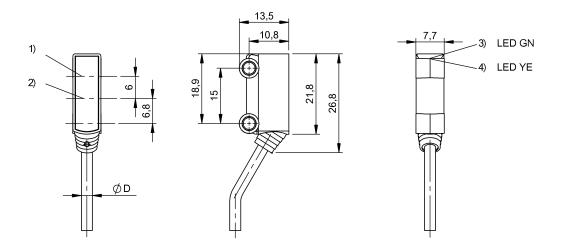
# BOS R020K-NS-RF12-02

**Order Code: BOS0215** 





1) Optical axis receiver, 2) Optical axis emitter, 3) Operating voltage, 4) Light reception









### **Basic features**

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

## Display/Operation

Display	LED green: Power
	LED yellow: Light received

### **Electrical connection**

Cable diameter D	2.40 mm
Cable length L	2 m
Conductor cross-section	0.09 mm <sup>2</sup>
Connection	Cable, 2.00 m, PVC
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### **Electrical data**

No-load current lo max. at Ue	20 mA
Operating voltage Ub	1030 VDC
Protection class	III
Rated insulation voltage Ui	50 V DC
Rated operating current le	50 mA
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	20 %
Switching frequency	800 Hz
Turn-off delay toff max.	0.63 ms
Turn-on delay ton max.	0.63 ms
Voltage drop Ud max. at le	2.5 V

### **Environmental conditions**

Ambient temperature	-2550 °C
IP rating	IP67
Functional safety	
MTTF (40 °C)	1705 a
WITT (40 C)	1700 d
Interface	
Switching output	NPN normally open (NO)

#### Material

Subject to change without notice: 243256

Housing material	ABS
Material jacket	PVC
Material sensing surface	PMMA

### **Photoelectric Sensors**

# BOS R020K-NS-RF12-02 Order Code: BOS0215



### Mechanical data

**Dimension** 7.7 x 26.8 x 13.5 mm

Mounting part Screw M3

### Range/Distance

Range 1...60 mm
Rated operating distance Sn 60 mm

### **Optical features**

Ambient light max. 5000 Lux

Principle of optical operation Diffuse sensor, HGA fixed Special optical feature Background suppression

Switching function, optical Light-on Wave length 660 nm

#### Remarks

The sensor is functional again after the overload has been eliminated.

Reference object (target): gray card, 100 x 100, 90 % remission, axial approach.

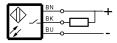
For additional information, refer to user's guide.

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**