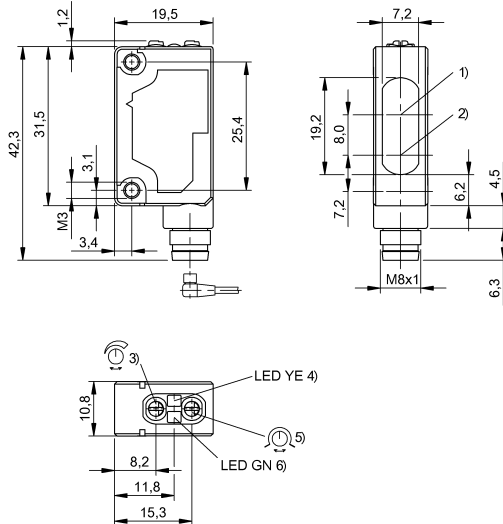
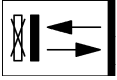


**BOS 5K-PU-LH12-S75**  
**Ordering code: BOS01JK**

Diffuse sensor  
 Series 5K  
 Working Range: 20...300 mm

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

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1) Optical axis receiver, 2) Optical axis emitter, 3) Sn, 4) Output function, 5) Light-on / Dark-on, 6) Stability

**Characteristic data**

Operating voltage	10...30 V DC
Connection	Connector, M8x1-S75
Switching freq. f max.	2000 Hz
Short-circuit protected	yes
Protected against polarity reversal	yes
Enclosure Type per IEC 60529	IP67
Indicator	Output function - LED YE Stability - LED GN
Adjuster	Potentiometer 270° (1x)/Potentiometer 6-turn (1x)
Setting	Light-on/dark-on Switching distance (Sn)

Turn-on delay ton max.	0,25 ms
No-load current max. Io at Ue	35 mA
Voltage drop Ud max. (at Ie)	1,5 V

**Mechanical data**

Eff. switching distance Sr	300 mm
Capture range Sd	20...300 mm
Beam characteristic	Focus typ. at 260 mm
Range Sn	Sn = 300 mm, adjustable
Minimum operating distance	20 mm
Dist. dev. 18% max. (% of Sr)	8 %
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

**Optical data**

Principle of optical operation	Light scanner, triangulation
Switching function, optical	NO/NC: light-on/dark-on
Light spot size, typical	0.2 mm x 0.3 mm at focal point
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)
Optical special feature	Background suppression

**Basic data**

Basic standard	IEC 60947-5-2
The sensor is functional again after the overload has been eliminated.	
Reference object (target): Gray card, 100 x 100 90 % remission, axial approach.	
To meet EMC requirements according 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 Ta max. may not exceed the value of 50°C.	

**Electrical data**

Rated operating voltage Ue DC	24,0 V
Effective operating current Ie	100 mA
Ripple max. (% of Ue)	10
Switching output	PNP (1x)
Switching function	NO/NC
Turn-off delay toff max.	0,25 ms

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