

WLR2100-D1311

ZoneControl

PHOTOELECTRIC SENSORS





Ordering information

Туре	part no.
WLR2100-D1311	7027185

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	Single accumulation
Type of Release	Single 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 ¹⁾
Type of light	Visible red light
Light source	LED ²⁾
Light spot size (distance)	Ø 205 mm (9 m)
Adjustment	None
Special applications	ZoneControl

¹⁾ Reflector PL80A.

Mechanics/electronics

Supply voltage U _B	18 V DC 30 V DC
Ripple	< 5 V _{pp} ¹⁾
Current consumption	40 mA ²⁾
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

 $^{^{1)}}$ Of V_{S} .

 $^{^{2)}}$ Average service life: 100,000 h at T_U = +25 °C.

²⁾ Without load and valve deenergized.

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

⁴⁾ C = interference suppression.

⁵⁾ D = outputs overcurrent and short-circuit protected.

Connection type for daisy chain	Cable with female connector, M12, 4-pin 1 m
Circuit protection	A ³⁾ C ⁴⁾ D ⁵⁾
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	Spade, 1 m

¹⁾ Of V_S.

Pneumatic

Connection type solenoid valve	Spade, 1 m
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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

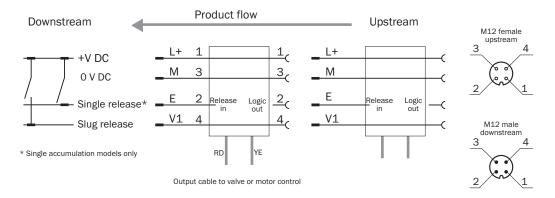
²⁾ Without load and valve deenergized.

 $^{^{3)}}$ A = V_S connections reverse-polarity protected.

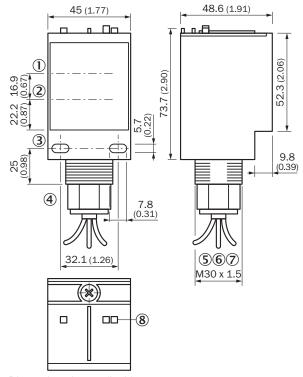
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Connection diagram Cd-199



Dimensional drawing



Dimensions in mm (inch)

- 1 sender
- 2 receiver
- ③ Fastening threads
- 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	stems		
	 Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included 	BEF-WN-RT/IRT	2074621
0 0	 Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Usable for: WTR/WLR, IRT 	BEF-WK-WTR	2051786
2 A 11 A	 Description: Universal mounting bracket for reflectors Dimensions (W x H x L): 85 mm x 90 mm x 35 mm Material: Steel Details: Steel, zinc coated Suitable for: C110A, P250, PL20, PL30A, PL40A, PL80A 	BEF-WN-REFX	2064574
6	 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
onnectors a	nd cables		
Q. Co	 Connection type head A: Female connector, M12, 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 	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
No.	 Connection type head A: Female connector, M12, 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 	YF2A14-050UB3XLEAX	2095608
eflectors an	d optics		
	 Description: Rectangular, screw connection Dimensions: 51 mm 61 mm Ambient operating temperature: -30 °C +65 °C 	P250	5304812

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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.

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