

record FlipFlow WIDE

User manual



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List of changes

Change	Location
Complete revision of all Sections and content	Entire document
New Section structure	Entire document
Revision of all graphics	Entire document

1 Safety

1 Safety

1.1 Presentation of warning signs

Various symbols are used in this guide for easier understanding:



NOTICE

Useful advice and information to ensure correct and efficient workflow of the system.



IMPORTANT

Specific details which are essential for trouble-free operation of the system.



IMPORTANT

Important details which must be read for proper function of the system.



CAUTION

Against a potential hazardous situation that can lead to minor personal injury and property damage.



WARNING

Against a latent hazardous situation that can lead to severe injuries or death and cause substantial property damage.



DANGER

Against an imminent hazardous situation that can lead to severe injury or death.



DANGER

Against an imminent or latent hazardous situation that could lead to electric shock and cause serious injury or death.

1.2 Intended purpose of use

The system is designed exclusively for use as a pedestrian passage. The installation must only occur in dry areas. If there are deviations then proper waterproofing and water drains will be required onsite.

Any other application or use beyond this purpose is not considered to be an intended purpose. The manufacturer bears no liability for any resulting damage; the operator alone shall bear the associated risk

The intended purpose also includes observation of the operating conditions specified by the manufacturer, in addition to regular care, maintenance and repair.

Interventions in or alterations to the installation performed by non-authorized maintenance technicians exclude the manufacturer's liability for consequential damages.

1.3 General hazards

The following section lists hazards that can be caused by the system even when used as intended.

To reduce the risk of malfunction, damage to property or injury to persons and to avoid dangerous situations, the safety instructions listed here must be observed.

The specific safety instructions in the other sections of this manual must also be observed.



IMPORTANT

The country-specific regulations must be observed and complied with!



IMPORTANT

To avoid malfunctions, moving objects such as flags or parts of plants must not be allowed to enter the detection range of the sensors.



CAUTION

Risk of malfunctions, material damage or injury due to improper settings!

- a) Improper settings can lead to malfunctions, material damage or personal injury.
- ⇒ Do not disconnect the system from the power supply overnight.
- ⇒ Settings should only be made by personnel qualified to do so.
- ⇒ Do not disassemble, put out of operation or manipulate safety devices.
- ⇒ Have faults rectified by specialist personnel or by personnel qualified to do so.
- ⇒ Have service and maintenance carried out according to locally applicable regulations or according to a maintenance contract.



CAUTION

Risk of malfunctions, material damage or injuries due to insufficient or missing cleaning or care!

- a) Insufficient or inattentive cleaning or care of the system can lead to malfunctions, damage to property or injury to persons.
- ⇒ Check the sensors regularly for dirt and clean them if necessary.
- ⇒ Regularly remove dirt accumulations in the floor rail or under the floor mat.
- ⇒ Keep the system free from snow and ice.
- ⇒ Do not use aggressive or caustic cleaning agents.
- ⇒ Use road salt or loose chippings only conditionally.
- ⇒ Lay the floor mat without folds and flush with the floor.
- ⇒ Equipment required for cleaning purposes such as ladders or similar must not be leaned on or attached to the system.



CAUTION

Risk of material damage or injury due to unforeseen opening, closing or turning of the door!

- The door can open, close or turn unexpectedly. This may result in damage to property or injury to persons.
- ⇒ No persons may be present in the opening area of the system.
- ⇒ Ensure that moving objects such as flags or parts of plants do not enter the detection range of the sensors.
- ⇒ Do not make any settings on the control unit when the system is in use.
- ⇒ Have faults rectified immediately by specialist or personnel qualified to do so.
- ⇒ Remove objects from the opening area.
- ⇒ Do not disassemble, put out of operation or manipulate safety devices.
- ⇒ Do not rush through a closing system.



CAUTION

Risk of bruising and severing of limbs!

- a) If the system moves, careless behaviour can lead to serious injuries to limbs or severance of limbs.
- ⇒ Do not reach in when parts of the system are moving.
- ⇒ Keep a distance when parts of the system move.
- ⇒ Do not bump into or touch the system when it is moving.
- ⇒ Do not open or remove protective covers during operation.
- ⇒ Do not permanently remove covers from the system.
- ⇒ Only carry out inspection, service, maintenance and cleaning when the system is stationary and switched off.



CAUTION

Danger of material damage or injury due to non-functioning safety devices!

- a) If safety devices are not functioning, manipulated or put out of operation, there is a risk of damage to property or injuries that can lead to death.
- ⇒ Never disable or manipulate safety devices.
- ⇒ Have inspection, service and maintenance of the safety devices carried out according to local regulations or according to a maintenance contract.



CAUTION

Danger of malfunctions, damage to property or risk of injury if used by unauthorised persons!

- a) If unauthorised persons use the system, there is a risk of malfunction, damage to property or injury to persons.
- ⇒ Children under 8 years of age may only use the system under supervision.
- ⇒ Children must not play, clean or maintain the system.
- ⇒ Persons with limited physical, sensory or mental abilities as well as persons with insufficient knowledge or experience may only use the system under supervision or must have received and understood instructions to do so.



DANGER

Danger to life due to electric current!

- a) In case of contact with live parts, there is an immediate danger to life due to electric shock. Damage to or removal of the insulation or individual components can be life-threatening.
- ⇒ Before starting work on active parts of electrical systems and equipment, ensure that all poles are voltage free and that this is maintained for the duration of the work.
- ⇒ Keep moisture away from live parts. This can lead to a short circuit.
- ⇒ Never bridge fuses or put them out of operation.
- ⇒ Do not connect the power supply until all work has been completed.
- ⇒ Have work on the electrical system performed by qualified personnel only.



DANGER

Danger to life due to non-functioning safety devices of the fire protection system!

- a) If safety devices of the fire protection system do not function properly, there is a risk of serious or fatal injuries.
- ⇒ Never disconnect the fire protection system from the power supply overnight.
- ⇒ Do not disassemble, put out of operation or manipulate safety devices.
- ⇒ Do not remove safety instructions on the system.
- ⇒ Never block, hold open or otherwise prevent fire doors from closing.
- ⇒ Have inspection, service and maintenance of the fire protection system carried out in accordance with locally applicable regulations or according to a maintenance contract.
- ⇒ Have the fire protection system checked and maintained according to the state of the art.

1.4 State of technology

This system was developed using state of the art technology and officially recognized technical safety regulations. The system, depending on its options and diameter, comply with the requirements of the Machine Guidelines 2006/42/EG as well as EN 16005 and DIN 18650 (D).

Nevertheless, danger may arise if not used as intended.



IMPORTANT

Installation, commissioning, inspection, maintenance and repair work may only be conducted by qualified, trained and authorized technicians.

After commissioning or repair work, fill in the check list and give it to the customer for safe keeping.

We recommend obtaining a service agreement.

1.5 Personal protective equipment

Personal protective equipment is used to protect persons from adverse effects on health. Personnel must wear personal protective equipment during the various work activities on and with the system. Personal protective equipment is explained below:



Hearing protection is used to protect the hearing from noise. As a rule of thumb, hearing protection is compulsory from when normal conversation with other people is no longer possible.



The head protection serves to protect against falling and flying parts and materials. It also protects the head from bumping into hard objects.



Protective goggles protect the eyes from flying parts, dust, splinters or splashes.



Protective gloves are designed to protect hands from friction, abrasions, punctures or serious injury and from burning caused by contacting hot surfaces.



Safety shoes protect the feet from crushing, falling parts and slipping on surfaces. The puncture resistance of the shoes ensures, that pointy objects do not penetrate the foot.



The high-visibility vest is used to make the personnel stand out and therefore to be seen. With improved visibility and attention, the high-visibility vest protects personnel in busy work areas from collisions with vehicles.

Depending on the place of work and the working environment, the protective equipment varies and must be adapted accordingly. In addition to protective equipment for specific work, the work site may require other protective equipment (for example a harness).

In hygiene-protected areas, special or additional requirements of personal protective equipment may be required. These requirements must be considered when choosing personal protective equipment. If there is any uncertainty regarding the choice of personal protective equipment, the safety officer must be consulted at the place of work.

1.6 Spare parts and liability

Reliable and trouble free operation of the door is only guaranteed when using parts that were recommended by the manufacturer. The manufacturer declines any liability for damages resulting from unauthorized modifications to the door or the use of parts that are not permitted.

2 General information

2.1 Purpose and use of the instructions

These instructions are an integral part of the system and enable efficient and safe handling of the system. In order to ensure proper functioning, the instructions must be accessible at all times and kept in the immediate area of the system.

Although only the male form has been chosen for reasons of better legibility, the information refers to members of both sexes.

The operator must have read and understood the manual before starting any work. The basic requirement for safe working is to follow the safety instructions and the handling instructions. In addition, the local regulations and safety rules apply.

The manual can be handed over in extracts to instructed personnel who are familiar with the operation of the system.

The illustrations are for basic understanding and may differ from the actual presentation. Specific representations are contained in the drawings.

2.2 Copyright

The copyright of the instructions remain at:

BLASI GmbH

Carl-Benz-Str. 5-15

D - 77972 Mahlberg

It is prohibited to reproduce, distribute or use the manuals for purpose of competition without the written authorization of BLASI GmbH.

Violation of the here stated copyrights will be prosecuted and fined with compensation of damage.

Subject can change without prior notice.

Differences between product and manual are thereby possible.

2.3 Product identification

The nameplate located on the door provides accurate identification of the product.

2.4 Manufacturer BLASI GmbH

BLASI GmbH Automatic Door Systems

Carl-Benz-Str. 5-15 D-77972 Mahlberg

Germany

Telephone: +49 7822-893-0 Fax: +49 7822-893-119

2.5 Target groups



CAUTION

Risk of injury if personnel are insufficiently qualified!

If unqualified personnel work on the system or are in the danger zone of the system, dangers may arise which can cause serious injuries and considerable damage to property.

- a) All work must be carried out by qualified personnel only.
- b) Keep unqualified personnel away from danger areas.

This operating manual is intended for the target groups listed below:

- Operating entity of the system:
 the person who is responsible for the technical maintenance of this system
- Operator of the system:
 the person who operates the system every day and has been suitably instructed

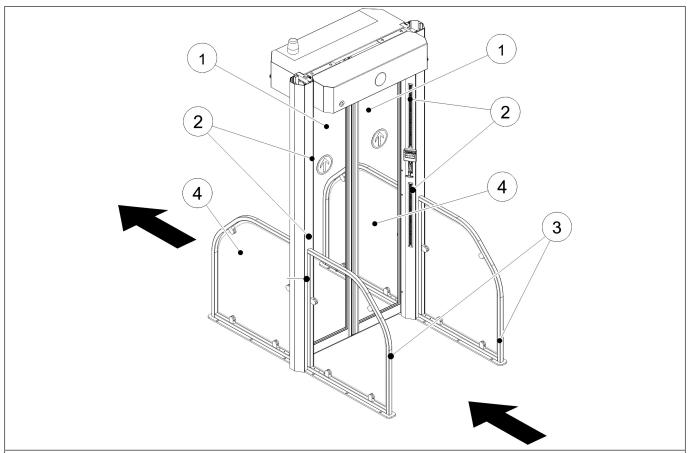
2 General information

2.6 Definition of terms

Term:	Explanation:
System	The term is also used in these instructions as a synonym for the product. Door operators, revolving doors, sliding doors, etc. are referred to as a system.
	If information in these instructions refers to a specific type, this is shown accordingly in the text.
User	Users are all persons who use the system.
System operator	The respective owner is referred to as the system operator, regardless of whether they operate the system as the owner or pass it on to third parties.
Authorized representative	The authorized representative takes over certain parts of the manufacturer's obligations with regard to fulfilling the requirements of the Machinery Directive. In particular, the authorized representative may also place the system on the market and/or sign EC declarations of incorporation.
Qualified personnel	Qualified personnel are authorized and appropriately trained to perform the following work:
	Disassembly, Assembly, Commissioning, Operation, Audit, Maintenance, Troubleshooting, Decommissioning
	The qualified personnel have several years of professional experience in the technical field, e.g. as mechanics or machine fitters.
	The qualified personnel are aware of the residual risks arising from the installation site and, due to their professional training, knowledge and experience, are able to carry out the work assigned to them and to independently identify and avoid possible danger points.
Manufacturer	The manufacturer is whoever designs and/or builds machinery or incomplete machinery under the scope of the Machinery Directive.
Life phases	All phases of the system's condition and use are referred to as life phases. This applies from the time the system leaves the factory until it is disposed of.
Personnel	All persons who carry out activities on and with the system are referred to as personnel. Personnel can be, for example, the operator, the cleaning staff, or the security staff. The personnel meet the personnel qualifications required by the manufacturer.
Service technician	Experts and specialists or representative authorized by the manufacturer to perform commissioning, maintenance and servicing.

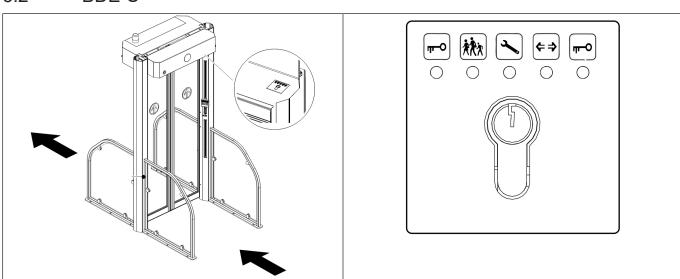
3 Description

3.1 Product overview



- 1 Swing door
- 2 LED signalling
- 3 Pedestrian guide elements on the entry side
- 4 Pedestrian guide elements with light barriers on the exit side

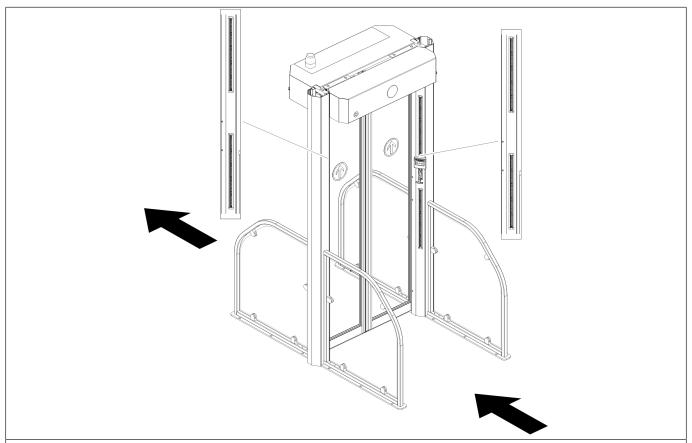
3.2 BDE-S



The program selection switch is located on the facade behind the cover of the entrance door.

The control unit switch enables switching among the four different operating modes.

3.3 FlipFlow signalling



Signalling depends on the selected operating mode and the additional functions ordered by the customer. In the basic model, the FlipFlow has a signal light panel with red and green indicator lamps integrated in the right doorpost. The signalling functionality is described in the sections on the various FlipFlow operating modes.

3.4 Building management system information

Receiving and sending information from the FlipFlow to the building management system can be done via potential-free relay contacts. In addition, a program selection switch in every door system enables remote control of the FlipFlow.

3.5 Commands transmitted to the building management system

3.5.1 Fully open

Command for emergency opening; highest priority.

3.5.2 Emergency closing

Command for emergency closing: closes and locks the door system. This takes priority over the operating modes.

3.5.3 Change in the operating modes (FLOW <- -> OPEN)

Enables the manual change of the locally set operating mode from OPEN to FLOW or vice versa, depending on the flow of pedestrian traffic.

3.5.4 Contacts 1 and 2 of the key switch (BMS) - optional

Replacing the local key switch as well as selecting one of the four possible operating modes can be done with the aid of these two contacts.

Contact 1	Contact 2	Operating mode
0	0 LOCKED	
0	1	FLOW
1	0	MAINTENANCE
1	1	OPEN

3.5.5	Operating mode without alarm - optional Activation of the operating mode without alarm function via the BMS.
3.5.6	Cleaning mode - optional

3.6 Information received by the BMS (OPTIONAL)



NOTICE

The following functions can be configured via the service display:

- a) information logic (No/Nc)
- b) information about the respective state of the doors
- 3.6.1 Intrusion alarm

An alarm due to intrusion was recorded.

3.6.2 Wrong direction of passage (=anti-passback)

An alarm due to the wrong direction of passage was recorded.

- 3.6.3 Alarm indicating a disruption in the pedestrian flow
 - An object or a person has been in a detection zone of the door system too long already.
- 3.6.4 Technical malfunction (grouped)

There is an object or a person in the detection zone of a presence detector; the object or person is blocking passage and/or one of the electrical components of the FlipFlow is defective.

- 3.6.5 Door system closed/locked
 - Transmits information about the status of the entrance door.
- 3.6.6 In operation

Indicates that no alarm is pending and the FlipFlow is working properly; people can pass through it.

3.6.7 During maintenance work

Indicates that maintenance work is being done on the FlipFlow or that the FlipFlow is in an operating mode without an alarm function.

3.6.8 Open service hatch

Indicates that the service hatch is open.

3.6.9 Emergency stop button (=escape route emergency switch) activated

Indicates that the emergency stop button was activated. It must be reset manually.

3.6.10 Cleaning mode

The FlipFlow is currently being cleaned.

3.6.11 230 VAC present

Indicates the status of the power supply.

3.6.12 FLOW operating mode

The FlipFlow is in FLOW mode.

3.6.13 OPEN operating mode

The FlipFlow is in OPEN mode.

3.6.14 LOCKED

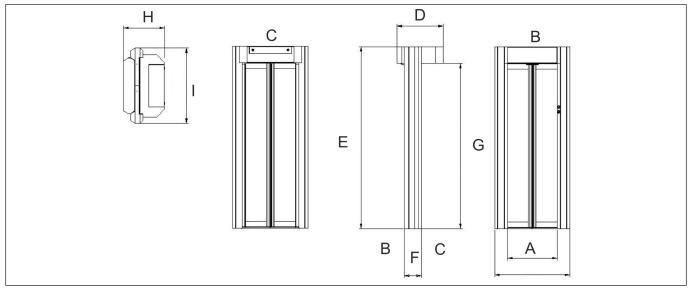
The FlipFlow is in LOCKED mode.

3.6.15 MAINTENANCE mode

The FlipFlow is in MAINTENANCE mode.

4 Specifications

4.1 Main dimensions



	FlipFlow WIDE dimensions (millimetre / inch)					
Door type	650	900	1100	1200	1400	
Α	650 mm / 25.591 in	900 mm / 35.433 in	1100 mm / 43.307	1200 mm / 47.244	1400 mm / 55.118	
			in	in	in	
		A = Pa	ssage width			
В	Entrance	Entrance	Entrance	Entrance	Entrance	
С	Exit	Exit	Exit	Exit	Exit	
D	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	
E	2365 mm / 93.110	2365 mm / 93.110	2365 mm / 93.110	2365 mm / 93.110	2365 mm / 93.110	
	in	in	in	in	in	
F	146 mm / 5,748 in	146 mm / 5,748 in	146 mm / 5,748 in	146 mm / 5,748 in	146 mm / 5,748 in	
G	2150 mm / 84.646	2150 mm / 84.646	2150 mm / 84.646	2150 mm / 84.646	2150 mm / 84.646	
	in	in	in	in	in	
	G = Passage height					
Н	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	664 mm / 26.142 in	
I	980 mm / 38.465 in	1230 mm / 48.307	1430 mm / 56.181	1530 mm / 60.118	1730 mm / 68.110	
		in	in	in	in	

4.2 Electrical inputs and connections



DANGER

Danger to life due to electric current!

- In case of contact with live parts, there is an immediate danger to life due to electric shock.
 Damage to or removal of the insulation or individual components can be life-threatening.
- ⇒ Before starting work (cleaning, maintenance, replacement) on active parts of electrical systems and equipment, ensure that all poles are voltage free and that this is maintained for the duration of the work.
- ⇒ Keep moisture away from live parts. This can lead to a short circuit.
- ⇒ Never bridge fuses or put them out of operation.
- ⇒ Do not connect the power supply until all work has been completed.
- ⇒ Have work on the electrical system performed by qualified personnel only.



DANGER

Danger to life in case of faulty installation

- a) There is an immediate danger to life by electric shock when touching live parts. Incorrect installation of individual components can be life-threatening.
- ⇒ The wiring for low voltage and mains voltage must be installed in a separate cable duct.
- ⇒ All wiring must be routed, secured and protected from moving parts, heat sources and sharp edges.
- ⇒ All electrical components inside the covers, must lie securely or be fixed with adhesive tape.



NOTICE

Electrical inputs are located on the control unit.

Inputs for the power supply line are available at each column.



IMPORTANT

If several systems are installed in parallel, the power supply must be provided via the floor on the two outer columns.



IMPORTANT

The building management system cables can also be connected via the floor. However, they must never be connected to the 115 / 230 VAC supply cables.



IMPORTANT

The system is designed for a fixed connection to the electrical supply network. Proper earthing must be provided and the cabling must comply with local regulations. Electrical data:

115 / 230 VAC / 50-60 Hz / 1000 watts

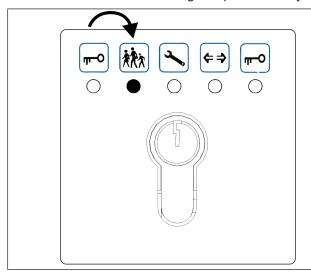
1 Phase / 3 Wires

5 Operation

5.1 Operating the BDE-S program selection switch

The BDE-S is a key switch with 5 positions: Simply insert the key into the lock and turn it until the LED for the desired operating mode lights up.

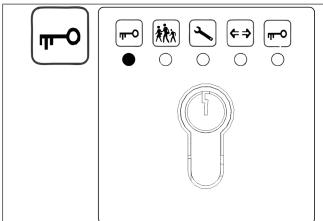
A different LED lights up each time you turn the key.

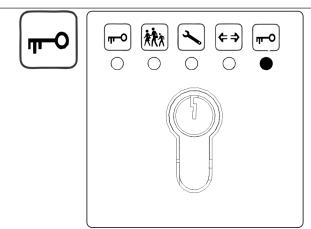


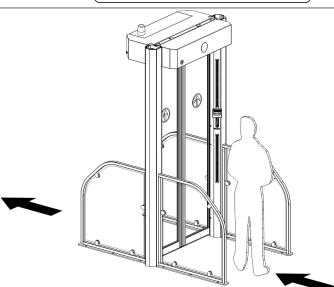
The BDE-S is equipped with a standard Euro profile halfcylinder that can be subsequently replaced in order to integrate it in an existing set of keys.

5.2 Operating modes and functions

5.2.1 Description of the LOCKED operating mode



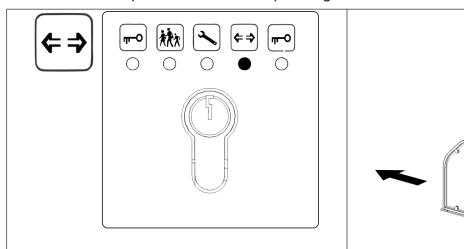




This can also be used to trigger a manual reset.

- The LED bars are lit up in red.
- The door system is closed and locked.
- If sensor monitoring is activated, the service display may not be used!

5.2.2 Description of the OPEN operating mode



FlipFlow status

- The entrance door is open.
- The LED bars on the entry side are lit up in green.
- The service display may be used even if sensor monitoring is activated.



NOTICE

The following functions can be configured via the service display:

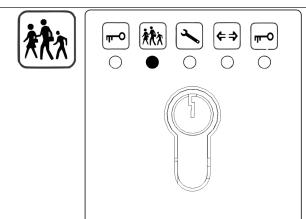
- a) activation/deactivation of presence/motion detection
- b) selection of response: technical malfunction or intrusion alarm

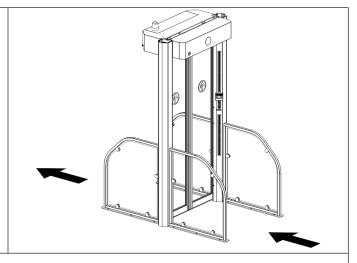
If the FlipFlow sensor monitoring is deactivated, it is possible to cross the door system in both directions without triggering an alarm.

If the sensor monitoring is activated, the door system can be crossed only in the permitted direction. Otherwise, an alarm will be triggered.

5.2.3 Description of the FLOW operating mode

In this operating mode, the FlipFlow works automatically, i.e. the opening of the door system is triggered by the entrance radar. If a person approaches from the wrong direction, an alarm is triggered: the door system closes and locks.





Initial state

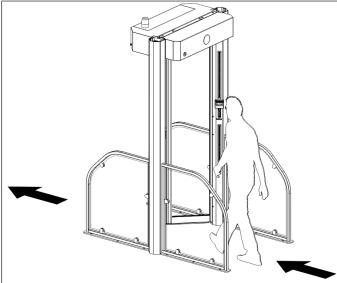
- The entrance door is closed.
- The LED bars are lit up in green.
- If sensor monitoring is activated, the service display may not be used!



NOTICE

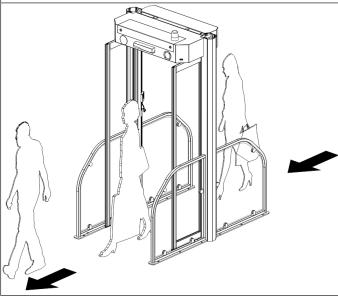
The following functions can be configured via the service display:

- a) door hold-open times, alarm operating time delays, etc.
- b) selection of response: Technical malfunction or intrusion

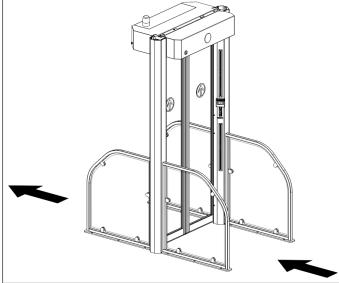


Cycle:

 A pedestrian arrives in front of the entrance radar and the door system opens. When other people follow, the door system remains open. (If there is only one person, the door system closes behind that person.)



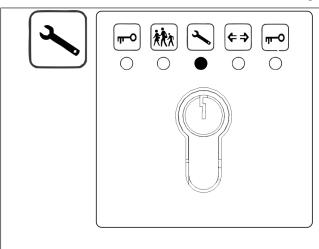
The people pass through the FlipFlow one after the other.

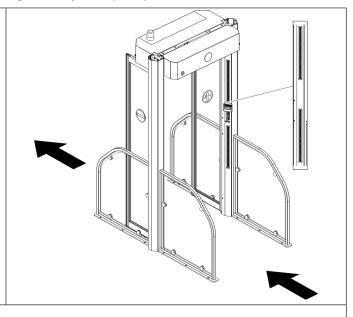


 After all persons have gone through the FlipFlow, the FlipFlow returns to its initial state and is ready for the next cycle.

5.2.4 Description of the MAINTENANCE mode

In this operating mode, none of the alarm signals of the FlipFlow are transmitted. Thus, the maintenance technician can work on the door system in peace. As an option, the message 'Maintenance Work' can be transmitted to the building management system (BMS).





Situation:

- The door system is open.
- The LED bars are lit up in yellow.
- If sensor monitoring is activated, the service display may be used.



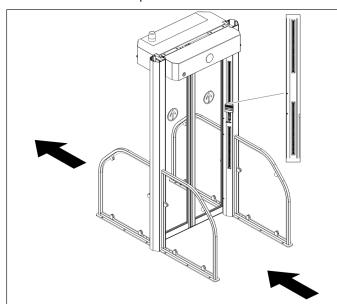
NOTICE

The following functions can be configured via the service display:

- a) door system open or closed
- b) flashing frequency of the signal lamps
- c) all FlipFlow parameters

5.2.5 Operation in the event of a power failure

In the event of a power failure, the door system closes and locks. The FlipFlow remains in this position until power is restored. This mode is only available when the optional battery pack is selected.



FlipFlow status

- Lighting and signal indicators are off.
- Entrance door closed and locked.

6 Inspection and maintenance

Regular inspection and maintenance of the system by trained and authorized personal from the manufacturer, is the best guarantee for long life and trouble-free secure operation.

These control and maintenance operations are required at regular intervals, following the manufacturer's instructions and the relevant legal requirements.

6.1 General remarks

According to current legislation, the operator of an automatic door system is responsible for its maintenance and safety.

Accidents or defects can be avoided if the system operator takes good care of the system.

Testing

Type of test	Measure		
Visual inspection	Check door leaves, guides, bearings, limiting devices, sensors, and the securing of crushing and shearing points for damage.		
Mechanical inspection	Check fastenings for tight fit.		
Safety check (exit and escape routes)	Check sensors, safety devices, and monitoring devices for tight fit and damage.		
Function testing	Check functioning of switches, operators, controllers, power or energy storage devices, and sensors.		
	Also check the adjustment of the safety devices and the setting of all movement sequences including the end points.		

Servicing

Type of servicing	Measure
Adjusting and cleaning	Clean and adjust bearings, sliding points, and power transmission.

For documentation and information purposes, the testing and servicing work as well as the condition of the system are recorded in a test log book. The test log book must be kept for at least one year or until the next testing/servicing.



IMPORTANT

The testing and/or servicing interval according to the manufacturer's specification is at least 1 to 2 times a year.



IMPORTANT

The recommended and planned spare parts and wearing parts can be requested from your service center.

6.2 Operator duties

Personal protection requires compliance with the standards and guidelines for publicly accessible facilities.

According to applicable standards and guidelines, automatic door systems must be tested and serviced by qualified persons.

The system operator is responsible for carrying out testing and servicing.

System operator tasks

Task	Personnel		Entered in test log book?
Maintenance and cleaning of the sensors for safety and triggering	System operator	Weekly, or as required	No
Function and safety check	System operator	Monthly	No

Tasks of qualified person

Task	Personnel	When?	Entered in test log book?
Acceptance test	Qualified person	After assembly of the door system ready for operation	Yes
Servicing	Qualified person	1 x annually, or according to country- specific standards and guidelines	Yes
Test (inspection)	Qualified person	1 x annually, or according to country- specific standards and guidelines	Yes
Test (inspection) for door systems in escape routes	Qualified person	2 x annually, or according to country- specific standards and guidelines	Yes
Testing of fire doors	Qualified person	1 x annually, or according to country- specific standards and guidelines	Yes

6.3 Cleaning

A special cleaning operation mode is available so that the cleaning personnel can work under optimal conditions. Please refer to the technical notice that describes this

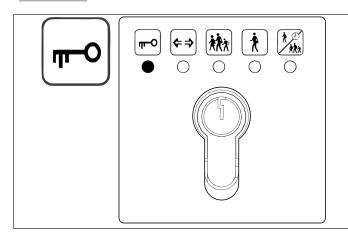
7 Malfunctions

7.1 Perform reset / restart



NOTICE

Some faults can remedied by resetting / restarting the control unit.



Set the key switch to the CLOSED and LOCKED operating mode.

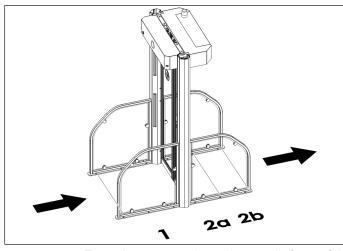
The system moves to the home position and performs a reset.

 Alternatively, disconnect the unit from the power supply for about one minute.

Restart initiated after network recovery.

7.2 Possible malfunctions

7.2.1 Description of the detection zones



Strategic detection zones are configured to ensure safe, reliable operation of the FlipFlow.

Zone 1 corresponds to the area in front of the door system. This area is monitored by a radar, which triggers the opening of the door system if necessary.

Zone 2a corresponds to the swing area of the door leaves. An infrared sensor in this zone prevents people from getting hit by a door leaf in motion.

The posts between **zones 1** and **2a** are equipped with light barriers: two light barriers ensure safety (when the door system re-opens), while a third detects the approximate number of people passing through the FlipFlow.

Zone 2b corresponds to the exit area between the pedestrian guide elements on the exit side. To detect persons who attempt to pass through the door system in the wrong direction, this zone is monitored by three infrared light barriers and a one-way radar.



NOTICE

The following function can be configured via the service display:

a) setting of all delay times for the delayed triggering of the alarms

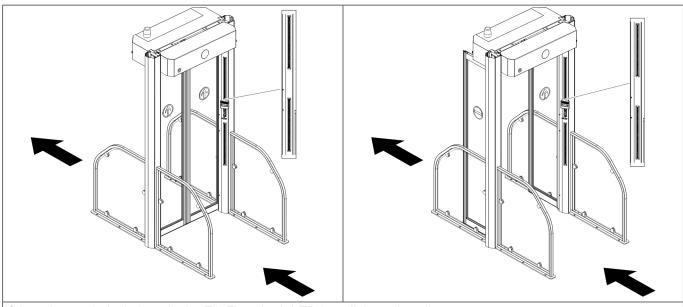
7.2.2 Alarm indicating a disruption in the pedestrian flow

Below you will find a list of situations in which an alarm (buzzer) can be triggered due to a disruption in the pedestrian flow. Time delays are programmed for the delayed triggering of the corresponding alarms.

- A person or an object is standing/lying in zone 2a or 2b; the door system is closed.
- A person or an object is standing/lying in the door system or in zone 2a and/or 2b; the door system is open.
- The door is no longer in one of its end positions.
- The door system is not open (or closed), though it should be.

7.2.3 Technical alarm

This alarm is triggered if a pedestrian flow disruption has lasted too long or if a technical malfunction has been detected. A reset is required to deactivate this alarm. A ringtone sounds at regular intervals as a reminder.



If there is a technical alarm in the FlipFlow, both LED bars light up in yellow.

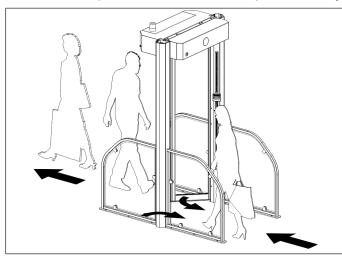


NOTICE

The following functions are accessible via the service display:

- a) alarm history
- b) with password: status of the entrances and exits

7.2.4 Optional use of the anti-passback system



If a person enters the zone between the pedestrian guide elements in the wrong direction, an alarm is triggered and the entrance door closes again.



NOTICE

The following functions can be configured via the service display:

- a) timer settings, delay times
- b) selection of response types

7.2.5 Intrusion alarm

This alarm is triggered when a person tries to enter the FlipFlow in the wrong direction and the entrance door does not close within a reasonable time (see below). A reset is required to deactivate this alarm.

7.2.6 Anti-passback alarm

This alarm is triggered when a person tries to enter the FlipFlow in the wrong direction and the entrance door is closed or does not close within a reasonable time (see below). A reset is required to deactivate this alarm.

7.2.7 The difference between anti-passback and intrusion



NOTICE

If the sensors detect a person entering the FlipFlow in the wrong direction when the entrance door is not closed, a (false) alarm is triggered. To limit the number of false intrusion alarms, the system measures the time required for the entrance door to close and compares it with the reference time.

If the closure time is less than the reference time, an anti-passback alarm is triggered.

If, on the other hand, the closure time is equal to or even longer than the reference time, an intrusion alarm is triggered.



NOTICE

This reference time is pre-set in the factory using a specific closing speed, so modifying it is prohibited!

8 Taking out of service and disposal

8.1 Decommissioning

When shutting down or taking out of service, the system is disconnected from the mains supply and any existing battery is unplugged.



NOTICE

After each temporary shutdown a new commissioning must be carried out.

8.2 Dismantling and disposal



IMPORTANT

All machine parts must be sorted by type of material and disposed of according to local regulations and guidelines.





NOTICE

The door systems can be completely disassembled in reverse order.

The automatic door mainly consists of the following materials:

Aluminum:

- Linking profiles
- Gearbox, Drive panel
- Door wing profiles and side profiles
- Various profiles and small parts

Steel / iron parts:

- Stainless steel casing, Floor panel, Box recess for floor installation
- Optional spacer or reinforcement profiles
- Gear components, springs
- Various small parts like fittings, covers, linking parts, etc.

Glass:

- Door wings and side panels

Various electronic and electromechanical components:

- Sensors, control and operator components
- Lead batteries and nickel-cadmium rechargeable batteries

Various plastics:

- Rollers
- Cable clips, coupling and linking parts
- Sealing profiles
- Casing of electromechanical components and sensors

