

WLG4S-3F2434V

W4S-3 Inox Glass

MINIATURE PHOTOELECTRIC SENSORS



Ordering information

Туре	Part no.
WLG4S-3F2434V	1054727

Other models and accessories → www.sick.com/W4S-3_Inox_Glass

Illustration may differ



Detailed technical data

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 ¹⁾
Type of light	Visible red light
Light source	PinPoint LED ²⁾
Light spot size (distance)	Ø 45 mm (1.5 m)
Wave length	650 nm
Adjustment	Cable ³⁾ Single teach-in button
AutoAdapt	✓
Special applications	Hygienic and washdown zones, Detecting transparent objects

¹⁾ Reflector PL80A.

 $^{^{2)}}$ Average service life: 100,000 h at T_U = +25 °C.

 $^{^{\}rm 3)}$ External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP
Switching mode	Dark switching
Output current I _{max.}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Attenuation along light beam	> 8 %
Connection type	Male connector M12, 4-pin ^{6) 7)}
Circuit protection	A, B, C ^{10) 8) 9)}
Protection class	III
Weight	45 g
Polarisation filter	✓
Housing material	Stainless steel, Stainless steel
Enclosure rating	IP66, IP67, IP68, IP69K
Special feature	Detecting transparent objects
Ambient operating temperature	-30 °C +70 °C ¹¹⁾ -30 °C +60 °C
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.

Classifications

ECI@ss 5.0	27270902
ECI@ss 5.1.4	27270902
ECI@ss 6.0	27270902
ECI@ss 6.2	27270902
ECI@ss 7.0	27270902
ECI@ss 8.0	27270902
ECI@ss 8.1	27270902
ECI@ss 9.0	27270902
ECI@ss 10.0	27270902

 $^{^{2)}\,\}mathrm{May}$ not exceed or fall below U_{V} tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ Max. tightening torque: 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 \leq 24 V and IA < 30 mA.

ECI@ss 11.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
UNSPSC 16.0901	39121528

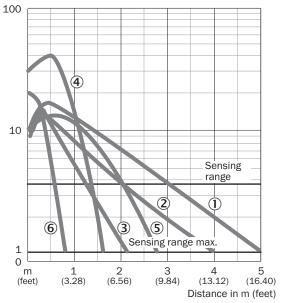
Connection diagram

Cd-092

Characteristic curve

WL4S-3, WLG4S-3, 5 m

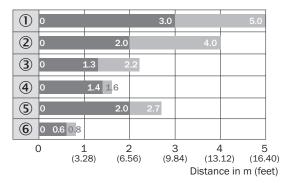
Operating reserve



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

Sensing range diagram

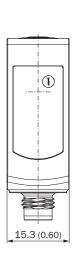
WL4S-3, WLG4S-3, 5 m

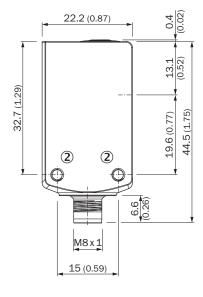


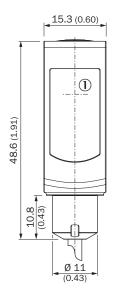
- Sensing range
- Sensing range max.
- ① Reflector PL80A
- ② Reflector PL40A
- 3 Reflector PL20A
- PL10F reflector
- ⑤ Reflector P250 CHEM
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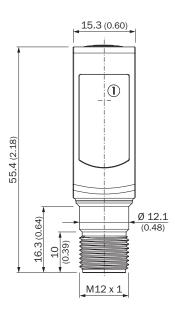
Dimensional drawing (Dimensions in mm (inch))

WL4S-3V, WLG4S-3V, with single teach-in button











- ① Center of optical axis
- ② Threaded mounting hole M3
- ③ LED indicator yellow: Status of received light beam
- 4 LED indicator green: Supply voltage active
- ⑤ Teach-in button

Recommended accessories

Other models and accessories → www.sick.com/W4S-3_Inox_Glass

	Brief description	Туре	Part no.		
Mounting brackets and plates					
N. A.	Mounting bracket for floor mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-B	2051630		
Plug connectors and cables					
•	Head A: female connector, M12, 4-pin, straight Head B: Flying leads Cable: PP, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H202 and CH202. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H202)	DOL-1204-G05MRN	6058476		
Reflectors					
	Chemically resistant, screw connection, 47 mm x 47 mm, plastic, Screw-on, 2 hole mounting $$	P250 CHEM	5321097		

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