

1) Operating voltage, 2) Optical axis



Basic features

| | |
|------------------------|--------------------------|
| Approval/Conformity | cULus CE WEEE |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Photoelectric sensor |
| Reference receiver | BOS 6K-...-LE10-... |
| Series | 6K |
| Style | Square Connection 90° |

Display/Operation

| | |
|---------|------------------|
| Display | LED green: Power |
|---------|------------------|

Electrical connection

| | |
|-----------------------------------|-----------------------------|
| Connection | Connector, M8x1-Male, 3-pin |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |

Electrical data

| | |
|-------------------------------------|-------------|
| No-load current I_0 max. at U_e | 30 mA |
| Operating voltage U_b | 10...30 VDC |
| Rated operating voltage U_e DC | 24 V |
| Ripple max. (% of U_e) | 12 % |

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 |
| IP rating per DIN 40050 | IP69K |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 426 a |
|--------------|-------|

Material

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

Mechanical data

| | |
|---------------|-------------------|
| Dimension | 12 x 41 x 21.6 mm |
| Mounting part | Screw M3 |

Photoelectric Sensors
BOS 6K-XT-LS10-S49
Order Code: BOS01M1

BALLUFF

Optical features

| | |
|--------------------------------|-------------------------------|
| Average power P_o max. | 390 μ W |
| Beam characteristic | Divergent |
| Laser class per IEC 60825-1 | 1 |
| Light spot size | 14 x 14 mm at 20 m |
| Light type | Laser red light |
| Principle of optical operation | Through-beam sensor (Emitter) |
| Pulse duration t max. | 2.0 μ s |

| | |
|------------------------|----------|
| Pulse frequency | 13.3 kHz |
| Pulse power P_p max. | 4.2 mW |
| Wave length | 650 nm |

Range/Distance

| | |
|--------------------------------|-----------------|
| Range | 0...18 m |
| Rated operating distance S_n | 18 m Adjustable |

Remarks

When using as a UL product the ambient temperature T_a max. must not exceed 50°C.

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 additional information, refer to user's guide.

Order accessories separately.

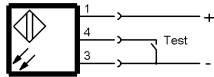
For more information about MTTF and B10d see MTTF / B10d Certificate

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



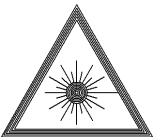
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER CLASS 1 per IEC 60825-1