



WSE2S-2P3230S04

W2

PHOTOELECTRIC SENSORS





Ordering information

Туре	part no.
WSE2S-2P3230S04	1086969

Included in delivery: SCREW SET W2S/G2S (1)

Other models and accessories → www.sick.com/W2

Illustration may differ



Detailed technical data

Features

Functional 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
Special features	Increased operating reserve

 $^{^{1)}}$ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage U _B	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾

¹⁾ Limit values.

 $^{^{2)}\,\}mbox{May}$ not fall below or exceed $\mbox{U}_{\mbox{\scriptsize V}}$ tolerances.

³⁾ Without load.

 $^{^{4)}}$ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

 $^{^{6)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 $^{^{7)}}$ 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/dark switching
Output current I _{max.}	≤ 50 mA
Response time	< 0.4 ms ⁴⁾
Switching frequency	1,200 Hz ⁵⁾
Connection type	Cable with M8 male connector, 4-pin, 200 mm ⁶⁾
Cable material	Plastic, PVC
Conductor cross section	0.09 mm ²
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 temperature, storage	-40 °C +75 °C
UL File No.	NRKH.E181493
Part number of individual components	2069152 WS2S-2D3230 2069153 WE2S-2P3230

¹⁾ Limit values.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	√
ACMA declaration of conformity	√
Moroccan declaration of conformity	√
China RoHS	√
cULus 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

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⁾ Do not bend below 0 °C.

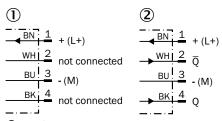
 $^{^{7)}}$ A = V_S connections reverse-polarity protected.

⁸⁾ B = output reverse-polarity protected.

⁹⁾ D = outputs overcurrent and short-circuit protected.

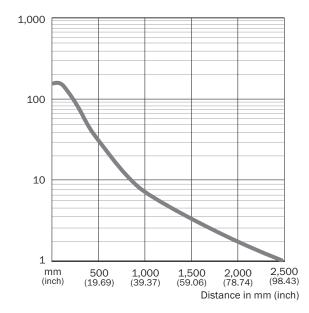
ECLASS 7.0	27270901
ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection diagram Cd-085



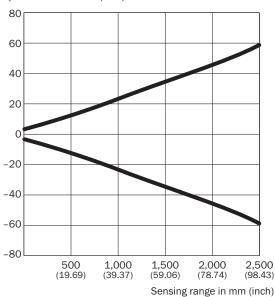
sender
 receiver

Characteristic curve WSE2S-2



Light spot size WSE2S-2

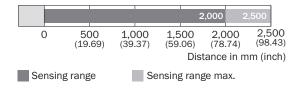




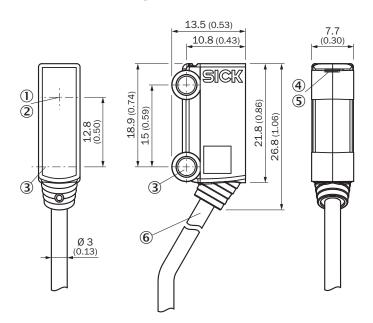
Dimensions in mm (inch)

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

Sensing range diagram WSE2S-2



Dimensional drawing WSE2S-2



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Dimensions in mm (inch)

- ① Optical axis, receiver
- ② Optical axis, sender
- 4 LED indicator green: power on
- ⑤ LED indicator yellow: Status of received light beam
- © Connection

Recommended accessories

Other models and accessories → www.sick.com/W2

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	 Description: Mounting bracket for floor mounting Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware Suitable for: W2S-2 	BEF-W2S-A	4034748	
	 Description: Plate N11N for universal clamp bracket Material: Stainless steel Details: Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp) Items supplied: Universal clamp (5322627), mounting hardware Usable for: DeltaPac, Glare, WTD20E 	BEF-KHS-N11N	2071081	
connectors an	nd cables			
	 Connection type head A: Female connector, M8, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF8U14-050VA3XLEAX	2095889	
	 Connection type head A: Female connector, M8, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YF8U14-050UA3XLEAX	2094792	
	 Connection type head A: Male connector, M8, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² 	STE-0804-G	6037323	

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.

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For us, that is "Sensor Intelligence."

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