



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

WLG4S-3E1134H



Type > [WLG4S-3E1134H](#)  
Part No. > [1048124](#)



*Illustration may differ*

**At a glance**

- Hygienic designed stainless steel housing and accessories (316L/1.4404)
- Hygienic mounting using M12-adapter thread or D12-adapter shaft
- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- PinPoint LED technology provides a highly visible laser-like light spot
- Teach-in stainless steel metal membrane or external teach-in

**Your benefits**

- Smooth hygienic housing and accessories with no grooves or crevices eliminates the potential for bacteria to grow, providing a more hygienic solution.
- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Reliable detection of all transparent objects in the pharmaceutical and food and beverage industries
- Quick and 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 fast 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 22.15 mm                          |
| Housing design:                  | Hygiene  |
| Housing design (light emission): | Rectangular, Slim                                      |
| 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 cable <sup>4)</sup>                           |
| Light spot size (distance):      | Ø 45 mm (1.5 m)  |
| Continuous threshold adaption:   | ✓  |

1) 2) PL80A 3) Average service life of 100,000 h at  $T_A = +25\text{ °C}$  4) External teach-in: pulse > 2 s with voltage  $U_V$  with PNP and M with NPN

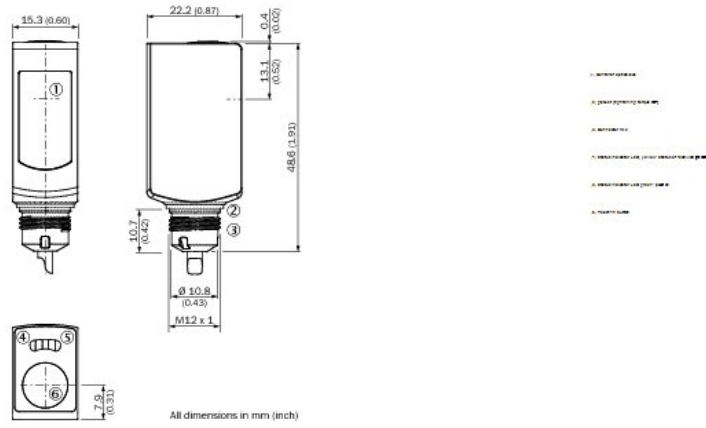
## Mechanics/electronics

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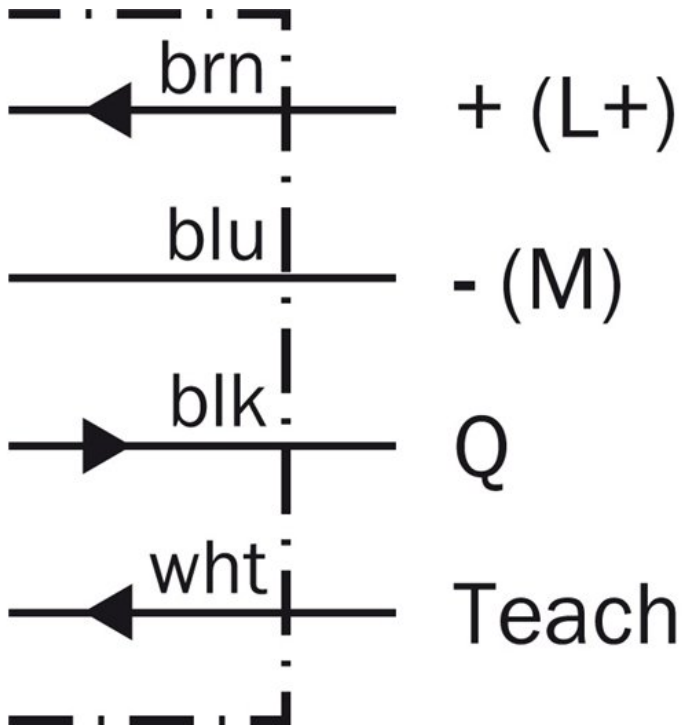
|                                |   |
|--------------------------------|---|
| Supply voltage:                | 10 V DC ... 30 V DC <sup>1)</sup>                 |
| Ripple:                        | < 5 Vpp <sup>2)</sup>                             |
| Power consumption:             | ≤ 30 mA <sup>3)</sup>                             |
| Output type:                   | NPN   |
| Switching mode:                | Dark switching                                    |
| Output current $I_{max.}$ :    | ≤ 100 mA  |
| Response time:                 | < 0.5 ms <sup>4)</sup>                            |
| Switching frequency:           | 1,000 Hz <sup>5)</sup>                            |
| Connection type:               | Cable, 4-wire, 2 m <sup>6)</sup>                  |
| Cable material:                | PVC   |
| Conductor cross-section:       | 0.14 mm <sup>2</sup>                              |
| Circuit protection:::          | A<br>B 7) 8) 9)<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>10)</sup> |
| Ambient storage temperature:   | -30 °C ... 75 °C                                  |
| UL File No.:                   | FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493  |

<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A <sup>2)</sup> May not exceed or fall short of  $V_S$  tolerances <sup>3)</sup> Without load <sup>4)</sup>  
Signal transit time with resistive load <sup>5)</sup> With light/dark ratio 1:1 <sup>6)</sup> Do not bend below 0 °C <sup>7)</sup> A =  $V_S$  connections reverse-polarity protected <sup>8)</sup> B = inputs and output  
reverse-polarity protected <sup>9)</sup> C = interference suppression <sup>10)</sup> At  $UV \leq 24\text{ V}$  and  $IA < 30\text{ mA}$

**Dimensional drawing**

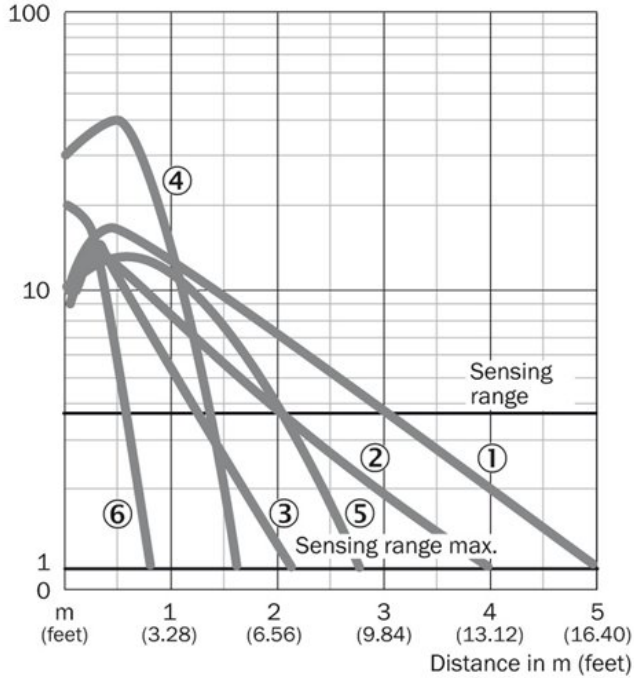


**Connection diagram**



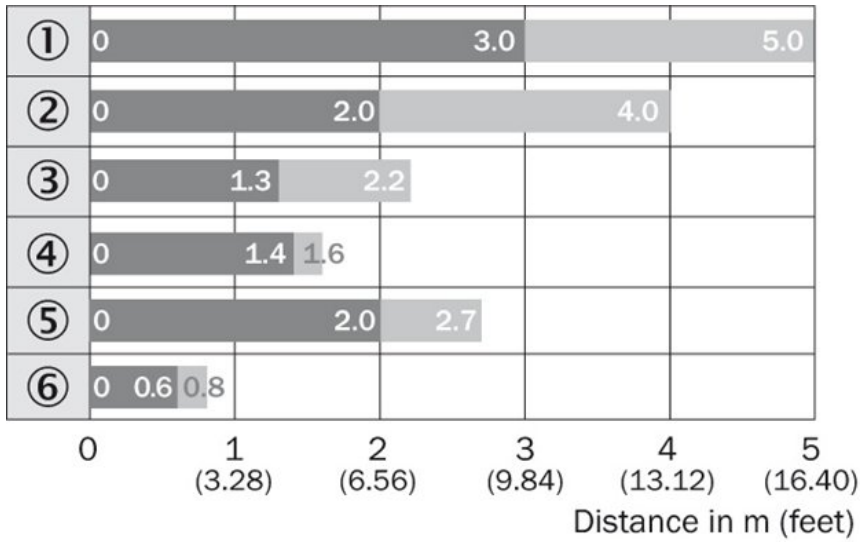
## Characteristic curve

Operating reserve



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

## Sensing range diagram

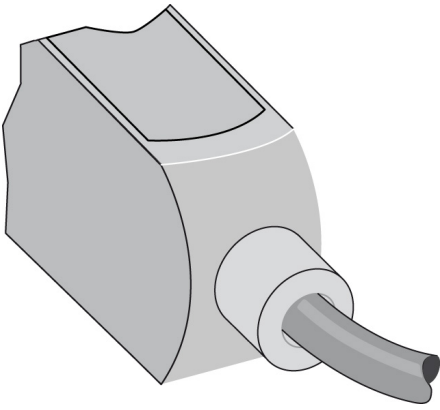


- |1| PL80A
- |2| PL40A
- |3| PL20A
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- |5| P250 CHEM
- |6| REF-IRF-56

■ Sensing range      ■ Sensing range max.

**Connection type**

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