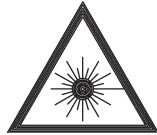
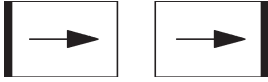
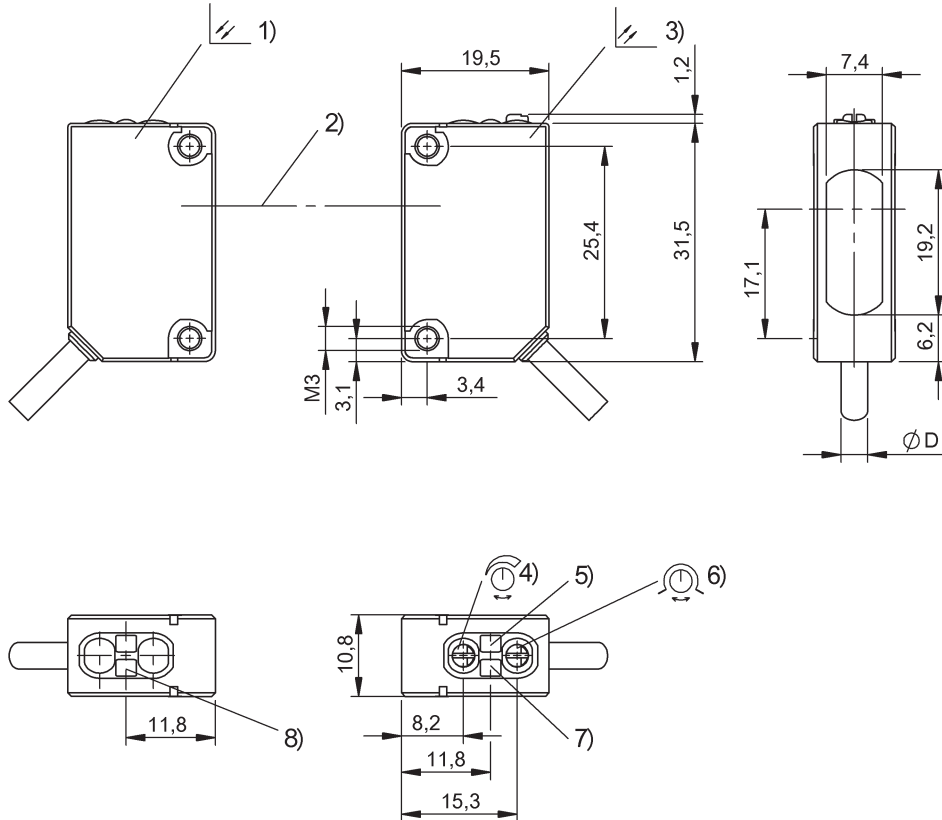


Photoelectric sensor

BOS 5K-NU-LX10-02
BOS01JL



LASER CLASS 1 per IEC 60825-1:
2003-10



1) Emitter 2) Optical axis 3) Receiver 4) Sensitivity 5) Output function 6) Light-on / Dark-on 7) Stability 8) Power

- Photoelectric sensor
- Series 5K
- Laser red light
- up to 50 m



General attributes

Adjuster Potentiometer 270° (2x)
Approvals / Conformity cULus
CE
CDRH
Basic standard IEC 60947-5-2
Enclosure Type per IEC 60529 IP67
Indicator Power - LED GN
Output function - LED YE
Stability - LED GN
Polarity reversal protected yes
Series Series 5K
Setting Light-on/dark-on
Sensitivity (Sn) Sensitivity (Sn)
Short circuit protected yes
Trademark GLOBAL

Electrical attributes

Connection type Cable
Eff. operating current I_e 100 mA
Eff. operating voltage U_e DC 24.0 V
Electrical version DC, direct current
No-load current max. I_o at U_e 45 mA
Operating voltage U_B max. DC [V] 30.0 V
Operating voltage U_B min. DC [V] 10.0 V
Ripple max. (% of U_e) 10 %
Switching freq. f max. (at U_e) 2000 Hz

Switching function NO/NC
Switching output NPN (1x)
Turn on time t_{on} max. 0.25 ms
Voltage drop U_d max. (at I_e) 1.5 V

Mechanical attributes

Ambient temperature T_a max. 55 °C
Ambient temperature T_a min. -10 °C
Cable diameter D max. 3.5 mm
Cable jacket material PVC
Cable length 2.00 m
Conductor cross-section 0.20 mm²
Eff. operating distance S_r 30000 mm
Housing material PC, PBT
Length 1 10.8 mm
Length 2 19.5 mm
Length 3 26.8 mm
Mounting type Screw M3
Number of conductors 3
2
Operating range R_o 0...30 m
Range S_n S_n = 30 m, adjustable
Sensing face material PMMA
Style Block, 45° connection
Tightening torque max. 0.5 Nm

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Optical attributes

Ambient light max.	5,000 Lux
Average power Po max.	< 390 µW (IEC 60825-1)
Laser Class per IEC 60825-1	1
Light spot size, typical	Ø5 mm at 3 m
Light type	Laser red light
Principle of optical operation	Through-beam
Switching function, optical	NO/NC: dark-on/light-on
Wavelength	650 nm

Additional text

Order accessories separately.
For additional information, refer to user's guide.
Operating object (test target): Gray card, 200 x 200, lateral approach
For use as UL listed product the Ambient temperature Ta max. may not exceed the value of 50°C.
To meet EMC requirements according EN 60947-5-2 the mounting bracket must not be grounded.

