ONLINE DATA SHEET
www.mysick.com

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

WL4SLG-3P3432V

SICK
Sensor Intelligence.

SICK
Sensor Intelligence.

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

Model Name > WL4SLG-3P3432V
Part No. > 1058264

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 [1)]
Housing design (light emission):	Rectangular, Slim
Mounting hole:	M3
Sensing range max.::	0 m ... 4.5 m [2) 3)]
Sensing range::	0 m ... 2 m [4) 5)]
Type of light:	Visible red light
Light source:	Laser [6)]
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)

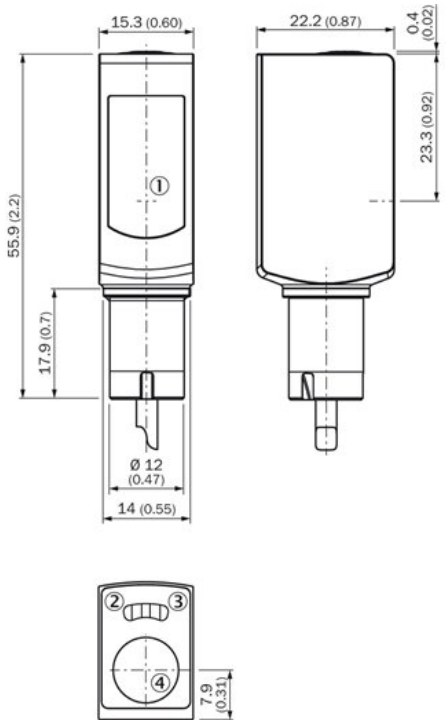
[1] The essential difference between a standard/washdown product and a hygiene product is that where the process and contact with the medium (activity in the vicinity of the food) are concerned, the product is designed in accordance with the latest standards and hygiene design guidelines, and materials are selected accordingly [2] [4] REF-AC1000 [3] [5] 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 [6] Average service life 50,000 h at T_A = +25 °C

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC [1]
Power consumption:	≤ 30 mA [2]
Output type:	PNP [3]
Output function:	Complementary
Switching mode:	Light/dark-switching [4]
Output current Imax.:	≤ 100 mA
Response time:	≤ 0.5 ms [5]
Switching frequency:	1,000 Hz [6]
Connection type:	Cable with connector M12, 4-pin, 150 mm [7]
Cable material:	PVC
Conductor cross-section:	0.14 mm²
Circuit protection:::	A, B, C [8] [9] [10]
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 [11]
Special feature:	For transparent objects
Ambient operating temperature:	-30 °C ... 50 °C
Ambient storage temperature:	-30 °C ... 70 °C
Ambient operating temperature extended::	-30 °C ... 55 °C [12] [13]
MTTFd:	647 a (EN ISO 13849-1) [14]

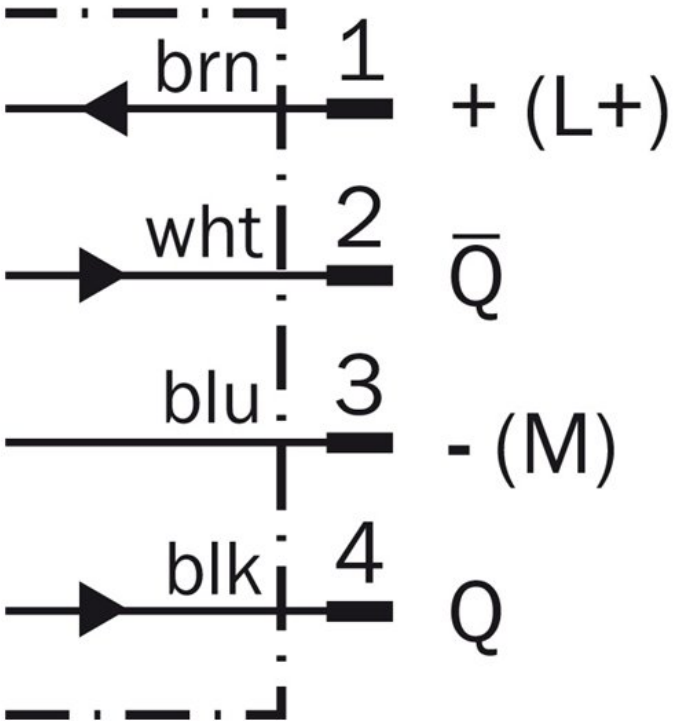
[1] Limit values, operation in short-circuit protected network max. 8 A [2] Without load [3] [4] Q = light-switching [5] Signal transit time with resistive load [6] With light/dark ratio 1:1 [7] Do not bend below 0 °C [8] A = V_S connections reverse-polarity protected [9] B = inputs and output reverse-polarity protected [10] C = interference suppression [11] Only in case of correctly mounted IP 69K connecting cable [12] As of T_a = 50 °C, a max. supply voltage $V_{max.}$ = 24 V and a max. load current $I_{max.}$ = 50 mA is permitted [13] Using the sensor below T_a = -10 °C is possible, if the sensor is turned on at T_a > -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_a = -10 °C [14] Mode of calculation: Parts-Count-calculation

Dimensional drawing

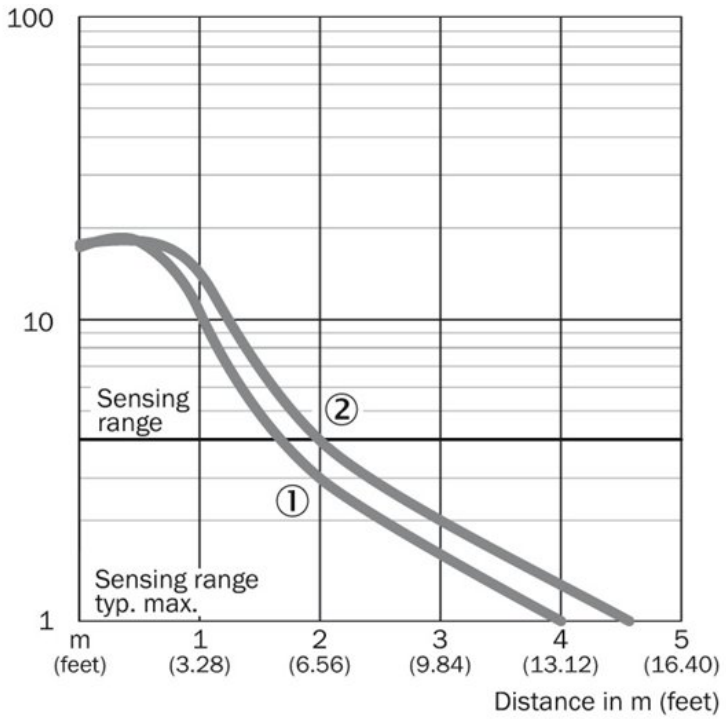


|1| Center of optical axis
|2| Status indicator LED,
yellow: Status of received light beam
|3| Status indicator LED green: power on
|4| single teach-in button

Connection diagram

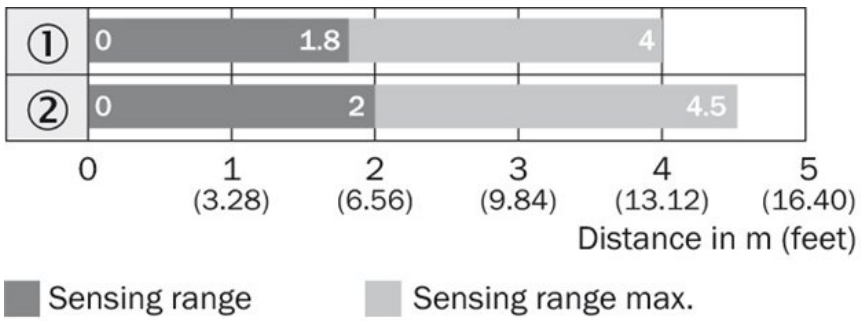


Characteristic curve



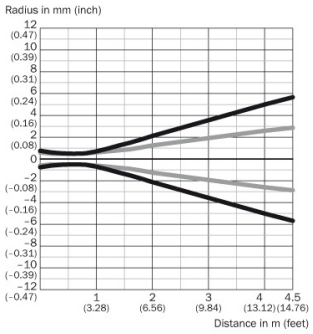
|1| PLV14-A / PLH25-M12 / PLH25-D12
|2| P41F / REF-AC1000

Sensing range diagram



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

Light spot size

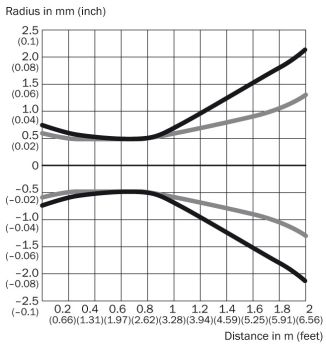


Dimensions in mm (inch)

Sensing range	Vertical	Horizontal
0.5 m (1.64 feet)	< 1.0 (0.04)	< 1.0 (0.04)
1 m (3.28 feet)	1.5 (0.06)	1.2 (0.05)
2 m (6.56 feet)	4.3 (0.17)	2.6 (0.10)
4.5 m (14.76 feet)	11.3 (0.44)	5.6 (0.22)

Vertical
Horizontal

Lichtfleckgröße (Detailansicht)



Vertical
Horizontal

· USmod 4c int40

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**

SICK
Sensor Intelligence.