

Basic features

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

Electrical data

| | |
|-------------------------------------|-------------|
| No-load current I_0 max. at U_e | 20 mA |
| Operating voltage U_b | 10...30 VDC |
| Rated operating current I_e | 200 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) | 211 a |
|--------------|-------|

Interface

| | |
|------------------|------------------------|
| Switching output | PNP normally open (NO) |
|------------------|------------------------|

Material

| | |
|--------------------------|-------------|
| Housing material | ABS PMMA |
| Material sensing surface | PMMA |

Mechanical data

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

Range/Distance

| | |
|-----------------------------|-------------------|
| Hysteresis H max. | 20 % |
| Range | 5...300 mm |
| Rated operating distance Sn | 300 mm Adjustable |

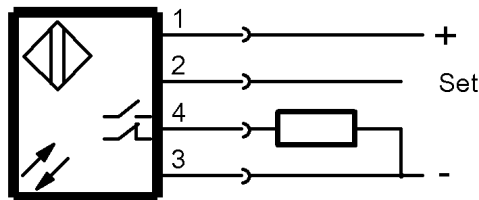
Optical features

| | |
|--------------------------------|----------------------|
| Ambient light max. | 10000 Lux |
| Light spot size | 18 x 18 mm at 300 mm |
| Light type | LED, red light |
| Principle of optical operation | Diffuse sensor |
| Wave length | 660 nm |

Connector Drawings



Wiring Diagrams



Opto Symbols

