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DATA SHEET

WSE4S-3P1430V

W4
Photoelectric sensors

SICK
Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

WSE4S-3P1430V

ORDERING INFORMATION

Type	part no.
WSE4S-3P1430V	1058184

Further device versions and accessories at www.sick.com/W4

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 [1]
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

[1] Average service life: 100,000 h at T_U = +25 °C.

SAFETY-RELATED PARAMETERS

$MTTF_D$	968 years
DC_{avg}	0 %
T_M (mission time)	20 years

ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC [1]
Ripple	< 5 V_{pp} [2]
Protection class	III
Digital output	
Type	PNP
Switching mode	Light switching
Output current $I_{max.}$	≤ 100 mA
Response time	< 0.5 ms [3]
Switching frequency	1,000 Hz [4]
Circuit protection	A [5] B [6] C [7]
Test input sender off	TE to 0 V

[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] Signal transit time with resistive load.

[4] With light/dark ratio 1:1.

[5] A = V_S connections reverse-polarity protected.

[6] B = inputs and output reverse-polarity protected.

[7] C = interference suppression.

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 [1]
Connection detail	
Conductor size	0.14 mm²
Length of cable (L)	5 m [1]
Material	
Housing	Metal, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Cable	Plastic, PVC
Weight	125 g

[1] Do not bend below 0 °C.

AMBIENT DATA

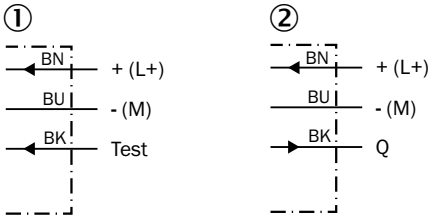
Enclosure rating	IP66 IP67 IP68 IP69K
Ambient operating temperature	–30 °C ... +70 °C [1]
Ambient temperature, storage	–30 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

[1] At UV ≤ 24 V and IA < 30 mA.

CERTIFICATES

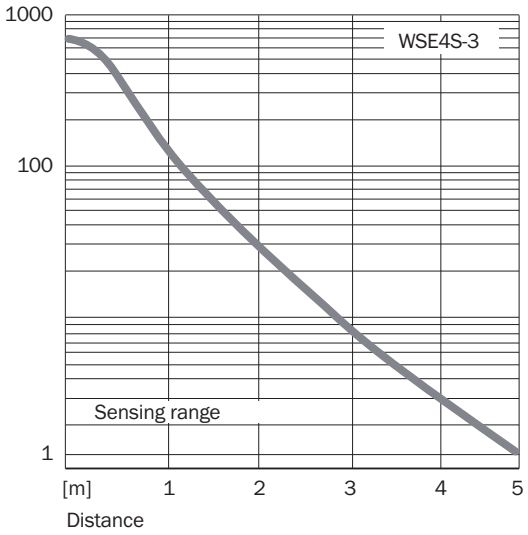
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
ECOLAB certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

CONNECTION DIAGRAM CD-061

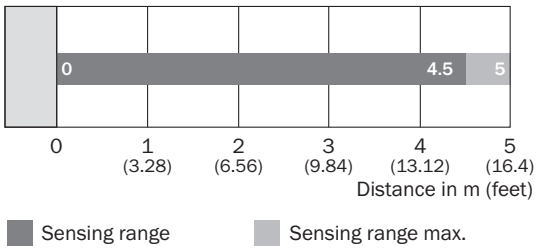


① sender
② receiver

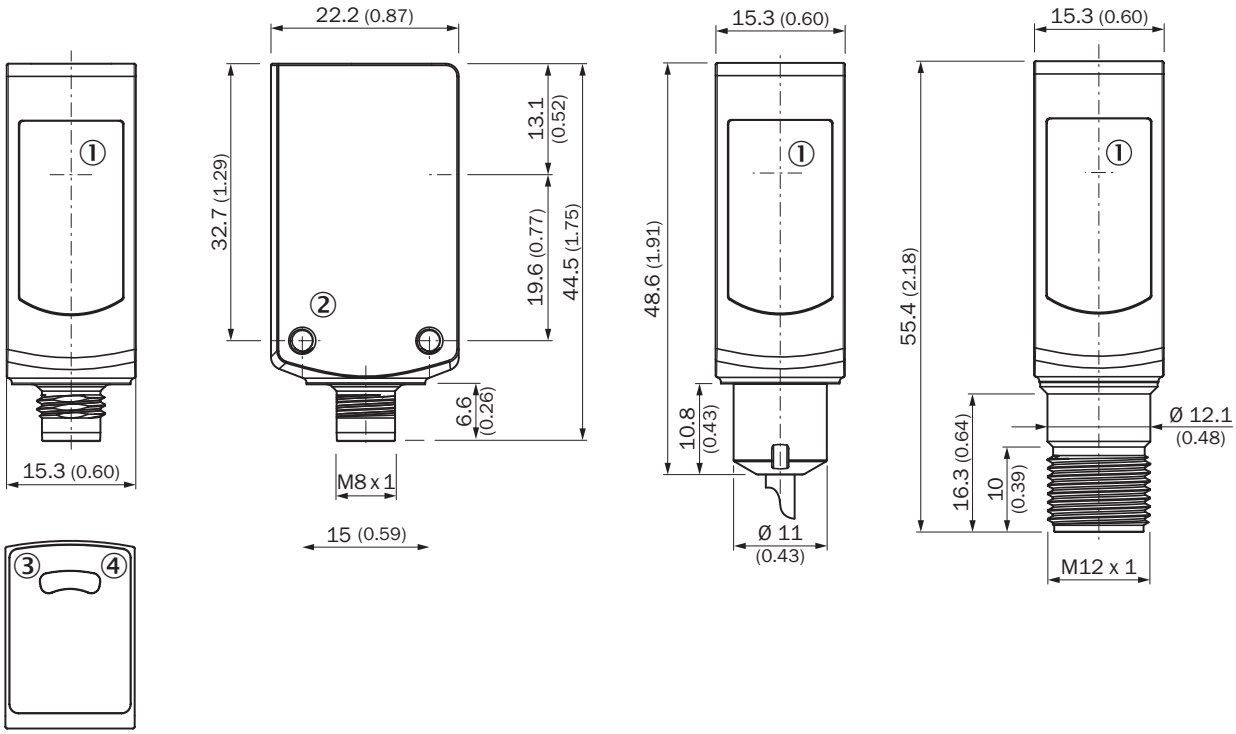
CHARACTERISTIC CURVE WSE4S-3V, WSE4S-3H



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1058184

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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