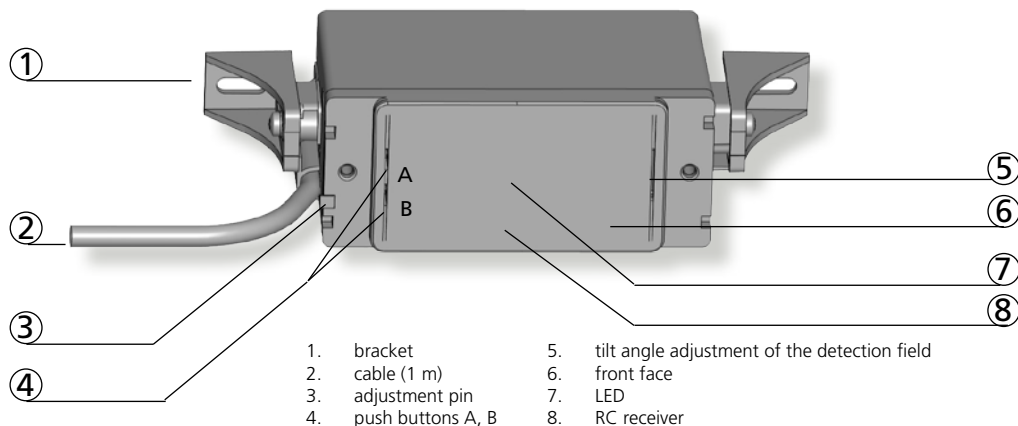


# RS-15

## Opening and presence sensor for automatic internal train doors

User's Guide for product version 0102 and higher  
and products with serial number RM 009500 and higher  
(see product label)

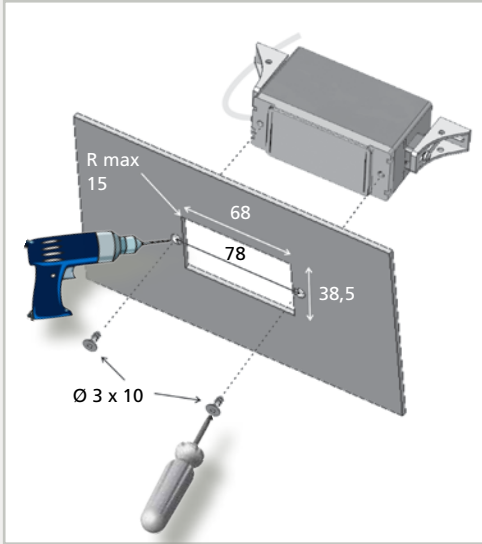
### DESCRIPTION



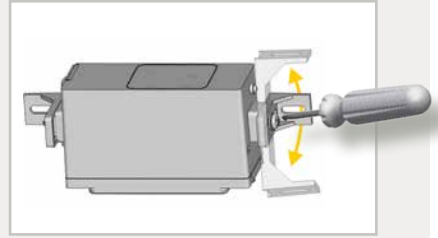
### TECHNICAL SPECIFICATIONS

Technology:	active infrared
Detection mode:	opening and presence
Max. detection zone:	1 m (W) x 1.2 m (D)
(mounting height 2 m; tilt angle 20°)	15 independent IR-spots with a diameter of typ. 130 mm
Reaction time:	< 100 ms
Supply voltage:	12V - 30V AC $\pm 10\%$ ; 12V - 45V DC $\pm 10\%$
Mains frequency:	50 - 60 Hz
Power consumption:	< 3 W (VA)
Output:	relay (free of potential change-over contact)
Max. contact voltage:	42 V AC - 60 V DC
Max. contact current:	1A (resistive)
Max. switching power:	30 W (DC) / 42 VA (AC)
Connection on sensor side:	unpluggable integrated 7-pin connector
Hold time:	0.5 s to 9 s (adjustable)
LED-signal:	red and orange
Mounting height:	max. 2.5 m (flush-mounting)
Degree of protection:	IP41
Temperature range:	-25 °C to + 55 °C (operating); -30 °C to + 60 °C (storage)
Dimensions:	140 mm (W) x 38 mm (H) x 55 mm (D)
Tilt angles:	0° to 16° vertical in steps of 4°
Material:	PC
Weight:	100 g
Norm conformity (sensor without cable):	EN 50155 (if nominal supply voltage is 24 V) EN 45545-2; NF F16-101; EN 50121-3-2; EN 50581
Norm conformity (cable):	EN 45545-2; EN 50581

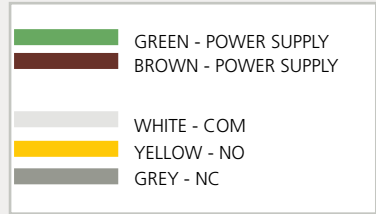
# 1 MOUNTING & WIRING



All dimensions are in mm

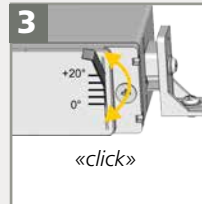
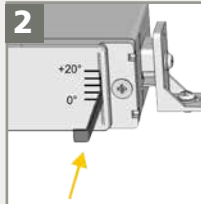
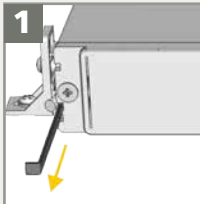


Loosen the screws to adapt the brackets to your application if necessary.



# 2 MECHANICAL ADJUSTMENTS

TILT ANGLE

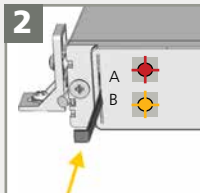
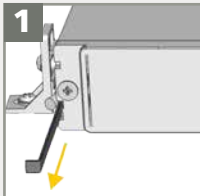


Typ. detection field dimensions (at 2 m with all spots activated):

0° = 100 cm (W) x 100 cm (D)

20° = 100 cm (W) x 120 cm (D)

PUSH BUTTONS



Without remote control, you can set two parameters using the push buttons:

## PUSH BUTTON A: SENSITIVITY (1-4)

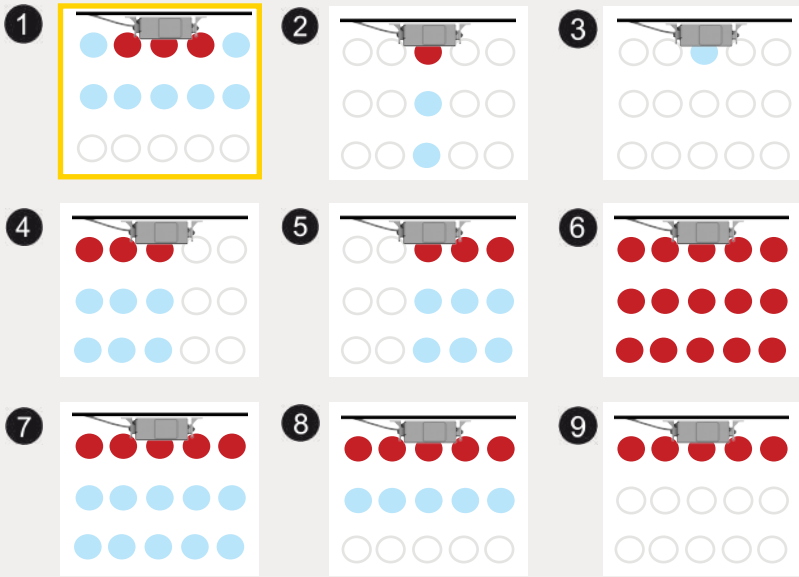
- Push once to enter into adjustment session. The red LED flashes. The number of flashes indicates the current value (see next page).
- Push again to increment the sensitivity. The red LED indicates the new setting. When you reach value 4 and push again, the sensitivity skips to value 1 (rolling system).
- Push button B to close the session, once you have reached the required sensitivity value.

## PUSH BUTTON B: DETECTION FIELD (1-9)

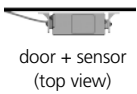
- Push once to enter into adjustment session. The orange LED flashes. The number of flashes indicates the current value (see next page).
- Push again to go to the next value. The orange LED indicates the new selected field. When you reach value 9 and push again, you will go back to value 1 (rolling system).
- Push button A to close the session, once you have reached the required sensitivity value.

If no button has been pushed for 1 minute, the adjustment session is automatically ended.

### 3 DETECTION FIELDS



mounting height: 2 m - tilt angle: 20°



- inactive spot
- active spot - opening
- active spot - presence



**TIP!**

Use the Spotfinder to check the position of the activated IR-spots.

### 4 SETTINGS



SENSITIVITY		lower	low	high	higher						
PULSE FREQUENCY		low	med	high							
OUTPUT CONFIGURATION			A	P	A = active output (NO-contact) P = passive output (NC-contact)						
HOLD TIME		0.5 s	1 s	2 s	3 s	4 s	5 s	6 s	7 s	8 s	9 s
MAX. DURATION OF PRESENCE DETECTION		20 s	1 min	2 min	3 min	5 min	7 min	10 min	15 min	20 min	25 min
DOOR CONTROL			auto	open	closed	open = sensor is continuously in detection > LED ON closed = sensor is in standby and does not detect > LED OFF					







CHECKING A VALUE: > > x

x = number of flashes = value of the parameter

FACTORY VALUES: +

LAUNCHING SETUP: +

## TROUBLESHOOTING

	The sensor will not power up.	Faulty power supply.	<b>1</b> Check power supply.
	The door opens and closes constantly.	The sensor is disturbed by the door motion or vibrations.	<b>1</b> Increase the tilt angle of the sensor. <b>2</b> Verify if the sensor is fastened correctly.
	Two sensors in proximity to each other are disturbed.	The overlapping detection fields create interferences.	<b>1</b> Choose a different pulse frequency for each sensor.
	The sensor does not respond to the remote control.	Batteries in the remote control are weak or installed improperly.	<b>1</b> Check and change the batteries if necessary.
		Remote control badly pointed.	<b>1</b> Point the remote control towards the sensor.
		The sensor is doing a setup.	<b>1</b> Cut and restore power supply. Stand outside of the detection field until the setup is finished.
	The sensor does not unlock when the access code is entered.	Bad access code.	<b>1</b> Cut and restore power supply. No code is required during the 1st minute after power on. Press on unlock + lock to save a new access code.
	The red LED flashes quickly.	The sensor goes into security mode after a faulty internal test.	<b>1</b> Replace sensor.

## ACCESS CODE

The access code (1 to 4 digits) is recommended to set sensors installed close to each other.

SAVING AN ACCESS CODE:



DELETING AN ACCESS CODE:



Once you have saved an access code, you always need to enter this code to unlock the sensor. If you forget the access code, **cut and restore the power supply**. During 1 minute, you can access the sensor without introducing any access code.



### SAFETY INSTRUCTIONS

- Test the good functioning of the installation before leaving the premises.
- The device cannot be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
- The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.
- The manufacturer of the sensor cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.
- Only trained and qualified personnel may install and setup the sensor.
- The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.
- Avoid touching any electronic and optical components, avoid vibrations, do not cover the sensor and avoid proximity to neon lamps or moving objects.
- It is recommended to clean the optical parts at least once a year or more often if required due to environmental conditions.



BEA hereby declares that the RS-15 is in conformity with the basic requirements and the other relevant provisions of the directives EMC 2014/30/EU and RoHS 2 2011/65/EU.  
The complete declaration of conformity is available on our website.



Only for EC countries: According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE)