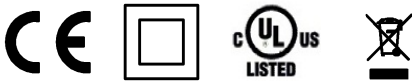


1) Display and control panel, 2) Optical axis receiver, 3) Optical axis emitter, 4) rotatable 270°



### Basic features

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

### Display/Operation

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

### Electrical connection

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

### Electrical data

|  |             |
|--|-------------|
| <b>No-load current <math>I_0</math> max. at <math>U_e</math></b> | 50 mA       |
| <b>Operating voltage <math>U_b</math></b>                        | 10...30 VDC |
| <b>Protection class</b>  | II          |
| <b>Rated insulation voltage <math>U_i</math></b>                 | 75 V DC     |
| <b>Rated operating current <math>I_e</math></b>                  | 200 mA      |
| <b>Rated operating voltage <math>U_e</math> DC</b>               | 24 V        |
| <b>Ripple max. (% of <math>U_e</math>)</b>                       | 10 %        |
| <b>Switching frequency</b>                                       | 2500 Hz     |
| <b>Turn-off delay <math>t_{off}</math> max.</b>                  | 0.2 ms      |
| <b>Turn-on delay <math>t_{on}</math> max.</b>                    | 0.2 ms      |
| <b>Utilization category</b>                                      | DC -13      |
| <b>Voltage drop <math>U_d</math> max. at <math>I_e</math></b>    | 2.4 V       |

Photoelectric Sensors  
**BOS 26K-PS-1LHC-S4-C**  
**Order Code: BOS008R**



**Environmental conditions**

|                                |  |
|--------------------------------|--|
| <b>Ambient temperature</b>     | -20...45 °C                                |
| <b>EN 60068-2-27, Shock</b>    | Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6 |
| <b>EN 60068-2-6, Vibration</b> | 10...55 Hz, amplitude 0.5 mm, 3x30 min     |
| <b>IP rating</b>               | IP67                                       |

**Functional safety**

|                     |     |
|---------------------|-----|
| <b>MTTF (40 °C)</b> | 9 a |
|---------------------|-----|

**Interface**

|  |                                 |
|--|---------------------------------|
| <b>Supplementary output</b>                  | Error output PNP                |
| <b>Switch function, supplementary output</b> | Normally closed (NC)            |
| <b>Switching output</b>                      | 2x PNP normally open (NO) Pin 4 |

**Material**

|                                 |      |
|---------------------------------|------|
| <b>Housing material</b>         | ABS  |
| <b>Material sensing surface</b> | PMMA |

**Mechanical data**

|                      |                 |
|----------------------|-----------------|
| <b>Dimension</b>     | 17 x 50 x 50 mm |
| <b>Mounting part</b> | Screw M4        |

**Optical features**

|   |                               |
|---|-------------------------------|
| <b>Ambient light max.</b>               | 5000 Lux                      |
| <b>Average power P<sub>o</sub> max.</b> | 1 mW                          |
| <b>Laser class per IEC 60825-1</b>      | 2                             |
| <b>Light type</b>                       | Laser red light               |
| <b>Principle of optical operation</b>   | Diffuse sensor, triangulation |
| <b>Pulse duration t max.</b>            | 10.0 µs                       |
| <b>Pulse frequency</b>                  | 14 kHz                        |
| <b>Pulse power P<sub>p</sub> max.</b>   | 4.8 mW                        |
| <b>Special optical feature</b>          | Background suppression        |
| <b>Switching function, optical</b>      | Light-on                      |
| <b>Wave length</b>                      | 670 nm                        |

**Range/Distance**

|   |                   |
|---|-------------------|
| <b>Distance deviation 18 % max. (% of Sr)</b> | 5 % on 90 % rem.  |
| <b>Range</b>                                  | 50...300 mm       |
| <b>Rated operating distance S<sub>n</sub></b> | 300 mm Adjustable |

**Remarks**

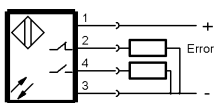
Order accessories separately.  
 For additional information, refer to user's guide.  
 The sensor is functional again after the overload has been eliminated.  
 Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.  
 Only for applications per NFPA 79 (machines with a supply 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.

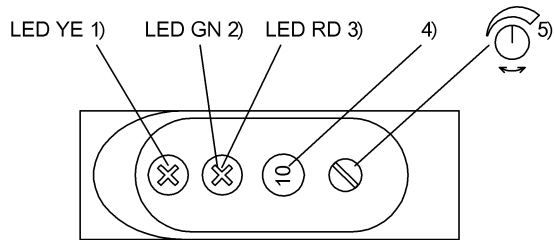
**Connector Drawings**



**Wiring Diagrams**



## Help Views

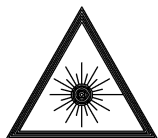


- 1) Output function
- 2) Stability
- 3) Error
- 4) Switching dist. dig. displ.
- 5) Sensitivity

## Opto Symbols



## Warning Symbols



LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!

LASER CLASS 2 per IEC60825-1: 2003-10