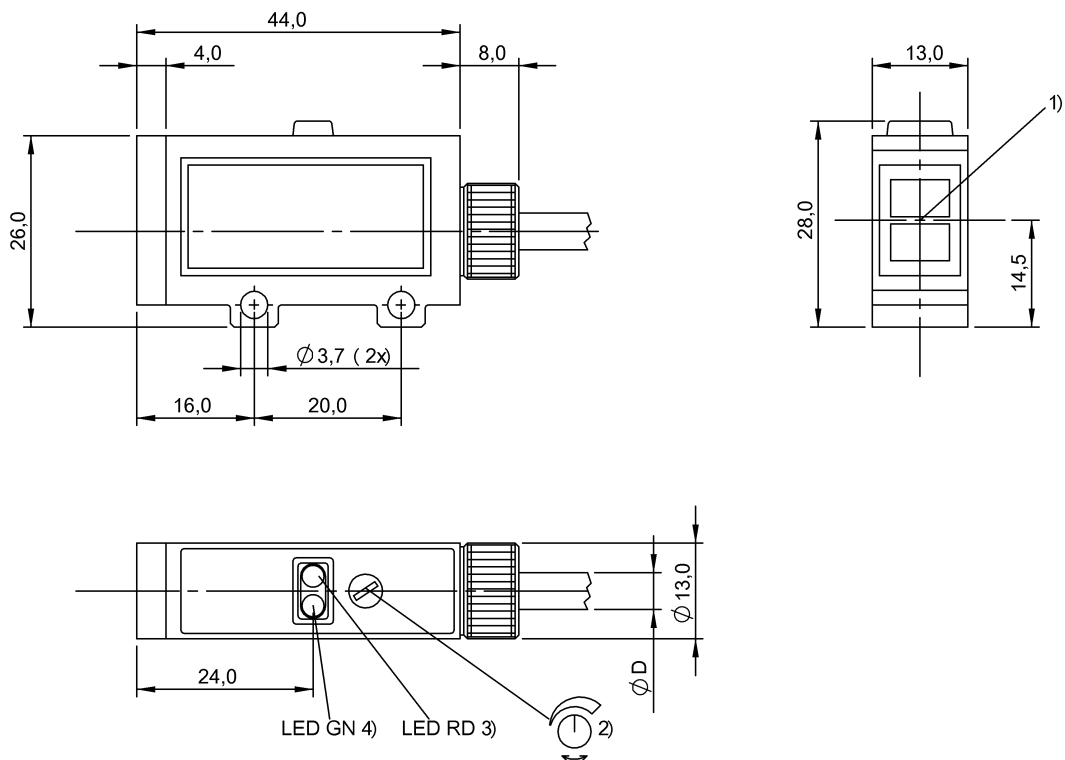




1) Optical axis, 2) Sn, 3) Output function, 4) stability



Basic features

|                        |                               |
|------------------------|-------------------------------|
| Approval/Conformity    | CE<br>WEEE                    |
| Basic standard         | IEC 60947-5-2                 |
| Principle of operation | Photoelectric sensor          |
| Series                 | 15K                           |
| Style                  | Square<br>Straight connection |

Electrical connection

|                             |                      |
|-----------------------------|----------------------|
| Cable diameter D            | 5.00 mm              |
| Cable length L              | 2 m                  |
| Conductor cross-section     | 0.25 mm <sup>2</sup> |
| Connection                  | Cable, 2.00 m, PVC   |
| Number of conductors        | 5                    |
| Polarity reversal protected | yes                  |
| Short-circuit protection    | yes                  |

Display/Operation

|          |                                                    |
|----------|----------------------------------------------------|
| Adjuster | Potentiometer 270°                                 |
| Display  | Output function - LED red<br>Stability - LED green |
| Setting  | Sensitivity (Sn)                                   |

Electrical data

|                                                    |                                              |
|----------------------------------------------------|----------------------------------------------|
| Input function                                     | Switching output PNP/NPN<br>Light-on/dark-on |
| Load capacitance max. at Ue                        | 0.5 µF                                       |
| No-load current I <sub>o</sub> max. at Ue          | 30 mA                                        |
| Operating voltage U <sub>b</sub>                   | 10...30 VDC                                  |
| Rated insulation voltage U <sub>i</sub>            | 75 V DC                                      |
| Rated operating current I <sub>e</sub>             | 100 mA                                       |
| Rated operating voltage U <sub>e</sub> DC          | 24 V                                         |
| Ripple max. (% of U <sub>e</sub> )                 | 8 %                                          |
| Switching frequency                                | 500 Hz                                       |
| Turn-off delay t <sub>off</sub> max.               | 1 ms                                         |
| Turn-on delay t <sub>on</sub> max.                 | 1 ms                                         |
| Utilization category                               | DC -13                                       |
| Voltage drop U <sub>d</sub> max. at I <sub>e</sub> | 1.5 V                                        |

Environmental conditions

|                         |                                            |
|-------------------------|--------------------------------------------|
| Ambient temperature     | -15...55 °C                                |
| EN 60068-2-27, Shock    | Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6 |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 1.5 mm, 3x2 h        |
| IP rating               | IP66                                       |

Interface

|                  |                                               |
|------------------|-----------------------------------------------|
| Switching output | PNP/NPN normally open/normally closed (NO/NC) |
|------------------|-----------------------------------------------|

Material

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

Mechanical data

|               |                 |
|---------------|-----------------|
| Dimension     | 13 x 28 x 52 mm |
| Mounting part | Screw M3        |

Optical features

|                                |                        |
|--------------------------------|------------------------|
| Ambient light max.             | 3000 Lux               |
| Light type                     | Infrared               |
| Polarizing filter              | no                     |
| Principle of optical operation | Retroreflective sensor |
| Switching function, optical    | dark-on/light-on       |
| Wave length                    | 880 nm                 |

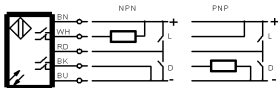
Range/Distance

|                                         |                    |
|-----------------------------------------|--------------------|
| Range                                   | 0...600 mm         |
| Rated operating distance S <sub>n</sub> | 600 mm, Adjustable |

Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.  
Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

Wiring Diagrams (Schematic)



Opto Symbols

