



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

WL4S-3N1132V



Type > [WLG4S-3N1132V](#)
Part No. > [1046450](#)



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 ¹⁾ |
| Sensing range: | 0 m ... 3 m ²⁾ |
| Type of light: | Visible red light |
| Light source: | PinPoint LED ³⁾ |
| 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: | ✓ |

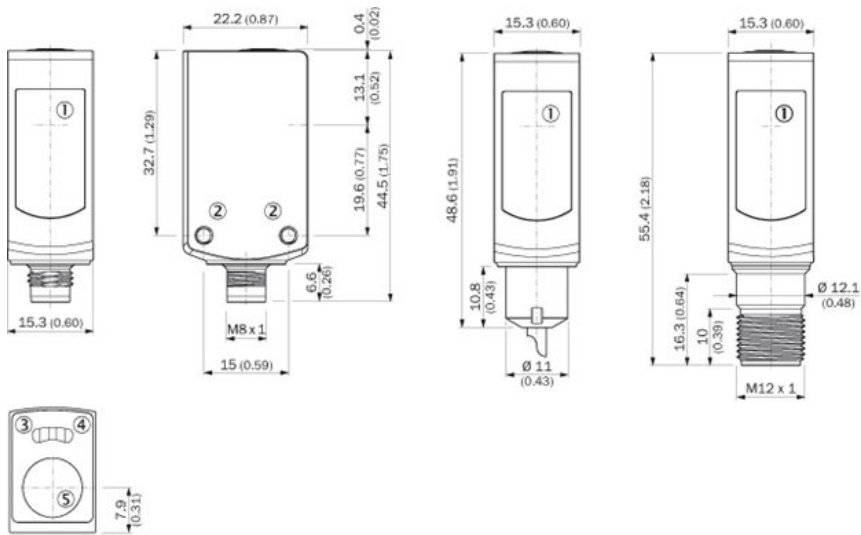
^{1) 2)} PL80A ³⁾ Average service life of 100,000 h at T_A = +25 °C

Mechanics/electronics

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

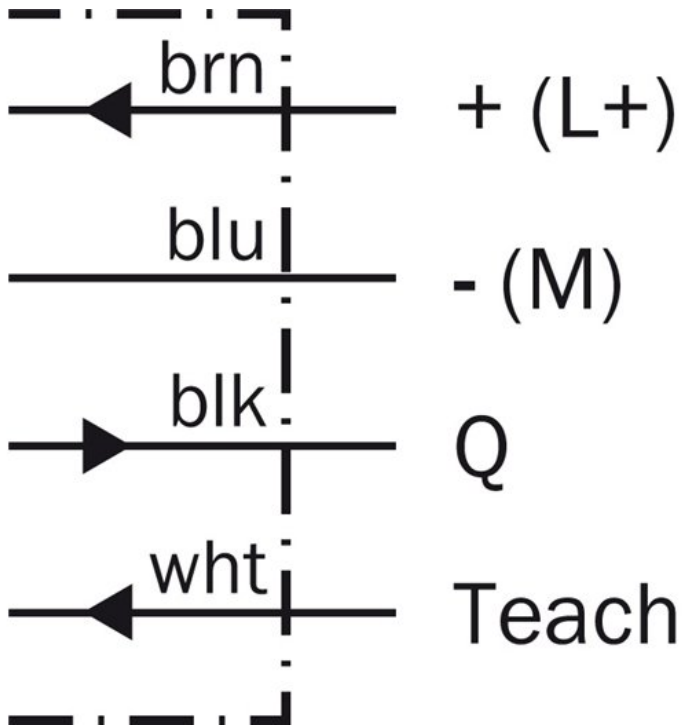
¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A ²⁾ Without load ³⁾ Signal transit time with resistive load ⁴⁾ With light/dark ratio 1:1 ⁵⁾ Do not bend below 0 °C ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ B = inputs and output reverse-polarity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

Dimensional drawing



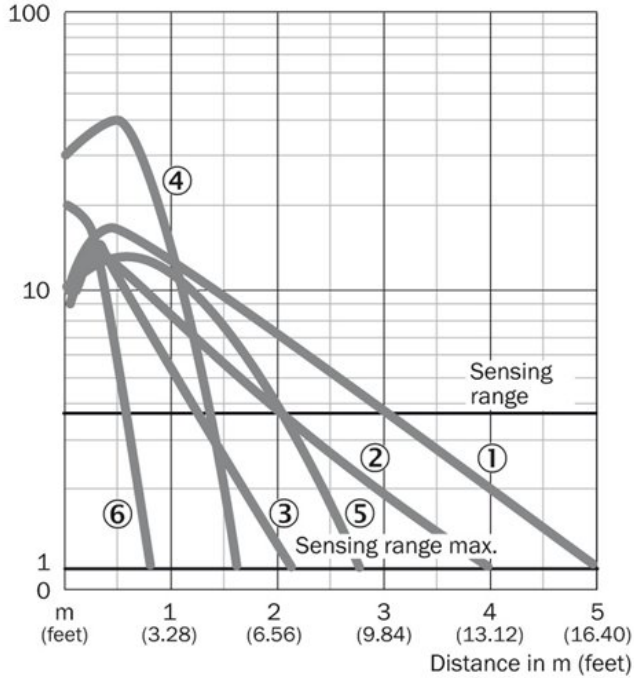
All dimensions in mm (inch)

Connection diagram



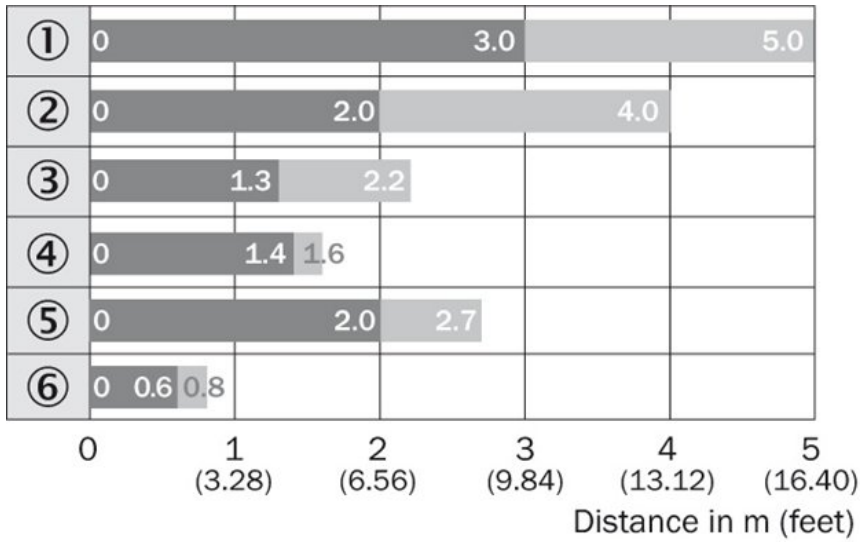
Characteristic curve

Operating reserve



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

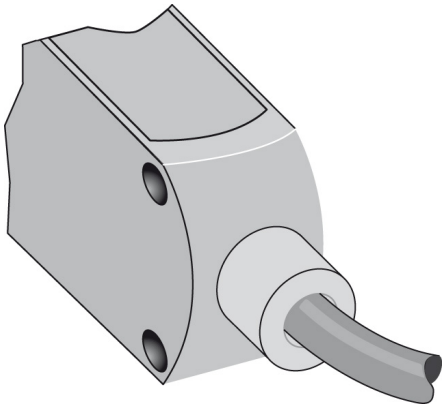
Sensing range diagram



- |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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