WLR2100-D2322

ZoneControl

MULTITASK PHOTOELECTRIC SENSORS

WLR2100-D2322 | ZoneControl
MULTITASK PHOTOELECTRIC SENSORS

Illustration may differ

Ordering information

Type	Part no.
WLR2100-D2322	7027810

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

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 [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.

[2] Average service life: 100,000 h at T_U = +25 °C.

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

[1] Of V_S.

[2] Without load and valve deenergized.

[3] A = V_S connections reverse-polarity protected.

[4] C = interference suppression.

[5] D = outputs overcurrent and short-circuit protected.

Switching frequency	500 Hz
Connection type	Cable with M12 male connector, 4-pin, 300 mm
Connection type for daisy chain	Cable with female connector, M12, 4-pin 2 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	Cable, 2m, with 9.4 mm DIN valve connector

[1)] Of V_S.

[2)] Without load and valve deenergized.

[3)] A = V_S connections reverse-polarity protected.

[4)] C = interference suppression.

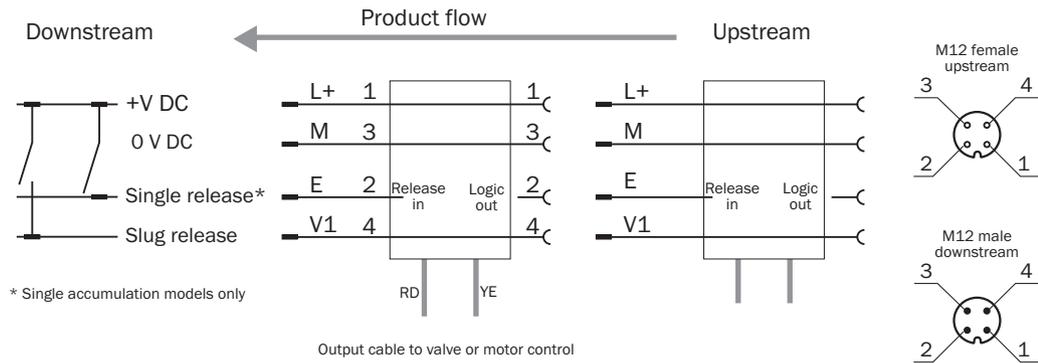[5)] D = outputs overcurrent and short-circuit protected.

Pneumatic

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

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

Connection diagram

Cd-199

Product flow

Downstream ← Upstream

+V DC
0 V DC

Single release*
Slug release

L+	1			1	L+
M	3			3	M
E	2	Release in	Logic out	2	E
V1	4			4	V1

Release in — Logic out

RD   YE

* Single accumulation models only

Output cable to valve or motor control

M12 female upstream

3 4
2 1

M12 male downstream

3 4
2 1

Dimensional drawing (Dimensions in mm (inch))

45 (1.77)
48.6 (1.91)

① Sender
② Receiver
16.9 (0.67)
22.2 (0.87)
73.7 (2.90)
52.3 (2.06)
5.7 (0.22)
③
25 (0.98)
9.8 (0.39)
④
7.8 (0.31)
32.1 (1.26)
⑤⑥⑦
M30 x 1.5
⑧
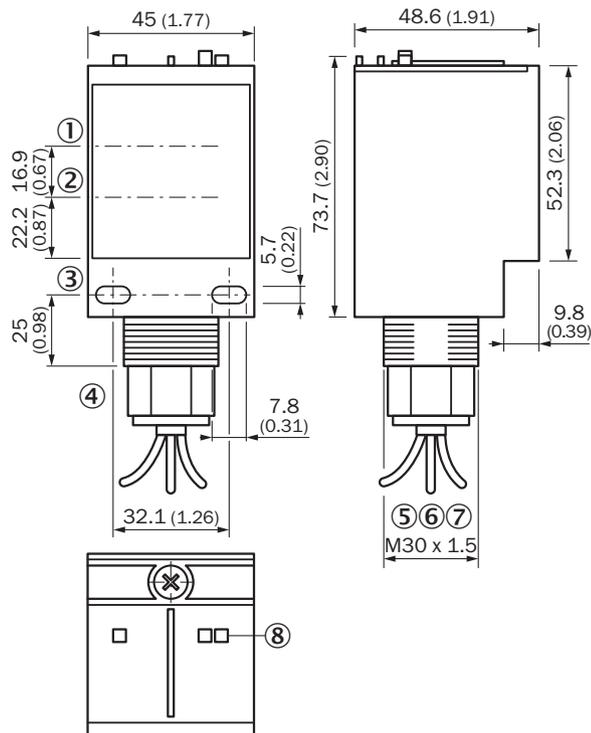
① Sender
② Receiver
③ Fastening threads
④ Threaded mounting hole
⑤ Series connection, cable with female connector
⑥ Cable
⑦ Daisy chain connector, male
⑧ Status indicator: LED

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket, steel, zinc coated, mounting hardware included	BEF-WK-WTR	2051786
	Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574
	Mounting bracket, steel, zinc coated, mounting hardware included	BEF-WN-RT/IRT	2074621
Plug connectors and cables			
	• **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	YF2A14-050VB3XLEAX	2096235
	• **Connection type head A:** Male connector, M12, 4-pin, straight • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	STE-1204-G	6009932
Reflectors			
	Rectangular, screw connection, 51 mm x 61 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812

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