

Basic features

Approval/Conformity	CE cULus UKCA WEEE
Principle of operation	Photoelectric sensor
Scope of delivery	Mounting bracket
Series	R81K
Style	Square with M18 Bullnose

Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow supply voltage - LED green
Setting	Sensitivity (Sn)

Electrical connection

Connection	M12x1-Male, 4-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

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
Voltage drop U_d max. at I_e	1 V

Environmental conditions

Ambient temperature	-15...60 °C
IP rating	IP67

Functional safety

MTTF (40 °C)	260 a
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Interface

Switching output	PNP normally open (NO)
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Material

Housing material	ABS PMMA
Material sensing surface	PMMA

Photoelectric Sensors
BOS R81K-PA-IE10-S4
Order Code: BOS0290

BALLUFF

Mechanical data

Dimension	15 x 48.9 x 31 mm
Mounting part	M18x1 Screw M3 (2x)

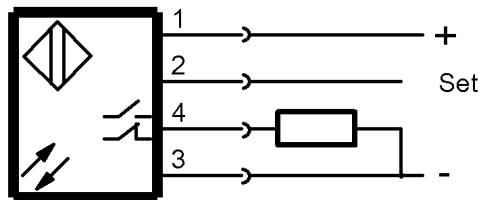
Optical features

Ambient light max.	10000 Lux
Light type	Infrared
Principle of optical operation	Through-beam sensor (receiver)
Wave length	850 nm

Range/Distance

Range	0.3...20 m
Rated operating distance Sn	20 m

Wiring Diagrams



Opto Symbols

