

# WSE4S-3P1430V

W4

**PHOTOELECTRIC SENSORS** 



# Ordering information

Туре	part no.
WSE4S-3P1430V	1058184

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

Illustration may differ



#### Detailed technical data

#### **Features**

Functional principle	Through-beam photoelectric sensor
Sensing range max.	0 m 5 m
Sensing range	0 m 4.5 m
Emitted beam	
Light source	PinPoint LED <sup>1)</sup>
Type of light	Visible red light
Light spot size (distance)	Ø 50 mm (2 m)
Key LED figures	
Wave length	650 nm
Adjustment	None
Special applications	Hygienic and washdown zones
Part number of individual components	2064069 WS4S-3D1430V 2064072 WE4S-3P1430V
Housing design	Washdown

 $<sup>^{1)}</sup>$  Average service life: 100,000 h at  $T_{U}$  = +25 °C.

## Safety-related parameters

MTTF <sub>D</sub>	968 years
<b>DC</b> <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

#### **Electronics**

Supply voltage $\mathbf{U}_{\mathrm{B}}$	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Protection class	III
Digital output	
Туре	PNP
Switching mode	Light switching
Output current I <sub>max.</sub>	≤ 100 mA
Response time	< 0.5 ms <sup>3)</sup>
Switching frequency	1,000 Hz <sup>4)</sup>
Circuit protection	A <sup>5)</sup> B <sup>6)</sup> C <sup>7)</sup>
Test input sender off	TE to 0 V

 $<sup>^{1)}</sup>$  Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

#### Mechanics

Housing	Rectangular
Design detail	Slim
Dimensions (W x H x D)	15.25 mm x 48.6 mm x 22.2 mm
Connection	Cable, 3-wire, 5 m <sup>1)</sup>
Connection detail	
Conductor size	0.14 mm <sup>2</sup>
Length of cable (L)	5 m <sup>1)</sup>
Material	
Housing	Metal, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Cable	Plastic, PVC
Weight	125 g

<sup>1)</sup> Do not bend below 0 °C.

#### Ambient data

Enclosure rating	IP66 IP67 IP68 IP69K
Ambient operating temperature	-30 °C +70 °C <sup>1)</sup>
Ambient temperature, storage	-30 °C +75 °C

 $<sup>^{1)}</sup>$  At UV  $\leq$  24 V and IA  $\leq$  30 mA.

 $<sup>^{2)}</sup>$  May not fall below or exceed  $\mathrm{U}_{\mathrm{V}}$  tolerances.

 $<sup>^{</sup>m 3)}$  Signal transit time with resistive load.

<sup>4)</sup> With light/dark ratio 1:1.

 $<sup>^{5)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

 $<sup>^{6)}</sup>$  B = inputs and output reverse-polarity protected.

 $<sup>^{7)}</sup>$  C = interference suppression.

#### UL File No. NRKH.E181493 & NRKH7.E181493

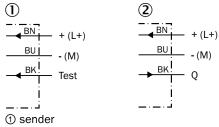
#### Certificates

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

#### Classifications

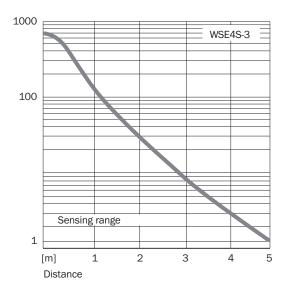
ECLASS 5.0	27270901
ECLASS 5.1.4	27270901
ECLASS 6.0	27270901
ECLASS 6.2	27270901
ECLASS 7.0	27270901
ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ETIM 5.0	EC002716
<b>ETIM 6.0</b>	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

# Connection diagram Cd-061

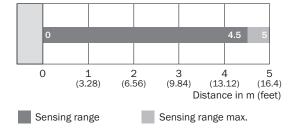


 $<sup>^{1)}</sup>$  At UV  $\leq$  24 V and IA < 30 mA.

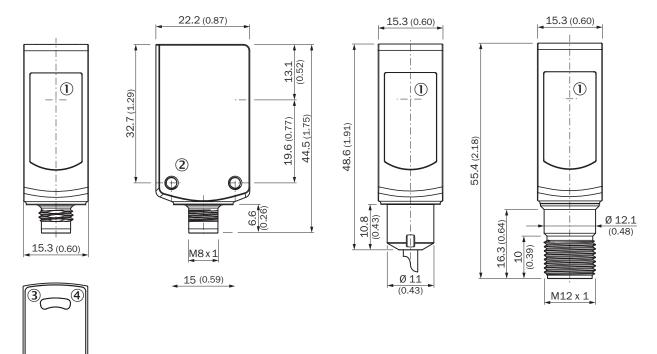
# Characteristic curve WSE4S-3V, WSE4S-3H



# Sensing range diagram WSE4S-3



### Dimensional drawing WL4S-3V, WLG4S-3V, without single teach-in button



Dimensions in mm (inch)

- 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

#### Recommended accessories

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

	Brief description	Туре	part no.
connectors ar	d cables		
	<ul> <li>Connection type head A: Male connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	STE-0803-G	6037322

	Brief description	Туре	part no.	
Mounting sys	Mounting systems			
M : Ful	<ul> <li>Description: Mounting bracket for floor mounting</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel 1.4571</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: W4S, W4F, W4S</li> </ul>	BEF-W4-B	2051630	
	<ul> <li>Description: Plate N02N for universal clamp bracket</li> <li>Material: Stainless steel, stainless steel</li> <li>Details: Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp)</li> <li>Items supplied: Universal clamp (5322627), mounting hardware</li> <li>Usable for: W4S-3 Glass, W10, W4SLG-3, W4S-3 Inox, W4S-3 Inox Glass, W9, W11-2, W12-3, W12-2 Laser, W12G, W12 Teflon, W16, W250, W250-2, PowerProx, W11G-2, TranspaTect, WTT12, UC12, P250, G6 Inox, W4S, W4SL-3V, W4SLG-3V, W4SL-3H</li> </ul>	BEF-KHS-NO2N	2051618	

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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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