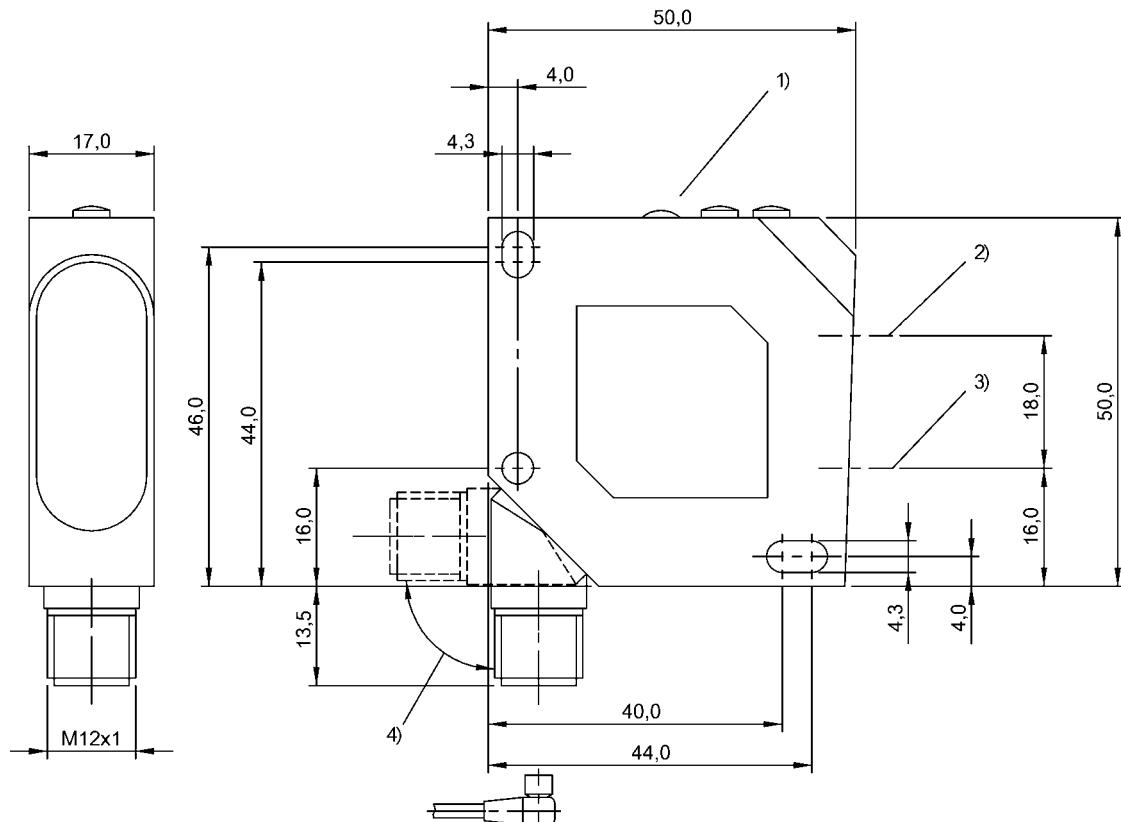


Photoelectric Sensors
BOS 26K-PA-1IE-S4-C
Order Code: BOS008A

BALLUFF



1) Display and control panel, 2) Optical axis receiver, 3) Optical axis emitter, 4) rotatable 270°



Basic features

| | |
|------------------------|-------------------------------------|
| Approval/Conformity | cULus CE UKCA WEEE |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Photoelectric sensor |
| Series | 26K |
| Style | Square Connection can be rotated |

Display/Operation

| | |
|----------|---|
| Adjuster | 2-turn potentiometer |
| Display | Output function- LED yellow Error - LED red Switching dist. - dig. disp. Stability - LED green |
| Setting | Rated switching distance (Sn) |

Electrical connection

| | |
|-----------------------------|------------------------------|
| Connection | Connector, M12x1-Male, 4-pin |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|--|-------------|
| Load capacitance max. at Ue | 1 μ F |
| No-load current I ₀ max. at Ue | 70 mA |
| Operating voltage U _b | 10...30 VDC |
| Protection class | II |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e | 200 mA |
| Rated operating voltage U _e DC | 24 V |
| Ripple max. (% of Ue) | 10 % |
| Switching frequency | 800 Hz |
| Turn-off delay t _{off} max. | 0.63 ms |
| Turn-on delay t _{on} max. | 0.63 ms |
| Utilization category | DC -13 |
| Voltage drop U _d max. at I _e | 2.4 V |

Environmental conditions

| | |
|-------------------------|--|
| Ambient temperature | -20...60 °C |
| EN 60068-2-27, Shock | Half-sinus, 30 g _n , 11 ms, 3x6 |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 0.5 mm, 3x30 min |
| IP rating | IP67 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 214 a |
|--------------|-------|

Interface

| | |
|------------------|---|
| Switching output | PNP normally closed (NC) PNP normally open (NO) Pins 4-2 |
|------------------|---|

Material

| | |
|--------------------------|------|
| Housing material | ABS |
| Material sensing surface | PMMA |

Mechanical data

| | |
|---------------|-----------------|
| Dimension | 17 x 50 x 50 mm |
| Mounting part | Screw M4 |

Optical features

| | |
|--------------------------------|-------------------------------|
| Ambient light max. | 5000 Lux |
| Light spot size | 20 x 20 mm at 400 mm |
| Light type | Infrared |
| Principle of optical operation | Diffuse sensor, triangulation |
| Special optical feature | Background suppression |
| Switching function, optical | Light-on dark-on |
| Wave length | 880 nm |

Range/Distance

| | |
|--|-------------------|
| Distance deviation 18 % max. (% of Sr) | 8 % on 90 % rem. |
| Hysteresis H max. (% of Sr) | 5.0 % |
| Range | 150...600 mm |
| Rated operating distance Sn | 600 mm Adjustable |

Remarks

Order accessories separately.

For additional information, refer to user's guide.

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

Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

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.

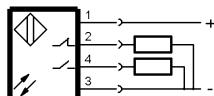
For more information about MTTF and B10d see MTTF / B10d Certificate

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



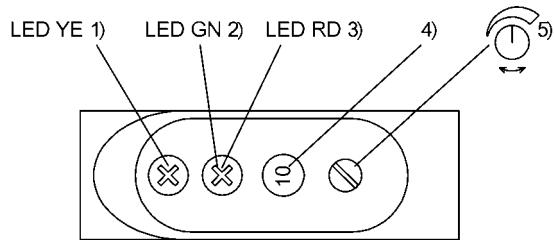
Wiring Diagrams



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Help Views



- 1) Output function
- 2) Stability
- 3) Error
- 4) Switching dist. dig. displ.
- 5) Sensitivity

Opto Symbols

