

Detailed technical data

Features

Sensor 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 ¹⁾	PinPoint LED
Light spot size (distance)	Ø 65 mm (1,500 mm)
Wave length	640 nm

¹⁾ Average service life of 100,000 h at $T_A = +25 \text{ °C}$.

Mechanics/electronics

Supply voltage ¹⁾	10 V DC ... 30 V DC
Ripple ²⁾	$\leq 5 V_{pp}$
Power consumption ³⁾	$\leq 20 \text{ mA}$
Output type	PNP / NPN (depending on type)
Switching mode	Light switching Dark-switching Light/dark-switching (depending on type)
Output current I_{max}	$< 50 \text{ mA}$
Response time ⁴⁾	$< 0.4 \text{ ms}$
Switching frequency ⁵⁾	1,200 Hz
Connection type	Cable, 2 m ⁶⁾ Cable with connector, 200 mm ⁶⁾ (depending on type)
Circuit protection	A ⁷⁾ , B ⁸⁾ , D ⁹⁾
Housing material	ABS/PC
Optics material	PMMA
Enclosure rating	IP 67
Ambient operating temperature	$-25 \text{ °C} \dots +50 \text{ °C}$
Ambient storage temperature	$-40 \text{ °C} \dots +75 \text{ °C}$

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

²⁾ May not exceed or fall short of V_S 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.

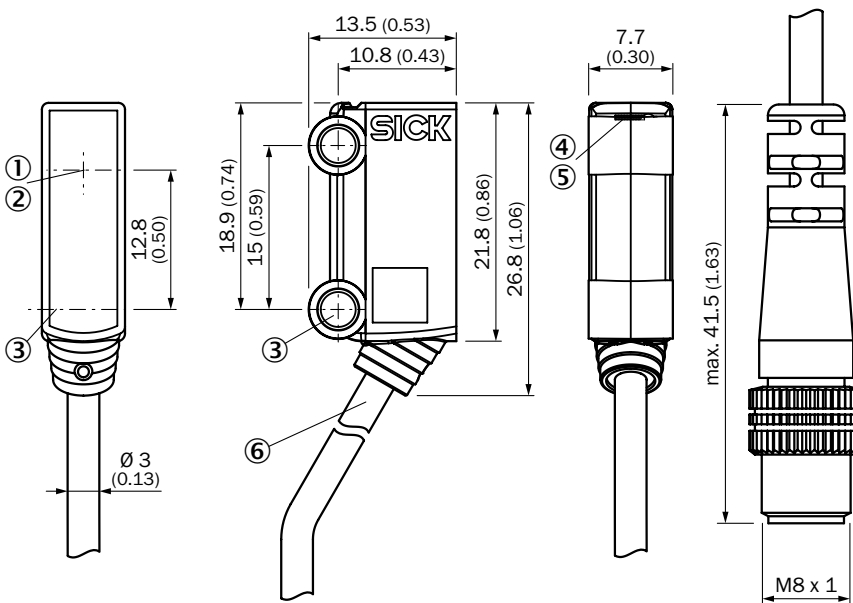
Ordering information

Other models available at www.mysick.com/en/W2S-2

WSE2S-2

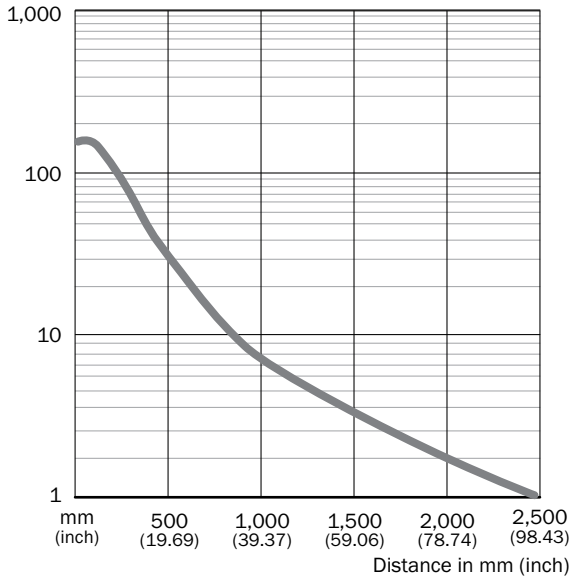
Sensing range max.	Output type	Switching mode	Connection	Connection diagram	Model name	Part no.	
0 m ... 2.5 m	PNP	Light switching	Cable, 3-wire, 2 m	Cd-049	WSE2S-2P1330	1065940	
			Cable with connector M8, 3-pin, 200 mm	Cd-051	WSE2S-2P3130	1063521	
			Cable with connector M8, 3-pin, 1000 mm	Cd-051	WSE2S-2P3030S02	1069003	
		Dark-switching	Cable, 3-wire, 2 m	Cd-049	WSE2S-2F1330	1965941	
			Cable with connector M8, 3-pin, 200 mm	Cd-051	WSE2S-2F3130	1063523	
			Cable with connector M8, 3-pin, 700 mm	Cd-051	WSE2S-2F3030S01	1068155	
	NPN	Light/dark-switching	Cable with connector M8, 4-pin, 200 mm	Cd-085	WSE2S-2P3230	1063650	
			Light switching	Cable, 3-wire, 2 m	Cd-049	WSE2S-2N1330	1064584
				Cable, 3-wire, 2 m	Cd-049	WSE2S-2E1330	1064586
		Dark-switching	Cable with connector M8, 3-pin, 200 mm	Cd-051	WSE2S-2E3130	1064588	
			Light/dark-switching	Cable, 4-wire, 2 m	Cd-085	WSE2S-2N1130	1063660

Dimensional drawing (Dimensions in mm (inch))

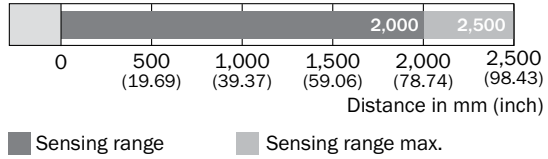


- ① Optical axis, receiver
- ② Optical axis, sender
- ③ Middle axis fixing hole \varnothing 3.2 mm
- ④ LED indicator green: power on
- ⑤ Status indicator LED, yellow: Status of received light beam
- ⑥ Connection

Characteristic curve

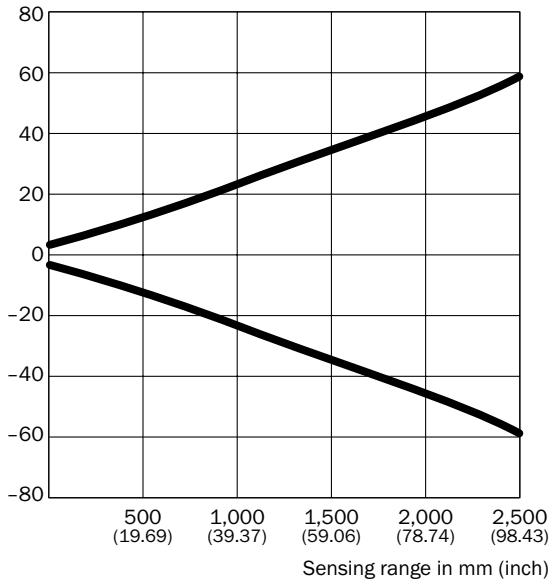


Bar diagrams



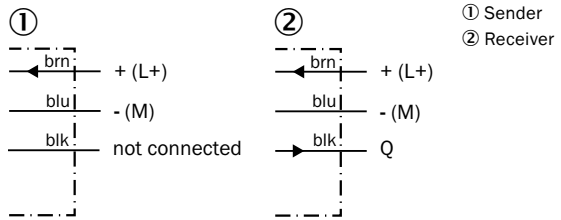
Light spot size

Spot diameter in mm (inch)

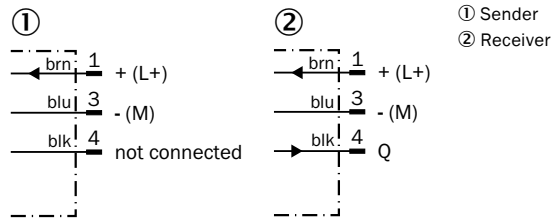


Connection diagram

Cd-049



Cd-051



Cd-085

