

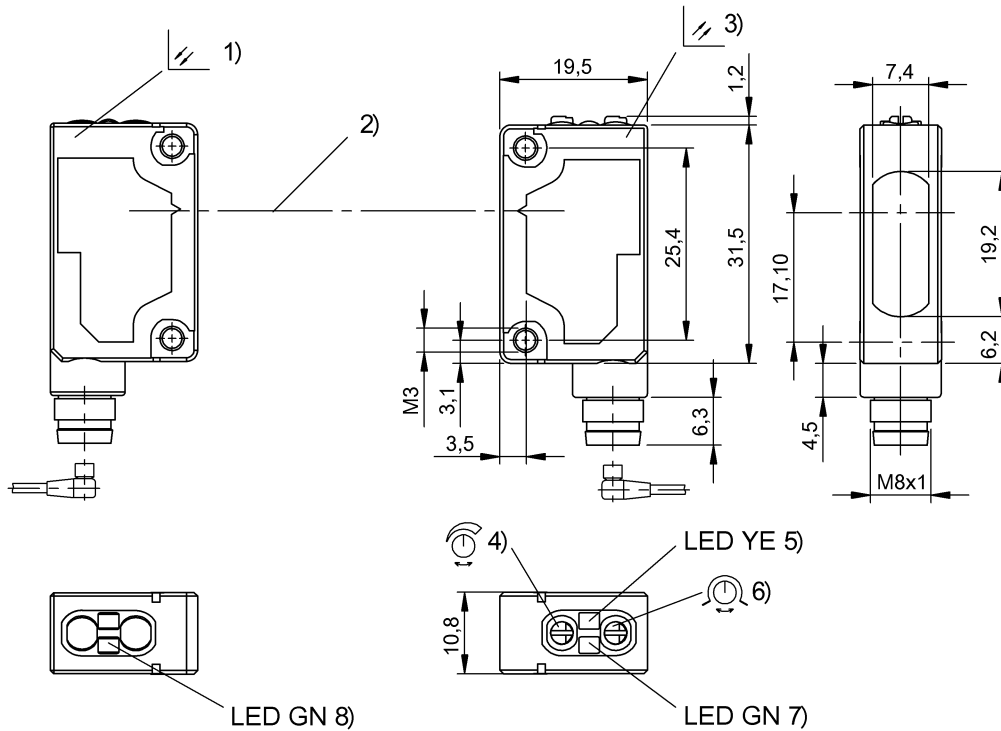
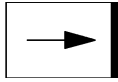
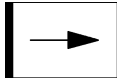
BOS 5K-NU-LX10-S75
Ordering code: BOS01JN

Through-beam sensor
 Series 5K
 Working Range: 0...30 mm

NPN (1x), antivalent
Laser red light, Laserklasse 1
DC, direct current

BALLUFF

sensors worldwide



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

Characteristic data

Operating voltage	10...30 V DC
Connection	Connector, M8x1-S75
Switching freq. f max.	2000 Hz
Indicator	Stability - LED GN
Setting	Sensitivity (Sn), Light-on/dark-on
Adjuster	Potentiometer 270° (2x)
Short-circuit protected	yes
Protected against polarity reversal	yes
Enclosure Type per IEC 60529	IP67

Optical data

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

Electrical data

Rated operating voltage Ue DC	24.0 V
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Effective operating current Ie	100 mA
Ripple max. (% of Ue)	10
Switching output	NPN (1x)
Switching function	NO/NC
Turn-off delay toff max.	0,25 ms
Turn-on delay ton max.	0,25 ms
No-load current max. Io at Ue	45 mA
Voltage drop Ud max. (at Ie)	1,5 V

Mechanical data

Eff. switching distance Sr	30.000 mm
Operating range Ro	0...30 m
Beam characteristic	Divergent
Range Sn	Sn = 30 m, adjustable
Connector type	M8x1-S75
Sensing surface material	PMMA
Housing material	PC, PBT
Mounting type	Screw M3
Design	Block, 90° connection
Ambient temperature	-10...55 °C

Basic data

Basic standard	IEC 60947-5-2
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Operating object (test target): Gray card, 200 x 200, lateral approach
 To meet EMC requirements according to EN 60947-5-2 the mounting bracket must not be grounded.
 Only for NFPA 79 applications (machines with a supply voltage of maximum 600 volts). Device shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.
 For additional information, refer to user's guide.
 Order accessories separately.
 For use as UL listed product the Ambient temperature T_a max. may not exceed the value of 50°C.

