



WLG4S-3P2232V

W4

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
WLG4S-3P2232V	1046446

Other models and accessories → www.sick.com/W4

Illustration may differ



Detailed technical data

Features

Functional principle	Photoelectric retro-reflective sensor	
Functional principle detail	Autocollimation	
Sensing range max.	0 m ... 5 m ¹⁾	
Sensing range	0 m ... 3 m ¹⁾	
Polarisation filters	Yes	
Emitted beam	Light source Type of light Light spot size (distance)	PinPoint LED ²⁾
		Visible red light
		Ø 45 mm (1.5 m)
Key LED figures	Wave length	650 nm
		Single teach-in button
Adjustment		
Special applications	Hygienic and washdown zones, Detecting transparent objects	
Housing design	Washdown	
AutoAdapt	✓	

¹⁾ Reflector PL80A.

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

Safety-related parameters

MTTF_D	1,232 years
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DC_{avg}	0 %
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Electrical data

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Protection class	III
Digital output	
Type	PNP
Switching mode	Light/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 %
Output function	Complementary
Circuit protection	A, B, C ^{6) 7) 8)}

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ 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⁾ A = V_S connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

Mechanical data

Housing	Rectangular
Design detail	Slim
Dimensions (W x H x D)	15.25 mm x 44.9 mm x 22.2 mm
Connection	Male connector M8, 4-pin ¹⁾
Material	
Housing	Stainless steel, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Weight	40 g

¹⁾ Max. tightening torque: 0.6 Nm.

Ambient data

Enclosure rating	IP66 IP67 IP68 IP69K ¹⁾
Ambient operating temperature	-30 °C ... +60 °C ²⁾
Ambient temperature, storage	-30 °C ... +75 °C

¹⁾ Only in case of correctly mounted IP69K connecting cable.

²⁾ At UV ≤ 24 V and IA < 30 mA.

UL File No.

NRKH.E181493 & NRKH7.E181493

1) Only in case of correctly mounted IP69K connecting cable.

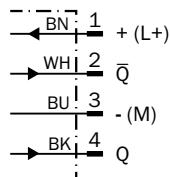
2) At UV \leq 24 V and IA $<$ 30 mA.

Classifications

ECLASS 5.0	27270902
ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902
ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

Connection diagram

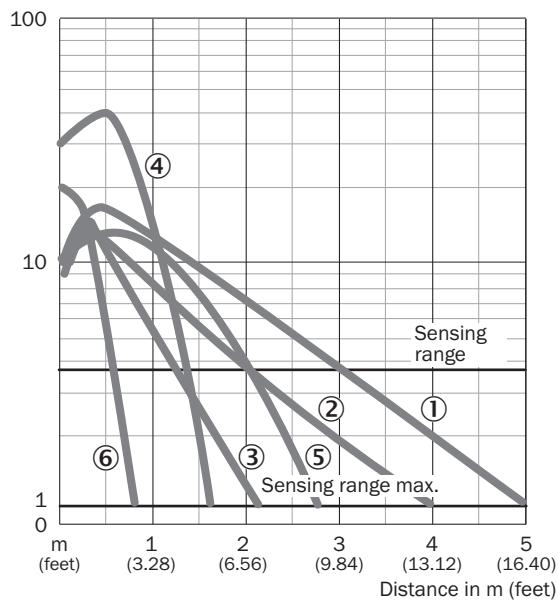
Cd-083



Characteristic curve

WL4S-3, WLG4S-3, 5 m

Operating reserve



① Reflector PL80A

② Reflector PL40A

③ Reflector PL20A

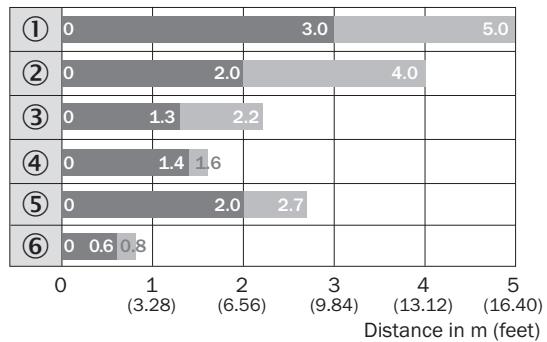
④ PL10F reflector

⑤ Reflector P250 CHEM

⑥ 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

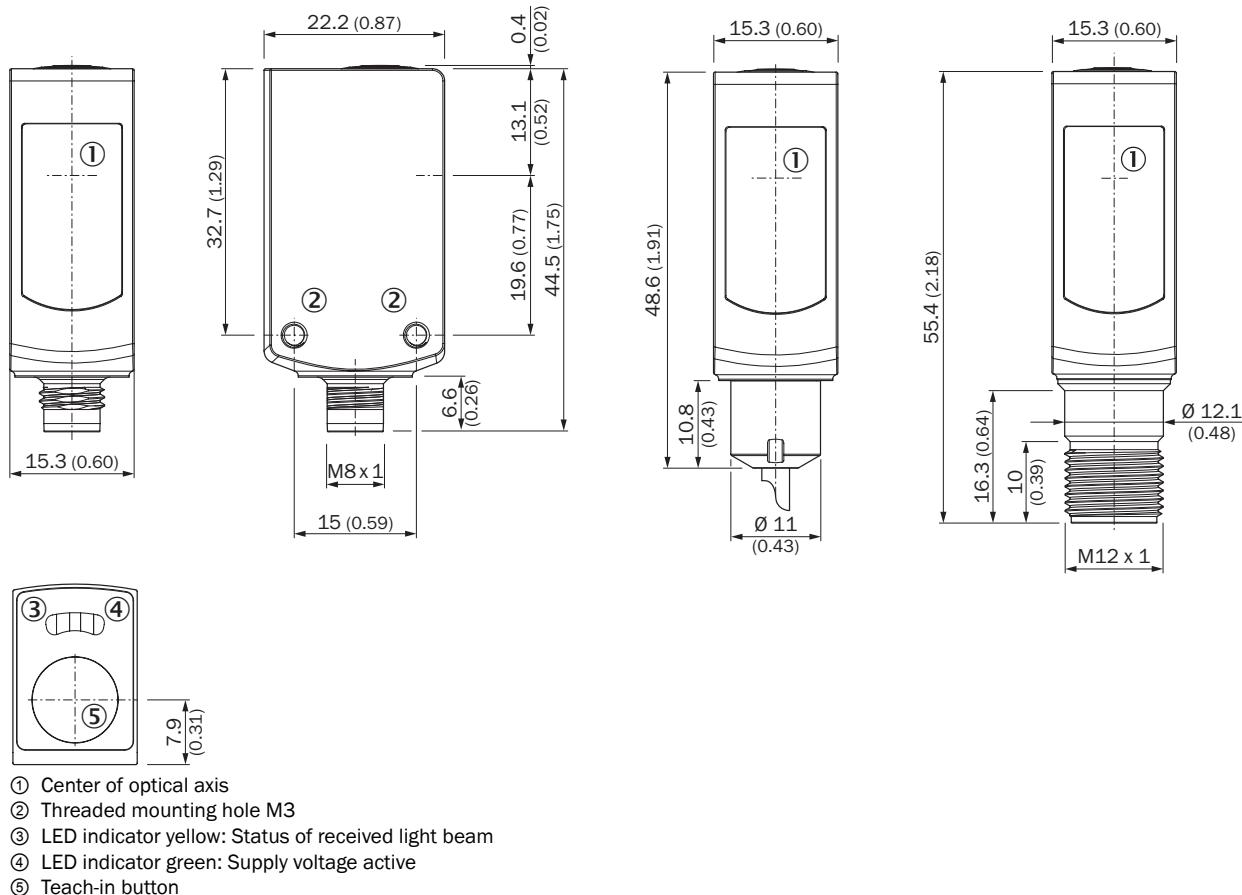
④ PL10F reflector

⑤ Reflector P250 CHEM

⑥ Reflective tape REF-IRF-56

Dimensional drawing (Dimensions in mm (inch))

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



Recommended accessories

Other models and accessories → www.sick.com/W4

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for floor mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-B	2051630
Reflectors			
	Chemically resistant, screw connection, 52 mm x 61 mm, plastic, Screw-on, 2 hole mounting	P250 CHEM	5321097

	Brief description	Type	Part no.
Others	<p></p> <ul style="list-style-type: none"> Connection type head A: Female connector, M8, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2) Application: Hygienic and washdown zones 	DOL-0804-G05MNI	6059194

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

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