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 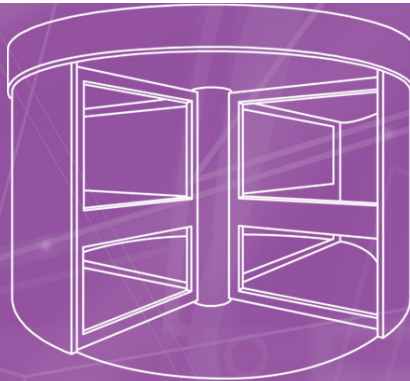repeatable switching points and high operating reserves. The reflection light barriers LBGate R18 and LBGate R25 operate with polarised reflectors, which means only one device requires electrical connection and installation. All these principles also detect shiny and reflective objects.

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

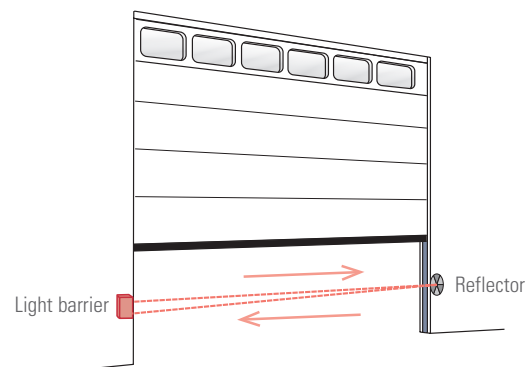### Matching variants for each control
- Variants with sealed-in cable (LBGate 18) and with large terminal compartment (LBGate 25)
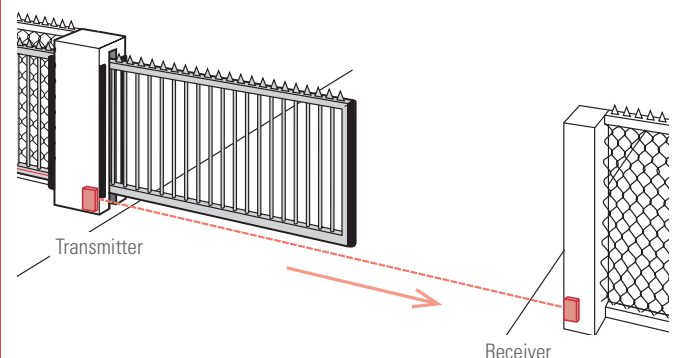
Robust and reliable
- Outstanding detection of shiny and reflective objects using the polarising principle

Functional principle

Reflection light barrier

Light barrier / Reflector

Thru-beam light barrier

Transmitter

Receiver

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
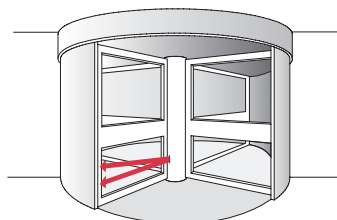- The door is held open during activation

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
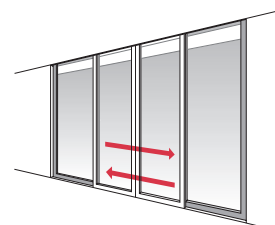- Thanks to its compact dimensions, the light barrier forms part of the overall system

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
316762	**LBGate R18** Reflection light barrier with reflector LBGate REF84 and fixing bracket
316763	**LBGate TB18** Thru-beam light barrier with fixing bracket
212063	**LBGate R25** Reflection light barrier, bright switching with reflector LBGate REF84 Note: fixing bracket must be ordered separately
212064	**LBGate R25.D** Reflection light barrier, dark switching with reflector LBGate REF84 Note: fixing bracket must be ordered separately
212121	**LBGate REF84** Reflector (polarised), round, Ø 84 mm
212120	**LBGate REF46** Reflector (polarised), round, Ø 46 mm
212109	**LBGate HW25** Fixing bracket for LBGate R25

Supplementary products

Activation of automatic gates
Loop detector ProLoop2

Closing edge protection
Safety edges ClickLine and CoverLine

Technical data

Mechanical data

Housing material	R18	PC
	TB18	PC
	R25	ABS

Weight	R18	154 g
	TB18	247 g
	R25	101 g

Dimensions	R18	62 x 35 x 18 mm
	TB18	62 x 35 x 18 mm
	R25	90 x 66 x 26 mm

Connection type	R18	Cable 2 m
	TB18	Cable 2 m
	R25	Terminals

Technology data

Technology		Red light
Beams		1
Aperture angle	R18	3°
	TB18	0.5°/1.5°
	R25	±1°

Operating range (double signal reserve)	R18	9 m
	TB18	30 m
	R25	10.5 m

Response time	R18	25 ms
	TB18	25 ms
	R25	50 ms

Electrical data

Supply voltage	R18	24–240 VAC, 12–240 VDC
	TB18	24–240 VAC, 12–240 VDC
	R25	24–230 VACDC

Power consumption	R18	< 2 VA
	TB18	< 1 VA + < 1 VA
	R25	0.2 W at 24 VDC 1.8 VA at 230 VAC

| Output | | Relay, changeover contact |

Switching voltage	R18	240 VAC
	TB18	250 VAC
	R25	230 VAC

Switching current	R18	< 3 A
	TB18	< 3 A
	R25	< 2 A

Ambient conditions

Protection class		IP 67
Operating temperature	R18/TB18	−25°C to +55°C
	R25	−20°C to +60°C

Standards

| Electr. safety | EN 60947-5-2 |
| Electrical isolation | 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.