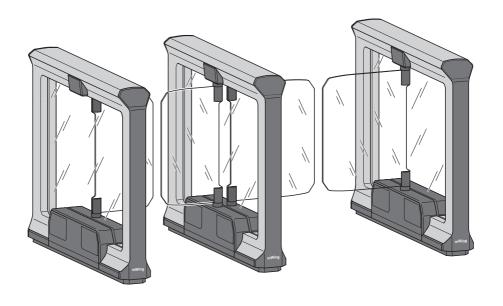


Operating Instructions

Pedestrian gate with swing wings
MHTM™ FlowMotion® **mWing**



Doc.ID: 5817,0034EN Version 01

Original Operating Instructions

This document is available as PDF in the Magnetic Autocontrol download area (www.magnetic-access.com). Authorisation is required for download.

MAGNETIC AUTOCONTROL GMBH

Grienmatt 20 D-79650 Schopfheim Germany

Phone +49 7622 695 5 Fax +49 7622 695 802 info@magnetic-germany.com www.magnetic-access.com

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1 Notices on the document

1.1 Purpose and contents of this operating instructions

These operating instructions provide all the information required for the product in the various phases of its life cycle.

This operating instructions contains the following information: Design and function, transport and storage, unpacking and delivery, installation and mounting, electrical connection, commissioning, operation, cleaning and maintenance, decommissioning, dismounting and disposal.



IMPORTANT!

For parameterisation see separate document "Description of control unit MGC for mWing (Doc.ID: 5817,0033)".



IMPORTANT!

The swing wings are available in different heights. In the figures, the swing wings are mainly shown in the standard height.

1.2 Reading and storing the operating instructions

Prerequisite for secure work is compliance with all indicated safety notes, warning notes and instructions. In addition, the local accident prevention regulations, general safety regulations and local environmental regulations applicable to the area of application of the product must be observed.

Carefully read these operating instructions before starting any work! The operating instructions are a product component and must be kept in direct proximity of the product, well accessible to the personnel at all times.

When passing the product on to third parties, these operating instructions must also be handed over.

1.3 Non-observance of the operating instructions

Magnetic declines all liability for personal injury and material damage caused by not observing the operating instructions.

This applies in particular to damage caused by:

-) Improper use
- Use of non-qualified personnel
- Use of non-approved components
- Arbitrary modifications
- Inappropriate mounting and installation
- Incorrect operation
-) Defective or unperformed maintenance and repairs
-) Use of non-approved spare parts
- Operating a defective product

1.4 Symbols and illustrations used in the operating instructions

1.4.1 Warning notes and notices

Warning notes are characterised by pictograms in these instructions. A warning note starts with a signal word that expresses the extent of the hazard.

It is absolutely essential to observe the warning notes and to proceed with caution in order to prevent accidents as well as bodily injuries and property damage.

Warning Notes

DANGER



The signal word DANGER points to an immediately dangerous situation, which leads to death or severe injuries if it is not avoided.

MARNING



The signal word WARNING points to a potentially dangerous situation, which can lead to death or severe injuries if it is not avoided.

CAUTION



The signal word CAUTION points to a potentially dangerous situation, which can lead to minor injuries if it is not avoided.

NOTICE



The signal word NOTICE points to a potentially harmful situation, which leads to property damage if it is not avoided.

Notes and recommendations



IMPORTANT!

The signal word IMPORTANT highlights useful notes and recommendations as well as information for an efficient and trouble-free operation.

2 Safety

2.1 Intended use

The Magnetic pedestrian gate mWing is designed for the control of persons entering or leaving an area with restricted access.

The pedestrian gate is intended for passage of persons who can pass the pedestrian gate safely, speedily and without any help. Separate means of access must be provided for persons who cannot pass through the pedestrian gate safely, quickly or without assistance, such as small children, elderly people or people with disabilities. Children under 8 years of age may only pass through the pedestrian gate under the supervision of an adult.

The pedestrian gate may only be mounted on non-flammable floors.

The pedestrian gate may only be operated within the temperature range indicated on the type plate.

Misuse

Any use differing from or beyond this is considered improper use. Magnetic is not liable for any resulting personal injury or damage to property.

For example, the following applications are regarded as improper use:

- Use of the pedestrian gate by unaccompanied children under 8 years of age.
- Use of the pedestrian gate by persons who cannot pass the pedestrian gate safely, quickly or without assistance.
- Use of the pedestrian gate without released passage. This means that the swing wings are forced to rotate.
- Mounting of the pedestrian gate on flammable ground.

2.2 Changes and modifications

Modifications and conversions to the product, to an attachment or to one of the components can lead to unforeseen dangers. Magnetic's written approval must be obtained before any technical modifications or alterations are made to the product or any of its components.

2.3 Target groups

2.3.1 Operator and its responsibility

The operator must comply with the statutory obligations regarding work safety. In addition to the safety instructions and warning notes in this operating instructions, the valid safety, accident prevention and environmental protection regulations must be observed.

In particular, the operator must:

- determine additional danger in a danger analysis
- implement the necessary behavioural requirements in work instructions for operation with the product at the operating location
- regularly verify throughout the product time of use that the work instructions drawn up by him comply with the current state of the regulations
- adapt the working instructions to any new provisions, standards and usage conditions - where required.
- clearly regulate the responsibilities for all work on the product and with the product such as mounting, commissioning, operation, cleaning, maintenance, etc.
-) ensure that personal protective equipment is worn
- > ensures that all employees who work with the product or on the product have read and understood the operating instructions.

Furthermore, the operator must train personnel regarding the use of the product at regular intervals and provide information on possible dangers.

Furthermore, the operator is responsible for:

- the product is always in perfect technical condition.
- the product is maintained at specified maintenance intervals
- the product is only operated within the permitted temperature range.

The operator is also responsible for ensuring that the danger area of the product cannot be accessed by any unauthorised persons under any circumstances.

2.3.2 Personnel - activities and qualifications

Only authorised, trained and sufficiently qualified personnel may work on and with the product. The personnel must know and have understood the operating instructions and the required operating procedures.

Designation	Qualification
Transport equipment operator	 Has professional experience as a transport equipment operator or warehouse and transport worker. Has a valid driving licence for the required industrial truck, e.g. forklift. Knows the necessary regulations. Can evaluate the work assigned to him, recognise possible dangers and take appropriate safety measures.
Technician	 Has completed training as a systems mechanic, machinery technician, installation mechanic, installation technician or has comparable technical training. Has completed training as an electrical safety expert. Has additional knowledge and experience. Knows the relevant technical terms and regulations. Can evaluate the work assigned to him, recognise possible dangers and take appropriate safety measures.
Magnetic MHTM™ FlowMotion® service expert	Meets all the requirements of the technician.Trained and authorised by Magnetic.
Operator	> Trained by the operator.

Table 1: Qualifications of personnel

Task	Transport equipment operator	Technician	Magnetic service expert	Operator
Transporting	X	Х	_	_
Unpacking	X	Х	Х	_
Laying the foundation	_	X	_	_
Mounting	-	Х	Х	_
Electrical connection	_	Х	Х	_
Parameterisation	-	_	Х	_
Commissioning 1)	_	_	Х	_
Operating	-	X	Х	x
Cleaning	-	Х	Х	x
Servicing	_	Х	Х	_
Troubleshooting	-	Х	Х	_
Repairing	-	Х	Х	_
Decommissioning	-	Х	Х	-
Dismounting	-	Х	Х	-
Disposing	_	Х	_	_

¹⁾ According to the supplied log book MHTM™ FlowMotion® mWing

Table 2: Activities and qualifications

2.4 Personal protective equipment

It is necessary to wear personal protective equipment when dealing with the product so as to minimise health hazards.

Before carrying out any work, properly dress in the necessary protective equipment such as work clothes, protective gloves, safety shoes and wear during work.

2.5 Symbols on the device



Warning of electric voltage!

The warning sign indicates dangerous areas with dangerous electric voltage. Non-observance of the warning signs causes severe injuries or death. The work to be carried out may only be carried out by a qualified electrician or an electrical safety expert.

This warning sign is fixed at the following point:

At the terminals, under the cover.

2.6 For your safety



Mortal danger by electric voltage!

Touching live parts can be lethal. Damage to the insulation or to individual components can be lethal.

- If the insulation or any parts are damaged, switch off the power supply at once and initiate repair.
- Only qualified electricians or electrical safety experts may carry out work on the electrical system.
- > Before commencing any work, switch off power supply and secure against restarting. Test for absence of voltage.
- Perform the electrical installation in accordance with the applicable regulations.
- Protective devices that are required according to national and local regulations, e.g. residual current devices, must be provided. These protective devices must be provided by the customer.
-) Observe the information on the type plate.
- Close all covers after all work is completed.
- › Keep moisture and dust away from live parts. Intruding moisture and dust may cause a short circuit.
- If the electrical connection is made during precipitation, e.g. rain or snow, prevent the intrusion of moisture by means of suitable protective covers.
- During or after a lightning strike into the system, there is danger to life if the components are touched or during a stay in the immediate vicinity of the system. When mounting outside, do not install and mount the pedestrian gate during thunderstorms.

2.7 To protect the environment



Improper disposal!

Improper disposal can result in damage to the environment.

- > Dispose of the product in accordance with local and national laws and regulations.
- > Sort resources and supply them to recycling.

2.8 Emergency opening of the pedestrian gate

↗ Page 77, chapter 8.4.1.

3 Technical data

3.1 Dimensions and design

3.1.1 mWing

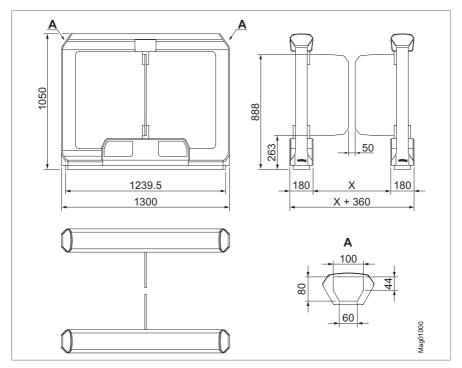


Fig. 1: Dimensions mWing with swing wing at standard height (dimensions in mm), X corresponds to ordered passage width

A Installation space for reader without the option of the passage direction display, installation depth 40 mm

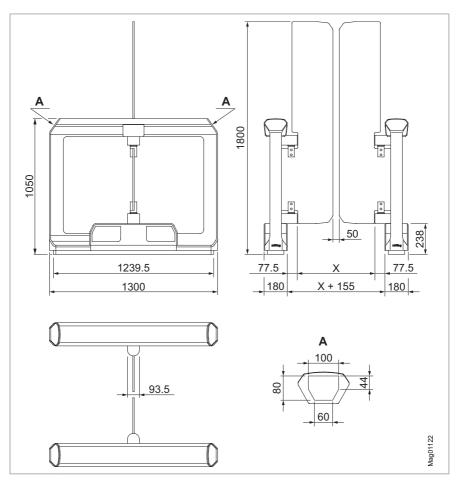


Fig. 2: Dimensions mWing with swing wing in high version (dimensions in mm), X corresponds to the ordered passage width

A Installation space for reader without the option of the passage direction display, installation depth 40 mm

Designation	Value	
Dimensions (length x width x height)	 > mWing with swing wing at standard height 1300 mm x 180 mm x 1050 mm ¬ Page 16, Fig. 1. > mWing with swing wing in high version 1800 mm x 335.5 mm x 1050 mm ¬ Page 17, Fig. 2. 	
Passage width	 Standard versions: 600 mm or 900 mm Special versions: 520 mm or 960 mm Other dimensions on request 	
Weight	 › Pedestrian gate: Approx. 82 kg › Base frame FURA100 ¹⁾: 11 kg › Base frame FURA102 ¹⁾: 17.5 kg 	
Material	 › Housing: mDure › Base frame ¹⁾: Stainless steel › Base plate ¹⁾: Stainless steel 	

1) Optional

Table 3: Dimensions and design – mWing

3.2 Clearances and line configuration to be maintained

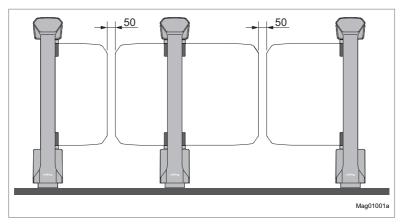


Fig. 3: Clearances and line configuration to be maintained. Minimum distance 50 mm
Distancing between modules → Page 16, Fig. 1 and → Page 17, Fig. 2

3.3 Electrical connection

Designation	Value
Power supply	100 to 240 V AC ± 10 %, 50 to 60 Hz
Current consumption at 240 V AC	1.0 A
Current consumption at 100 V AC	2.1 A
Max. performance	174 W
Duty cycle	100 %

Table 4: Electrical connection

3.4 Operating conditions

Designation	Value
Operating temperature range	-30 to +55 °C
Storage temperature range	-30 to +55 °C
Relative humidity	Maximum 95 %, non-condensing
IP rating	IP 54

Table 5: Operating conditions

3.5 Emissions

Designation	Value
Airborne sound pressure level (LpA)	≤ 70 dB (A)

Table 6: Emissions

3.6 Control unit MGCplus

Designation		Value
Power supply		24 V DC
Control unit		max. 1 A: max. 300 mA + current consumption of the individual plugin modules
Power consumption		max. 24 W: Max. 7.2 W + power consumption of the individual plug-in modules
Control unit safety device		1 A T
Output terminal 2	Output voltage	24 V DC
	Max. output current	300 mA
Digital inputs	Number	8
	Input voltage	24 ± 10 % V DC
	Input current	< 10 mA per input
	Max. cable length 1)	30 m
Digital outputs	Number	4 (open collector)
	Input voltage	24 ± 10 % V DC
	Input current	100 mA
	Max. cable length 1)	30 m
Relay outputs	Number	3 closers + 3 changeovers , isolated
	Max. switched voltage	30 V AC / DC
	Switching current	10 mA to 1 A
	Max. cable length 1)	30 m
Display		Graphics display, 128 x 65 pixel
Number of slots for plug-in modules		5

¹⁾ Specified without optional over voltage module. For cable lengths above 30 m, over-voltage modules must be installed upstream of the connection terminals.

Table 7: Control unit MGCplus

4 Design and function

4.1 Design

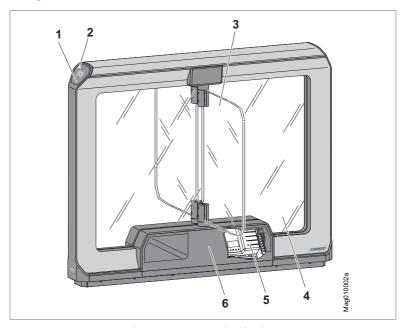


Fig. 4: Design mWing with swing wing at standard height

- 1 Room for access-control device provided by the customer, e.g. card reader
- 2 Space for GED (passage direction display)
- 3 Swing wing e.g. glass wing
- 4 Inlay
- 5 Control unit MGCplus
- 6 Cover for control unit and drive blocking element

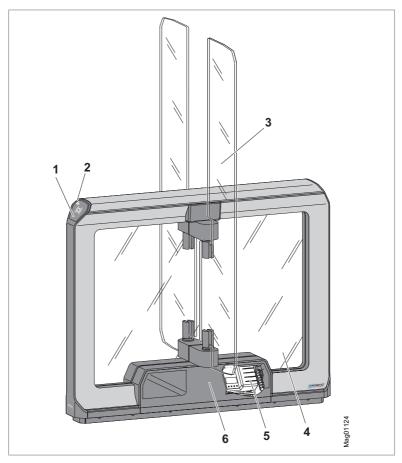


Fig. 5: Design mWing with swing wing in high version

- 1 Room for access-control device provided by the customer, e.g. card reader
- 2 Space for GED (passage direction display)
- 3 Swing wing e.g. glass wing
- 4 Inlay
- 5 Control unit MGCplus
- 6 Cover for control unit and drive blocking element

4.2 Definitions

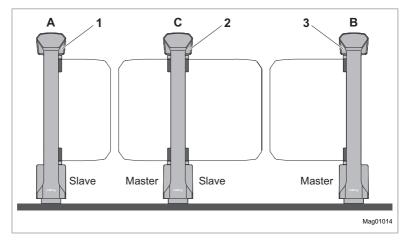


Fig. 6: Definitions

- 1 A-module: Slave-function, no control unit
- 2 C-module: Slave and master function, the control unit is located on the master side
- 3 B-module: Master function, the control unit is located on the master side

Every passage requires two modules. The swing wings of a passage are always controlled by the module with the master function.

4.2.1 A-module

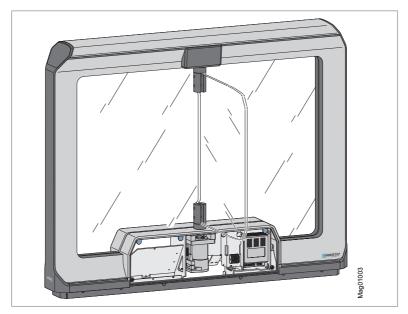


Fig. 7: A-module, shown here without cover The A-module fulfils the slave function.

4.2.2 B-module

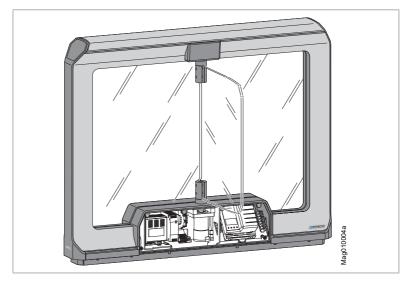


Fig. 8: B-module, shown here without cover The B-module fulfils the master function.

4.2.3 C-module

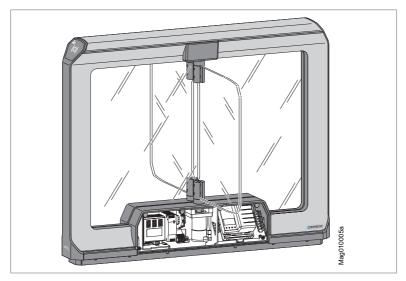


Fig. 9: C-module, shown here without cover
The C-module fulfils the slave and master function.

4.3 Function

The Magnetic pedestrian gates with swing wing mWing are used for fast control of persons, e.g. in the reception area of public buildings, hotels, companies or museums. It can be used outdoors, e.g. in sports stadiums.

The modular system allows for several lane configurations. There are also some passage widths that permit access, e.g. with wheelchairs, strollers, etc.

The pedestrian gates can be operated in two directions. In multi-lane installations with high throughput rates, the entry and exit lanes can also be parameterised for operation in one direction. The gate end displays installed by default show the current mode via a green or red arrow.

In its normal state, the swing wings are closed. The swing wings only open after authorisation from an external command transmitter, such as a card reader.

Attempted cheating such as passage in the wrong direction, or a second person following without authorisation (tailgating) is recognised and activates the alarm system. Recognition takes place by several light barriers.

With MHTM drive technology used, the swing wings can be blocked in any position, e.g. by hand. During a power failure, or if an emergency trips, the swing wings can be disconnect from mains and can be moved easily by hand.

Children up to 8 years of age are not allowed to use the pedestrian gate; they must take a separate passage.

A random check function is integrated for checking persons or bags. If the random check function reaches the random value of passages, the passage is blocked and a signal is given. Only after the operator, e.g. porter, has actuated an enable signal, the passage is enabled and the person can pass.

5 Receipt of goods, transport and storage

5.1 Receipt of goods

Immediately check the delivery after receipt for completeness and transport damages.

In case of externally visible transport damage, proceed as follows:

-) Do not accept the delivery or only under reserve.
- Note the extent of damage on the transport documents or on the delivery note of the carrier.
- > Lodge complaint.



IMPORTANT!

Lodge a complaint for each defect, as soon as it is recognised. Compensation claims can only be submitted within the valid complaint periods.

5.2 Safety during transport

Qualification of personnel

- > Transport equipment operator
- Technician
- Magnetic MHTM™ FlowMotion® service expert
- **↗** Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

MARNING



Lifting heavy loads!

Lifting heavy objects can result in severe damage to the back or supporting structure.

- Preferably, transport the goods with suitable transport equipment.
- Alternatively, the transported goods can be carried by two persons.
- > Lift and deposit the transport goods with two persons.

NOTICE



Improper transport!

An improper transport may result in damage to the product.

-) Observe the symbols on the packaging.
-) Always load, transport and unload packages carefully.
- Note the dimension.
- Do not remove packaging until immediately before mounting and at the final location of the product.

5.3 Transport

The recipient of the product is responsible for internal transport.

- Transport and position the goods to be transported with a suitable forklift or pallet truck.
- The forklift forks or lift truck forks must reach completely under the transported goods. Observe the centre of gravity of the load.
- > Secure the transported goods with sufficiently dimensioned lifting gear.

5.4 Storage

Store packages or the product under the following conditions:

- Store the delivery in its original packaging. Observe the symbols on the packaging.
-) Do not store outdoors.
- > Store dry and dust free.
-) Do not expose to aggressive media.
- > Protect against solar irradiation.
- > Avoid mechanical vibrations.
- > Storage temperature range: -30 to +55 °C
- > Relative humidity: max. 95 %, non-condensing

Check the general condition of all components and packaging regularly, if they are stored for longer periods than 3 months.

6 Unpacking, scope of delivery and identification

6.1 Unpacking

MARNING



Lifting heavy loads!

Lifting heavy objects can result in severe damage to the back or supporting structure.

- > Preferably, transport the goods with suitable transport equipment.
- Alternatively, the transported goods can be carried by two persons.
- \times \text{Lift and deposit the transport goods with two persons.}

The individual components are packed according to the expected transport conditions.

Do not destroy the packaging and remove only directly before mounting. The packaging should protect the components against transport damages, corrosion, etc.

- 1. Unpack product at final location.
- 2. Report an incomplete or faulty delivery to Magnetic.
- 3. Check the scope of delivery with the delivery note.
- 4. Separate material according to type and size and continue to use them after recycling. Observe local and regional standard laws and guidelines.

6.2 Scope of delivery

The following components are supplied by default with every module:

-) 1 module (A-module, B-module or C-module)
-) 1 tool for dismounting the cover
-) 1 drilling template
-) 1 bag with screws and washers
 - > 8 screws DIN 7984 M 8 x 30, A2
 -) 4 screws DIN 7984 M 8 x 20, A2
 -) 4 screws DIN 7984 M 8 x 16, A2
 -) 4 washers DIN 125 A8.4, A2
- Documentation: Electrical circuit diagram, log book, these operating instructions and description "Control unit MGCplus"

For options and attachments, see your order confirmation.

6.3 Identification

6.3.1 Type plate

The type plate is located under the cover to the right of the drive unit. The C-module has the type plate on the master side.

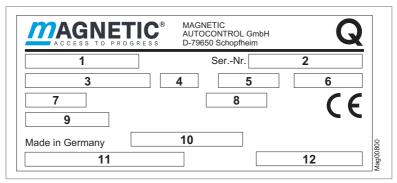


Fig. 10: Type plate

- 1 Product designation
- 2 Serial number
- 3 Power supply
- 4 Frequency
- 5 Current consumption
- 6 Not used
- 7 IP rating
- 8 Duty cycle for operating mode S1 "Continuous operation"
- 9 Ambient temperature range
- 10 Date of manufacture, version, date of type plate printing
- 11 Bar code for product designation
- 12 Bar code for serial number

7 Installation and mounting

7.1 Safety during installation and mounting

Qualification of personnel

- Technician
- Magnetic MHTM™ FlowMotion® service expert
- **↗** Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

WARNING



Improper fixing!

Improper fixing can cause the pedestrian gate to tip over, resulting in crushing and serious injury.

- Mount the pedestrian gate in accordance with the description on the foundation.
- Observe and follow the separate notes and instructions of the fixing material manufacturer.
-) After mounting, check all screws and nuts for tightness.

♠ WARNING



Improper mounting on flammable ground!

The mounting of the pedestrian gate on a flammable floor can promote the development of a fire and accelerate the spread of the fire. A fire and the resulting smoke can cause life-threatening injuries.

) Only mount the pedestrian gate on a non-flammable floor.

7.2 Mounting variants

You may mount the pedestrian gate as follows:

Mounting variant	Required material per module	Notice
Variant 1: Mount the pedestrian gate directly on a foundation.	> Attachment set BSS100 for mounting the pedestrian gate directly on a foundation	 Suitable for concrete foundation Indoor application typical Use M 8 x 30 screws.
Variant 2: Mount base frame on foundation or unfinished floor. Mount base plate to foundation or finished floor. Mount the pedestrian gate on the base plate. The threaded rods position the base plate and are set in concrete.	Base frame FURA100 Attachment set BSSFURA100 for mounting the pedestrian gate via threaded rods Attachment set BSS100 for mounting the base frame, alternatively customer- supplied fastening material	 Suitable for solid floors Height of finished floor can still be defined Indoor application typical
Variant 3: Glue base frame to foundation or finished floor. Mount the pedestrian gate on the base frame.	Base frame FURA100 Adhesive set BSSKL100 for gluing the base frame	 Suitable for finished floors such as tiles Not suitable for concrete as the porous structure absorbs the adhesive Indoor application typical Use M 8 x 16 screws to mount the metal base frame to the floor. Use M 8 x 20 screws to mount the plastic frame to the floor.
Variant 4: Mount the base frame on the foundation. Mount the pedestrian gate on the base frame.	Base frame FURA102 Attachment set BSS100 for mounting the base frame, alternatively customersupplied fastening material	Concrete foundation required as mounting base Suitable for slabs and interlocking paving stones Outdoor application typical

Table 8: Mounting variants

Installation and mounting

Mounting material	Consisting of
Mounting material supplied	> 8 screws DIN 7984 M 8 x 30, A2 > 4 screws DIN 7984 M 8 x 20, A2 > 4 screws DIN 7984 M 8 x 16, A2 > 4 washers DIN125 A8.4, A2
BSS100 (optional attachments)	Attachment set > 8 sleeves with inner thread M 8, VA > 4 washers DIN 125 A8.4, A2 > 8 screws DIN 7984 M 8 x 30, A2 > 8 screws DIN 7984 M 8 x 16, A2 > Composite mortar UPAT UPM CX150 Mounting aid for sleeves with inner thread: > 1 screw DIN 912 M 8 x 30, A2 > 1 nut DIN 934 M 8 > 1 hexagon SW 6 x 60
BSSFURA100 (optional attachments)	Attachment set > 1 FlowMotion base plate > 8 threaded rods M 8 x 330, 1.4301 > 32 nuts M 8
BSSKL100 (optional accessory)	Adhesive set > Surface cleaner HaftClean > Surface cleaner HaftPlus > Surface cleaner Entferner > Construction adhesive Power
FURA100 (optional accessory)	Base frame, 1.4301
FURA102 (optional accessory)	Base frame height 150 mm, 1.4301

Table 9: Description mounting material

7.3 Steps to be taken

The following work step must be carried out prior to mounting:

> Build foundation and lay empty conduits.
 ✓ Page 37, chapter 7.4.

The following work steps must be carried out during mounting:

- > Unpack the pedestrian gate. <a> → Page 31, chapter 6.1.
- > Align the pedestrian gate. <a> □ Page 46, chapter 7.8.
- Prepare the pedestrian gate for mounting and electrical connection.
 ✓ Page 46, chapter 7.9.
- Mount the pedestrian gate. <a> → Page 64, chapter 7.11.
- Connect the pedestrian gate electrically. <a> □ Page 70, chapter 8.
- > Assemble the pedestrian gate. <a> ⊿ Page 64, chapter 7.11.

7.4 Building foundation and laying empty conduits

7.4.1 Requirements foundation

The foundation must meet the following requirements:

- Have sufficient load-carrying capacity.
- Concrete C20/25 or corresponding industrial floor
- > Fastening must have a secure grip
- > Foundation cross-section according to foundation and empty conduit plan
- > Non-slip surface
- > Horizontal and level.

Foundation and empty conduit plan:
¬ Page 39, Fig. 11.

When installing outdoors, the foundation must meet the following additional requirements:

- Concrete C35/45 XD 3 XF2
- > Foundation depth: at least 800 mm, frost-proof. Adapt the foundation depth to the local conditions.
- > Reinforcement mesh according to reinforcement plan

Reinforcement plan: **↗** Page 40, Fig. 12.

7.4.2 Requirements empty conduits

Note the following points for the empty conduits:

-) Lay empty conduits according to the foundation plan.
- Conduits have to be planned to a sufficient length.
- Plan the empty conduits required for access control-devices and other peripheral equipment. The wiring for this is the responsibility of the customer.



IMPORTANT!

To ensure trouble-free operation, separate empty conduits must be installed for all mains cables and control lines.

7.4.3 Building foundation and laying empty conduits

- Excavate the foundation hole according to the foundation and empty conduit plan.
- 2. When installing outdoors, lay the reinforcement mesh.
- 3. Place empty conduits according to the foundation and empty conduit plan in the foundation hole.
- 4. Seal empty conduits so that no water can enter.
- 5. Concrete the foundation.
- 6. Create a smooth plaster.
- Let concrete cure.
- 8. Apply moisture protection for outdoor mounting.

400 Paid 90 (180)2 7 6 560 120 100 8 1400 (1300) 3 09 100 5 560 Master Slave 800 1

7.4.4 Foundation plan and reinforcement

Fig. 11: Foundation plan (dimensions in mm)

1 Foundation, frost depth, outdoor

Unpaid

- 2 Outline mWing
- 3 Feedthrough for empty conduits
- 4 Position of the motors
- 5 Boreholes (8 x)
- 6 Passage direction 1 from "Paid" to "Unpaid"
- 7 Passage direction 2 from "Unpaid" to "Paid"

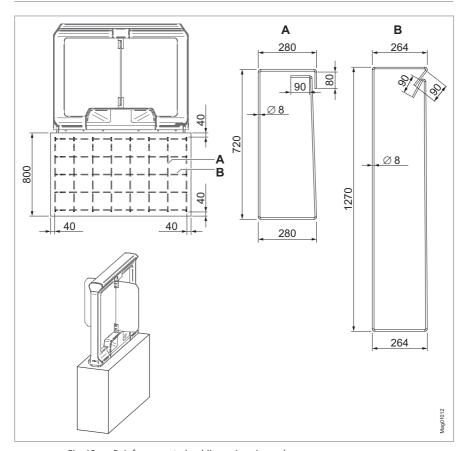


Fig. 12: Reinforcement plan (dimensions in mm)

7.4.5 Distances depending on panel heights and passage widths

Distances for mWing with swing wings at standard height

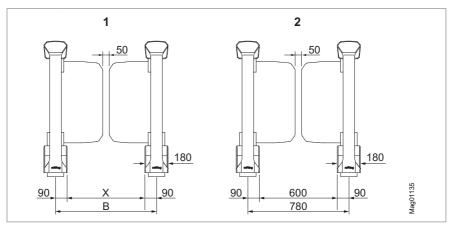


Fig. 13: Distances mWing with swing wings at standard height (dimensions in mm)

- 1 Marking for B and X see following table
- 2 Example of distance for passage width 600 mm

Ordered passage width	X: Passage width [mm]	B: Distance between the centre of two modules /foundations [mm] B = X + (2 x 90 mm)
DG520	520	700
DG600	600	780
DG900	900	1080
DG960	960	1140

Table 10: Distances mWing with swing wing at standard height

1 2 180 180 50 50 77.5 Χ 77.5 77.5 600 77.5 90 Α 90 90 755 90 В 935

Distances for mWing with swinging wing in high version

Fig. 14: Distances mWing with swing wing in high version (dimensions in mm)

- A Marking for A, B and X see following table
- B Example of distance for passage width 600 mm

Ordered passage width	X: Passage width [mm]	A: Distance between two modules [mm] A = X + (2 x 77.5 mm)	B: Distance between the centre of two modules / foundations [mm] B = A + (2 x 90 mm) or B = X + (2 x 77.5 mm) + (2 x 90 mm)
DG520	520	675	855
DG600	600	755	935
DG900	900	1055	1235
DG960	960	1115	1295

Table 11: Distances mWing with swing wing in high version

7.4.6 Empty conduit plan

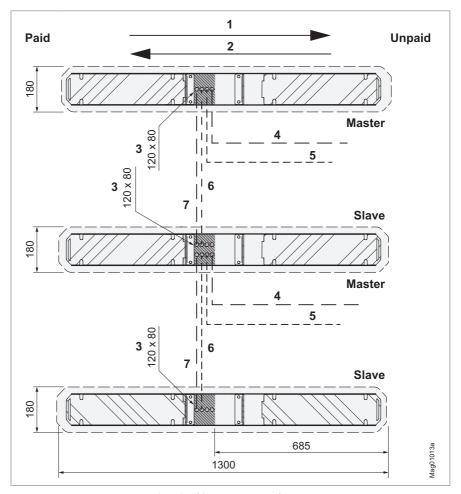


Fig. 15: Empty conduit plan (dimensions in mm)

- 1 Passage direction 1 from "Paid" to "Unpaid"
- 2 Passage direction 2 from "Unpaid" to "Paid"
- 3 Area for empty conduits 120 mm x 80 mm
- 4 Empty conduit for 230 V mains cable
- 5 Empty conduit for data lines and signal lines, min. diameter Ø 40 mm
- 6 Empty conduit for data lines and signal lines, min. diameter Ø 40 mm
- 7 Empty conduit for mains connection cable for power supply of the slave 230 V

7.5 Base frame FURA100

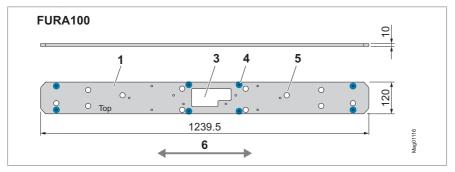


Fig. 16: Base frame FURA100 (dimensions in mm)

- 1 Base frame FURA100
- 2 Feedthrough for empty conduits
- 3 Relevant boreholes M 8 for threaded rods or screws (8 x)
- 4 Boreholes Ø 20 mm for sleeves with inner thread
- 5 Passage side

7.6 Base plate FlowMotion

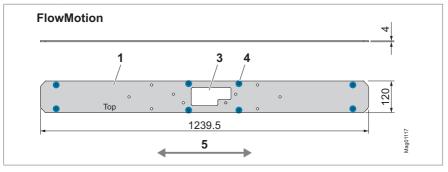


Fig. 17: Base plate FlowMotion (dimensions in mm)

- 1 Base plate FlowMotion
- 2 Feedthrough for empty conduits
- 3 Relevant boreholes M 8 for threaded rods (8 x)
- 4 Passage side

7.7 Base frame FURA102

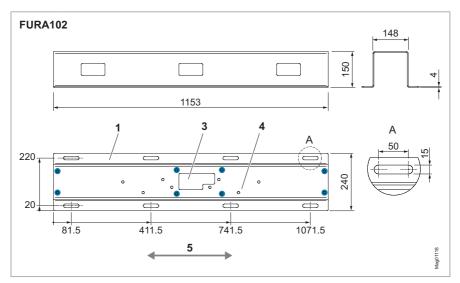


Fig. 18: Base frame FURA102 (dimensions in mm)

- 1 Base frame FURA102
- 2 Feedthrough for empty conduits
- 3 Relevant boreholes M 8 for screws (8 x)
- 4 Passage side

7.8 Aligning the pedestrian gate

When mounting several pedestrian gates, align the pedestrian gates to the customer's specifications and to the on-site conditions, e.g. walls, tile joints and railings, using a laser or scale.

7.9 Preparing mTripod for mounting and electrical connection

- 1. Dismount the high version of the swing wings.

 ☐ Page 66, chapter 7.12.
- 2. Remove the cover. To do this, pull the remove strips.
- 3. Remove remove strips from the cover.

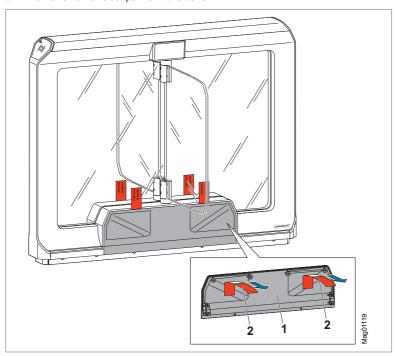


Fig. 19: mWing in delivery state

- 1 Cover
- 2 Remove strips (2 pieces)

4. Dismount the side parts.

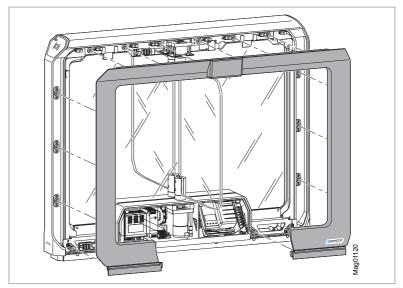


Fig. 20: Mounting of the side part

5. Dismount the strips.

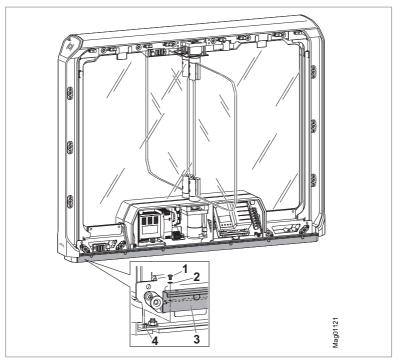


Fig. 21: Dismounting the strips

- 1 Screw
- 2 Washer
- 3 Strip
- 4 Thread
- \lor The pedestrian gate is prepared for mounting and electrical connection.

7.10 Mounting mWing

7.10.1 Mounting variant 1 (direct mounting)

With this mounting variant, you mount the pedestrian gate directly on a foundation.

Required material, included in the scope of delivery:

- > Screw M 8 x 30, stainless steel
- Washer A 8.4 mm, stainless steel

Required material (not included in the scope of delivery):

- > Sleeves with inner thread M 8 x 90, stainless steel
- Composite mortar UPAT UPM CX150



IMPORTANT!

We recommend the attachment set BSS100, which contains the necessary material for direct mounting. You must order the BSS100 attachment set separately.

Requirements

- > The foundation was built.
- > The empty conduits were laid.
- > The foundation has cured.

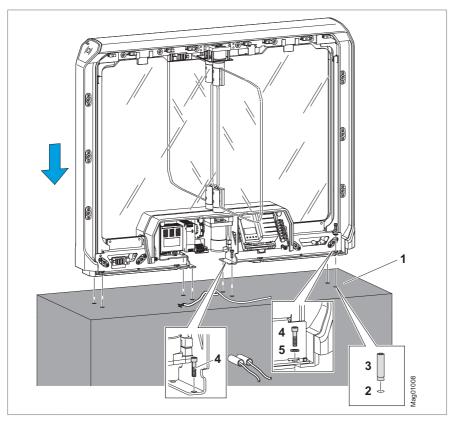


Fig. 22: Mounting variant 1 (direct mounting)

- 1 Concrete foundation
- 2 Boreholes (8 x)
- 3 Sleeve with inner thread M 8 x 90, stainless steel, (8 x)
- 4 Screw M 8 x 30, stainless steel, (8 x)
- 5 Washer A 8.4 mm, stainless steel (4 x)



IMPORTANT!

Follow the separate notices and instructions for the composite mortar and sleeves with inner thread.

Foundation and empty conduit plan: **↗** Page 39, Fig. 11.

 Boreholes for the sleeves with inner thread according to the foundation plan.

NOTICE

Incorrect alignment of the pedestrian gate! The pedestrian gate is not symmetrically constructed. Align the pedestrian gate so that the passage side is on the correct side. Observe foundation plan.

- 2. Clean the boreholes with compressed air.
- 3. Inject composite mortar into the boreholes.
- 4. Turn in the sleeves with inner thread to the bottom of the boreholes by hand. The BSS100 attachment set contains mounting aids.
- 5. Wait for the curing time. Follow separate instructions.
- 6. Place mWing.
- 7. Place washers and screws.



Possible injuries due to pedestrian gate falling over!
Use the M 8 x 30 screws supplied or the M 8 x 30 screws from the BSS100 attachment set. Do not use the M 8 x 16 or M 8 x 20 screws.

- 8. Tighten the screws slightly.
- 9. Align mWing.
- 10. Tighten the screws firmly.
- 11. If necessary, seal the housing with a silicone joint.
- **13.** Assemble the mWing. **₹** Page 64, chapter 7.11.

7.10.2 Mounting variant 2

With this mounting variant, first mount the base frame on the foundation or on the unfinished floor. Use threaded rods to position the base plate at the desired height. After completion of the finished floor, mount the pedestrian gate on the base plate. The threaded rods are set in concrete.

Required material (not included in the scope of delivery):

-) Base frame FURA100
- Attachment set BSSFURA100 for mounting the pedestrian gate
- Attachment set BSS100 for mounting the base frame, alternatively customer-supplied fastening material

Before finishing the finished floor - mounting and preparing the base frame

Requirements

-) The foundation / unfinished floor has been built.
- The empty conduits were laid.
-) The foundation / unfinished floor has hardened.

Foundation and empty conduit plan:

↗ Page 39, Fig. 11 and **↗** Page 43, Fig. 15.

Base plate FlowMotion:

☐ Page 44, Fig. 17.

1. Mount the FURA100 base frame on the foundation or unfinished floor.

NOTICE

Incorrect alignment of the pedestrian gate! The pedestrian gate is not symmetrically constructed. Align the pedestrian gate so that the passage side is on the correct side. Note the figure of the base plate.

2. Screw the threaded rods into the base frame.

NOTICE

Incorrect placement of the threaded rods! Note the figure of the base frame.

3. Fix the threaded rods with nuts.

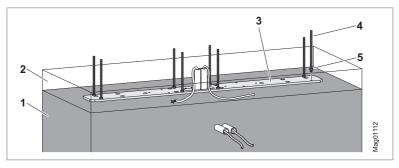


Fig. 23: Mounting the base frame and threaded rods

- 1 Foundation / unfinished floor
- 2 Planned finished floor
- 3 Base frame FURA100
- 4 Threaded rods M 8 x 330, stainless steel, (8 x)
- 5 Nut M 8 (8 x)

- 4. Mount the other nuts on the threaded rods so that the top edge of the FlowMotion base plate is flush with the finished floor.
- 5. Position the FlowMotion base plate.
- 6. Fix the FlowMotion base plate with nuts.

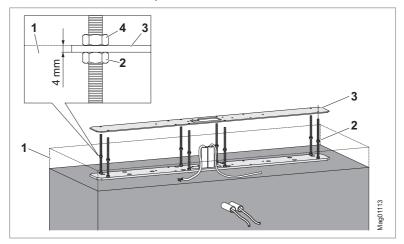


Fig. 24: Positioning the FlowMotion base plate

- 1 Planned finished floor
- 2 Nut M 8 below the planned finished floor (8 x)
- 3 Base plate FlowMotion
- 4 Nut M 8 for fixing the base plate (8 x)

After completion of the finished floor - mounting mWing

Requirements

- > The finished floor is finished.
- The nuts fixing the base plate have been removed.

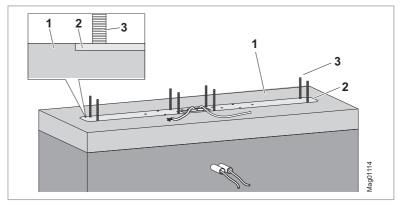


Fig. 25: FlowMotion base plate in the finished floor

- 1 Finished floor
- 2 FlowMotion base plate, flush with finished floor
- 3 Threaded rods M 8 x 330, stainless steel, (8 x)
- 1. Flex off the threaded rods 20 mm above the finished floor.

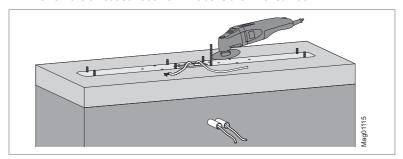


Fig. 26: Flexing off threaded rods

- 2. Place the mWing on the threaded rods.

 ☐ Page 56, Fig. 27.
- 3. Mount the mWing with washers and nuts.
- 4. Tighten the nuts slightly.

Installation and mounting

- 5. Align mWing.
- 6. Tighten the nuts with 10 Nm.
- 7. If necessary, seal the housing with a silicone joint.

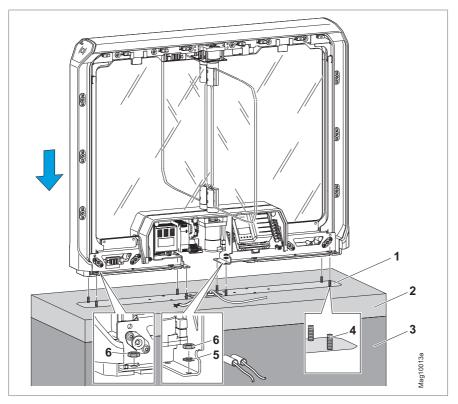


Fig. 27: Mounting variant 2

- 1 Base plate FlowMotion
- 2 Finished floor
- 3 Unfinished floor / foundation
- 4 Threaded rods M 8 x 330, stainless steel, (8 x)
- 5 Washer A 8.4 mm, stainless steel (4 x)
- 6 Nut M 8 (8 x)

7.10.3 Mounting variant 3

With this mounting variant, you first glue the base frame onto the foundation or the finished floor. Then mount the pedestrian gate on the base frame.

Required material, included in the scope of delivery:

- > Screw M 8 x 20. stainless steel
- > Screw M 8 x 16, stainless steel
- Washer A 8.4 mm, stainless steel

Required material (not included in the scope of delivery):

-) Base frame FURA100
- Adhesive set BSSKL100 for gluing the base frame

Requirements

- The foundation / finished floor has been built.
- The empty conduits were laid.
- The foundation / finished floor has hardened.



IMPORTANT!

Follow the separate instructions as well as the packaging labels for the surface cleaner, construction adhesive and remover.

The floor must be free of paint and varnish.

Foundation and empty conduit plan:

7 Page 39, Fig. 11 and **7** Page 43, Fig. 15.

1. Base frame and aligning.

NOTICE

Incorrect alignment of the pedestrian gate! The pedestrian gate is not symmetrically constructed. Align the pedestrian gate so that the passage side is on the correct side. Observe foundation plan.

- 2. Mark the outline of the base frame on the floor. Make sure that the markings are either washable or invisible.
- 3. Mark the outline of the base frame on the floor. Make sure that the markings are either washable or invisible.

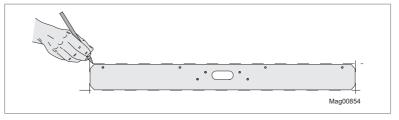


Fig. 28: Mark outline

- 4. Put the base frame aside. The underside must face upwards.
- 5. Clean the floor with the "HaftClean" surface cleaner.
- 6. Clean the underside of the base frame with the "HaftClean Metall" surface cleaner.
- Apply construction adhesive "Klebt + D Dicht Power" to the floor in the form of a beat within the marking. Apply less construction adhesive towards the edge.

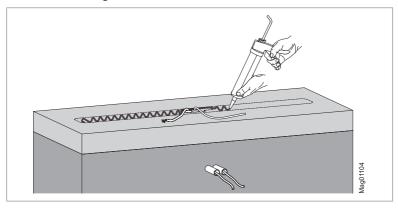


Fig. 29: Applying construction adhesive

8. Immediately place the base frame on the construction adhesive. Observe markings.

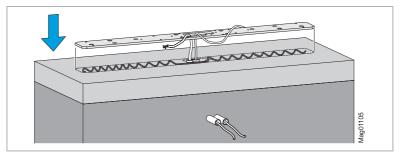


Fig. 30: Placing base frame

- 9. Immediately press the base frame down well. If the base frame lifts due to unevenness of the ground, weigh down the base frame with weights.
- Remove excess construction adhesive as soon as possible with "Klebt +
 Dichtet Entferner". If the construction adhesive has already cured, remove
 excess construction adhesive with a suitable tool. When selecting the tool,
 consider the material of the base.
- 11. Wait for the curing time.
- 12. Place mWing on base frame.

 → Page 60, Fig. 31.
- 13. Place washers and screws.

NOTICE

Possible damage to the finished floor! Use the M 8×16 and M 8×20 screws supplied. Do not use the M 8×30 screws.

- 14. Tighten the screws slightly.
- 15. Align mWing.
- 16. Tighten the screws firmly.
- 17. If necessary, seal the base frame laterally with a silicone joint.
- 19. Assemble the mWing. **₹** Page 64, chapter 7.11.

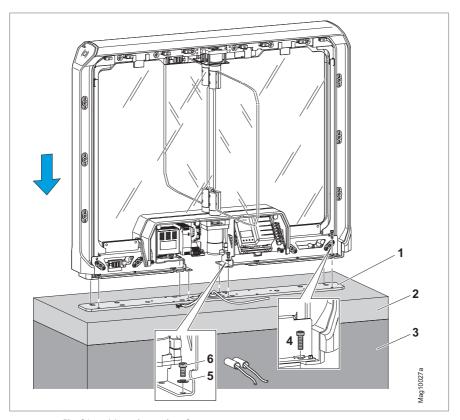


Fig. 31: Mounting variant 3

- 1 Base frame FURA100
- 2 Finished floor
- 3 Unfinished floor / foundation
- 4 Screw M 4 x 20, stainless steel, (8 x)
- 5 Washer A 8.4 mm, stainless steel (4 x)
- 6 Screw M 4 x 16, stainless steel, (8 x)

7.10.4 Mounting variant 4

With this mounting variant, first mount the base frame on the foundation or on the unfinished floor. After completion of the finished floor, mount the turnstile directly onto the base frame.

Required material, included in the scope of delivery:

- > Screw M 8 x 30, stainless steel
- Washer A 8.4 mm, stainless steel

Required material (not included in the scope of delivery):

-) Base frame FURA102
- Attachment set BSS100 for mounting the base frame, alternatively customer-supplied fastening material

Before finishing the finished floor - Mounting the base frame

Requirements

- The foundation / unfinished floor has been built.
- The empty conduits were laid.
-) The foundation / unfinished floor has hardened.

Foundation and empty conduit plan:

7 Page 39, Fig. 11 and **7** Page 43, Fig. 15.

1. Mount base frame FURA102 on the foundation or unfinished floor.

NOTICE

Incorrect alignment of the pedestrian gate! The pedestrian gate is not symmetrically constructed. Align the pedestrian gate so that the passage side is on the correct side. Observe foundation plan.

After completion of the finished floor - Mounting mWing

Requirements

- > The finished floor is finished.
- 1. Mount the base frame.
- 2. Place mWing on base frame.
- 3. Mount the mWing with washers and screws. ↗ Page 63, Fig. 32.
- 4. Tighten the screws slightly.
- 5. Align mWing.
- 6. Tighten the screws with 10 Nm.
- 7. If necessary, seal the housing with a silicone joint.

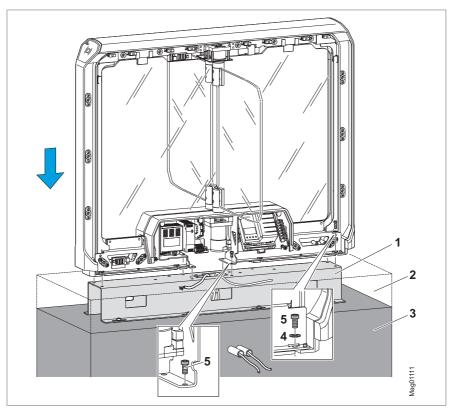


Fig. 32: Mounting variant 4

- 1 Base frame FURA102
- 2 Planned finished floor such as interlocking paving stones
- 3 Concrete foundation
- 4 Washer A 8.4 mm, stainless steel (4 x)
- 5 Screw M 8 x 30, stainless steel, (8 x)

7.11 Assembling the mWing

Requirements

- > The pedestrian gate is mounted on the floor.
- The electrical connection has been made.



IMPORTANT!

The swing wings are available in different heights. Standard height swing wings can remain mounted during mounting. You must dismount high swing wings before mounting.

1. Mount the strips.

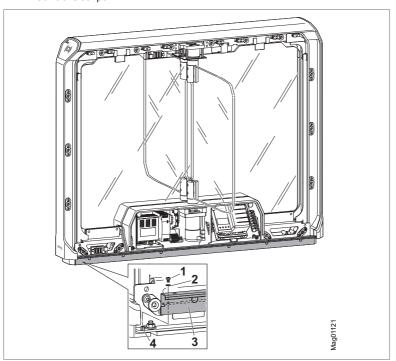


Fig. 33: Mount the strips, here mWing with swing wing at standard height

- 1 Screw
- 2 Washer
- 3 Strip
- 4 Thread

Mount side part. A click sound is heard each time it clicks into place. NOTICE

Do not pinch any cables when closing the side parts.

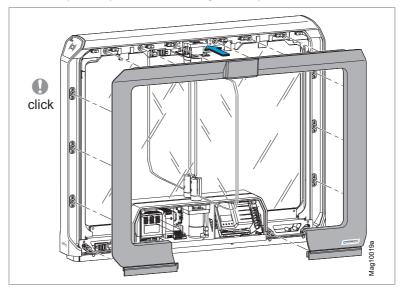


Fig. 34: Fit side part, here mWing with swing wing at standard height

3. Mount cover. The cover is held on by magnets.

⚠ CAUTION

Danger of crushing! Hold the cover with both hands only at the side. Do not hold the cover by the upper or lower edge.

-) Hook in the cover.
- Tilt the cover backwards until the magnets close the cover.

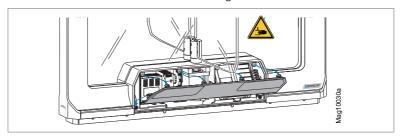


Fig. 35: Fit cover, here mWing with swing wing at standard height

7.12 Mounting swing wing

- 1. Mount the swivel casement according to the figure.
 - > Swing wing at standard height: <a> Page 66, Fig. 36.
 - > Swing wing in high version: <a> □ Page 67, Fig. 37.

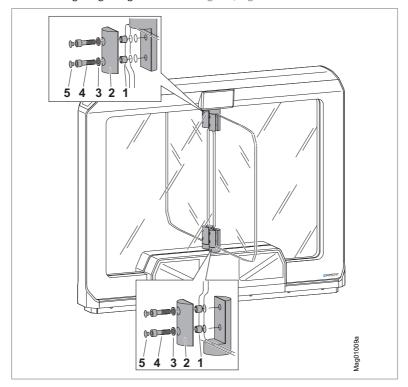


Fig. 36: Mounting the swing wing at standard height

- 1 Sleeve
- 2 Attachment
- 3 Washer
- 4 Screw
- 5 Screw cover

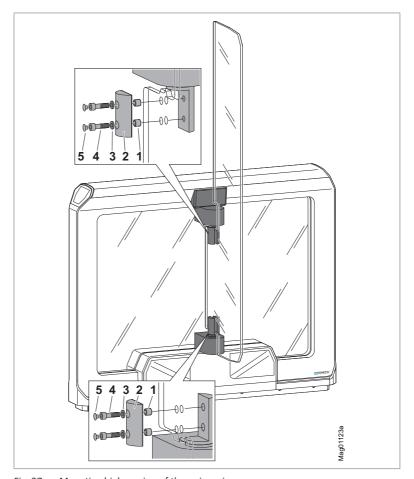


Fig. 37: Mounting high version of the swing wing

- 1 Sleeve
- 2 Attachment
- 3 Washer
- 4 Screw
- 5 Screw cover
- Stick enclosed label from the document set onto the glass wing. The label makes it easier to see the glass wing. You can also use your own labels instead of the enclosed ones, e.g. with your company logo.
- 3. A label is stuck on the swing wing. The label gives values for S, T and C. These values are needed for parameterisation.

- 4. Place the glass wings before the attachment points.
- 5. Screw on the glass wing at the top and bottom.

7.13 Dismantling and mounting the cover

For the following activities, for example, you must dismount the cover:

- > Switch the pedestrian gate on and off.
- > Parameterise the control unit MGCplus.

The cover is held on by magnets.

Dismounting of the cover

- 1. Place the tool supplied in one of the two grooves on the housing.
- 2. Lever the cover forward with the tool.
- 3. Place the tool supplied in the other groove in the housing.
- 4. Lever the cover forward with the tool.
- Unhook the cover.

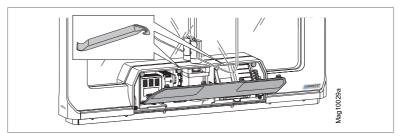


Fig. 38: Dismounting the cover with tool

Mounting of the cover

1. Hook in the cover.



Danger of crushing! Hold the cover with both hands only at the side. Do not hold the cover by the upper or lower edge.

2. Tilt the cover backwards until the magnets close the cover.

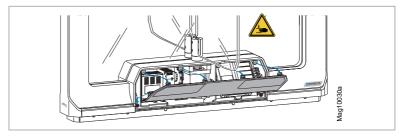


Fig. 39: Fit cover, here mWing with swing wing at standard height

7.14 Checking the mounting

Check the following points after mounting:

- > Are all screws and nuts tightened?
- Have all pedestrian gate covers been properly mounted?

8 Electrical connection

8.1 Safety during electrical connection

Qualification of personnel

- Technician
- Magnetic MHTM™ FlowMotion® service expert
- **↗** Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

DANGER



Electric voltage

Touching live parts can be lethal. Damage to the insulation or to individual components can be lethal.

- Only qualified electricians or electrical safety experts may carry out work on the electrical system.
- > Before commencing any work, switch off power supply and secure against restarting. Test for absence of voltage.
- > Keep moisture and dust away from live parts. Moisture or dust may cause a short circuit.
- If the electrical connection is established at precipitation, e.g. rain or snow, intrusion of moisture must be prevented by suitable measures, such as a protective cover.
- Protective devices that are required according to national and local regulations, e.g. residual current devices, must be provided. These protective devices must be provided by the customer.
-) Observe the information on the type plate.
- Close all covers after all work is completed.

M DANGER



Mortal danger from lightning and electric voltage!

During or after a lightning strike into the system, there is danger to life if the components are touched or during a stay in the immediate vicinity of the system.

- > When mounting outside, do not install and mount the pedestrian gate during thunderstorms.
- > Protect yourself in buildings or vehicles.

NOTICE



Electromagnetic interference!

The pedestrian gate is approved for industrial, residential, commercial and business use. Operation in other electromagnetic environments may result in interferences or malfunction.

- Place control lines and mains cables into separate conduits.
- Customer access-control devices, signal transmitters and receivers must be EMC-tested and comply with the prescribed EMC limits. In this case, a Declaration of Conformity must be carried out by the customer.

8.2 Installing electrical protective devices

The protective devices that are required according to national and local regulations must be provided on site. This safety equipment is to be provided by the customer.

As a rule, the following protective devices must be installed:

- Residual current device (RCD)
-) Circuit-breaker
- Lockable 2-pole main switch acc. to EN 60947-3.

8.3 Connecting the mains cable and the mains connection cable

DANGER



Incorrect connection of the mains connection cable between master and slave!

If the mains connection cable between master and slave is connected to the terminals XD1 at the master, the power supply for the slave is not switched off via switch S1 in the pedestrian gate. Touching live parts can be lethal.

Connect the mains connection cable on the master to terminals X1 and on the slave to terminals XD1.

Niring diagram, separate document.

NOTICE



Incorrect connection of the mains connection cable between master and slave!

Incorrect connection of the mains connection cable between master and slave will cause the pedestrian gate to malfunction.

Connect the mains connection cable on the master to terminals X1 and on the slave to terminals XD1.

Niring diagram, separate document.

8.3.1 Wire and cable cross-sections, stripping lines and cores



IMPORTANT!

The core cross-section of the mains cables to the master and the mains connection cables between master and slave must be between 1.5 and 4 mm². Observe national regulations regarding cable length and corresponding wire cross-section.

Strip the mains cables, the mains connection cables and wires as per the following figure.

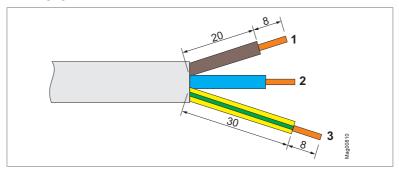


Fig. 40: Stripping (dimensions in mm)

- 1 Phase
- 2 Zero conductor
- 3 Protective earth conductor

8.3.2 Overview of connection of mains cables and mains connection cables

For modules with master function, connect a mains cable on the master connection side and a mains connection cable to the associated module with slave function. For modules with slave function, connect the mains connection cable of the associated module with master function on the slave connection side.

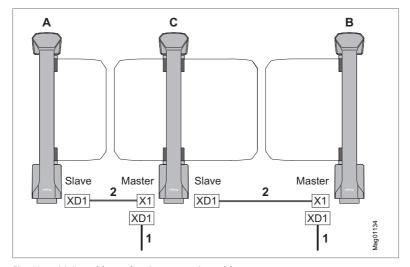


Fig. 41: Mains cables and mains connection cables

- 1 Connect the mains cable to the master to terminals XD1
- 2 Connect the mains connection cable to the master to terminals X1 and on the slave to terminals XD1

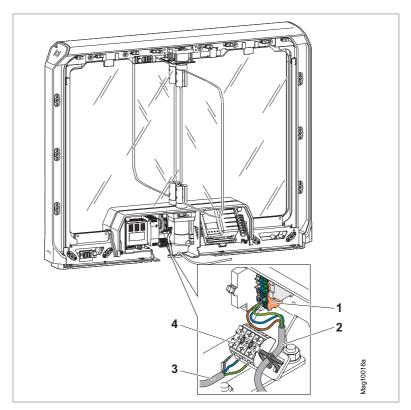


Fig. 42: Connecting the mains cable and mains connection cable - Example C-module, master connection side

- 1 Terminals X1 for mains connection cable
- 2 Mains connection cable between master and slave
- 3 Mains cable
- 4 Terminals XD1 for mains cable

8.3.3 Connecting module with master connection side

Modules B and C have a master connection side.

Requirements

- > The housing is open. ▶ Page 69, chapter 7.14
- Disconnect the system from the power supply. Ensure absence of voltage.
 Secure against reactivation.
 - **⚠** DANGER

Mortal danger by electric voltage!

- Strip the mains cable, mains connection cable and wires.

 ¬ Page 73,
 chapter 8.3.1
- 3. Connect the mains cable to the terminals X1: Connect L / N / PE.
- 4. Mains connection cable to terminals X1: Connect L / N / PE.
- 5. Secure the mains cable and the mains connection cable to the lugs using cable ties.

8.3.4 Connecting module with slave connection side

Modules A and C have a slave connection side.

Requirements

- > The housing is open. → Page 69, chapter 7.14
- Disconnect the system from the power supply. Ensure absence of voltage. Secure against reactivation.
 - ↑ DANGER

Mortal danger by electric voltage!

- 2. Strip the mains connection cable and wires.
 ☐ Page 73, chapter 8.3.1
- 3. Mains connection cable to terminals XD1: Connect L / N / PE.
- 4. Secure the mains connection cable to the lugs using cable ties.

8.4 Connect customer's control lines



IMPORTANT!

For connecting the control lines provided by the customer, see separate document "Description of MGCplus control unit for mWing (Doc.ID: 5817,0033)".

8.4.1 Connecting emergency opening contacts

¬ Separate wiring diagram and document "Description control unit MGCplus for mWing (Doc.ID: 5817,0033)".

Connect fire brigade switches, emergency opening contacts, etc. to the "Emergency open" input. This input has the highest priority. The input function "Emergency open" is superordinate to all other input functions. As long as +24 V DC are present at this input, the pedestrian gate is in operation.

8.5 Installing and connecting customer access-control devices

You can install access-control devices in the following places:

> At both ends of the housing

☐ Separate wiring diagram and document "Description control unit MGCplus for mWing (Doc.ID: 5817,0033)".

At both ends of the housing

Attach the access-control device to the cover with screws. Observe the installation dimensions.

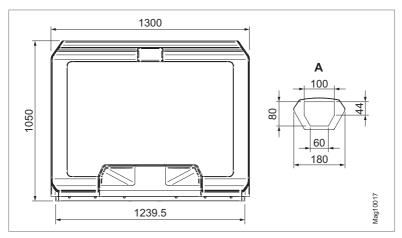


Fig. 43: Installation space for access-control device (dimensions in mm)

A Dimensions for customer access-control device

8.6 Checking the electrical connections

Check the following after completing the electrical installation:

- Does the power supply match the specification on the type plate?
- Are the required protective devices installed?
-) Is the pedestrian gate connected according to electrical circuit diagram?
-) Is the emergency signal transmitter correctly connected?
- Are the customer's signal transmitters and receivers correctly connected?
- > Are all screws tightened?
- Have all pedestrian gate covers been properly mounted?

9 Commissioning

9.1 Safety during commissioning

Qualification of personnel

> Magnetic MHTM™ FlowMotion® service expert

↗ Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

9.2 Putting the pedestrian gate into operation



IMPORTANT!

Commissioning must be carried out in accordance with the log book. See separate document "Log Book mWing (Doc.ID: 5837,0011)".

9.3 Switching the pedestrian gate on and off

NOTICE



Restarting quickly!

Restarting the pedestrian gate too quickly can lead to damage of the equipment!

- Wait for at least 10 seconds after switching off the pedestrian gate before you switch the mains power on again.
- 1. Dismount of the cover. **¬** Page 68, chapter 7.13.
- 2. Switch the pedestrian gate on or off using the on/off switch.

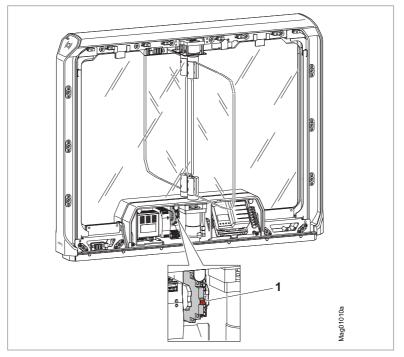


Fig. 44: Switching the mWing on and off

- 1 On and off switch
- 3. Mount cover. **₹** Page 68, chapter 7.13.

9.4 Parameterising the pedestrian gate

MARNING



Parameterisation by unqualified persons!

Parameterisation by unqualified persons can lead to an unintended behaviour of the swing wings.

> Only Magnetic MHTM™ FlowMotion® service experts are allowed to carry out the parameterisation.



IMPORTANT!

For parameterisation see separate document "Description of control unit MGC for mWing (Doc.ID: 5817,0033)".

10 Log book

The pedestrian gate must be checked at least once a year in accordance with the log book.

The "Log Book mWing" (Doc.ID: 5837.0011) is included in the scope of delivery.

11 Operation

The operation of the pedestrian gate depends on the connected access-control devices, signal transmitters and signal receivers and on the parameterisation of the control unit.

We recommend to create a description for the operation, depending on the connected devices and the parameterisation.



IMPORTANT!

For parameterisation see separate document "Description of control unit MGC for mWing (Doc.ID: 5817,0033)".

12 Cleaning and maintenance

12.1 Cleaning the pedestrian gate

NOTICE



Aggressive cleaning aids and substances!

Aggressive detergents and consumables may damage or destroy components, electric cables, or the coating of the pedestrian gate.

) Do not use cleaning agents with aggressive ingredients.

Cleaning the pedestrian gate from the outside

- 1. Switch off power supply and secure against restarting.
- 2. Pre-clean surfaces with a moist cloth. Never use wet cloth.
- 3. Clean the surface with a mild household cleaner.
- 4. Carefully clean areas with persistent dirt with spirit.
- 5. Dry surfaces with a dry cloth.

12.2 Maintenance schedule

The maintenance plan lists all work required to ensure safe, optimum and trouble-free operation of the pedestrian gate.

Interval	Work	Personnel
Monthly	Check emergency function.	Operator
	Check the swing wings and inlay from the outside for damage.	Operator
Every 6 months	Check the attachment of the swing wings.	Technician
	Check the function of the external residual current circuit breaker.	Technician
Every 12 months	Check electrical lines for damage.	Technician
	Check if all electrical connections are firm.	Technician
	Check the fastening of the housing.	Technician

Table 12: Maintenance schedule

13 Corrective action



IMPORTANT!

For troubleshooting, see separate document "Description of MGC control unit for mWing (Doc.ID: 5817,0033)".

14 Spare parts and repair

NOTICE



Wrong and faulty spare parts!

Incorrect or defective spare parts can result in damage, malfunctions or total failure and also impair safety.

) Use only the manufacturer's original spare parts.

Spare parts can be purchase from your authorised dealer. The address can be found on your delivery receipt, invoice or the rear of these operating instructions.

Spare part lists can be obtained on request.

15 Customer service

Our customer service can be contacted for any technical advice. Notices concerning the responsible contact person can be retrieved by telephone, fax, E-mail or via the Internet at any time, refer to manufacturer's address on page 2.



IMPORTANT!

In order to enable fast handling note the data of the type plate such as type, serial number, version etc. before calling.

16 Decommissioning

The pedestrian gate must be taken out of service in the following cases:

- The pedestrian gate is mounted at a different location.
- The pedestrian gate is decommissioned for more than 6 months.

If you only want to deactivate the pedestrian gate for a short time, see the "Switching the pedestrian gate on and off" section. $\[\]$ Page 80, chapter 9.3.

16.1 Safety during decommissioning

Qualification of personnel

- Technician
- Magnetic MHTM™ FlowMotion® service expert
- **↗** Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

16.2 Taking the pedestrian gate out of service

- 1. Switch off the pedestrian gate.

 ☐ Page 80, chapter 9.3.
- 2. Disconnect the pedestrian gate from the power supply.
- 3. If necessary, dismount the pedestrian gate.
- Store the pedestrian gate or its components correctly.

 ¬ Page 30, chapter 5.4.

17 Dismounting and disposal

17.1 Safety during dismounting and disposal

Qualification of personnel

- Technician
- Electrical specialist
- Magnetic MHTM™ FlowMotion® service expert
- **↗** Page 12, chapter 2.3.2.

Personal protective equipment

Wear the following personal protective equipment:

- Work clothes
- > Protective gloves
- > Safety shoes.

17.2 Dismounting and disposal of pedestrian gate

Requirements

- > The pedestrian gate is out of order. <a> □ Page 85, chapter 16.2.
- 1. Disassemble the pedestrian gate into individual components.
- Recycle parts by type and material. Dispose of non-recyclable materials in an environmentally friendly manner. Observe local and national laws and guidelines.
- √ The pedestrian gate is dismounted and disposed of.



EU-Declaration of Conformity



The manufacturer MAGNETIC AUTOCONTROL GmbH hereby declares for the product supplied by him:

Designation	Pedestrian gate FlowMotion®
Туре	mWing FMWI_*
From serial number	11449059

The conformity according to:

Directive 2006/42/EC (Machinery Directive) amended by 2009/127/EC

Directive 2014/30/EU (EMC Directive)
Directive 2011/65/EU (RoHS-2 Directive)

Applied harmonised standards (or parts hereof):

EN ISO 12100:2010

Safety of machinery - General principles for design - Risk assessment and risk reduction

EN 60204-1:2018

Safety of machinery - Electrical equipment of machines - Part 1: General Requirements

EN 61000-6-2:2005/AC:2005

Electromagnetic compatibility (EMC) - Part 6-2: Generic standard - Immunity for industrial environments

EN 61000-6-3:2007/A1:2011/AC:2012

Electromagnetic compatibility (EMC) – Part 6-3: Generic standard – Emission standard for residential, commercial and light industry

EN ISO 13849-1:2018

Safety of machinery - Safety-related parts of control systems - Part 1: General principles of design

EN 60335-2-103:2015

Household and similar electrical appliances – Safety - Part 2-103: Particular requirements for drives for gates, doors and windows

prEN17352:2019

Force-actuated access control devices – usage safety – requirements and test methods

This declaration is not an assurance of properties within the meaning of the Product Liability Act. The safety information of the operating instructions must be observed.

MAGNETIC AUTOCONTROL GmbH

Grienmatt 20-28 D-79650 Schopfheim Authorized for documentation

Willinge Han

Mr Stefan Wellinger

Schopfheim, 04/02/2021

Place and date

Signature

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MAGNETIC AUTOCONTROL GMBH

Grienmatt 20 D-79650 Schopfheim Germany

Phone +49 7622 695 5 Fax +49 7622 695 802 in fo@magnetic-germany.comwww.magnetic-access.com



Sales partner

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