



Photoelectric sensors  
W4SLG-3V, Photoelectric retro-reflective sensor,  
autocollimation

WL4SLGC-3P2432V



**Model Name** > [WL4SLGC-3P2432V](#)  
**Part No.** > [1058262](#)



*Illustration may differ*

#### At a glance

- Precise laser light spot, laser class 1, no blind spots
- Stainless steel housing with washdown design
- Latest SICK proprietary ASIC and laser technologies for very good background suppression and ambient light immunity
- ECOLAB certified, tested to IP66, IP67, IP68 and IP69K enclosure rating
- Teach-in pushbutton can be switched between detection of transparent and tiny non-transparent objects
- IO-Link (optional)

#### Your benefits

- Precise laser light spot for highly accurate switching
- Washable stainless steel housing reduces bacterial contamination
- Innovative washdown design with sealed connections and unique patented membrane teach-in pushbutton
- High ambient light immunity reduces incorrect switching and ultimately machine downtime, even when modern energy-saving lights are used
- The highest degree of machine design flexibility. Outstanding BGS (background suppression) eliminates the effect of undesired background reflections. Autocollimation permits detection through very small drilled holes.
- IO-Link provides effortless initial diagnostics of system performance



#### Features

|                                  |                                                                           |
|----------------------------------|---------------------------------------------------------------------------|
| Sensor/detection principle:      | Photoelectric retro-reflective sensor, autocollimation                    |
| Dimensions (W x H x D):          | 12.2 mm x 41.8 mm x 17.3 mm                                               |
| Housing design:                  | Washdown <sup>1)</sup>                                                    |
| Housing design (light emission): | Rectangular, Slim                                                         |
| Mounting hole:                   | M3                                                                        |
| Sensing range max.::             | 0 m ... 4.5 m <sup>2) 3)</sup>                                            |
| Sensing range::                  | 0 m ... 2 m <sup>4) 5)</sup>                                              |
| Type of light:                   | Visible red light                                                         |
| Light source:                    | Laser <sup>6)</sup>                                                       |
| Laser class:                     | 1 (EN60825-1:2008-05 & IEC 60825-1:2007-03/CDRH 21 CFR 1040.10 & 1040.11) |
| Wave length:                     | 650 nm                                                                    |
| Adjustment:                      | Single teach-in button                                                    |
| Light spot size (distance):      | Ø 1 mm (500 mm)                                                           |

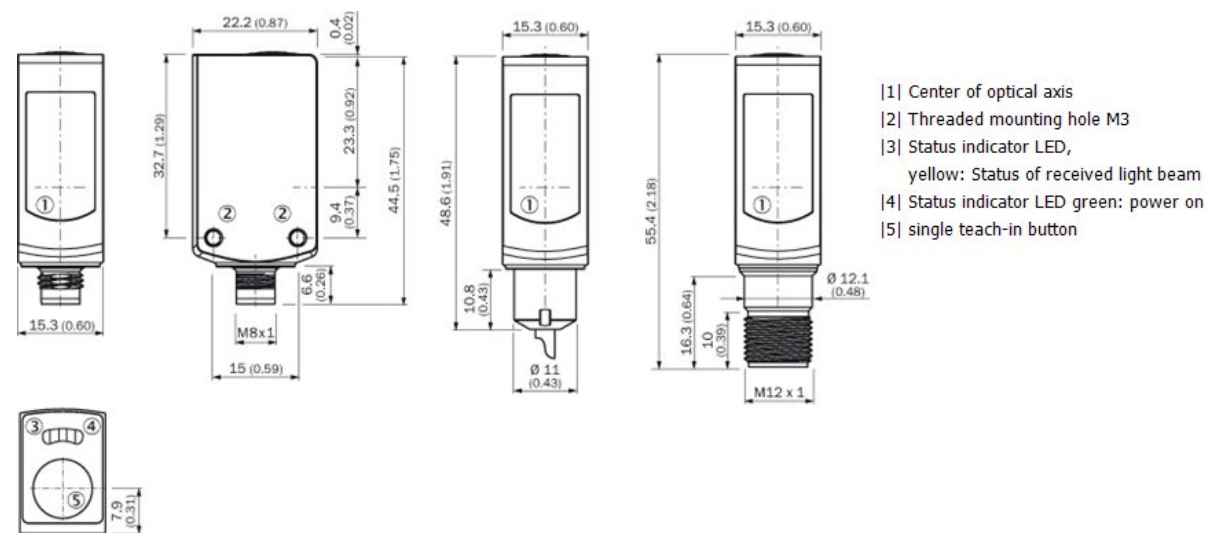
<sup>1)</sup> The essential difference between a standard/washdown product and a hygiene product is that where the process and contact with the medium (activity in the vicinity of the food) are concerned, the product is designed in accordance with the latest standards and hygiene design guidelines, and materials are selected accordingly <sup>2) 4)</sup>  
REF-AC1000 <sup>3) 5)</sup> We recommend using reflective tape REF-AC1000 or reflectors based on this reflective tape, like P41F, PLV14-A, PLH25-M12 or PLH25-D12, to ensure reliable operation. Reflectors with larger-scaled triple structures should only be used after application clarification <sup>6)</sup> Average service life 50,000 h at T<sub>A</sub> = +25 °C

## Mechanics/electronics

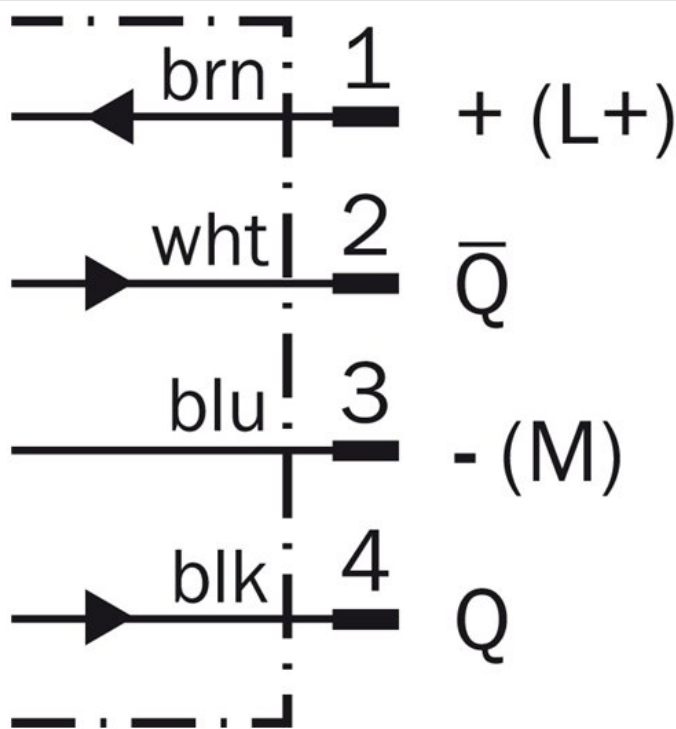
|                                          |                                            |
|------------------------------------------|--------------------------------------------|
| Supply voltage:                          | 10 V DC ... 30 V DC <sup>1)</sup>          |
| Power consumption:                       | ≤ 30 mA <sup>2)</sup>                      |
| Output type:                             | PNP <sup>3)</sup>                          |
| Output function:                         | Complementary                              |
| Switching mode:                          | Light/dark-switching <sup>4)</sup>         |
| Output current I <sub>max</sub> :        | ≤ 100 mA                                   |
| Response time:                           | ≤ 0.5 ms <sup>5)</sup>                     |
| Switching frequency:                     | ± 1,000 Hz <sup>6)</sup>                   |
| Connection type:                         | Connector M12, 4-pin                       |
| Circuit protection:::                    | A, B, C <sup>7) 8) 9)</sup>                |
| Protection class:                        | III                                        |
| Weight:                                  | 100 g                                      |
| Polarisation filter:                     | ✓                                          |
| IO-Link:                                 | -                                          |
| Housing material:                        | Stainless steel                            |
| Optics material:                         | PMMA                                       |
| Enclosure rating:                        | IP 66, IP 67, IP 68, IP 69K <sup>10)</sup> |
| Special feature:                         | IO-Link                                    |
| Ambient operating temperature:           | -30 °C ... 50 °C                           |
| Ambient storage temperature:             | -30 °C ... 70 °C                           |
| Ambient operating temperature extended:: | -30 °C ... 55 °C <sup>11) 12)</sup>        |

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A <sup>2)</sup> Without load <sup>3) 4)</sup> Q = light-switching <sup>5)</sup> Signal transit time with resistive load <sup>6)</sup> With light/dark ratio 1:1 <sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected <sup>8)</sup> B = inputs and output reverse-polarity protected <sup>9)</sup> C = interference suppression <sup>10)</sup> Only in case of correctly mounted IP 69K connecting cable <sup>11)</sup> As of T<sub>a</sub> = 50 °C, a max. supply voltage V<sub>max</sub> = 24 V and a max. load current I<sub>max</sub> = 50 mA is permitted <sup>12)</sup> Using the sensor below T<sub>a</sub> = -10 °C is possible, if the sensor is turned on at T<sub>a</sub> > -10 °C, then the environment cools down and the sensor is not disconnected from the supply voltage during the whole time. It is not allowed to turn on the sensor below T<sub>a</sub> = -10 °C

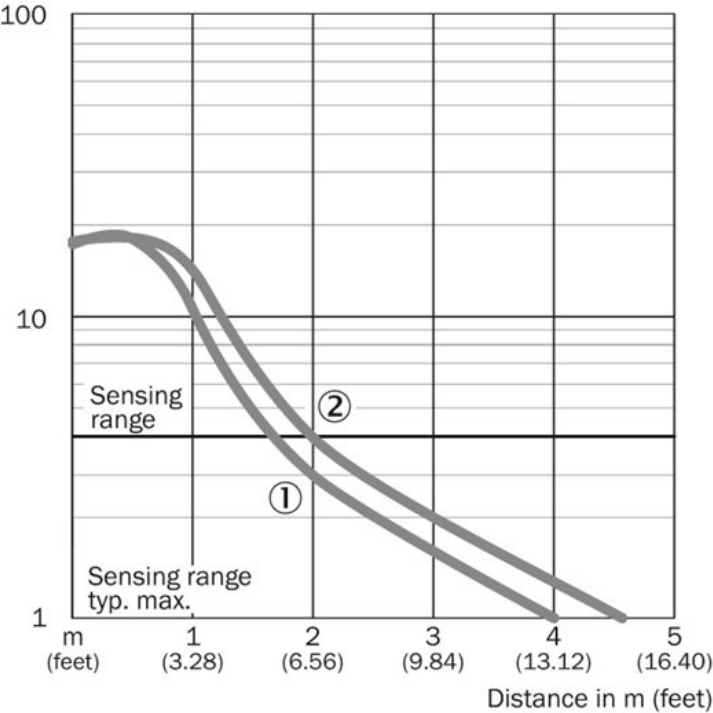
Dimensional drawing



Connection diagram

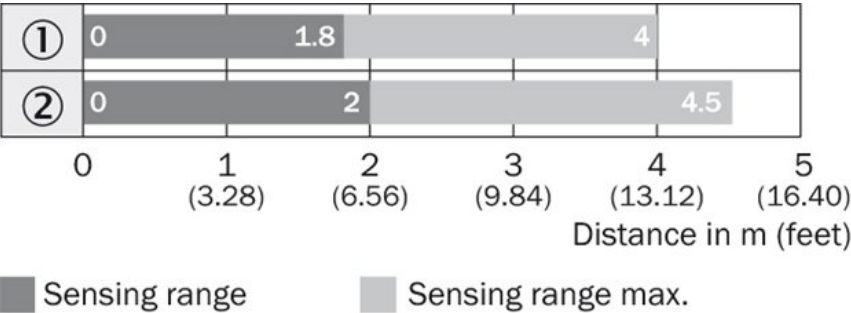


Characteristic curve



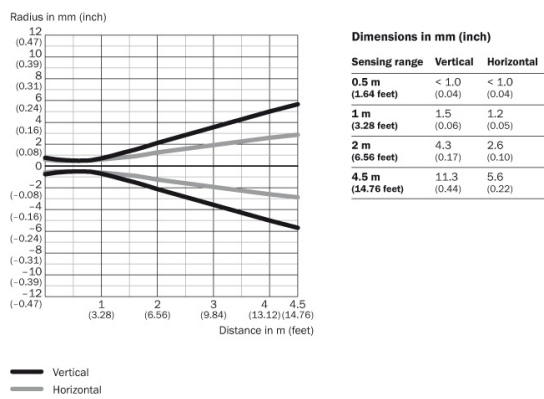
[1] PLV14-A / PLH25-M12 / PLH25-D12  
[2] P41F / REF-AC1000

Sensing range diagram

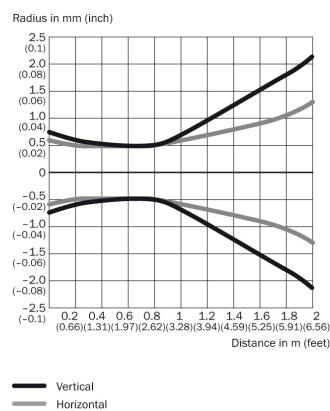


[1] PLV14-A / PLH25-M12 / PLH25-D12  
[2] P41F / REF-AC1000

Light spot size



Lichtfleckgröße (Detailansicht)



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)