



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

WLG4S-3P2232V



**Model Name** > [WLG4S-3P2232V](#)  
**Part No.** > [1046446](#)



*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 44.9 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

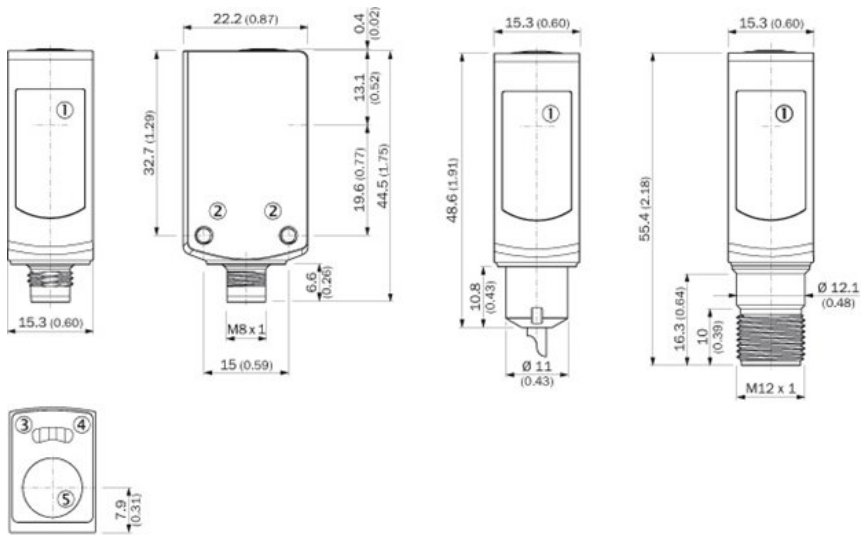
## Mechanics/electronics

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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
Output function:	Complementary
Switching mode:	Light/dark-switching
Output current I <sub>max.</sub> :	≤ 100 mA
Response time:	< 0.5 ms <sup>3)</sup>
Switching frequency:	1,000 Hz <sup>4)</sup>
Connection type:	Connector M8, 4-pin
Circuit protection:::	A B <sup>5) 6) 7)</sup> C
Protection class:	III
Weight:	40 g
Polarisation filter:	✓
Special device:	-
Housing material:	Stainless steel, Stainless steel 316L
Enclosure rating:	IP 66 IP 67 IP 68 <sup>8)</sup> 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>  $A = V_S$  connections reverse-polarity protected <sup>6)</sup> B = inputs and output reverse-polarity protected <sup>7)</sup> C = interference suppression <sup>8)</sup> Only in case of correctly mounted IP 69K connecting cable <sup>9)</sup> At UV ≤ 24 V and IA < 30 mA

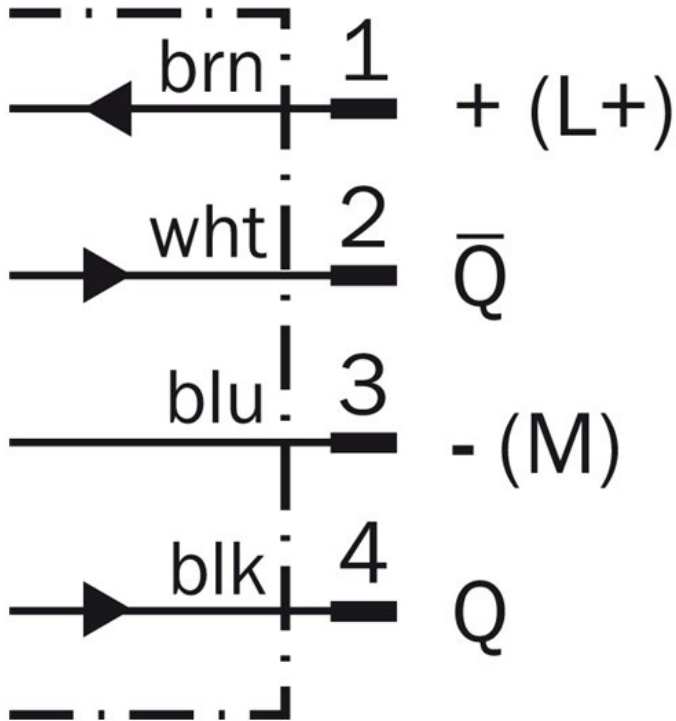
## Dimensional drawing



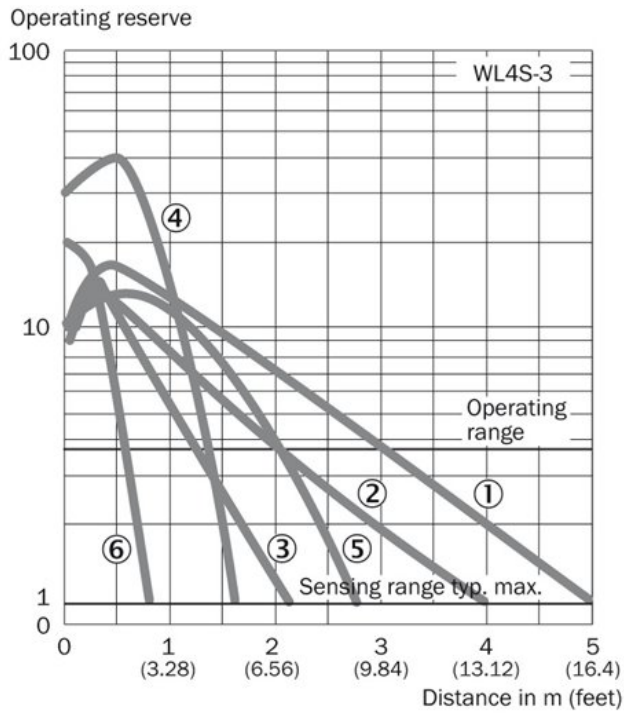
- [1] Center of optical axis
- [2] Threaded mounting hole M3
- [3] Status indicator LED, yellow: Status of received light beam
- [4] Status indicator LED green: power on
- [5] Teach-in button

All dimensions in mm (inch)

## Connection diagram

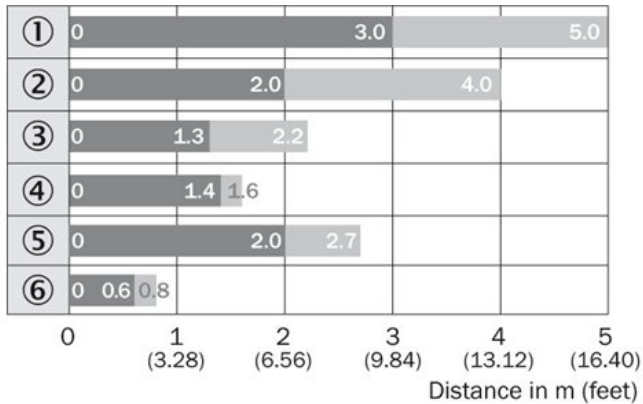


## Characteristic curve



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

## Sensing range diagram



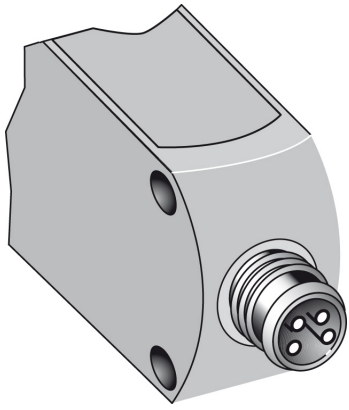
- |1| PL80A
- |2| PL40A
- |3| PL20A
- |4| PL10F
- |5| P250 CHEM
- |6| REF-IRF-56

■ Operating range      ■ Sensing range typ. max.

- ① Reflector type PL80A
- ② Reflector type PL40A
- ③ Reflector type PL20A
- ④ Reflector type PL10F
- ⑤ Reflector type P250 CHEM
- ⑥ Reflective tape REF-IRF-56

**Connection type**

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