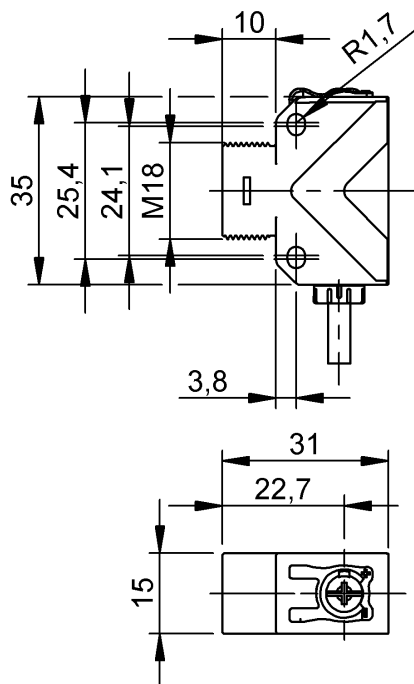


Basic features

|                        |                               |
|------------------------|-------------------------------|
| Approval/Conformity    | CE<br>cULus<br>UKCA<br>WEEE   |
| Principle of operation | Photoelectric sensor          |
| Scope of delivery      | Mounting bracket<br>Reflector |
| Series                 | R81K                          |
| Style                  | Square with M18 Bullnose      |

Display/Operation

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

Electrical connection

|                                   |                 |
|-----------------------------------|-----------------|
| Cable diameter D                  | 3.9 mm          |
| Cable length L                    | 2 m             |
| Connection                        | Cable, 2 m, PVC |
| Number of conductors              | 4               |
| Polarity reversal protected       | yes             |
| Protection against device mix-ups | yes             |
| Short-circuit protection          | yes             |

Electrical data

|                                     |             |
|-------------------------------------|-------------|
| No-load current $I_o$ 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) | 260 a |
|--------------|-------|

Interface

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

Material

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

Mechanical data

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

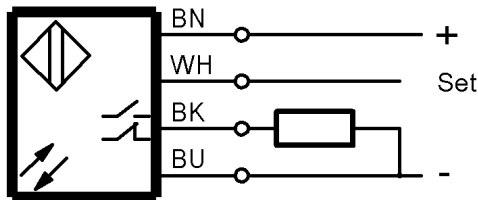
Optical features

|                                |                        |
|--------------------------------|------------------------|
| Ambient light max.             | 10000 Lux              |
| Light spot size                | 180 x 180 mm at 3 m    |
| Light type                     | LED, red light         |
| Principle of optical operation | Retroreflective sensor |
| Wave length                    | 660 nm                 |

Range/Distance

|                             |                |
|-----------------------------|----------------|
| Range                       | 0...3 m        |
| Rated operating distance Sn | 3 m Adjustable |

Wiring Diagrams



Opto Symbols

