



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

WLG4S-3N2432V



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

Type > [WLG4S-3N2432V](#)
Part No. > [1054728](#)



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
Adjustment:	Single teach-in button
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

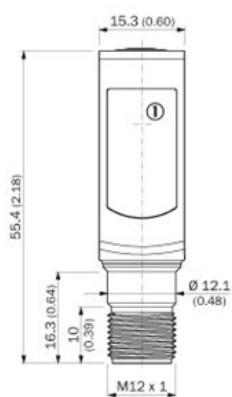
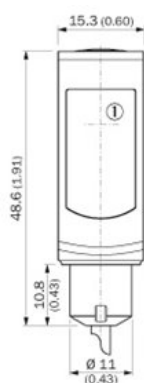
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	< 5 Vpp ²⁾
Power consumption:	≤ 30 mA ³⁾
Output type:	NPN
Output function:	Complementary
Switching mode:	Light/dark switching
Output current I _{max} :	≤ 100 mA
Response time:	< 0.5 ms ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾
Connection type::	M12, 4-pin male connector ^{6) 7)}
Cable material:	PVC
Circuit protection:::	A B 8) 9) 10) C
Protection class:	III
Weight:	45 g
Polarisation filter:	✓
Special device:	-
Enclosure rating:	IP 66 IP 67 IP 68 IP 69K
Special feature:	Detecting transparent objects
Ambient operating temperature:	-30 °C ... +60 °C, -30 °C ... +70 °C ¹¹⁾
Ambient storage temperature:	-30 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493
Housing material:	Stainless steel, Stainless steel 316L

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾
Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ Tightening torque, max.: 0.7 Nm 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⁾ At UV ≤ 24 V and IA < 30 mA

Technical drawing of the M8x1 1/2. The drawing includes three views: a front view, a top view, and a side view. The front view shows a rectangular component with a central circular feature (1) and a threaded section (2) at the bottom. The top view shows a rectangular component with two circular features (3) and a central circular feature (4). The side view shows a rectangular component with a central circular feature (5) and a threaded section (6) at the bottom. Dimensions are provided in millimeters (mm) and inches (in).

View	Feature	Dimension (mm)	Dimension (in)
Front View	Overall Width	15.3	0.60
	Overall Height	32.7	1.29
	Threaded Section Height	6.6	0.26
Top View	Overall Width	22.2	0.87
	Overall Height	44.5	1.75
	Distance between Circular Features	19.6	0.77
	Distance from Top Edge to Circular Features	13.1	0.52
Side View	Overall Width	15	0.59
	Overall Height	7.9	0.31



- [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: supply voltage on
- [5] Teach-in button

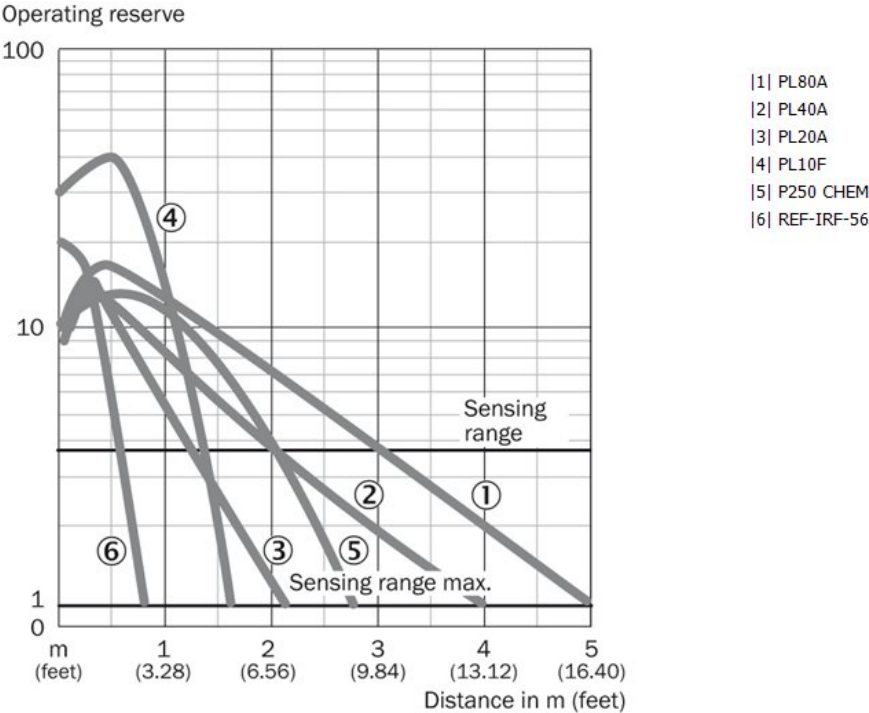
All dimensions in mm (inch)

Diagram illustrating a quantum circuit with four qubits (1, 2, 3, 4) and their corresponding states:

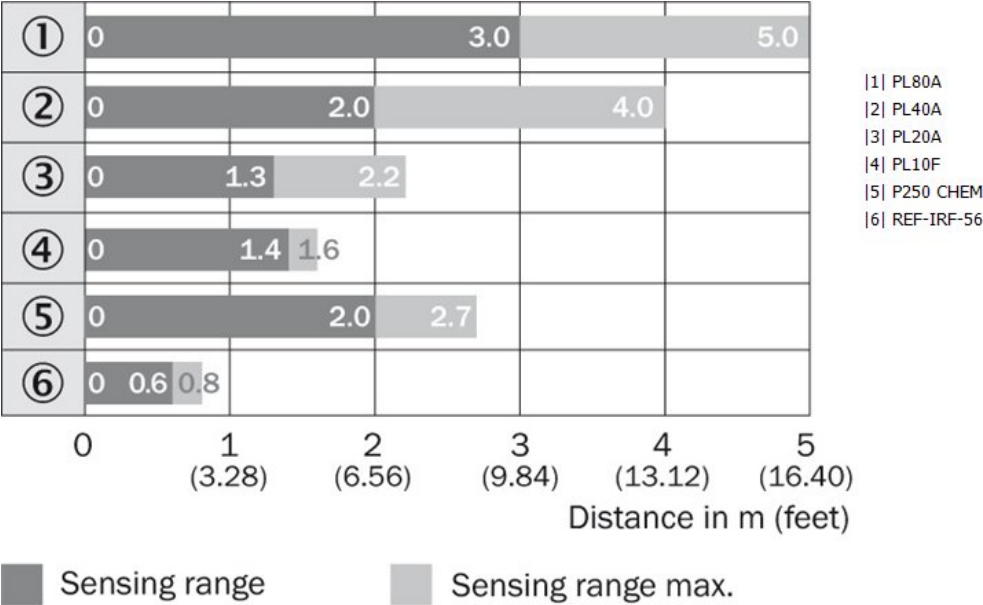
- Qubit 1: $|L+\rangle$
- Qubit 2: $|\bar{Q}\rangle$
- Qubit 3: $|M\rangle$
- Qubit 4: $|Q\rangle$

The circuit involves gates labeled **brn**, **wht**, **blu**, and **blk**, which are applied sequentially to the qubits.

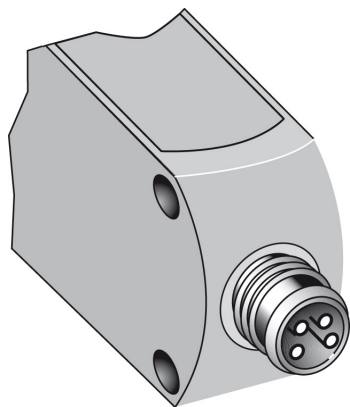
Characteristic curve



Sensing range diagram



Connection type



Australia

Phone +61 3 9457 0600
1800 33 48 02 – 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 marketing@sick.com.br

Canada

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

Česká 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 info@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 +972-4-6881000
E-Mail info@sick-sensors.com

Italia

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

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

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

Nederland

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

Norge

Phone +47 67 81 50 00
E-Mail sick@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 sales.gsg@sick.com

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 88 65 878
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