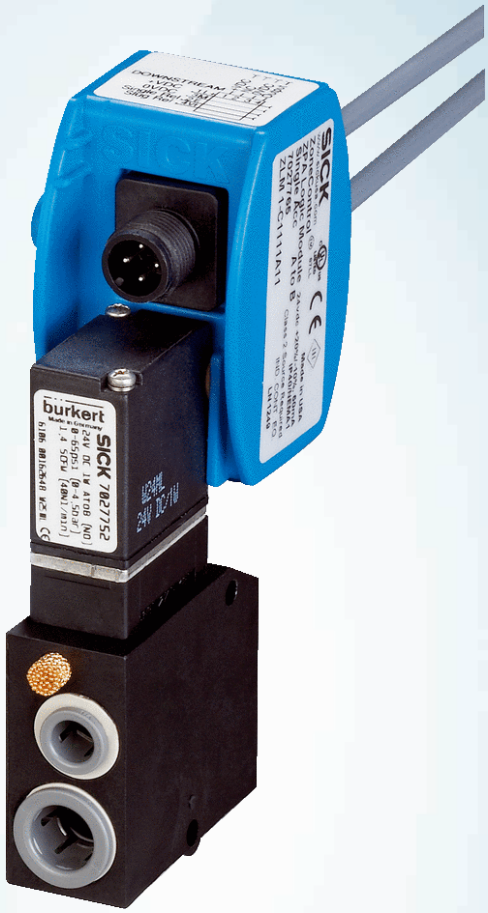
Data sheet



ZLM1-B1612E42

ZoneControl

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	part no.
ZLM1-B1612E42	7028842

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

Detailed technical data

Features

Actuator	Pneumatic, valve on board
Max. number of sensors	Approx. 30 [1] Approx. 50 [2]
Logical principle of operation	Single accumulation
Type of Release	Single release, block (slug) release
Dimensions (W x H x D)	31 mm x 105 mm x 74 mm
Adjustment	None
Special applications	ZoneControl

[1] When powerd from the end of the IR daisy chain.
[2] When powerd from center of the IR daisy chain.

Mechanics/electronics

Supply voltage U_B	≥ 21.6 V DC [1]
Ripple	< 5 V_{pp} [2]
Current consumption	60 mA [3]
Switching output	PNP
Signal voltage PNP HIGH/LOW	Approx. V_S – 0.5 V / 0 V
Output current $I_{max.}$	≤ 100 mA

[1] Limit values, the device may connect only to protected extra low voltage.
[2] May not fall below or exceed U_V tolerances.
[3] Without load and valve deenergized.
[4] Do not bend below 0 °C.
[5] A = V_S connections reverse-polarity protected.
[6] C = interference suppression.
[7] D = outputs overcurrent and short-circuit protected.
[8] Other valve types available on request.
[9] P - A.
[10] In combination with cylinders with small air volume we recommend tests.

Connection type	Cable with female connector, M12, 4-pin, 1.1 m [4]
Connection type for daisy chain	Cable with M12 male connector, 4-pin 1.2 m
Cable material	Plastic, PVC
Circuit protection	A [5] C [6] D [7]
Protection class	III
Housing material	Plastic, ABS
Enclosure rating	IP40
Ambient operating temperature	–10 °C ... +55 °C
Ambient temperature, storage	–25 °C ... +75 °C
Medium for valves	Compressed air or neutral gases filtered, non-lubricated or lubricated
Design solenoid valve	3/2-way valve [8]
Mode of operation solenoid valve	Air to Drive (NC)
Connection type solenoid valve	Compressed air 2 x 8 mm diameter, output line 4 mm diameter
Coil ratings	24 V DC 1 W
Air flow rate	Approx. 20 Nl/min [9]
Ventilation capacity	Approx. 130 Nl/min
Operating pressure range	2 bar ... 8 bar [10]

[1] Limit values, the device may connect only to protected extra low voltage.
[2] May not fall below or exceed U_V tolerances.
[3] Without load and valve deenergized.
[4] Do not bend below 0 °C.
[5] A = V_S connections reverse-polarity protected.
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[8] Other valve types available on request.
[9] P - A.
[10] In combination with cylinders with small air volume we recommend tests.

Pneumatic

Coil ratings	24 V DC 1 W
Medium for valves	Compressed air or neutral gases filtered, non-lubricated or lubricated
Design solenoid valve	3/2-way valve [1]
Connection type solenoid valve	Compressed air 2 x 8 mm diameter, output line 4 mm diameter
Air flow rate	Approx. 20 Nl/min [2]
Ventilation capacity	Approx. 130 Nl/min
Operating pressure range	2 bar ... 8 bar [3]

[1] Other valve types available on request.
[2] P - A.
[3] In combination with cylinders with small air volume we recommend tests.

Certificates

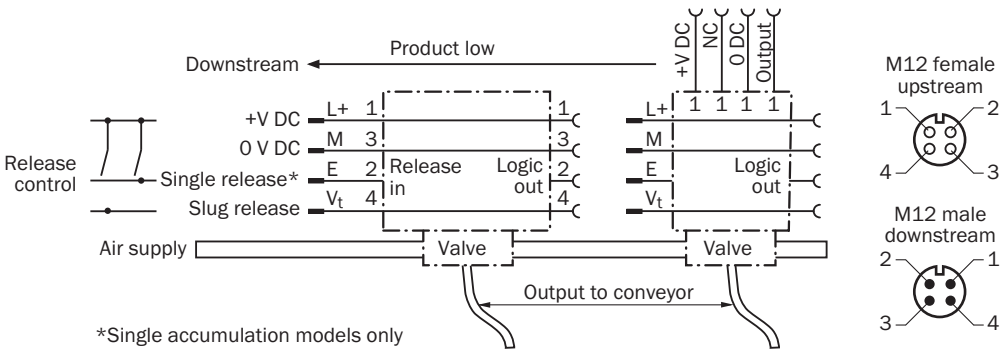
EU declaration of conformity	✓

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 type

Connection diagram Cd-263



Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Mounting bracket • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Mounting hardware included	BEF-WN-RT/IRT	2074621
	• **Description:** Mounting bracket • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Mounting hardware included • **Usable for:** WTR/WLR, IRT	BEF-WK-WTR	2051786

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

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