

# WLR2100-D2322

ZoneControl

**PHOTOELECTRIC SENSORS** 





## Ordering information

Туре	part no.
WLR2100-D2322	7027810

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

Illustration may differ

#### Detailed technical data

#### **Features**

Functional principle	Photoelectric retro-reflective sensor
Logical principle of operation	Block (slug) accumulation
Type of Release	Block (slug) release
Dimensions (W x H x D)	45 mm x 73.7 mm x 48.6 mm
Sensing range max.	0 m 9 m
Sensing range	0 m 9 m <sup>1)</sup>
Type of light	Visible red light
Light source	LED <sup>2)</sup>
Light spot size (distance)	Ø 205 mm (9 m)
Adjustment	None
Special applications	ZoneControl

<sup>1)</sup> Reflector PL80A.

## Mechanics/electronics

Supply voltage U <sub>B</sub>	18 V DC 30 V DC
Ripple	< 5 V <sub>pp</sub> <sup>1)</sup>
Current consumption	40 mA <sup>2)</sup>
Switching output	PNP
Switching mode	Light switching
Response time	1 ms
Switching frequency	500 Hz
Connection type	Cable with M12 male connector, 4-pin, 300 mm

 $<sup>^{1)}</sup>$  Of  $V_S$ .

 $<sup>^{2)}</sup>$  Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

<sup>&</sup>lt;sup>2)</sup> Without load and valve deenergized.

 $<sup>^{3)}</sup>$  A =  $\rm V_{S}$  connections reverse-polarity protected.

<sup>&</sup>lt;sup>4)</sup> C = interference suppression.

<sup>5)</sup> D = outputs overcurrent and short-circuit protected.

Connection type for daisy chain	Cable with female connector, M12, 4-pin 2 m
Circuit protection	A <sup>3)</sup> C <sup>4)</sup> D <sup>5)</sup>
Protection class	II
Housing material	Plastic, ABS
Enclosure rating	IP67
Shock and vibration resistance	According to IEC 68
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C
Connection type solenoid valve	Cable, 2m, with 9.4 mm DIN valve connector

 $<sup>^{1)}</sup>$  Of  $V_S$ .

## Pneumatic

Connection type solenoid valve	Cable, 2m, with 9.4 mm DIN valve connector
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## Classifications

ECLASS 5.0	27270902
ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902
ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

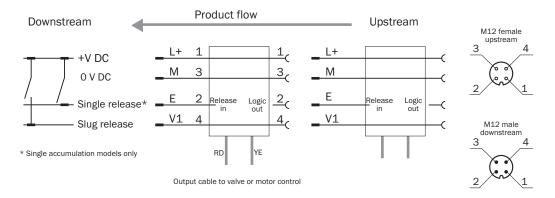
<sup>&</sup>lt;sup>2)</sup> Without load and valve deenergized.

 $<sup>^{3)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

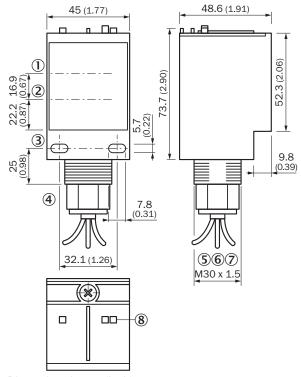
<sup>&</sup>lt;sup>4)</sup> C = interference suppression.

<sup>5)</sup> D = outputs overcurrent and short-circuit protected.

## Connection diagram Cd-199



## **Dimensional drawing**



Dimensions in mm (inch)

- 1 sender
- 2 receiver
- $\ensuremath{\ensuremath}\amb}\amb}}}}}}}}}}}}}}}}}}}$
- 4 Threaded mounting hole
- (5) series connection, cable with female connector
- 6 cable
- 7 Daisy chain connector, male
- Status indicator: LED

## Recommended accessories

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

	Brief description	Туре	part no.
Mounting sys	tems		
	Description: Mounting bracket     Material: Steel     Details: Steel, zinc coated     Items supplied: Mounting hardware included	BEF-WN-RT/IRT	2074621
0 0	<ul> <li>Description: Mounting bracket</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Mounting hardware included</li> <li>Usable for: WTR/WLR, IRT</li> </ul>	BEF-WK-WTR	2051786
	<ul> <li>Description: Universal mounting bracket for reflectors</li> <li>Dimensions (W x H x L): 85 mm x 90 mm x 35 mm</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Suitable for: C110A, P250, PL20, PL30A, PL40A, PL80A</li> </ul>	BEF-WN-REFX	2064574
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
onnectors a	nd cables		
Q.	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-050VB3XLEAX	2096235
	Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	STE-1204-G	6009932
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3XLEAX	2095608
reflectors and	dioptics		
	<ul> <li>Description: Rectangular, screw connection</li> <li>Dimensions: 51 mm 61 mm</li> <li>Ambient operating temperature: -30 °C +65 °C</li> </ul>	P250	5304812

## 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

