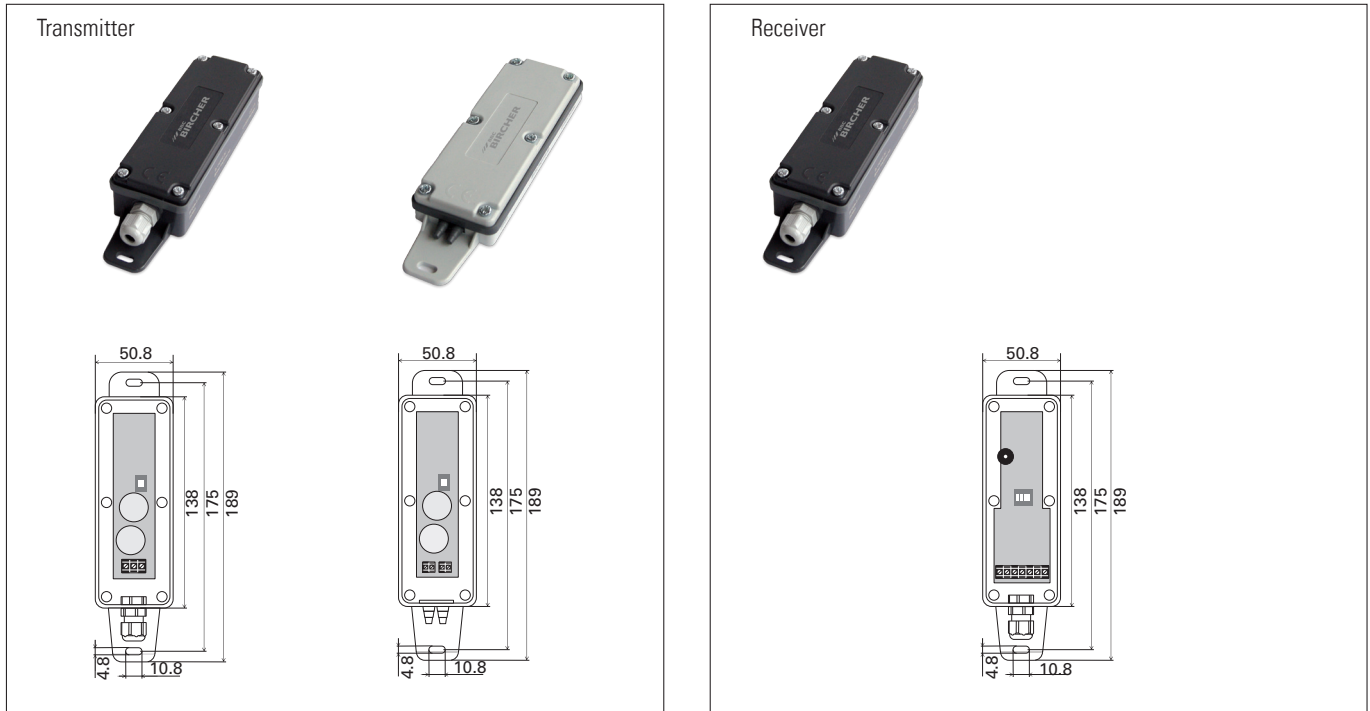


# RFGate 2.1

Wireless signal transmission system for safety edges

## Translation of original operating instructions

### General



## 1 Safety instructions

**Warning:** Switch off the operating voltage before working on the system. Only trained, qualified personnel may perform installation and startup. The unit may only be repaired by the manufacturer. The switching unit may only be used to protect against dangers on crushing and shearing points and on automatic industrial doors and gates (intended use). National and international regulations on industrial door and gate safety must be complied with. Always

consider the safety functions of your application as a whole, never just in relation to one individual section of the system. The installer is responsible for carrying out a risk assessment and installing the industrial door system correctly.

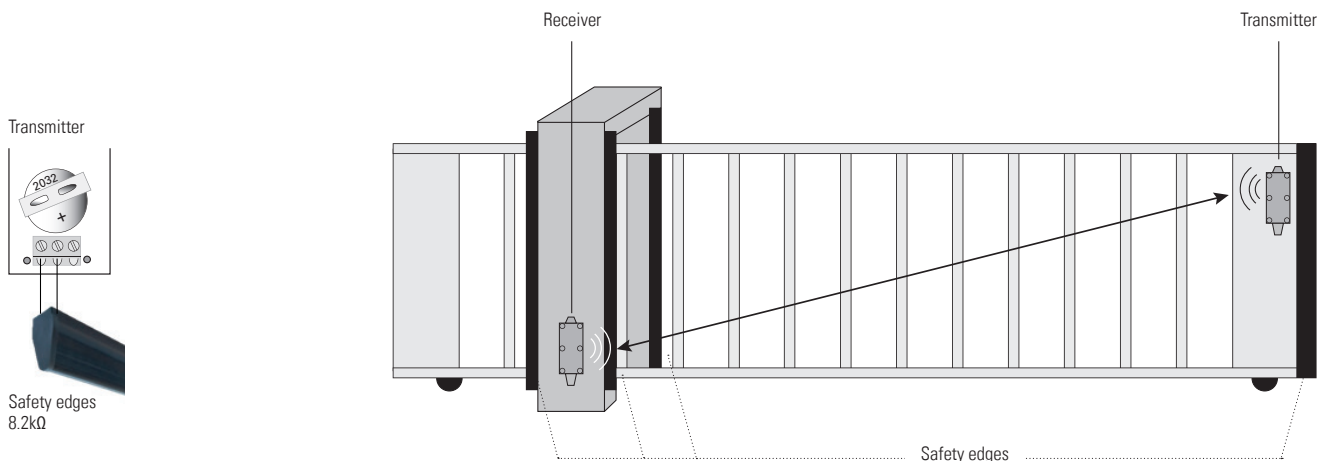
**It is recommended to change the batteries every year.**

## 2 Common application

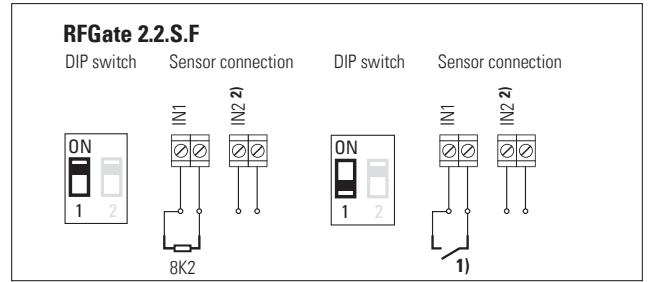
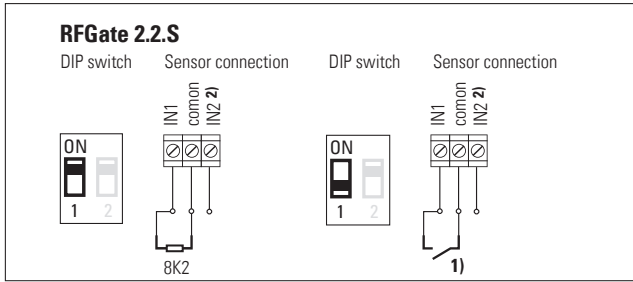
### 2.1 Site entrance gate

Up to 10 transmitters can be linked with the same receiver

Transmitters and receivers (also among each others) must be at least 0.5 m apart.



3.1 DIP switch setting according to sensor (safety edge, switch contact)



- 1) Change from NC to NO, see chapter 3.2
- 2) IN2 has no function

3.2 Change input from NC to NO (factory setting = NC)

1. Remove all batteries

2. Insert battery 1

Observe the sequence

3. Status

NC	2x	NO	5x
LED flashes 2x		LED flashes 5x	

After inserting the battery 1, you have 10 seconds to change the logic

4. Change

Press button on transmitter

NC ↔ NO

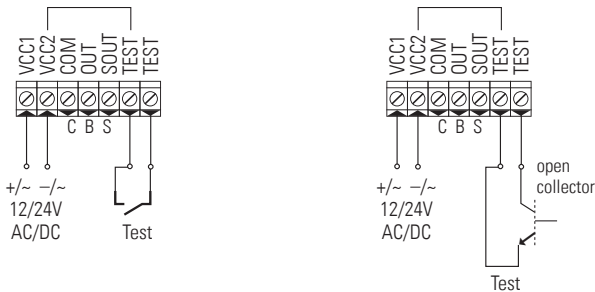
Status changes

LED flashes

5. Insert battery 2

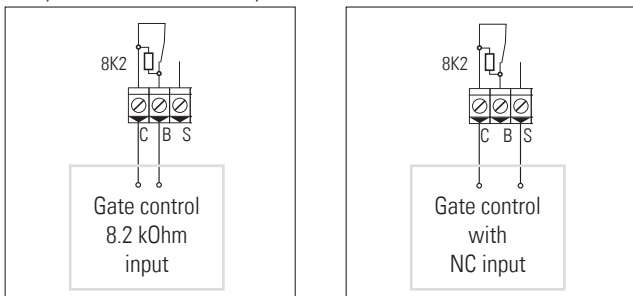
6. Change stored

4.1 Wiring: Power supply and test inputs



4.2 Wiring: Outputs and control

Relay contacts are shown unpowered



Status	Terminals C – B	Terminals C – S
Sensor not activated (operating mode)	8K2	closed
Sensor activated (security system activated)	closed	open
No supply voltage	closed	open
Transmitter and receiver not paired	closed	open
Broken cable between sensor and transmitter	closed	open
Transmitter batteries low	closed	open

4.3 DIP switches

	<p><b>* Safety application</b> standard according to EN ISO 13849-1</p>
	<p>inactive → no safety function! (Radio connection is not monitored)</p>
	<p><b>Transmission frequency</b> 869.85 MHz: Set DIP-switch before pairing transmitter – receiver</p>
	<p><b>* 868.95 MHz:</b> Set DIP-switch before pairing transmitter – receiver</p>
	<p><b>Test input type</b> NC activated = contact open</p>
	<p><b>* NO</b> activated = contact closed</p>
	<p><b>Automatic frequency adjustment</b> active used only in case of radio disturbances</p>
	<p><b>* inactive</b></p>

\* = factory setting

## 5 Start-up

1. Check DIP switch settings		2. Install and wire receiver		3. Turn on power supply	
4. Transmitter: insert batteries		5. Programming (Chapter 6.1): pair transmitter with receiver		Transmitters and receivers (also among each others) must be at least 0.5 m apart.	
6. Transmitter: install		7. Transmitter: wire		<b>Please observe the torque when fastening the cover: Max. 45 N cm</b>	
8. System test of safety edge on gate					

## 6 Programming

### 6.1. RFGate 2.1, pairing transmitter with receiver

	Transmitters and receivers (also among each others) must be at least 0.5 m apart.						
1. On the receiver							
	Press button	Beep	Release button	LED lights up			
2. On the transmitter		On the receiver					
	Press and release button			Beep	Wait 10 sec.	2 beeps	Code saved LED goes out

### 6.2 Clear pairings

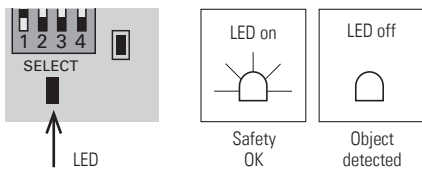
On the receiver								All pairings deleted
	Press button and hold	Beep	Keep pressed the button	Short beeps	Release button	Wait 10 sec.	2 beeps	

### 6.3 Memory full

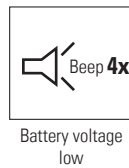
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## 7 Standard operation

### 7.1 Receiver LED indicators



### 7.2 Warning indicator for low battery voltage



Receiver: Signal sounds at each activation

## 8 Technical data

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	10
Output	1 relay 24 V, 1 A; micro switch-off 1B
Power consumption	0.5 W @ 12 V; 1.2 W @ 24 V
Test signal input	See page 2, chapter 4.1, I = 3 mA switching threshold: off = 0.6 V / on = 1.8 V

Transmitter	
Battery power	2 x Lithium 3 V Type CR2032
Power consumption	Transmitting: 17 mA standby: 16 µA

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	under optimum conditions up to 100 m
Protection class IEC 60529	IP55
Pollution degree	2
Working temperature	-20 °C to +55 °C

## 9 EU Declaration of Conformity

 See attachment

## 10 WEEE



Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

## 11 Contact

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