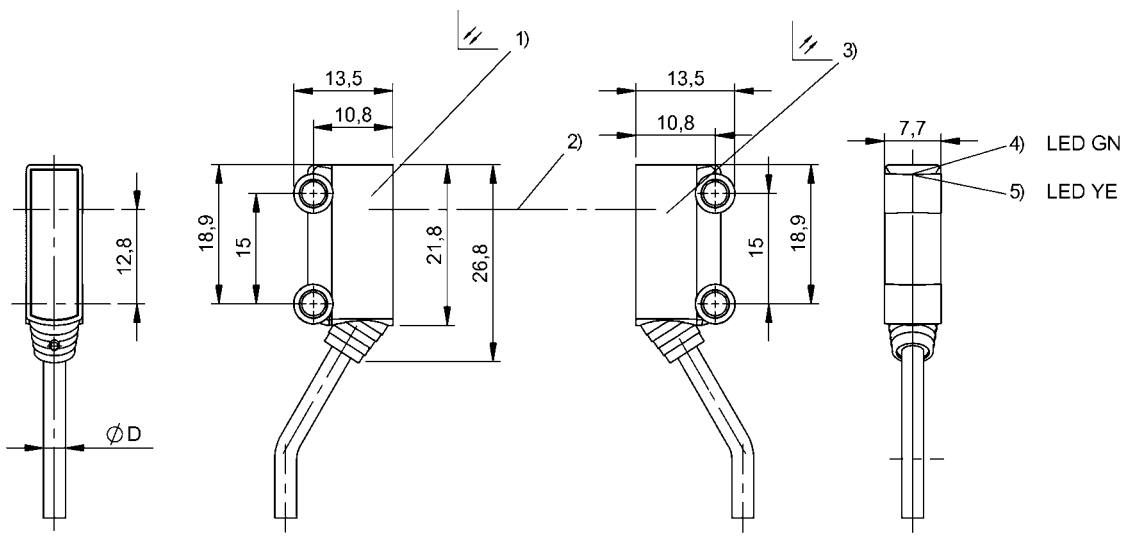


Photoelectric Sensors
BOS R020K-PS-RX11-02
Order Code: BOS0211



1) Emitter, 2) Optical axis, 3) Receiver, 4) Operating voltage, 5) Output function



Basic features

Approval/Conformity	cULus
	CE
	WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	R020K
Style	Square
	Connection 60°

Electrical connection

Cable diameter D	2.40 mm
Cable length L	2 m
Conductor cross-section	0.20 mm ²
Connection	Cable, 2.00 m, PVC
Number of conductors	2
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Display/Operation

Display	LED green: Power
	LED yellow: Light received

Electrical data

Operating voltage U _b	10...30 VDC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	100 ms
Ripple max. (% of U _e)	10 %
Switching frequency	800 Hz
Turn-off delay t _{off} max.	0.63 ms
Turn-on delay t _{on} max.	0.63 ms
Voltage drop U _d max. at I _e	2 V

Environmental conditions

Ambient temperature	-25...55 °C
IP rating	IP67

Functional safety

MTTF (40 °C)	2659 a
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Interface

Switching output	PNP normally open (NO)
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Material

Housing material	PC PBT
Material jacket	PVC
Material sensing surface	PMMA

Mechanical data

Dimension	7.7 x 26.8 x 13.5 mm
Mounting part	Screw M3

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light spot size	Ø 23 mm at 500 mm
Light type	LED, red light
Principle of optical operation	Through-beam sensor
Switching function, optical	dark-on
Wave length	660 nm

Range/Distance

Range	0...2 m
Rated operating distance Sn	2 m

Remarks

Actuation object (target): gray card, 200 x 200, lateral approach.

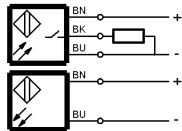
For additional information, refer to user's guide.

Order accessories separately.

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.

Wiring Diagrams



Opto Symbols

