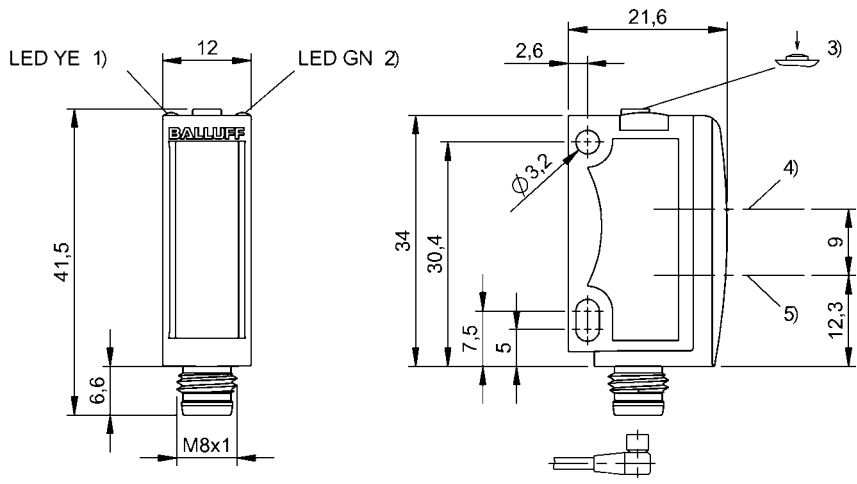


Photoelectric Sensors
BOS 6K-PU-LE10-S49
Order Code: BOS01LU



1) Output function, 2) Operating voltage, 3) Sensitivity, light/dark, 4) Optical axis



Basic features

| | |
|------------------------|--------------------------|
| Approval/Conformity | CE cULus WEEE |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Photoelectric sensor |
| Reference emitter | BOS 6K-.-LS10-.. |
| Series | 6K |
| Style | Square Connection 90° |

Electrical data

| | |
|-------------------------------------|-------------|
| No-load current I_o max. at U_e | 30 mA |
| Operating voltage U_b | 10...30 VDC |
| Rated operating current I_e | 100 mA |
| Rated operating voltage U_e DC | 24 V |
| Ripple max. (% of U_e) | 12 % |
| Switching frequency | 2000 Hz |
| Turn-off delay t_{off} max. | 0.25 ms |
| Turn-on delay t_{on} max. | 0.25 ms |
| Voltage drop U_d max. at I_e | 2.4 V |

Display/Operation

| | |
|----------|---|
| Adjuster | button |
| Display | Output function- LED yellow LED green: Power |
| Setting | Teach mode Stand./Dyn. Sensitivity (S_n) Light-on/dark-on |

Environmental conditions

| | |
|-------------------------|--|
| Ambient temperature | -20...60 °C |
| EN 60068-2-27, Shock | Half-sinus, 30 g_r , 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 |

Electrical connection

| | |
|-----------------------------|-----------------------------|
| Connection | Connector, M8x1-Male, 3-pin |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 519 a |
|--------------|-------|

Interface

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

Material

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

Mechanical data

| | |
|---------------|---------------------|
| Dimension | 12 x 41.5 x 21.6 mm |
| Mounting part | Screw M3 |

Optical features

| | |
|--------------------------------|--------------------------------|
| Ambient light max. | 5000 Lux |
| Laser class per IEC 60825-1 | 1 |
| Light type | Laser red light |
| Principle of optical operation | Through-beam sensor (receiver) |
| Switching function, optical | dark-on/light-on |

Range/Distance

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

Remarks

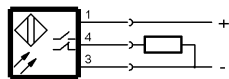
When using as a UL product the ambient temperature Ta max. must not exceed 50°C.
Do not press key using a pointed tool.
Order accessories separately.
For additional information, refer to user's guide.
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.
Actuation object (target): gray card, 200 x 200, lateral approach.
The sensor is functional again after the overload has been eliminated.
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

