WSE2S-2P3130

W2S-2

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

WSE2S-2P3130 | W2S-2

MINIATURE PHOTOELECTRIC SENSORS

Ordering information

Type	Part no.
WSE2S-2P3130	1063521

Other models and accessories ➔ www.sick.com/W2S-2

Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	7.7 mm x 21.8 mm x 13.5 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m ... 2.5 m
Sensing range	0 m ... 2 m
Type of light	Visible red light
Light source	PinPoint LED [1]
Light spot size (distance)	Ø 65 mm (1,500 mm)
Wave length	640 nm
Adjustment	None

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	≤ 5 V_{pp} [2]

[1] Limit values.
[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] Do not bend below 0 °C.
[7] A = V_S connections reverse-polarity protected.
[8] B = output reverse-polarity protected.
[9] D = outputs overcurrent and short-circuit protected.

Current consumption	20 mA [3]
Switching output	PNP
Switching mode	Light switching
Output current I$_{max.}$	< 50 mA
Response time	< 0.4 ms [4]
Switching frequency	1,200 Hz [5]
Connection type	Cable with connector M8, 3-pin, 200 mm [6]
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A [7] B [8] D [9]
Housing material	Plastic, ABS/PC
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +50 °C
Ambient storage temperature	–40 °C ... +75 °C
UL File No.	NRKH.E181493
Part number of individual components	2071144 WS2S-2D3130 2071147 WE2S-2P3130

[1] Limit values.

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[3] Without load.

[4] Signal transit time with resistive load.

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[7] A = V$_S$ connections reverse-polarity protected.

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Safety-related parameters

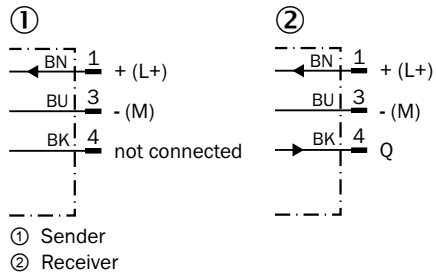|	
MTTF$_D$	2,659 years
DC$_{avg}$	0%

Classifications

ECl@ss 5.0	27270901
ECl@ss 5.1.4	27270901
ECl@ss 6.0	27270901
ECl@ss 6.2	27270901
ECl@ss 7.0	27270901
ECl@ss 8.0	27270901
ECl@ss 8.1	27270901
ECl@ss 9.0	27270901
ECl@ss 10.0	27270901
ECl@ss 11.0	27270901
ETIM 5.0	EC002716

ETIM 6.0	EC002716
ETIM 7.0	EC002716
UNSPSC 16.0901	39121528

Connection diagram

Cd-051

① Sender
② Receiver

Characteristic curve

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Light spot size

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Spot diameter in mm (inch)
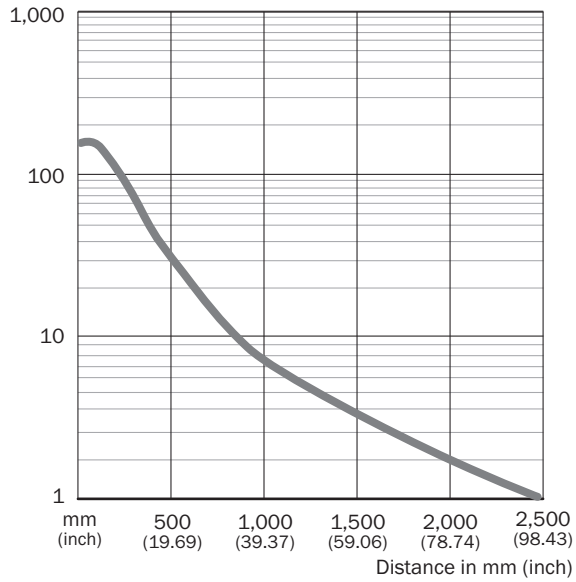
Sensing range in mm (inch)
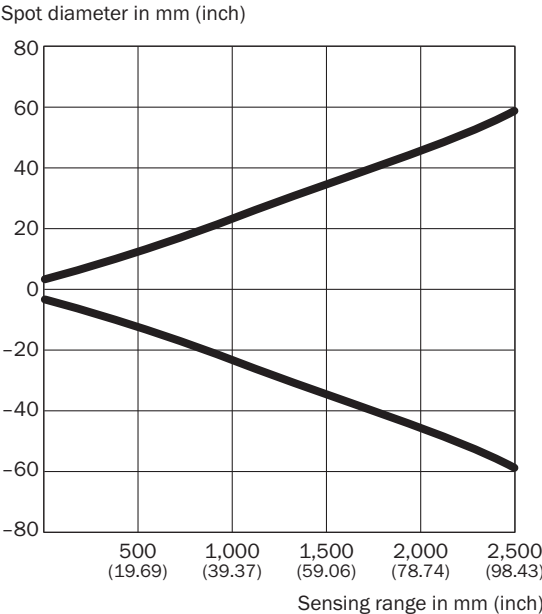
Dimensions in mm (inch)

Sensing range	Spot diameter
10 (0.39)	4.0 (0.16)
250 (9.84)	13.0 (0.51)
500 (19.69)	23.0 (0.91)
1,000 (39.37)	45.0 (1.77)
1,500 (59.06)	65.0 (2.56)
2,500 (98.43)	116.0 (4.57)

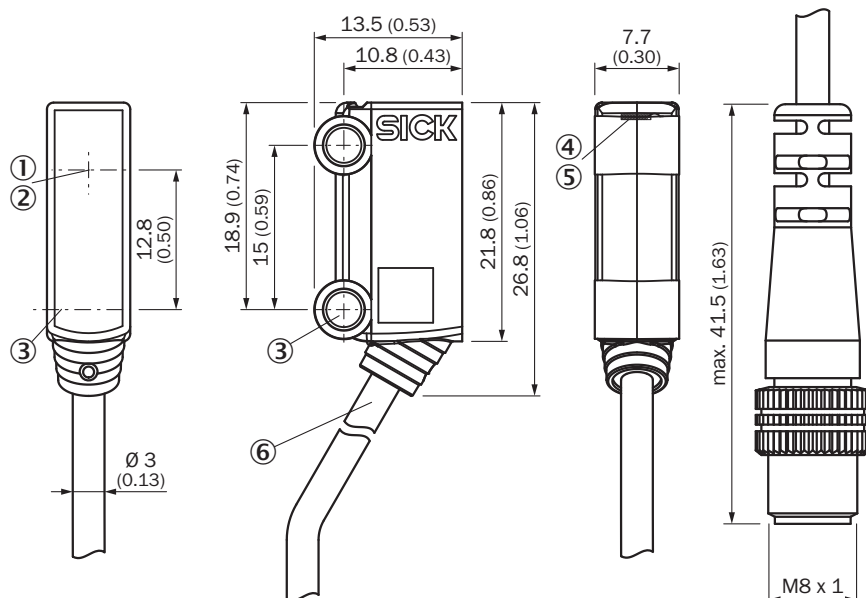## Sensing range diagram

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Distance in mm (inch)

■ Sensing range   ■ Sensing range max.
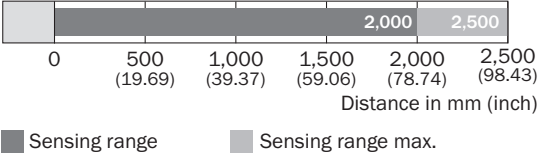
Dimensional drawing (Dimensions in mm (inch))

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① Optical axis, receiver
② Optical axis, sender
③ Middle axis fixing hole Ø 3.2 mm
④ LED indicator green: power on
⑤ LED indicator yellow: Status of received light beam
⑥ Connection

Recommended accessories

Other models and accessories ➜ www.sick.com/W2S-2

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U13-050VA1XLEAX	2095884
	Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322

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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."

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