



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

WLG4S-3F2235V



Model Name > [WLG4S-3F2235V](#)
Part No. > [1045098](#)



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 44.5 mm x 22.2 mm
Housing design:	Washdown
Housing design (light emission):	Rectangular, Slim
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:	☒ Cable
Light spot size (distance):	Ø 45 mm (1.5 m)
Continuous threshold adaption:	✓

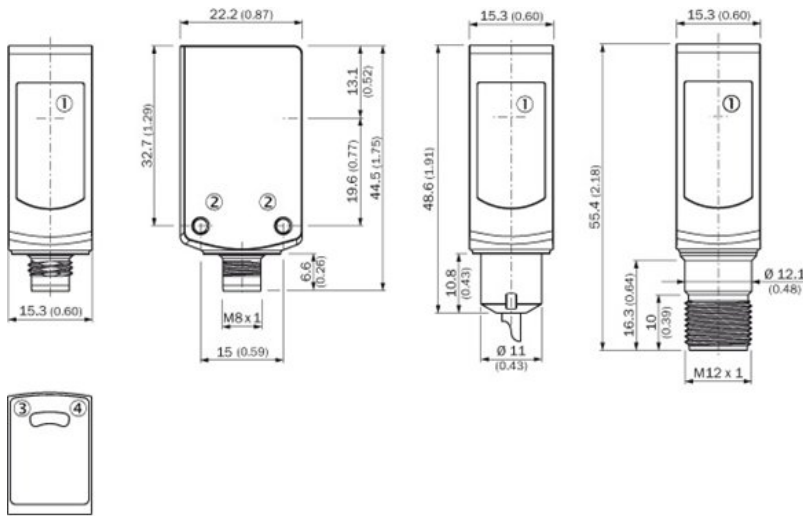
1) 2) PL80A ³⁾ Average service life of 100,000 h at T_A = +25 °C ⁴⁾ External teach-in: pulse > 2 s with voltage U_v with PNP and M with NPN

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	< 5 Vpp ²⁾
Power consumption:	≤ 30 mA ³⁾
Output type:	PNP
Switching mode:	Dark-switching
Output current I _{max.} :	≤ 100 mA ⁴⁾
Response time:	< 0.5 ms ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾
Connection type:	Connector M8, 4-pin
Circuit protection:::	A B ^{6) 7) 8)} 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 IP 69K ⁹⁾
Special feature:	For transparent objects
Ambient operating temperature:	-30 °C ... 60 °C, -30 °C ... 70 °C ¹⁰⁾
Ambient storage temperature:	-30 °C ... 75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

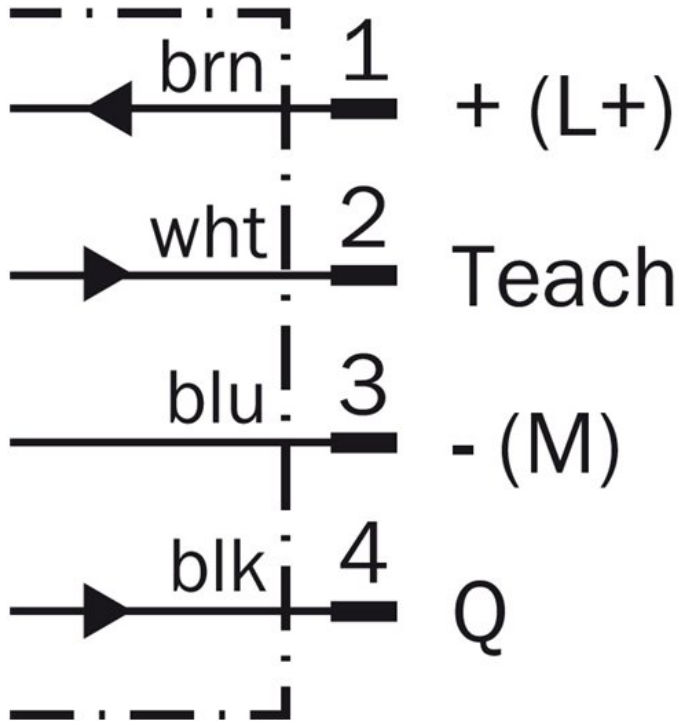
¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network, max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ Without load
Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ B = inputs and output reverse-polarity protected ⁸⁾
C = interference suppression ⁹⁾ Only in case of correctly mounted IP 69K connecting cable ¹⁰⁾ At UV ≤ 24 V and IA < 30 mA

Dimensional drawing

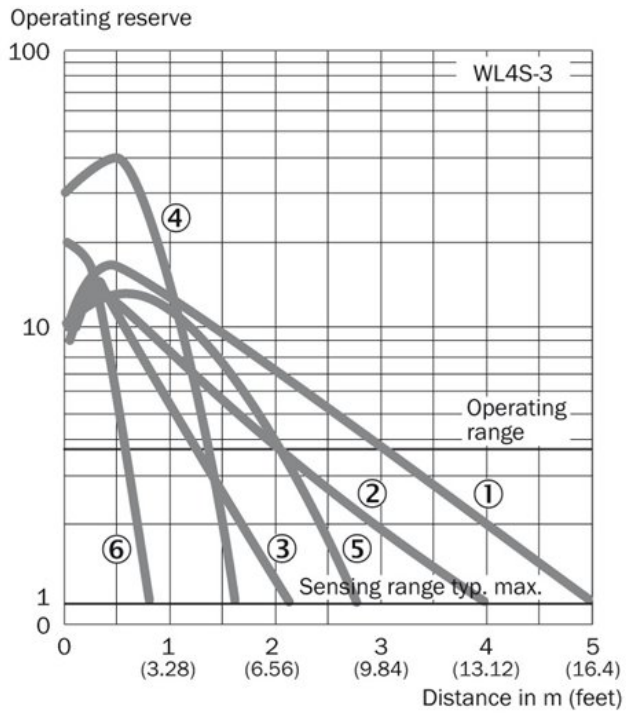


- [1] Center of optical axis
- [2] Threaded mounting hole M3
- [3] Status indicator LED,
yellow: Status of received light beam
- [4] Status indicator LED green: power on

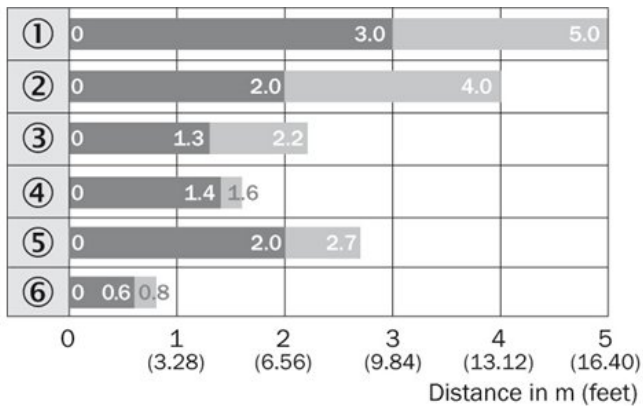
Connection diagram



Characteristic curve



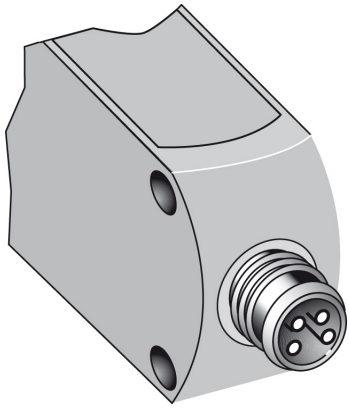
Sensing range diagram



■ 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



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