

### Basic features

<b>Approval/Conformity</b>	CE UL Listed UKCA WEEE
<b>Principle of operation</b>	Photoelectric sensor
<b>Scope of delivery</b>	Mounting bracket
<b>Series</b>	R81K
<b>Style</b>	Square with M18 Bullnose

### Display/Operation

<b>Display</b>	Output function- LED yellow supply voltage - LED green
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### Electrical connection

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

### Electrical data

<b>No-load current <math>I_0</math> max. at <math>U_e</math></b>	25 mA
<b>Operating voltage <math>U_b</math></b>	10...30 VDC
<b>Rated operating current <math>I_e</math></b>	100 mA
<b>Rated operating voltage <math>U_e</math> DC</b>	24 V
<b>Ready delay <math>t_v</math> max.</b>	100 ms
<b>Voltage drop <math>U_d</math> max. at <math>I_e</math></b>	1.8 V

### Environmental conditions

<b>Ambient temperature</b>	-15...60 °C
<b>IP rating</b>	IP67

### Functional safety

<b>MTTF (40 °C)</b>	529 a
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### Interface

<b>Switching output</b>	PNP normally open (NO)
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### Material

<b>Housing material</b>	ABS PMMA
<b>Material sensing surface</b>	PMMA

## Mechanical data

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

## Range/Distance

Hysteresis H max.	5 %
Range	100 mm
Rated operating distance Sn	100 mm

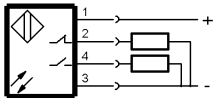
## Optical features

Ambient light max.	10000 Lux
Light spot size	8 x 8 mm at 100 mm
Light type	LED, red light
Principle of optical operation	Triangulation
Wave length	660 nm

## Connector Drawings



## Wiring Diagrams



## Opto Symbols

