



Photoelectric sensors  
W4S-3 Inox Glass, Photoelectric retro-reflective  
sensor, autocollimation

WLG4S-3P1132V



Type > [WLG4S-3P1132V](#)  
Part No. > [1055044](#)



*Illustration may differ*

**At a glance**

- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Tough stainless steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- Modern electrical connection available - M12 connector with pin casting
- PinPoint LED technology provides a highly visible laser-like light spot
- Teach-in via stainless steel pushbutton with a metal membrane
- Continuous threshold adjustment technology reliably detects objects in changing conditions

**Your benefits**

- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Reliable detection of all materials, including transparent objects in the pharmaceutical, packaging, and food and beverage industries
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton
- Quick and easy alignment due to highly visible PinPoint emitter LED
- Remote monitoring and quick diagnostics via IO-Link (optional)



**Features**

|                                  |                                                        |
|----------------------------------|--------------------------------------------------------|
| Sensor/detection principle:      | Photoelectric retro-reflective sensor, autocollimation |
| Dimensions (W x H x D):          | 15.25 mm x 49.2 mm x 22.2 mm                           |
| Housing design:                  | Washdown                                               |
| Housing design (light emission): | Rectangular                                            |
| Sensing range max.:              | 0 m ... 5 m <sup>1)</sup>                              |
| Sensing range:                   | 0 m ... 3 m <sup>2)</sup>                              |
| Type of light:                   | Visible red light                                      |
| Light source:                    | PinPoint LED <sup>3)</sup>                             |
| Wave length:                     | 650 nm                                                 |
| Teach-in:                        | Single teach-in button                                 |
| Adjustment:                      | Teach-in                                               |
| Light spot size (distance):      | Ø 45 mm (1.5 m)                                        |
| Continuous threshold adaption:   | ✓                                                      |

<sup>1) 2)</sup> PL80A <sup>3)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

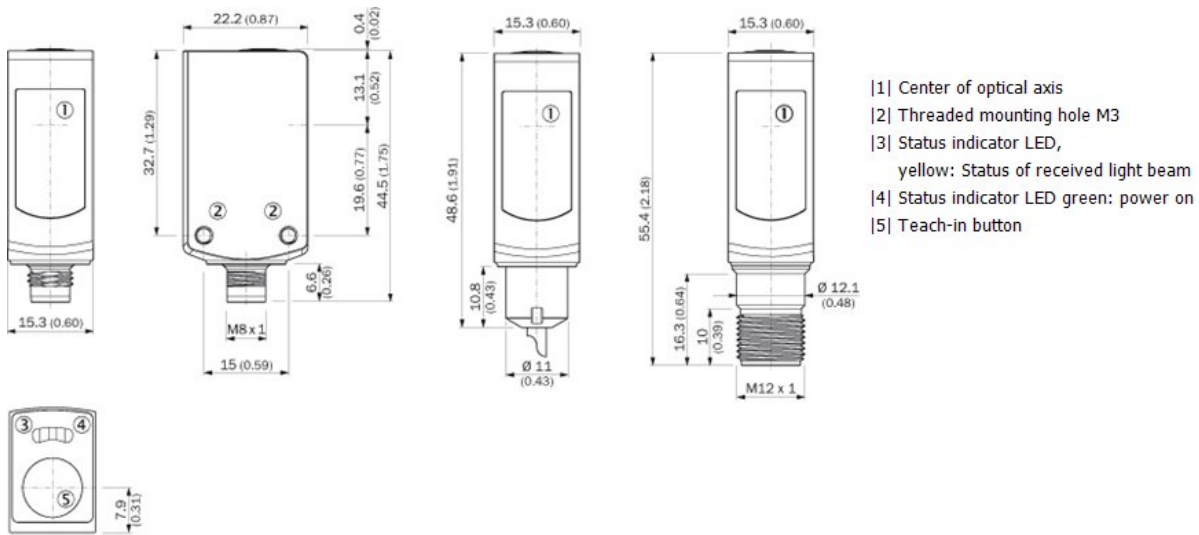
## Mechanics/electronics

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|                                    |                                                  |
|------------------------------------|--------------------------------------------------|
| Supply voltage:                    | 10 V DC ... 30 V DC <sup>1)</sup>                |
| Power consumption:                 | ≤ 30 mA <sup>2)</sup>                            |
| Output type:                       | PNP                                              |
| Switching mode:                    | Light/dark switching                             |
| Output current I <sub>max</sub> ·: | ≤ 100 mA <sup>3)</sup>                           |
| Response time:                     | < 0.5 ms <sup>3)</sup>                           |
| Switching frequency:               | 1,000 Hz <sup>4)</sup>                           |
| Connection type:                   | Cable, 4-wire, 2 m <sup>5)</sup>                 |
| Cable material:                    | PVC                                              |
| Conductor cross-section:           | 0.14 mm <sup>2</sup>                             |
| Circuit protection:::              | A<br>B <sup>6) 7) 8)</sup><br>C                  |
| Protection class:                  | III                                              |
| Weight:                            | 80 g                                             |
| Polarisation filter:               | ✓                                                |
| Housing material:                  | Stainless steel, Stainless steel 316L            |
| Enclosure rating:                  | IP 66<br>IP 67<br>IP 68<br>IP 69K                |
| Special feature:                   | For transparent objects                          |
| Ambient operating temperature:     | -30 °C ... 60 °C, -30 °C ... 70 °C <sup>9)</sup> |
| Ambient storage temperature:       | -30 °C ... 75 °C                                 |
| UL File No.:                       | NRKH.E181493 & NRKH7.E181493                     |

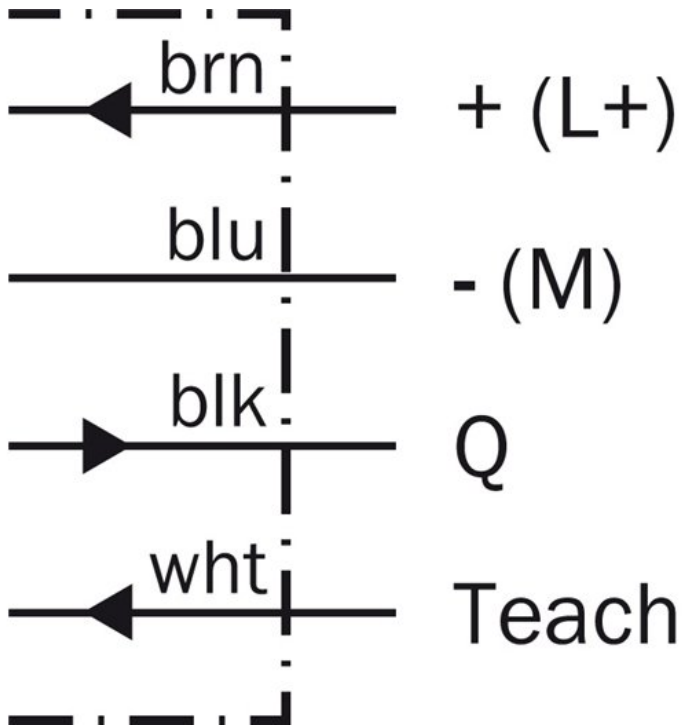
<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A <sup>2)</sup> Without load <sup>3)</sup> Signal transit time with resistive load <sup>4)</sup> With light/dark ratio 1:1 <sup>5)</sup> Do not bend below 0 °C <sup>6)</sup> A = V<sub>S</sub> connections reverse-polarity protected <sup>7)</sup> B = inputs and output reverse-polarity protected <sup>8)</sup> C = interference suppression <sup>9)</sup> At UV ≤ 24 V and IA < 30 mA

## Dimensional drawing



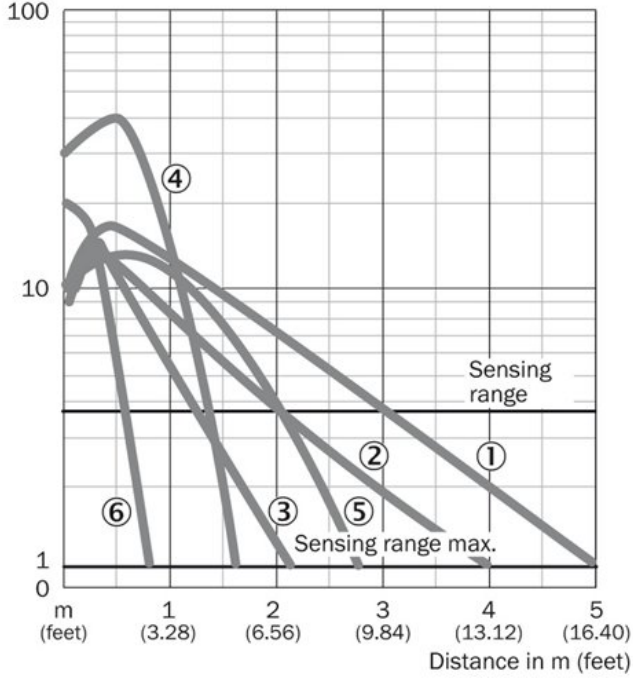
All dimensions in mm (inch)

## Connection diagram



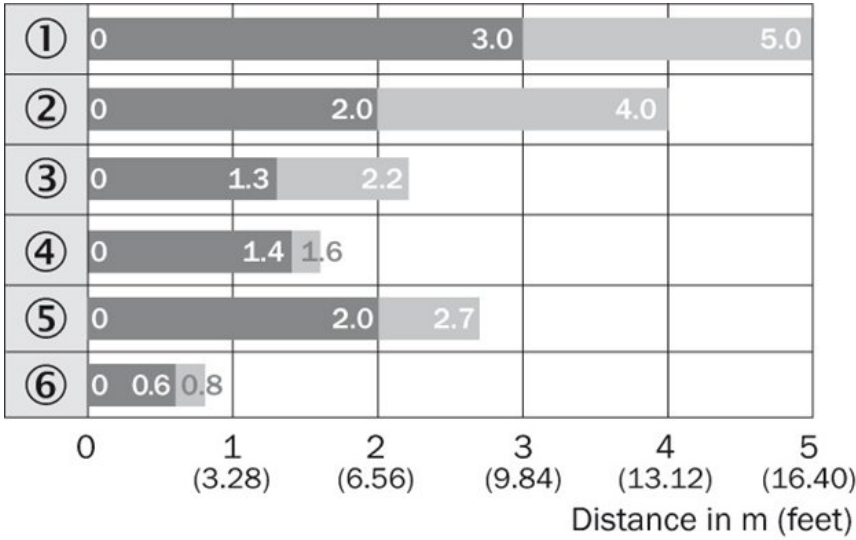
**Characteristic curve**

Operating reserve



- |1| PL80A
- |2| PL40A
- |3| PL20A
- |4| PL10F
- |5| P250 CHEM
- |6| REF-IRF-56

**Sensing range diagram**

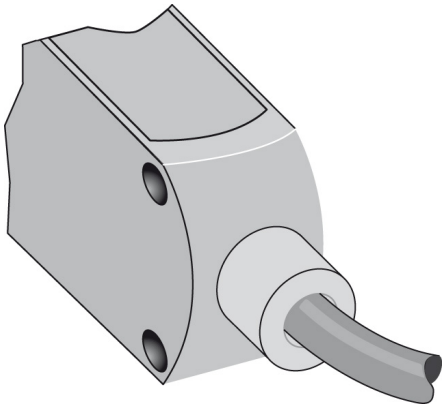


- |1| PL80A
- |2| PL40A
- |3| PL20A
- |4| PL10F
- |5| P250 CHEM
- |6| REF-IRF-56

■ Sensing range      ■ Sensing range max.

**Connection type**

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