

## **LBGate TB18 / R18** **LBGate R25 / R25.D**

Thru-beam light barrier,  
reflection light barrier with reflector

**Simple, reliable, discreet**

- High level of user-friendliness by simple adjustment and alignment
- Robust, waterproof housing
- Good optical properties in spite of compact housing dimensions
- Insensitive to extraneous light



# LBGate

## Thru-beam and reflection light barriers

### Basic light barriers for detecting people, objects and vehicles

The LBGate can be used in a wide variety of applications and offers reliable protection up to a range of 30 m. The compact thru-beam light barrier system LBGate TB18 stands out with repeatable switching points and high operating reserves. The reflection light barriers LBGate R18 and LBGate R25 operate with polarised reflectors, which means only one device requires electrical connection and installation. All these principles also detect shiny and reflective objects.

### Compact design

The small sensors can easily be integrated into door frames and are easy to install.

### Integrated electronics save space and complexity

The electronics are completely integrated into the light barrier. No external booster electronics are required.



## Benefits for you

### Easy mounting

- Easy to mount and adjust with the associated mounting bracket

### Rapid start-up

- Aligning the transmitter could not be easier: The visible LED display on the receiver lights up as soon as the light emitted by the transmitter is received

### Safety by testing

- The function test of the light barrier can be carried out without a switching unit, simply by switching off the operating voltage of the transmitter

### Matching variants for each control

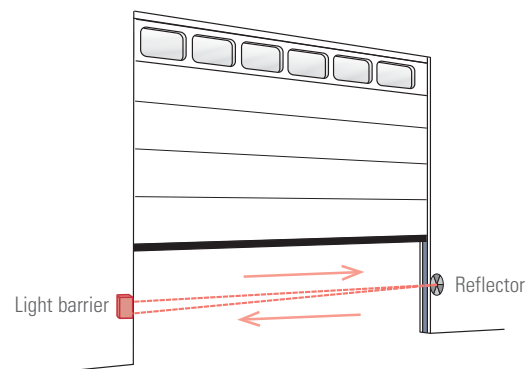
- Variants with sealed-in cable (LBGate 18) and with large terminal compartment (LBGate 25)

### Robust and reliable

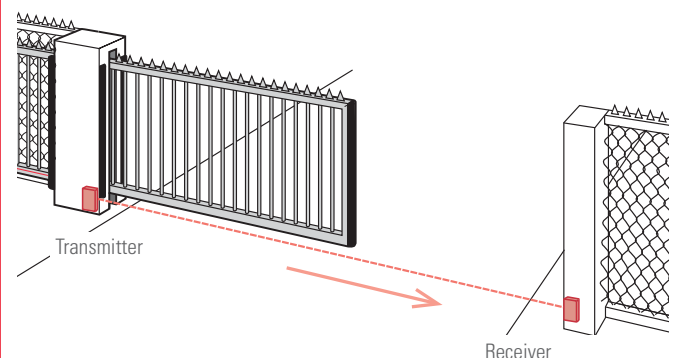
- Outstanding detection of shiny and reflective objects using the polarising principle

## Functional principle

### Reflection light barrier



### Thru-beam light barrier





## Fixing bracket and reflector

Using a fixing bracket, LBGate can be neatly mounted in many positions. The triple reflector, consisting of many individual pyramid-shaped reflectors, rotates the polarisation plane through 90° for safer accurate operation.



Fixing bracket



Reflectors



## Safe in every application

### Situation

Primary closing edge of the vertical closing door

### Solution

- The light barrier prevents the door from closing early, and thus colliding with people or vehicles

### Benefits

- "Invisible" protective device
- The door is held open during activation



### Situation

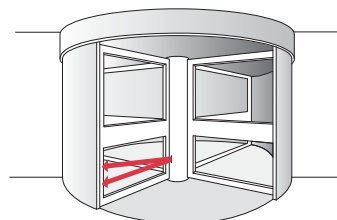
Lower door panel of the revolving door

### Solution

- Protection of the door panel and heel protection

### Benefits

- People are detected quickly and without contact
- "Invisible" heel protection



### Situation

Activation of escalators

### Solution

- The light barrier detects people and triggers the restart

### Benefits

- The escalator only runs when people are present, which saves energy
- Thanks to its compact dimensions, the light barrier forms part of the overall system



### Situation

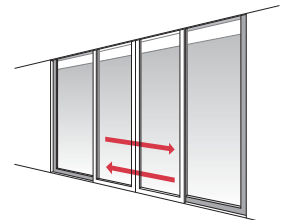
Primary closing edge of the sliding door

### Solution

- Protection of the primary closing edge of sliding doors

### Benefits

- Simple point and precise protection
- Space-saving solution



## Ordering information

Article no.	Description	
<b>316762</b>	<b>LBGate R18</b> Reflection light barrier with reflector LBGate REF84 and fixing bracket	
<b>316763</b>	<b>LBGate TB18</b> Thru-beam light barrier with fixing bracket	
<b>212063</b>	<b>LBGate R25</b> Reflection light barrier, bright switching with reflector LBGate REF84 Note: fixing bracket must be ordered separately	
<b>212064</b>	<b>LBGate R25.D</b> Reflection light barrier, dark switching with reflector LBGate REF84 Note: fixing bracket must be ordered separately	
<b>212121</b>	<b>LBGate REF84</b> Reflector (polarised), round, Ø 84 mm	
<b>212120</b>	<b>LBGate REF46</b> Reflector (polarised), round, Ø 46 mm	
<b>212109</b>	<b>LBGate HW25</b> Fixing bracket for LBGate R25	

## Supplementary products

### Activation of automatic gates

Loop detector ProLoop2



### Closing edge protection

Safety edges ClickLine and CoverLine with signal transmission / switching unit RFGate



## Technical data

### Mechanical data

<b>Housing material</b>	<b>R18</b> PC <b>TB18</b> PC <b>R25</b> ABS
<b>Weight</b>	<b>R18</b> 154 g <b>TB18</b> 247 g <b>R25</b> 101 g
<b>Dimensions</b>	<b>R18</b> 62 x 35 x 18 mm <b>TB18</b> 62 x 35 x 18 mm <b>R25</b> 90 x 66 x 26 mm
<b>Connection type</b>	<b>R18</b> Cable 2 m <b>TB18</b> Cable 2 m <b>R25</b> Terminals

### Technology data

<b>Technology</b>	Red light
<b>Beams</b>	1
<b>Aperture angle</b>	<b>R18</b> 3° <b>TB18</b> 0.5°/1.5° <b>R25</b> ±1°
<b>Operating range</b> (double signal reserve)	<b>R18</b> 9 m <b>TB18</b> 30 m <b>R25</b> 10.5 m
<b>Response time</b>	<b>R18</b> 25 ms <b>TB18</b> 25 ms <b>R25</b> 50 ms

### Electrical data

<b>Supply voltage</b>	<b>R18</b> 24–240 VAC, 12–240 VDC <b>TB18</b> 24–240 VAC, 12–240 VDC <b>R25</b> 24–230 VACDC
<b>Power consumption</b>	<b>R18</b> < 2 VA <b>TB18</b> < 1 VA + < 1 VA <b>R25</b> 0.2 W at 24 VDC 1.8 VA at 230 VAC
<b>Output</b>	Relay, changeover contact
<b>Switching voltage</b>	<b>R18</b> 240 VAC <b>TB18</b> 250 VAC <b>R25</b> 230 VAC
<b>Switching current</b>	<b>R18</b> < 3 A <b>TB18</b> < 3 A <b>R25</b> < 2 A

### Ambient conditions

<b>Protection class</b>	IP 67
<b>Operating temperature</b>	<b>R18/TB18</b> –25°C to +55°C <b>R25</b> –20°C to +60°C

### Standards

<b>Electr. safety</b>	EN 60947-5-2
<b>Electrical isolation</b>	EN 62103

### 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.

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