



# WSE11-2P1130

W11-2

**PHOTOELECTRIC SENSORS** 





#### Ordering information

Туре	part no.
WSE11-2P1130	1057572

Other models and accessories → www.sick.com/W11-2

Illustration may differ



#### Detailed technical data

#### **Features**

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	15.6 mm x 48.5 mm x 42 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m 20 m
Sensing range	0 m 15 m
Focus	Approx. 1.5°
Type of light	Visible red light
Light source	LED <sup>1)</sup>
Light spot size (distance)	Ø 220 mm (15 m)
Angle of dispersion	Approx. 1.5°
Wave length	633 nm
Adjustment	None

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

#### Mechanics/electronics

Supply voltage U <sub>B</sub>	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Power consumption, sender	≤ 25 mA <sup>3)</sup>
Power consumption, receiver	$\leq$ 20 mA $^{3)}$
Switching output	PNP
Output function	Complementary
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	Uv - 2.5 V / approx. 0 V
Output current I <sub>max.</sub>	≤ 100 mA
Response time	$\leq$ 2.5 ms $^{4)}$
Switching frequency	200 Hz <sup>5)</sup>
Connection type	Cable, 4-wire, 2 m <sup>6)</sup>
Cable material	Plastic, PVC
Conductor cross section	0.25 mm <sup>2</sup>
Circuit protection	A <sup>7)</sup> C <sup>8)</sup> D <sup>9)</sup>
Protection class	III
Weight	200 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67 IP69K
Test input sender off	TE to 0 V
Ambient operating temperature	-30 °C +60 °C
Ambient temperature, storage	-40 °C +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493
Part number of individual components	2063412 WS11-2D1130 2063413 WE11-2P1130

 $<sup>^{1)}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

#### Safety-related parameters

$MTTF_D$	982 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

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

<sup>3)</sup> Without load.

<sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

<sup>6)</sup> Do not bend below 0 °C.

 $<sup>^{7)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

 $<sup>^{8)}</sup>$  C = interference suppression.

 $<sup>^{9)}</sup>$  D = outputs overcurrent and short-circuit protected.

# WSE11-2P1130 | W11-2

# PHOTOELECTRIC SENSORS

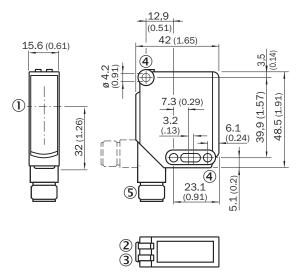
#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ECOLAB certificate	✓
cULus certificate	✓
EAC certificate / DoC	✓
Photobiological safety (DIN EN 62471) certificate	<b>✓</b>

#### 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
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

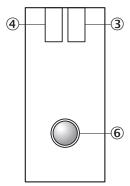
#### Dimensional drawing WSE11-2



Dimensions in mm (inch)

- ① Center of optical axis
- ② LED indicator green: Supply voltage active
- 3 LED indicator yellow: Status of received light beam
- 4 Mounting hole ø 4.2 mm
- ⑤ M12 connector, 4-pin or cable

#### Adjustments WTE11-2, WSE11-2

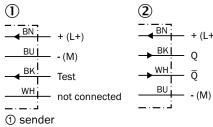


- 3 LED indicator green: Supply voltage active
- 4 LED indicator yellow: Status of received light beam
- 6 Adjustment sensing range: single teach-in button

#### Connection type

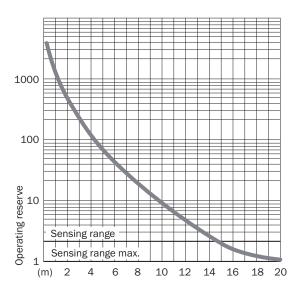


#### Connection diagram Cd-088



### 2 receiver

#### Characteristic curve WSE11-2



#### Recommended accessories

Other models and accessories → www.sick.com/W11-2

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	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	<ul> <li>Description: Mounting bracket, large</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: W11-2, W12-3, W16</li> </ul>	BEF-WG-W12	2013942	
6	<ul> <li>Description: Plate N11N for universal clamp bracket</li> <li>Material: 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: DeltaPac, Glare, WTD20E</li> </ul>	BEF-KHS-N11N	2071081	

	Brief description	Туре	part no.
connectors ar	nd cables		
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm²</li> </ul>	STE-1204-G	6009932

## 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.

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:**

Contacts and other locations -www.sick.com

