



WLG4S-3P3232HS02

W4

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

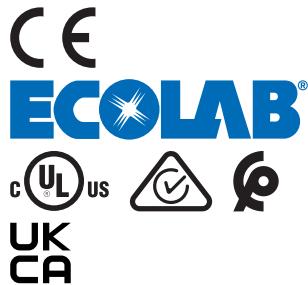


Ordering information

Type	part no.
WLG4S-3P3232HS02	1050665

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

Illustration may differ



Detailed technical data

Features

Functional principle	Photoelectric retro-reflective sensor
Functional principle detail	Without reflector minimum distance (autocollimation/coaxial optics)
Sensing range max.	0 m ... 5 m ¹⁾
Sensing range	0 m ... 3 m ¹⁾
Polarisation filters	Yes
Emitted beam	
Light source	PinPoint LED ²⁾
Type of light	Visible red light
Light spot size (distance)	Ø 45 mm (1.5 m)
Key LED figures	
Wave length	650 nm
Adjustment	Single teach-in button
Special features	Complementary switching outputs
Special applications	Hygienic and washdown zones, Detecting transparent objects
Housing design	Hygiene
AutoAdapt	✓

¹⁾ Reflector PL80A.

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

Electronics

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	$< 5 \text{ V}_{\text{pp}}$ ²⁾
Current consumption	30 mA ³⁾
Protection class	III
Digital output	
Type	PNP
Switching mode	Light/dark switching
Output current $I_{\text{max.}}$	$\leq 100 \text{ mA}$
Response time	$< 0.5 \text{ ms}$ ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Attenuation along light beam	$> 8 \text{ \%}$
Output function	Complementary
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾
Special feature	D12 adapter shaft

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

²⁾ May not fall below or exceed 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.

Mechanics

Housing	Rectangular
Design detail	Slim
Dimensions (W x H x D)	15.25 mm x 63.2 mm x 22.15 mm
Connection	Cable with M8 male connector, 4-pin ¹⁾ ²⁾
Connection detail	
Length of cable (L)	150 mm ²⁾
Material	
Housing	Metal, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Cable	Plastic, PVC
Weight	50 g

¹⁾ Max. tightening torque: 0.6 Nm.

²⁾ Do not bend below 0 °C.

Ambient data

Enclosure rating	IP66 IP67
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¹⁾ At $UV \leq 24 \text{ V}$ and $IA < 30 \text{ mA}$.

	IP68 IP69K
Ambient operating temperature	-30 °C ... +70 °C ¹⁾ -30 °C ... +60 °C
Ambient temperature, storage	-30 °C ... +75 °C
UL File No.	FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493

¹⁾ At UV ≤ 24 V and IA < 30 mA.

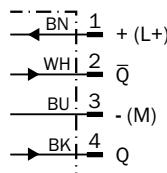
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
ECOLAB certificate	✓
cULus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

Classifications

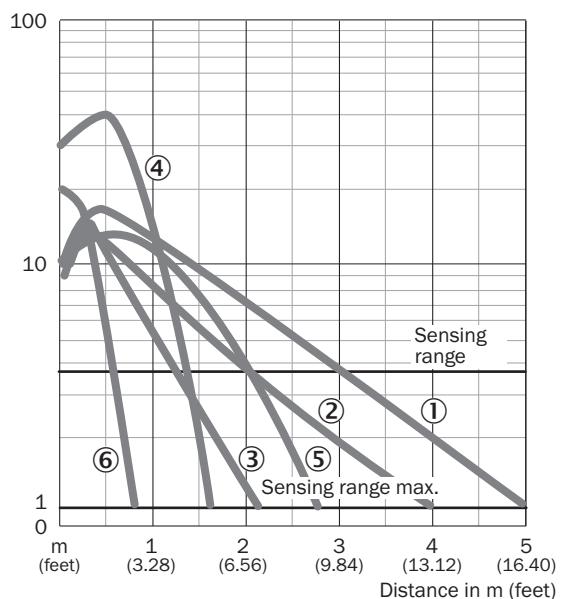
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ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902
ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0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

Connection diagram Cd-083



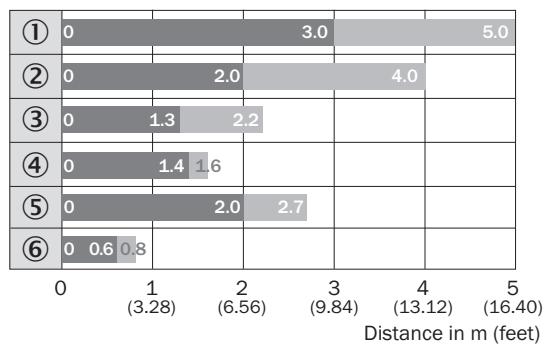
Characteristic curve WL4S-3, WLG4S-3, 5 m

Operating reserve



- ① Reflector PL80A
- ② Reflector PL40A
- ③ Reflector PL20A
- ④ PL10F reflector
- ⑤ Reflector P250 CHEM
- ⑥ Reflective tape REF-IRF-56

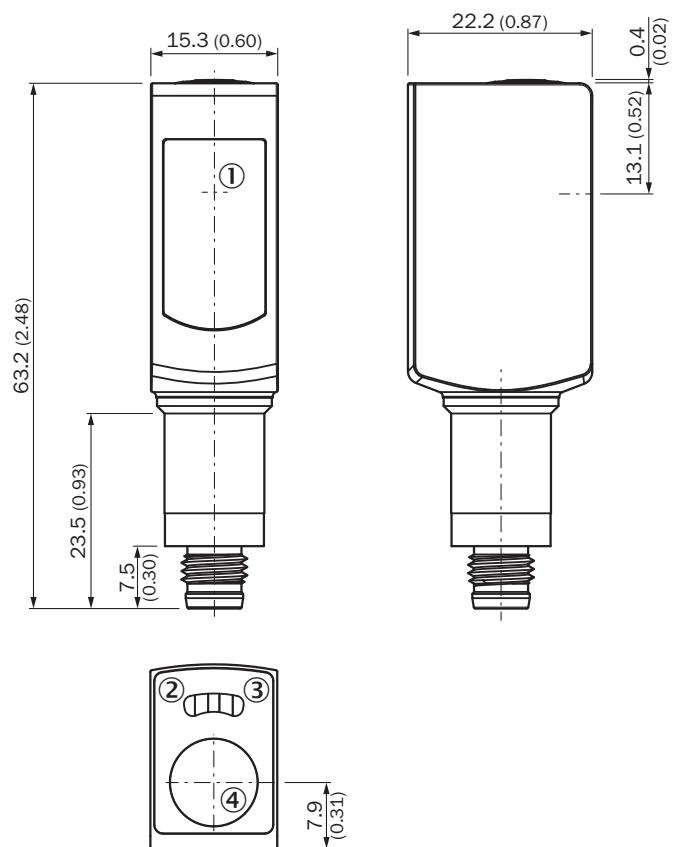
Sensing range diagram WL4S-3, WLG4S-3, 5 m



■ 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 WTB4S-3H, WL4S-3H, WLG4S-3H, with single teach-in button, D12 adapter shaft



Dimensions in mm (inch)

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

Recommended accessories

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

Brief description	Type	part no.
connectors and cables		



- **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

	Brief description	Type	part no.
reflectors and optics	 <ul style="list-style-type: none">Description: Chemically resistant, screw connectionDimensions: 52 mm 61 mmAmbient operating temperature: -20 °C ... +140 °C	P250 CHEM	5321097

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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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