



## ZoneControl

Zero pressure accumulation made easy

**SICK**  
Sensor Intelligence.



## Technical data overview

<b>Dimensions (W x H x D)</b>	20.6 mm x 99.2 mm x 48.9 mm 59.9 mm x 151.9 mm x 48.9 mm 50 mm x 125.3 mm x 48.9 mm 50 mm x 147.4 mm x 48.9 mm 49.9 mm x 135.4 mm x 48.9 mm 54.6 mm x 131.5 mm x 46 mm 31 mm x 105 mm x 74 mm 31 mm x 93 mm x 74 mm 51.5 mm x 151.4 mm x 46 mm 18 mm x 99.5 mm x 46 mm 51.5 mm x 157 mm x 46 mm 31 mm x 110 mm x 83 mm 30 mm x 110 mm x 70 mm 45 mm x 73.7 mm x 48.6 mm
<b>Functional principle detail</b>	Background suppression
<b>Light source</b>	LED
<b>Type of light</b>	Infrared light / visible red light (depends on variant)
<b>Enclosure rating</b>	IP67 IP65 IP54 IP40 NEMA 3 (depends on variant)
<b>Housing material</b>	Plastic
<b>Adjustment</b>	Potentiometer / none (depends on variant)

## Product description

Just as traffic lights regulate the flow of traffic in towns and cities, SICK's ZoneControl solutions control the flow of products on a belt – without the need for a PLC or another type of external control. ZoneControl by SICK consists of three product families to control the flow of products. This procedure is called zero pressure accumulation (ZPA). ZoneControl solutions are extremely easy to install (plug and play): Connect the ZoneControl products in series, install the sensor, and connect the pneumatic line or the connection to the motor-driven rollers. There is, therefore, no need for PLC programming, laptops, and expensive cabling. Each product contains one of two types of startup logic: single feed (with or without sleep function) and block (slug) feed, depending on the requirements of the application. So that the various requirements can be met, there are three mounting configurations to choose from: mounting between the rollers (R/IR), mounting on the side frame (ZLM), or mounting above the belt (WLR)

## At a glance

- Three mounting types: mounting between the rollers (R/IR), mounting on the side frame (ZLM), or mounting above the belt (WLR)
- Three types of logic: single feed, single feed with sleep function, block (slug) feed
- Up to 50 ZoneControl solutions can be connected in series.
- Fully animated simulation to ease selection and implementation
- Standard cut lengths of 1 m (3 ft) or 2 m (6 ft)

## Your benefits

- Largest Zero Pressure Accumulation portfolio on the market gives users a wide variety of choices for their application
- SICK ZoneControl solutions control the flow of packages on a conveyor without a PLC or other external control
- Quick setup since no programming, no laptop, and no PLC interfacing are required
- With 20 years of ZoneControl experience and personal support from SICK experts, all application and product issues are quickly addressed
- Quick expansion or modification of the conveyor due to the modular design

## Ordering information

Other models and accessories → [www.sick.com/ZoneControl](http://www.sick.com/ZoneControl)

- **Product version:** IR
- **Switching output:** PNP
- **Connection type:** male connector

Sensing range max.	Functional principle Dropdown	Functional principle detail Dropdown	Type	Part no.
250 mm 1,500 mm	Photoelectric retro-reflective sensor	–	IRL-P211E41	1063185
			IRL-P211E50	1063186
			IRL-P212E40	1085231
			IRL-P212E50	1093984
60 mm 900 mm	Photoelectric proximity sensor	Background suppression	IRT-P006C83S05	1063097
			IRT-P210E31S04	1063106
			IRT-P211A10	1063117
			IRT-P211A11	1063118
			IRT-P211C63	1063127
			IRT-P211E31S02	1063111
			IRT-P211E40	1063103
			IRT-P211E41	1063107
			IRT-P211E50	1063104
			IRT-P212A10	1063123
			IRT-P212A11	1063124
			IRT-P212C63	1063116
			IRT-P212C73	1063102
			IRT-P212E40	1063108
			IRT-P212E41	1063109
			IRT-P231C83	1063101
			IRT-P232C75	1063099
			IRT-P232C83	1063100
			IRT-P232C83S19	1068794
			IRTF-P210E41S09	1063112
			IRTF-P211A10	1063128
			IRTN-P210E41S08	1063113
			IRTT-P210E50S14	1063189
			IRX-P232C83S21	1077344
			IRXT-P210E50S16	1063192

- **Product version:** R
- **Sensing range max.:** 60 mm 900 mm
- **Functional principledropdown:** Photoelectric proximity sensor
- **Functional principle detaildropdown:** Background suppression

Switching output	Switching mode	Connection type	Type	Part no.
FET	Dark switching	Cable	RT-M2117	1063197
			RTF-M2117	1063198
			RTN-M2117	1063199
	Light switching	Cable	RT-M1117	1063194
			RTF-M1117	1063195
			RTN-M1117	1063196
NPN	Dark switching	Cable with male connector	RT-N2427	1063154
			RT-N2525	1063159
			RT-N2526	1063160
			RT-N2528	1063161
	Light switching	Male connector	RT-N7231	1063164
		Cable with terminal connection	RT-N1000S05	1063143
			RT-N1000S06	1063144
			RT-N1000S07	1063145
			RT-N1623	1063151
			RT-N1627	1063152
		Cable with male connector	RT-N1526	1085177
	Light/dark switching	Cable	RT-N3117	1063180
		Male connector	RT-N3221	1063162
PNP	Dark switching	Cable	RT-N2528S18	1065742
		Cable with male connector	RT-P2233	1063132
			RT-P2420S03	1063133
			RT-P2422	1063176
			RT-P2525	1063156
			RT-P2527	1063157
			RT-P2528	1063158
			RT-P6423	1063167

Switching output	Switching mode	Connection type	Type	Part no.
		Male connector	RT-P2221	1077270
			RT-P2231	1063190
	Light switching	Cable with terminal connection	RT-P1625	1063149
			RT-P1627	1066844
		Cable	RT-P4117	1063168
			RT-P1223	1063135
		Cable with male connector	RT-P1233	1063136
			RT-P1427	1116765
			RT-P3117	1063179
	Light/dark switching	Cable	RTF-P3117	1063181
			RTN-P3117	1063182
			RTQ-P4117	1063183
			RT-P3223	1063130
		Cable with male connector	RT-P3227	1078930
			RT-P3233	1081692
			RT-P3221	1063129
		Male connector	RT-P3231	1063131
			RTF-P3221	1063171
			RTN-P3221	1063172
			RTQ-P4221	1063173
			RT-B2117	1063178
PNP, NPN	Dark switching	Cable	RT-B2118	1063155
			RT-B2221	1063175
	Light switching	Cable	RT-B1117	1063153
		Male connector	RT-B1221	1063174
	Light/dark switching	Cable	RTQ-B1117	1063184
		Male connector	RTQ-B1221	1063177

- **Product version:** WLR
- **Functional principledropdown:** Photoelectric retro-reflective sensor
- **Switching output:** PNP
- **Switching mode:** Light switching

Sensing range max.	Connection type	Type	Part no.
0 m 9 m	Cable with male connector	WLR2100-D1311	7027185
		WLR2100-D1312	7027753
		WLR2100-D1313	7028917
		WLR2100-D1321	7027754
		WLR2100-D1322	7027755
		WLR2100-D2311	7027808
		WLR2100-D2312	7027811
		WLR2100-D2321	7027809
		WLR2100-D2322	7027810
		WLR2100-M6361	7027089
		WLR2100-M6362	7027090
250 mm 5,000 mm	Male connector	WLR1-P410S01	1025651

- **Product version:** ZLM
- **Switching output:** PNP
- **Connection type:** cable with female connector

Type	Part no.
ZLM1-B1011A10	7027800
ZLM1-B1011A11	7027801
ZLM1-B1021A10	7027792
ZLM1-B1021A11	7027793
ZLM1-B1111A10	7027768
ZLM1-B1111A11	7027769
ZLM1-B1121A10	7027760
ZLM1-B1121A11	7027761
ZLM1-B1211A10	7027784
ZLM1-B1211A11	7027785
ZLM1-B1221A10	7027776
ZLM1-B1221A11	7027777
ZLM1-B1421A10	7125211
ZLM1-B1421A11	7125212
ZLM1-B1451A10	1052126
ZLM1-B1521A10	1041942
ZLM1-B1521A11	1041943
ZLM1-B1612E42	7028842
ZLM1-B1612E43	7028843
ZLM1-B1622E42	7028844

Type	Part no.
ZLM1-B1622E43	7028845
ZLM1-B2011A10	7027802
ZLM1-B2011A11	7027803
ZLM1-B2021A10	7027794
ZLM1-B2021A11	7027795
ZLM1-B2111A10	7027770
ZLM1-B2111A11	7027771
ZLM1-B2121A10	7027762
ZLM1-B2121A11	7027763
ZLM1-B2211A10	7027786
ZLM1-B2211A11	7027787
ZLM1-B2221A10	7027778
ZLM1-B2221A11	7027779
ZLM1-B5121A10	7125166
ZLM1-B5612E41	7028428
ZLM1-C1011A10	7027796
ZLM1-C1011A11	7027797
ZLM1-C1021A10	7027788
ZLM1-C1021A11	7027789
ZLM1-C1111A10	7027764
ZLM1-C1111A11	7027765
ZLM1-C1121A10	7027756
ZLM1-C1121A11	7027757
ZLM1-C1211A10	7027780
ZLM1-C1211A11	7027781
ZLM1-C1221A10	7027772
ZLM1-C1221A11	7027773
ZLM1-C1451A10	7029987
ZLM1-C1451A11	7029988
ZLM1-C2011A10	7027798
ZLM1-C2011A11	7027799
ZLM1-C2021A10	7027790
ZLM1-C2021A11	7027791
ZLM1-C2111A10	7027766
ZLM1-C2111A11	7027767
ZLM1-C2121A10	7027758
ZLM1-C2121A11	7027759
ZLM1-C2211A10	7027782
ZLM1-C2211A11	7027783
ZLM1-C2221A10	7027774

Type	Part no.
ZLM1-C2221A11	7027775
ZLM1-C9121A10	7029642
ZLM1C1121S01	7028829
ZLM1C1121S03	7028978
ZLM1C2121S02	7028856
ZLM1C2121S04	7028979

- **Product version:** WTR
- **Functional principledropdown:** Photoelectric proximity sensor
- **Functional principle detaildropdown:** Background suppression

Sensing range max.	Switching output	Switching mode	Connection type	Type	Part no.
100 mm 900 mm 3.9 in 35.4 in	PNP	Dark switching	Male connector	WTR1-P421A10	1025373
				WTR1-P421A10P01	7123916
			Male connector	WTR1-P421A10P02	7125297
				WTR1-P421A10P03	7125298
				WTR1-P421A12	7028797
				WTR1-P421B10	1025390
				WTR1-P421B10P01	7125190
				WTR1-P721A11	1025374
				WTR1-P721B11	1025391
				WTR1-P921A10	1025375
				WTR1-P921A10P02	1045621
				WTR1-P921B10	1025392
300 mm 900 mm	NPN	Dark switching	Male connector	WTR2-N551S05	1019320
				WTR2-N551S06	1019583



Sensing range max.	Switching output	Switching mode	Connection type	Type	Part no.
	PNP	Light/dark switching	Male connector	WTR2-N551	1018877
		Dark switching	Male connector	WTR1-P421	1013260
				WTR1-P421S02	1015388
				WTR1-P421S08	1016233
				WTR1-P721	1015301
				WTR1-P721S09	1016291
				WTR1-P721S10	1017944
				WTR1-P821	1015918
				WTR2-P521	1015074
				WTR2-P521S09	1024302
				WTR2-P521S14	1025619
				WTR2-P621	1015157
				WTR2-P621S16	1026608
				WTR2-P621S22	1040597
				WTR2-P621S22P01	1046823
				WTR2-P621S27	1042271
		Light switching	Male connector	WTR2-P511	1015158
		Light/dark switching	Male connector	WTR2-P551S08	1022927
	PNP, NPN	Dark switching	Cable	WTR2-P021S24	1041629
		Light switching	Cable	WTR2-P511S20	1028700

## 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](http://www.sick.com)