Environmental conditions

-25...55 °C Ambient temperature EN 60068-2-27, Shock Half-sinus, 50 gn, 11 ms, 3x10 EN 60068-2-6, Vibration 10...55 Hz, amplitude 0.75 mm, 3x20 min IP rating IP67 **Functional safety**

MTTF (40 °C) 44 a

Photoelectric Sensors

BOS 5K-PO-IX10-02 Order Code: BOS011N



General data

Approval/Conformity cULus CE EAC WEEE

IEC 60947-5-2 Basic standard Principle of operation Photoelectric sensor

Series Square Style

Trademark Global

Material

Housing material PC PBT Material jacket **PVC** Material sensing surface PMMA

Connection 45°

Rated operating distance Sn 20 m Adjustable

Remarks

Order accessories separately.

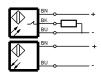
For additional information, refer to user's guide.

Actuation object (target): gray card, 200 x 200, lateral approach.

For further information about the 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.

Wiring Diagrams



Opto Symbols





Mechanical data

Dimension 10.8 x 32.7 x 19.5 mm

Mounting Screw M3

Optical data

Ambient light max. 5000 Lux Light type Infrared

Principle of optical operation Through-beam sensor

Light-on Switching function, optical Wave length 880 nm

Output/Interface

Switching output PNP normally closed (NC)

Range/Distance

Range 0...20 m

2/2