

sensing the future



RFGate 2

Wireless signal transmission system
for industrial doors with safety edges
and wicket doors

Simple, safe, low-maintenance

- Fast and easy installation and short start-up time
- Varied applications
- High safety standard through PLc, cat. 2 in accordance with EN ISO 13849-1
- Long service life and low operating costs thanks to the wear-free signal transmission

RFGate 2

Wireless signal transmission system for safety edges on rolling, sectional and folding doors, sliding gates and telescopic gates

Safety in an instant

RFGate 2 systems securely transmit wirelessly the status of pressure-sensitive safety edges mounted on the mobile part of the gate to the switching device. Install, configure, switch on, quick program and it's ready to go.

One and two-channel

Depending on application and needs, select the one-channel (RFGate 2.1) or one of the two-channel variants (RFGate 2.2).

Also with wicket door switch

In addition, we also provide a complete solution for the parallel evaluation of wicket doors and safety edges with our compact wicket door transmitter RFGate 2.1.W.S.



Your benefits

- Up to seven transmitters can be evaluated in parallel per channel
- Long battery life (> 2 years)
- Compatible with safety edges with 8.2 kOhm (factory setting) or sensors with NC or NO switch
- Option of automatic frequency changeover in environments with high interferences
- RFGate 2.2: two outputs to distinguish between OPEN and CLOSED direction or between safety edge and wicket door
- A slim version of the transmitter is now available, perfect for tight spaces (RFGate 2.2.S.F)

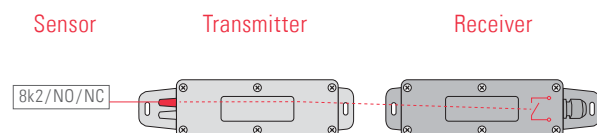
Robust housing

The robust housing of the RFGate 2.2.R.A receiver satisfies IP65.

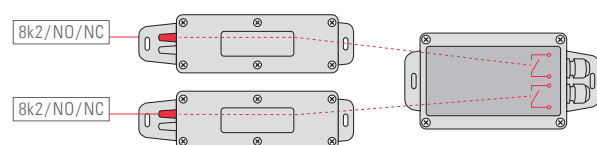


System overview

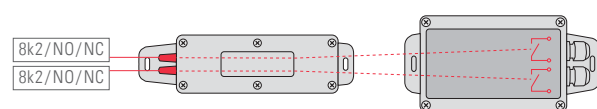
RFGate 2.1 (one-channel)
1 transmitter
1 receiver



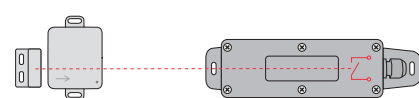
RFGate 2.2 (two-channel)
2 transmitter
1 receiver



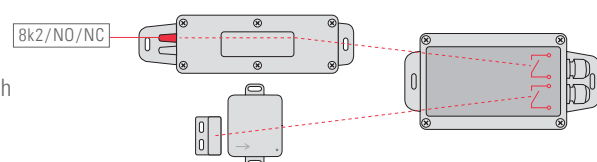
RFGate 2.2.NG (two-channel)
1 transmitter
1 receiver



RFGate 2.1.W (one-channel)
1 transmitter with wicket door switch
1 receiver



RFGate 2.2.W.F.A (two-channel)
1 transmitter
1 transmitter with wicket door switch
1 receiver



Note: Up to seven transmitters (RFGate 2.1: up to ten transmitters) per channel can communicate with one receiver.



Approvals

Combined with Bircher Reglomat safety edges such as CoverLine, ClickLine, etc., the RFGate signal transmission systems are type tested.



Safe in every application

Situation

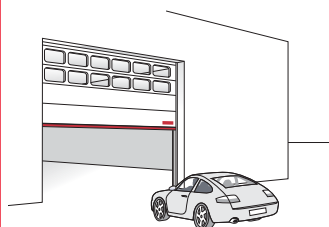
Rolling door, sectional door

Solution

- RFGate 2.1.F

Advantage

- Wear-free signal transmission even with high use gates or doors
- Slim transmitter can be easily mounted into the door construction



Situation

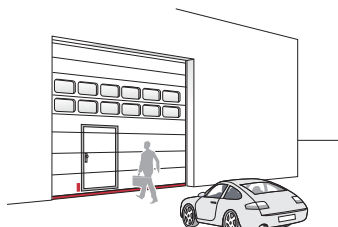
Sectional door with wicket door and safety edge

Solution

- RFGate 2.2.W.F.A / RFGate 2.2.NG

Advantage

- Receiver with two channels for parallel signal evaluation of safety edge and wicket door switch
- Slim transmitter can be easily mounted into the door construction



Situation

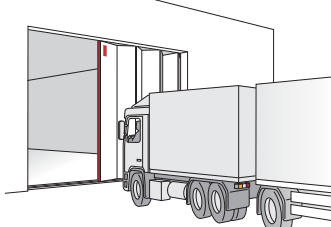
Folding door

Solution

- RFGate 2.1 / RFGate 2.2.A

Advantage

- Wear-free signal transmission for all safety edges



Situation

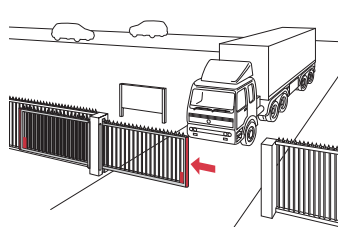
Sliding gate at site entrance, telescopic gate

Solution

- RFGate 2.2.A

Advantage





- Wear-free signal transmission for all safety edges, even with large gates
- Distinction between OPEN and CLOSED direction



Order details

Article no.	Description	
Sets RFGate 2.1 (one-channel)		
299769	RFGate 2.1.F 1 transmitter (slim) and 1 receiver	
250948	RFGate 2.1 1 transmitter and 1 receiver	
355355	RFGate 2.1.W 1 transmitter for wicket door 1 receiver	
Sets RFGate 2.2.A (two-channel)		
306921	RFGate 2.2.F.A 2 transmitter (slim) and 1 receiver	
306920	RFGate 2.2.A 2 transmitter and 1 receiver	
336806	RFGate 2.2.NG.F 1 transmitter (slim) and 1 receiver	
336804	RFGate 2.2.NG 1 transmitter and 1 receiver	
349282	RFGate 2.2.W.F.A 1 transmitter (slim), 1 transmitter for wicket door, 1 receiver	
Components		
340871	RFGate 2.2.S.F Transmitter (slim) for RFGate 2.1.F, RFGate 2.2.F.A and RFGate 2.2.NG.F	
340870	RFGate 2.2.S Transmitter for RFGate 2.1, RFGate 2.2.A and RFGate 2.2.NG	
345691	RFGate 2.1.W.S Transmitter with integrated wicket door switch	
250951	RFGate 2.1.R Receiver for RFGate 2.1 or RFGate 2.1.F	
306923	RFGate 2.2.R.A Receiver for all RFGate 2.2	

Supplementary products

ClickLine Electrical safety edge, rubber profiles with click-foot	
CoverLine Electrical safety edge, rubber profiles for sidewise clicking	
EsGate 2/3 Cat. 2/3 switching devices for sensors such as electrical safety edges	
AirMission 1.T Transmitter with integrated pressure wave switch	

Note
Technical details and recommendations concerning our products are based on experience and are an aid for the orientation of the user. Details stated in our brochures and data sheets do not guarantee special properties of the products. This does not apply to special product properties confirmed by us in writing or individually. Subject to technical alterations.

Technical data

Device dimensions (W x H x D)	
RFGate 2.2.S.F (Transmitter slim)	190 × 51 × 23 mm
RFGate 2.2.S (Transmitter)	190 × 51 × 36 mm
RFGate 2.1.W.S (Transmitter)	64 × 42 × 13 mm
RFGate 2.1.W.S (Magnet)	29 × 20 × 8 mm
RFGate 2.1.R (Receiver)	190 × 51 × 36 mm
RFGate 2.1.R.A (Receiver)	178 × 80 × 45 mm
Electrical data	
Transmitter	RFGate 2.2.S.F / RFGate 2.2.S
Supply voltage	2 lithium batteries 3 V (CR2032)
Battery life	Typ. 2 years
Current consumption	Transmitting: 17 mA in "sleep mode": 16 µA
Resistance values of the safety edges	8.2 kOhm or NC/NO switch
Frequency bands	868.95 MHz / 869.85 MHz
Wicket door switch	RFGate 2.1.W.S
Supply voltage	1 lithium battery 3 V (CR2032)
Battery life	Typ. 1 year
Receiver, switching device	RFGate 2.1.R : RFGate 2.2.R.A
Supply voltage	12–24 VAC/DC –10% / +20%
Power consumption	0.5 W at 12 V / 1.2 W at 24 V
Transmitter memory	10 : 7 per channel
Outputs	1 : 2
Relay	24 VDC, 1 A, NO, with 8k2 parallel resistor as option
Displays: LED red (safety edges not actuated)	1 : 2
Test input for RFGate 2.1.R	Non-electrically isolated NC or NO (adjustable with DIP switch)
Test input for RFGate 2.2.R.A	Electrically isolated NC or NO (adjustable with DIP switch)
Ambient conditions	
Protection category	IP55
Protection category (RFGate 2.1.W.S)	IP30
Operating temperature	–20°C to +55°C
Storage temperature	–40°C to +80°C
Air humidity	< 95%, non-condensing
General data	
Range	100 m under optimum conditions
Communication	Bidirectional
Radiated power	< 5 dbm / 3 mW
In environments with high interferences	Option of automatic frequency changeover (DIP switch)
Low battery indication	Acoustic and optical (LED)
Approvals	EN 300 220, EN 301 489 EN ISO 13849-1

Note
Additional technical data can be found on our data sheets.

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