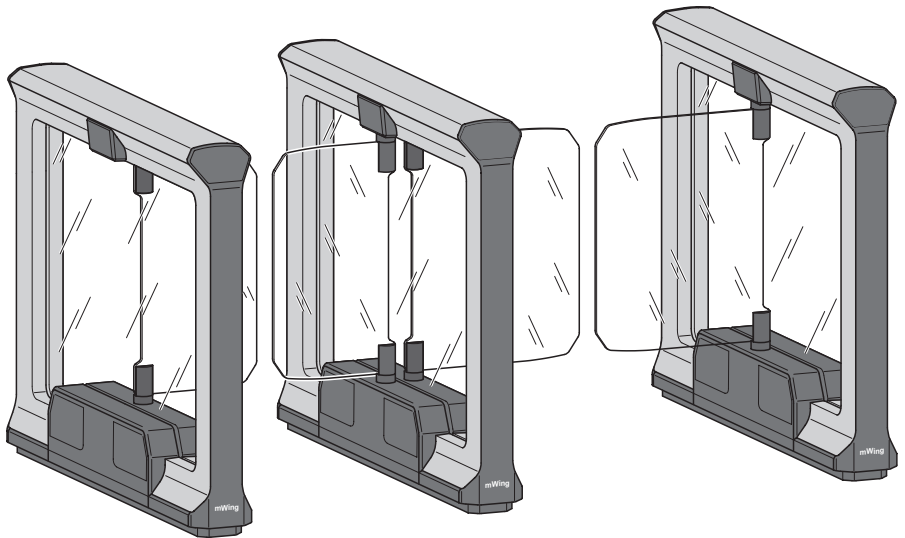


## Operating Instructions

Pedestrian gate with swing wings

# mWing





# Contents

<b>1</b>	<b>Notices on the document</b>	<b>7</b>
1.1	Purpose and contents of this operating instructions	7
1.2	Reading and storing the operating instructions	7
1.3	Non-observance of the operating instructions	8
1.4	Symbols and illustrations used in the operating instructions	8
1.4.1	Warning notes and notices	8
<b>2</b>	<b>Safety</b>	<b>10</b>
2.1	Intended use	10
2.2	Changes and modifications	10
2.3	Target groups	11
2.3.1	Operator and its responsibility	11
2.3.2	Personnel - activities and qualifications	12
2.4	Personal protective equipment	13
2.5	Symbols on the device	14
2.6	For your safety	14
2.7	To protect the environment	15
2.8	Emergency opening of the pedestrian gate	15
<b>3</b>	<b>Technical data</b>	<b>16</b>
3.1	Dimensions and design	16
3.1.1	mWing	16
3.2	Clearances and line configuration to be maintained	18
3.3	Electrical connection	19
3.4	Operating conditions	19
3.5	Emissions	19
3.6	Control unit MGCplus	20
<b>4</b>	<b>Design and function</b>	<b>21</b>
4.1	Design	21
4.2	Definitions	23
4.2.1	A-module	24
4.2.2	B-module	25
4.2.3	C-module	26
4.3	Function	27

---

<b>5</b>	<b>Receipt of goods, transport and storage</b>	<b>28</b>
5.1	Receipt of goods	28
5.2	Safety during transport	28
5.3	Transport	29
5.4	Storage	30
<hr/>		
<b>6</b>	<b>Unpacking, scope of delivery and identification</b>	<b>31</b>
6.1	Unpacking	31
6.2	Scope of delivery	32
6.3	Identification	33
6.3.1	Type plate	33
<hr/>		
<b>7</b>	<b>Installation and mounting</b>	<b>34</b>
7.1	Safety during installation and mounting	34
7.2	Mounting variants	35
7.3	Steps to be taken	37
7.4	Building foundation and laying empty conduits	37
7.4.1	Requirements foundation	37
7.4.2	Requirements empty conduits	38
7.4.3	Building foundation and laying empty conduits	38
7.4.4	Foundation plan and reinforcement	39
7.4.5	Distances depending on panel heights and passage widths	41
7.4.6	Empty conduit plan	43
7.5	Base frame FURA100	44
7.6	Base plate FlowMotion	44
7.7	Base frame FURA102	45
7.8	Aligning the pedestrian gate	46
7.9	Preparing mTripod for mounting and electrical connection	46
7.10	Mounting mWing	49
7.10.1	Mounting variant 1 (direct mounting)	49
7.10.2	Mounting variant 2	52
7.10.3	Mounting variant 3	57
7.10.4	Mounting variant 4	61
7.11	Assembling the mWing	64
7.12	Mounting swing wing	66
7.13	Dismantling and mounting the cover	68
7.14	Checking the mounting	69

---

<b>8</b>	<b>Electrical connection</b>	<b>70</b>
8.1	Safety during electrical connection	70
8.2	Installing electrical protective devices	71
8.3	Connecting the mains cable and the mains connection cable	72
8.3.1	Wire and cable cross-sections, stripping lines and cores	73
8.3.2	Overview of connection of mains cables and mains connection cables	74
8.3.3	Connecting module with master connection side	76
8.3.4	Connecting module with slave connection side	76
8.4	Connect customer's control lines	77
8.4.1	Connecting emergency opening contacts	77
8.5	Installing and connecting customer access-control devices	77
8.6	Checking the electrical connections	78
<b>9</b>	<b>Commissioning</b>	<b>79</b>
9.1	Safety during commissioning	79
9.2	Putting the pedestrian gate into operation	79
9.3	Switching the pedestrian gate on and off	80
9.4	Parameterising the pedestrian gate	81
<b>10</b>	<b>Log book</b>	<b>81</b>
<b>11</b>	<b>Operation</b>	<b>82</b>
<b>12</b>	<b>Cleaning and maintenance</b>	<b>83</b>
12.1	Cleaning the pedestrian gate	83
12.2	Maintenance schedule	83
<b>13</b>	<b>Corrective action</b>	<b>84</b>
<b>14</b>	<b>Spare parts and repair</b>	<b>84</b>
<b>15</b>	<b>Customer service</b>	<b>84</b>
<b>16</b>	<b>Decommissioning</b>	<b>85</b>
16.1	Safety during decommissioning	85
16.2	Taking the pedestrian gate out of service	85
<b>17</b>	<b>Dismounting and disposal</b>	<b>86</b>
17.1	Safety during dismounting and disposal	86
17.2	Dismounting and disposal of pedestrian gate	86

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<b>18</b>	<b>EU-Declaration of Conformity</b>	<b>87</b>
<b>Index</b>		<b>89</b>

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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, dismantling 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

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

 <b>WARNING</b>	
	The signal word <b>WARNING</b> 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 improper use. Manufacturer 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. 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	<ul style="list-style-type: none"> <li>› Has professional experience as a transport equipment operator or warehouse and transport worker.</li> <li>› Has a valid driving licence for the required industrial truck, e.g. forklift.</li> <li>› Knows the necessary regulations.</li> <li>› Can evaluate the work assigned to him, recognise possible dangers and take appropriate safety measures.</li> </ul>
Technician	<ul style="list-style-type: none"> <li>› Has completed training as a systems mechanic, machinery technician, installation mechanic, installation technician or has comparable technical training.</li> <li>› Has completed training as an electrical safety expert.</li> <li>› Has additional knowledge and experience.</li> <li>› Knows the relevant technical terms and regulations.</li> <li>› Can evaluate the work assigned to him, recognise possible dangers and take appropriate safety measures.</li> </ul>
Manufacturer service expert	<ul style="list-style-type: none"> <li>› Meets all the requirements of the technician.</li> <li>› Trained and authorised by Manufacturer.</li> </ul>
Operator	<ul style="list-style-type: none"> <li>› Trained by the operator.</li> </ul>

Table 1: Qualifications of personnel

Task	Transport equipment operator	Technician	Magnetic service expert	Operator
Transporting	X	X	–	–
Unpacking	X	X	X	–
Laying the foundation	–	X	–	–
Mounting	–	X	X	–
Electrical connection	–	X	X	–
Parameterisation	–	–	X	–
Commissioning <sup>1)</sup>	–	–	X	–
Operating	–	X	X	X
Cleaning	–	X	X	X
Servicing	–	X	X	–
Troubleshooting	–	X	X	–
Repairing	–	X	X	–
Decommissioning	–	X	X	–
Dismounting	–	X	X	–
Disposing	–	X	–	–

1) According to the supplied log book

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 minimize 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

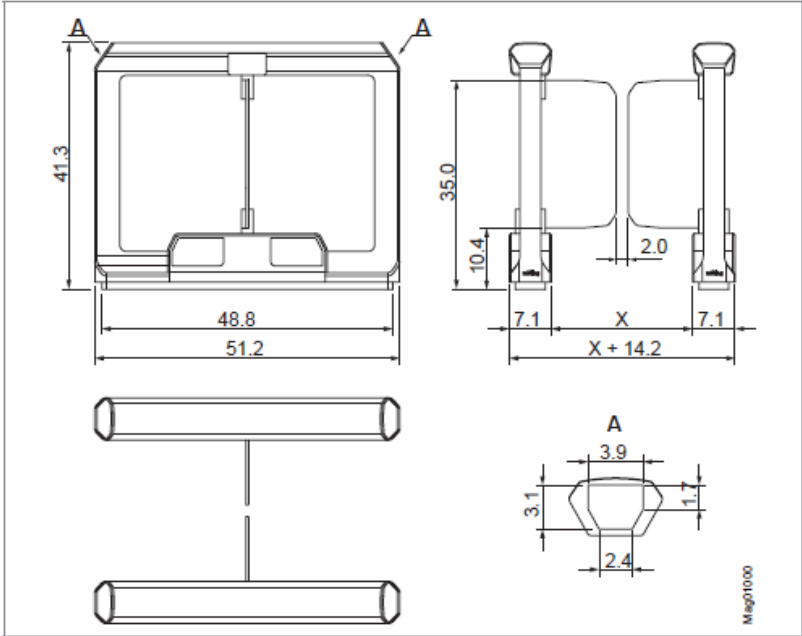
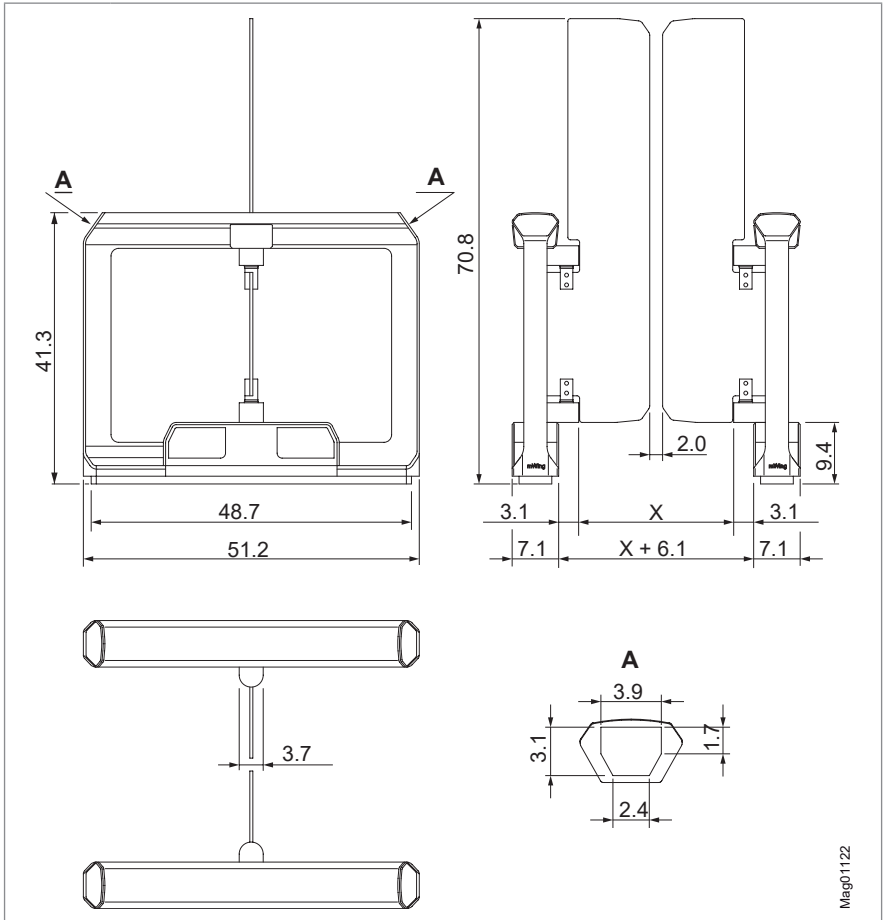


Fig. 1: Dimensions mWing with swing wing at standard height (dimensions in inches), X corresponds to ordered passage width  
A Installation space for reader without the option of the passage direction display, installation depth 1.6"





Mag01122

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

A Installation space for reader without the option of the passage direction display, installation depth = 1.6".

**Technical data**

Designation	Value
Dimensions (length x width x height)	<ul style="list-style-type: none"> <li>› mWing with swing wing at standard height 51.2" x 7.1" x 41.3" ↗ Page 16, Fig. 1.</li> <li>› mWing with swing wing in high version 51.2" x 13.2" x 41.3" ↗ Page 17, Fig. 2.</li> </ul>
Passage width	<ul style="list-style-type: none"> <li>› Standard versions: 23.5" or 36.2" (600 mm or 920 mm)</li> <li>› Special versions: 37.8" extra-wide passage (960 mm)</li> <li>› Other dimensions on request</li> </ul>
Weight	<ul style="list-style-type: none"> <li>› Pedestrian gate: Approx. 181 lbs.</li> <li>› Base frame FURA100 <sup>1)</sup>: 24.3 lbs.</li> <li>› Base frame FURA102 <sup>1)</sup>: 38.5 lbs.</li> </ul>
Material	<ul style="list-style-type: none"> <li>› Housing: mDure</li> <li>› Base frame <sup>1)</sup>: Stainless steel</li> <li>› Base plate <sup>1)</sup>: Stainless steel</li> </ul>

1) Optional

Table 3: Dimensions and design – mWing

### 3.2 Clearances and line configuration to be maintained

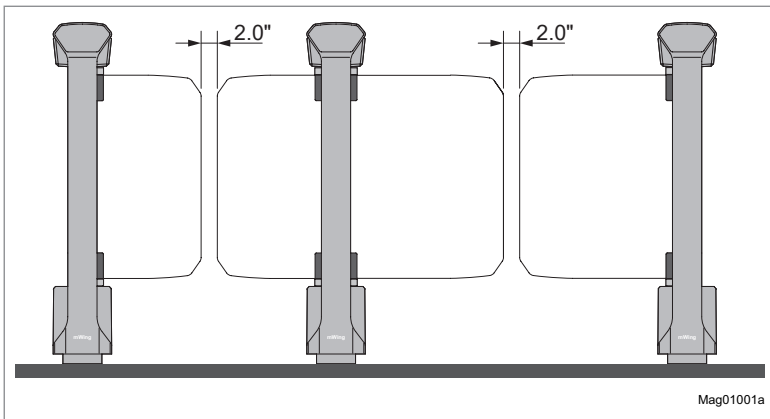


Fig. 3: Clearances and line configuration to be maintained. Recommended minimum distance 2.0"

Distances between modules ↗ Page 16, Fig. 1 and ↗ Page 17, Fig. 2

### 3.3 Electrical connection

Designation	Value
Power supply	100 to 240 V AC $\pm$ 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	-22 to +131 °F
Storage temperature range	-22 to +131 °F
Relative humidity	Maximum 95 %, non-condensing
IP rating	IP 54

Table 5: Operating conditions

### 3.5 Emissions

Designation	Value
Airborne sound pressure level (LpA)	$\leq$ 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 plug-in 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 <sup>1)</sup>	30 m
Digital outputs	Number	4 (open collector)
	Input voltage	24 ± 10 % V DC
	Input current	100 mA
	Max. cable length <sup>1)</sup>	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 <sup>1)</sup>	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 95 feet, over-voltage modules must be installed upstream of the connection terminals.

Table 7: Control unit MGCplus

## 4 Design and function

### 4.1 Design

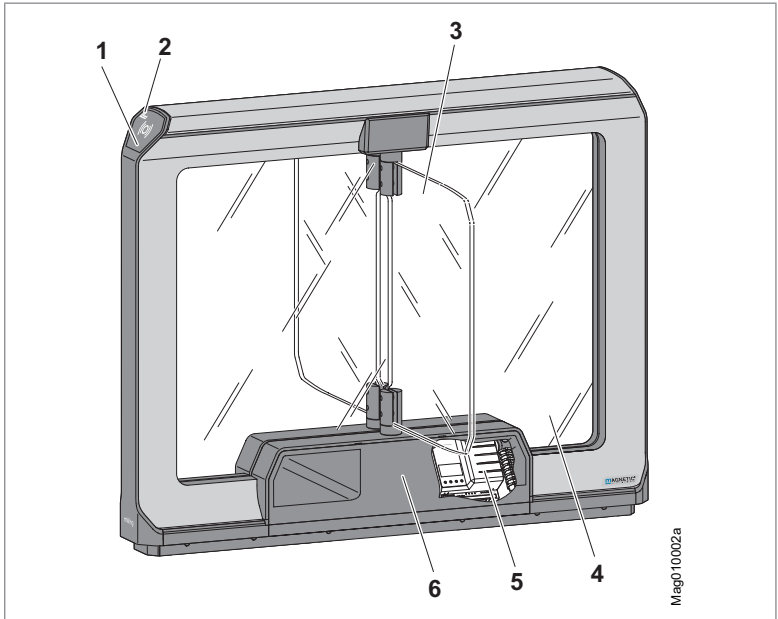


Fig. 4: Design mWing with swing wing at standard height

- 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

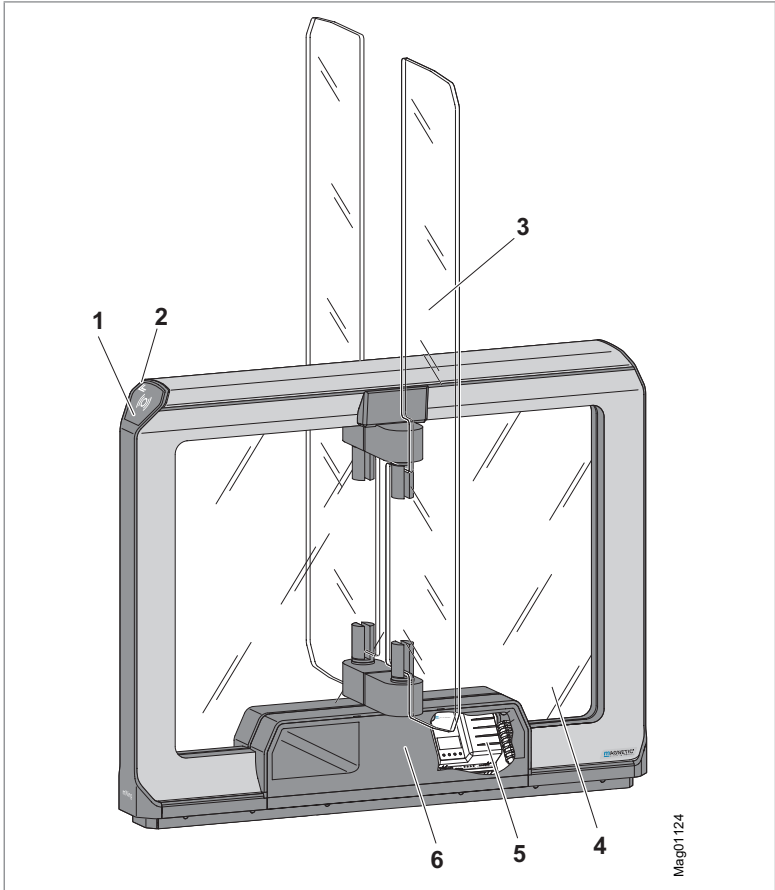


Fig. 5: Design mWing with swing wing in high version

- 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

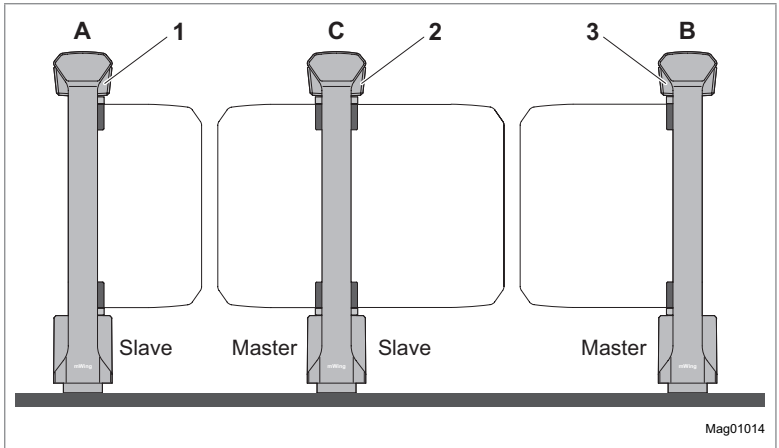


Fig. 6: Definitions

- 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

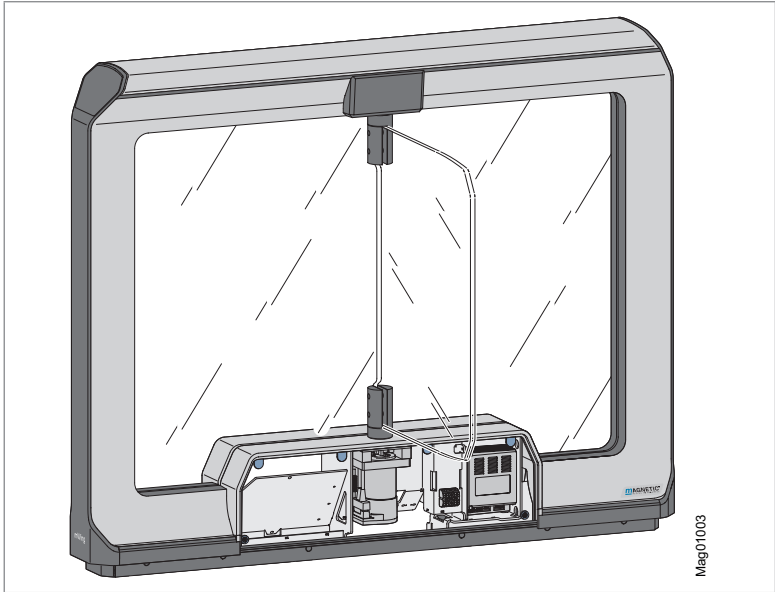


Fig. 7: A-module, shown here without cover  
The A-module fulfils the slave function.



#### 4.2.2 B-module

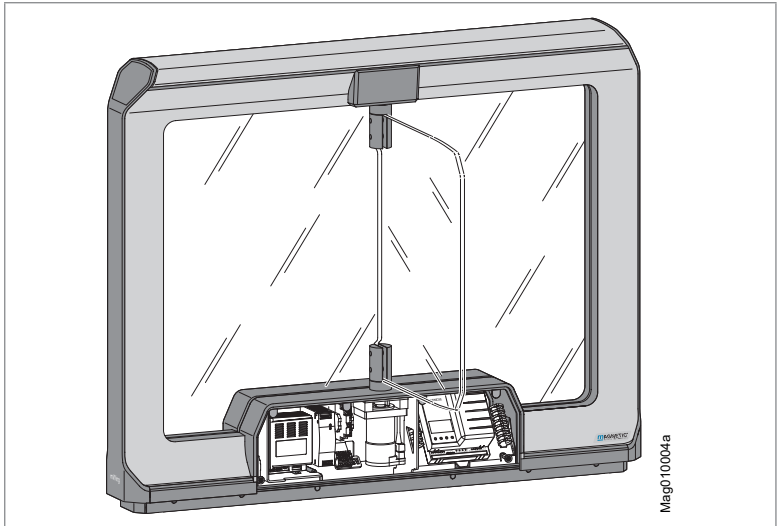


Fig. 8: B-module, shown here without cover  
The B-module fulfils the master function.

### 4.2.3 C-module

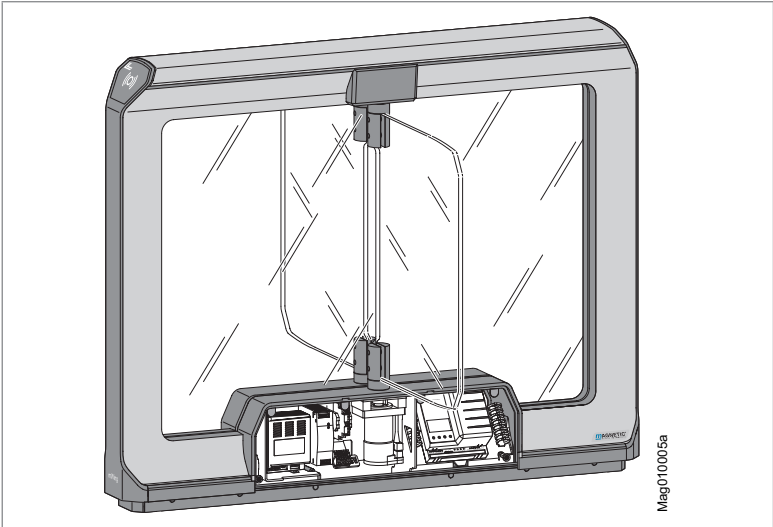


Fig. 9: C-module, shown here without cover  
The C-module fulfils the slave and master function.

### 4.3 Function

The 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 parameterized 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 authorization 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 authorization (tailgating) is recognized 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
  - › Manufacturer service expert
- ↗ Page 12, chapter 2.3.2.

#### **Personal protective equipment**

Wear the following personal protective equipment:

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

 <b>WARNING</b>	
	<p><b>Lifting heavy loads!</b></p> <p>Lifting heavy objects can result in severe damage to the back or supporting structure.</p> <ul style="list-style-type: none"> <li>› Preferably, transport the goods with suitable transport equipment.</li> <li>› Alternatively, the transported goods can be carried by two persons.</li> <li>› Lift and deposit the transport goods with two persons.</li> </ul>
<b>NOTICE</b>	
	<p><b>Improper transport!</b></p> <p>An improper transport may result in damage to the product.</p> <ul style="list-style-type: none"> <li>› Observe the symbols on the packaging.</li> <li>› Always load, transport and unload packages carefully.</li> <li>› Note the dimension.</li> <li>› Do not remove packaging until immediately before mounting and at the final location of the product.</li> </ul>

### 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: 22 to +131 °F
- › 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

 <b>WARNING</b>	
	<p><b>Lifting heavy loads!</b></p> <p>Lifting heavy objects can result in severe damage to the back or supporting structure.</p> <ul style="list-style-type: none"> <li>› Preferably, transport the goods with suitable transport equipment.</li> <li>› Alternatively, the transported goods can be carried by two persons.</li> <li>› Lift and deposit the transport goods with two persons.</li> </ul>

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 M8 x 30, A2
  - › 4 screws DIN 7984 M8 x 20, A2
  - › 4 screws DIN 7984 M8 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.

### **Metric to Standard (inch) Bolt Conversion Table**

M8 x 30 = 5/16" x 1 1/4" long

M8 x 20 = 5/16" x 7/8" long

M8 x 16 = 5/16" x 5/8" long



## 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.

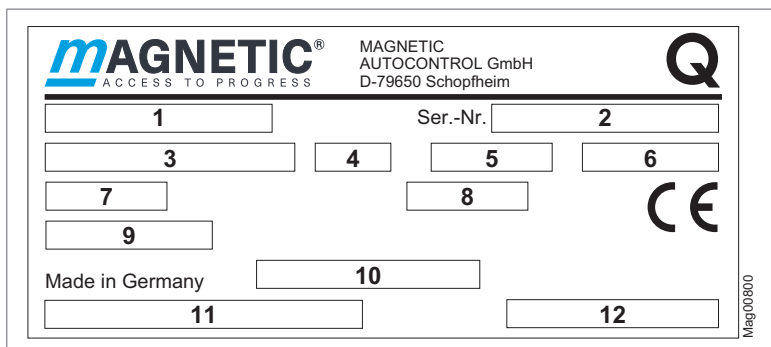


Fig. 10: Type plate

- 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
- › Manufacturer service expert
- ↗ Page 12, chapter 2.3.2.

#### Personal protective equipment

Wear the following personal protective equipment:

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

 <b>WARNING</b>	
	<p><b>Improper fixing!</b></p> <p>Improper fixing can cause the pedestrian gate to tip over, resulting in crushing and serious injury.</p> <ul style="list-style-type: none"><li>› Mount the pedestrian gate in accordance with the description on the foundation.</li><li>› Observe and follow the separate notes and instructions of the fixing material manufacturer.</li><li>› After mounting, check all screws and nuts for tightness.</li></ul>

 <b>WARNING</b>	
	<p><b>Improper mounting on flammable ground!</b></p> <p>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.</p> <ul style="list-style-type: none"><li>› Only mount the pedestrian gate on a non-flammable floor.</li></ul>

## 7.2 Mounting variants

You may mount the pedestrian gate as follows:

Mounting variant	Required material per module	Notice
<b>Variant 1:</b> Mount the pedestrian gate directly on a foundation.	<ul style="list-style-type: none"> <li>› Attachment set BSS100 for mounting the pedestrian gate directly on a foundation</li> </ul>	<ul style="list-style-type: none"> <li>› Suitable for concrete foundation</li> <li>› Indoor application typical</li> <li>› Use M8 x 30 screws.</li> </ul>
<b>Variant 2:</b> 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.	<ul style="list-style-type: none"> <li>› Base frame FURA100</li> <li>› Attachment set BSSFURA100 for mounting the pedestrian gate via threaded rods</li> <li>› Attachment set BSS100 for mounting the base frame, alternatively customer-supplied fastening material</li> </ul>	<ul style="list-style-type: none"> <li>› Suitable for solid floors</li> <li>› Height of finished floor can still be defined</li> <li>› Indoor application typical</li> </ul>
<b>Variant 3:</b> Glue base frame to foundation or finished floor. Mount the pedestrian gate on the base frame.	<ul style="list-style-type: none"> <li>› Base frame FURA100</li> <li>› Adhesive set BSKL100 for gluing the base frame</li> </ul>	<ul style="list-style-type: none"> <li>› Suitable for finished floors such as tiles</li> <li>› Not suitable for concrete as the porous structure absorbs the adhesive</li> <li>› Indoor application typical</li> <li>› Use M8 x 16 screws to mount the metal base frame to the floor. Use M8 x 20 screws to mount the mWing frame to the floor.</li> </ul>
<b>Variant 4:</b> Mount the base frame on the foundation. Mount the pedestrian gate on the base frame.	<ul style="list-style-type: none"> <li>› Base frame FURA102</li> <li>› Attachment set BSS100 for mounting the base frame, alternatively customer-supplied fastening material</li> </ul>	<ul style="list-style-type: none"> <li>› Concrete foundation required as mounting base</li> <li>› Suitable for slabs and interlocking paving stones</li> <li>› Outdoor application typical</li> </ul>

Table 8: Mounting variants

**Installation and mounting**

Mounting material	Consisting of
Mounting material supplied	<ul style="list-style-type: none"> <li>› 8 screws DIN 7984 M8 x 30, A2</li> <li>› 4 screws DIN 7984 M8 x 20, A2</li> <li>› 4 screws DIN 7984 M8 x 16, A2</li> <li>› 4 washers DIN125 A8.4, A2</li> </ul>
BSS100 (optional attachments)	<p>Attachment set</p> <ul style="list-style-type: none"> <li>› 8 sleeves with inner thread M8, VA</li> <li>› 4 washers DIN 125 A8.4, A2</li> <li>› 8 screws DIN 7984 M8 x 30, A2</li> <li>› 8 screws DIN 7984 M8 x 16, A2</li> </ul> <p>Composite mortar UPAT UPM CX150</p> <p>Mounting aid for sleeves with inner thread:</p> <ul style="list-style-type: none"> <li>› 1 screw DIN 912 M8 x 30, A2</li> <li>› 1 nut DIN 934 M8</li> <li>› 1 hexagon SW 6 x 60</li> </ul>
BSSFURA100 (optional attachments)	<p>Attachment set</p> <ul style="list-style-type: none"> <li>› 1 FlowMotion base plate</li> <li>› 8 threaded rods M8 x 330, 1.4301</li> <li>› 32 nuts M8</li> </ul>
BSSKL100 (optional accessory)	<p>Adhesive set</p> <ul style="list-style-type: none"> <li>› Surface cleaner HaftClean</li> <li>› Surface cleaner HaftPlus</li> <li>› Surface cleaner Entferner</li> <li>› Construction adhesive Power</li> </ul>
FURA100 (optional accessory)	Base frame, 1.4301 (stainless steel)
FURA102 (optional accessory)	Base frame height 5.9", 1.4301 (stainless steel)

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. ↗ Page 31, chapter 6.1.
- › Align the pedestrian gate. ↗ Page 46, chapter 7.8.
- › Prepare the pedestrian gate for mounting and electrical connection.  
↗ Page 46, chapter 7.9.
- › Mount the pedestrian gate. ↗ Page 64, chapter 7.11.
- › Connect the pedestrian gate electrically. ↗ Page 70, chapter 8.
- › Assemble the pedestrian gate. ↗ 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 31.5" (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**

1. 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.
7. Let concrete cure.
8. Apply moisture protection for outdoor mounting.

### 7.4.4 Foundation plan and reinforcement

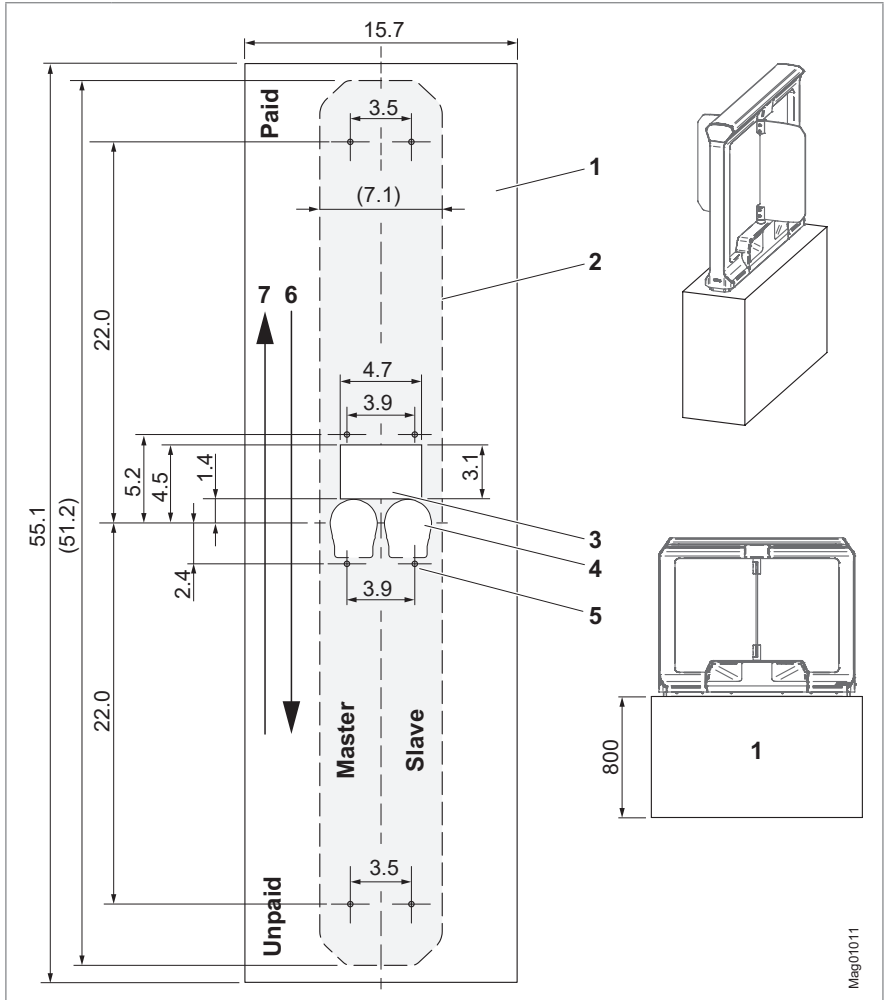


Fig. 11: Foundation plan (dimensions in inches)

- 1 Foundation, frost depth, outdoor
- 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"

Installation and mounting

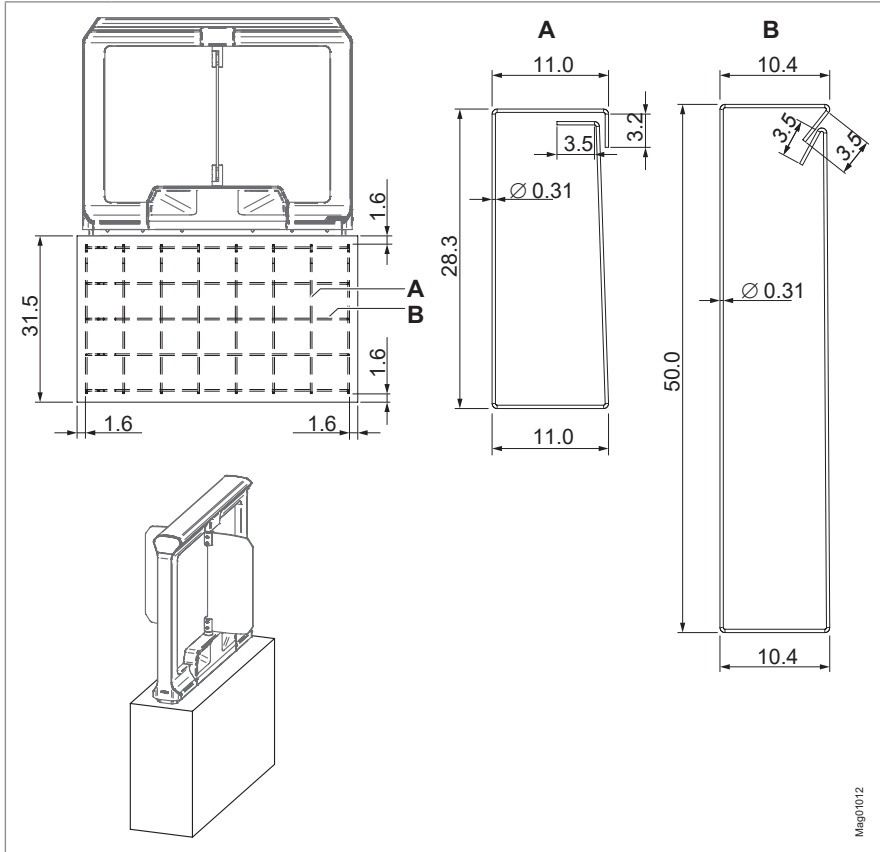


Fig. 12: Reinforcement plan (dimensions in inches)



### 7.4.5 Distances depending on panel heights and passage widths

#### Distances for mWing with swing wings at standard height

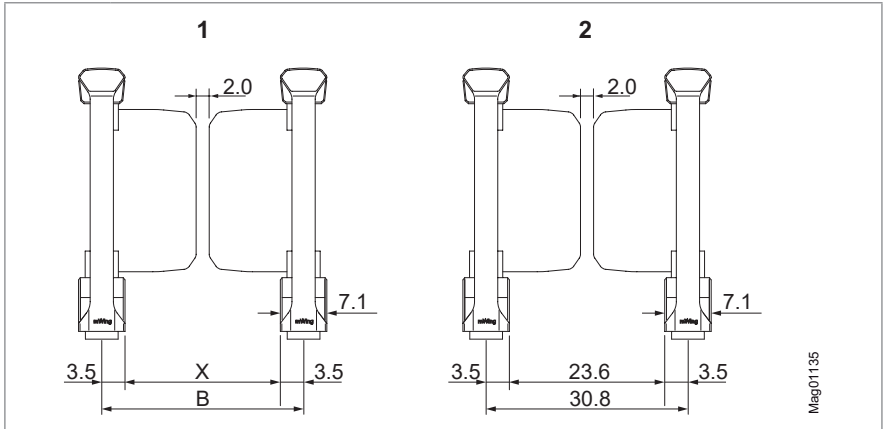


Fig. 13: Distances mWing with swing wings at standard height (dimensions in inches)

- 1 Marking for B and X see following table
- 2 Example of distance for passage width 23.6" clear passage

Ordered passage width	X: Passage width [inches/mm]	B: Distance between the center of two modules / foundations [inches / mm]  $B = X + (2 \times 3.5" / 2 \times 90 \text{ mm})$
23.6" (DG600)	23.6" / 600	30.7" / 780
36.2" (DG920)	36.2" / 920	43.2" / 1100
37.8" (DG960)	37.8" / 960	44.8" / 1140

Table 10: Distances mWing with swing wing at standard height

Distances for mWing with swinging wing in high version

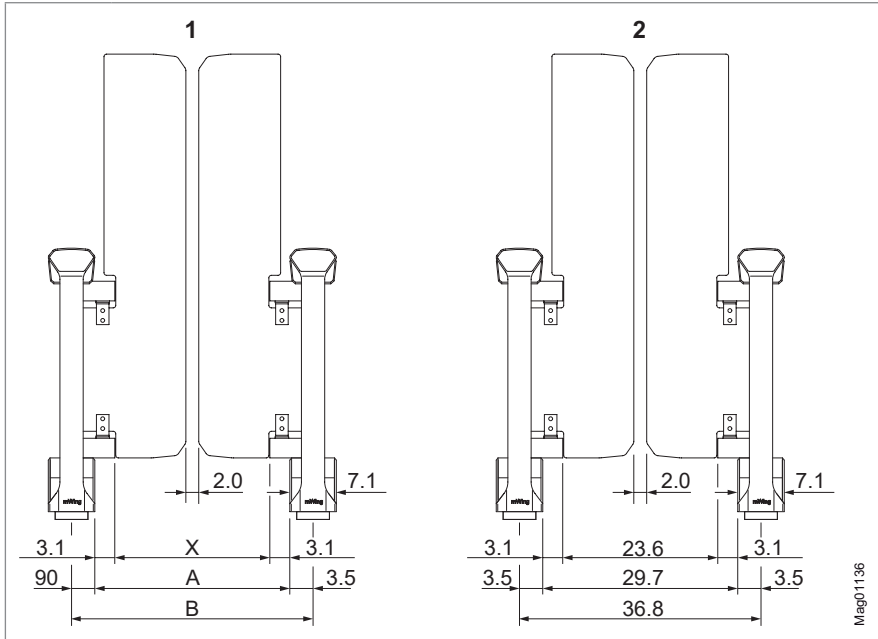


Fig. 14: Distances mWing with swing wing in high version (dimensions in inches)

A Marking for A, B and X see following table

B Example of distance for passage width 23.6" (600 mm)

Ordered passage width	X: Passage width [inches / mm]	A: Distance between two modules [inches]  A = X + (2 x 3.1 inch)	B: Distance between the center of two modules / foundations [inches]  B = A + (2 x 3.5") or B = X + (2 x 3.1") + (2 x 3.5")
23.6" Standard	23.6" / 520	26.6"	33.7"
36.2" ADA Wide	36.2" / 920	41.5"	48.6"
37.8" Extra Wide	37.8" / 960	43.9"	51.0"

Table 11: Distances mWing with swing wing in high version

### 7.4.6 Empty conduit plan

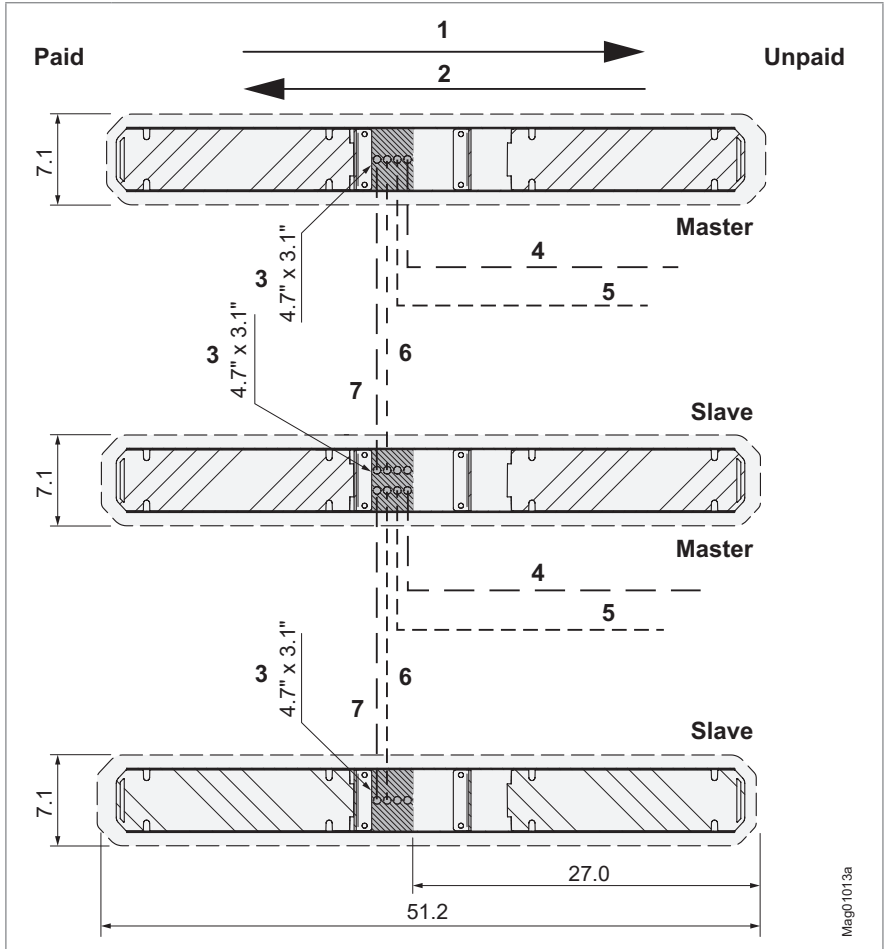


Fig. 15: Empty conduit plan (dimensions in inches)

- 1 Passage direction 1 from "Paid" to "Unpaid"
- 2 Passage direction 2 from "Unpaid" to "Paid"
- 3 Area for empty conduits 4.7" x 3.1"
- 4 Empty conduit for 120 VAC/230 VAC mains power cable
- 5 Empty conduit for data lines and signal lines, min. diameter  $\varnothing$  1.6"
- 6 Empty conduit for data lines and signal lines, min. diameter  $\varnothing$  1.6"
- 7 Empty conduit for mains connection cable for power supply of the secondary module 120 VAC/230 VAC power cable



## 7.7 Base frame FURA102

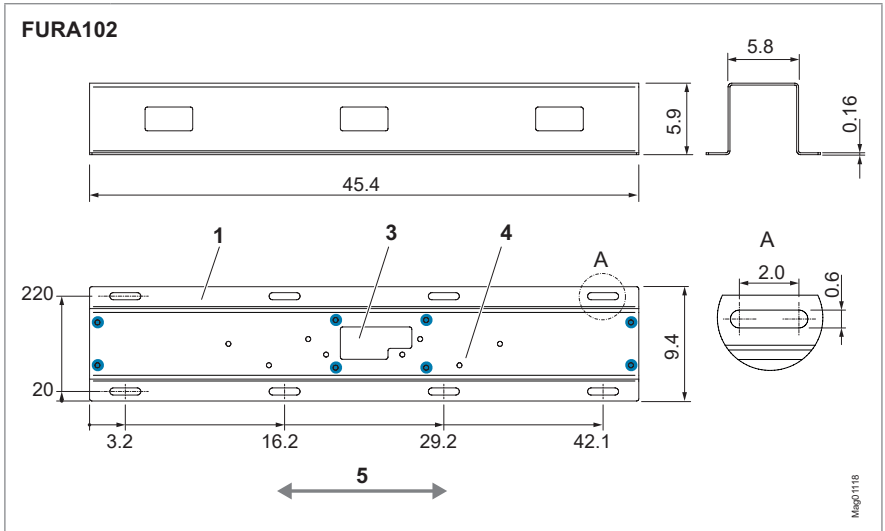


Fig. 18: Base frame FURA102 (dimensions in inches)

- 1 Base frame FURA102
- 2 Feedthrough for empty conduits
- 3 Relevant boreholes 5/16" 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.

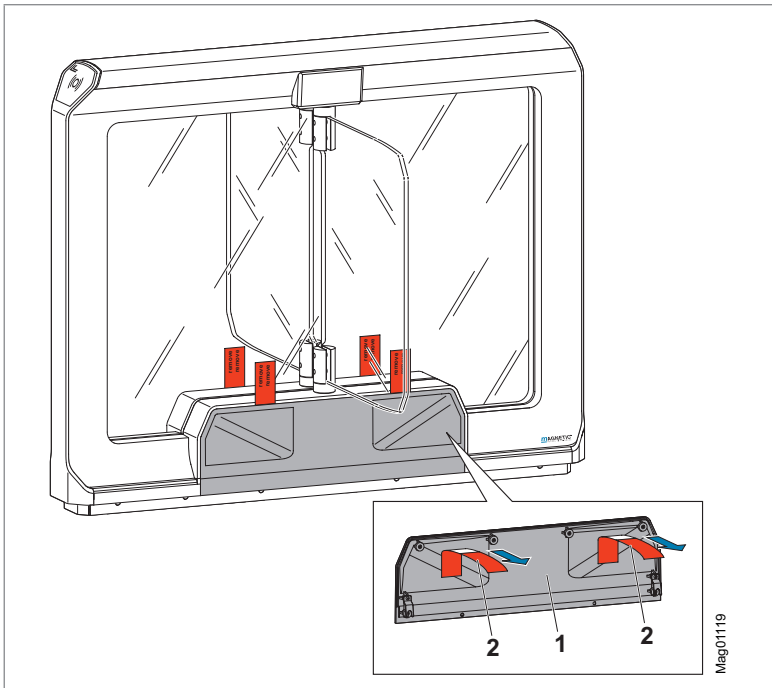


Fig. 19: mWing in delivery state

- 1 Cover
- 2 Remove strips (2 pieces)

4. Dismount the side parts.

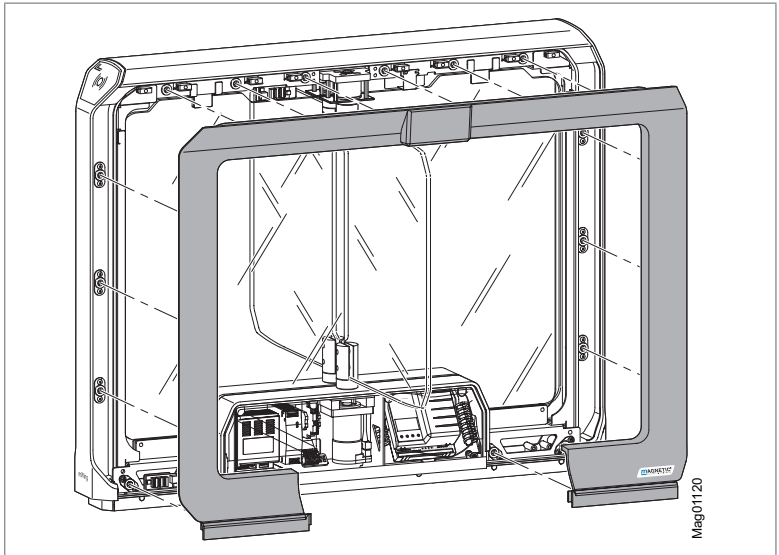


Fig. 20: Mounting of the side part

5. Dismount the strips.

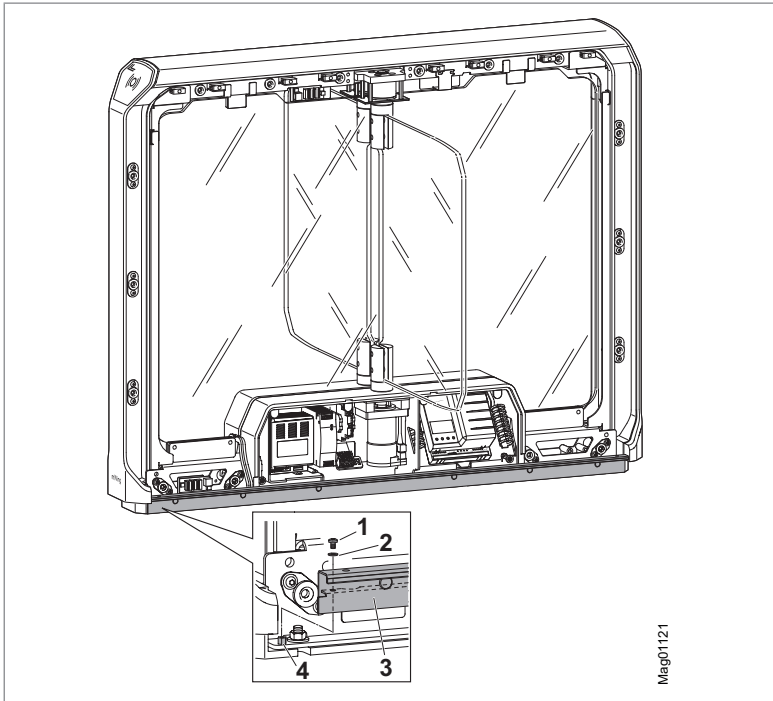


Fig. 21: Dismounting the strips

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

✓ 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 5/16" x 1.25" stainless steel
- › Washer 3/8" dia., stainless steel

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

- › Sleeves with inner thread 5/16" x 3.5" long, 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.

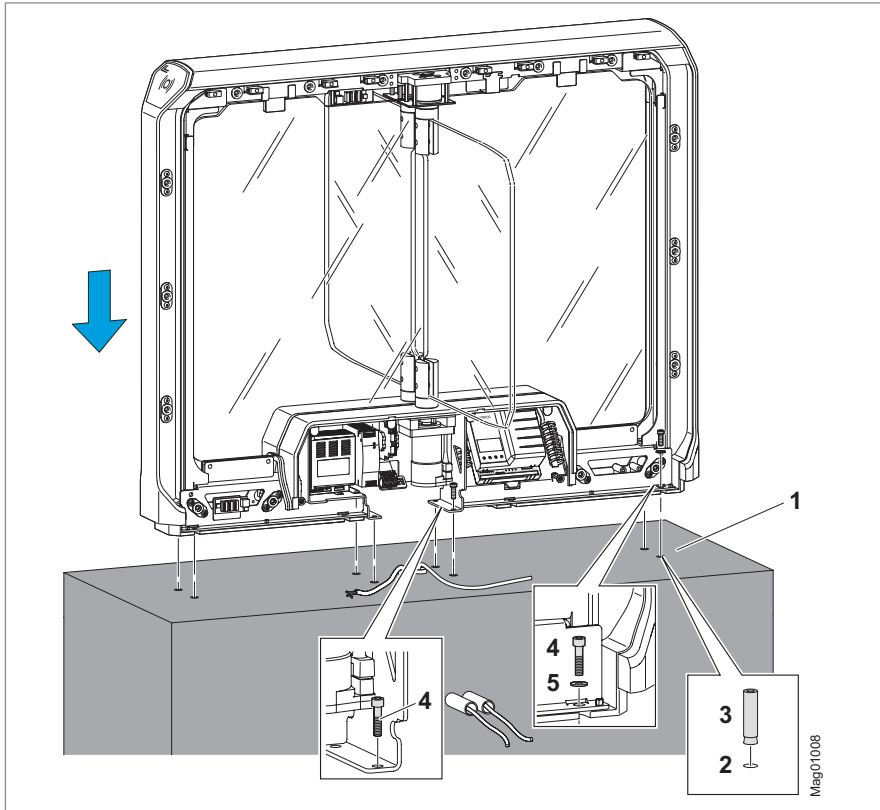


Fig. 22: Mounting variant 1 (direct mounting)

- 1 Concrete foundation
- 2 Boreholes (8 x)
- 3 Sleeve with inner thread 5/16" x 3.5" long, stainless steel, (8 x)
- 4 Screw 5/16" x 1.25" stainless steel, (8 x)
- 5 Washer 3/8" dia., 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.

1. 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.

**⚠ WARNING**

**Possible injuries due to pedestrian gate falling over!**

Use either 5/16" x 1.25" long screws or the M8 x 30 mm screws supplied or the screws from the BSS100 attachment set. Do not use the M8 x 16 or M8 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.
12. Arrange electrical connections. ↗ Page 70, chapter 8.
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 frame FURA100: ↗ Page 44, Fig. 16.

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.

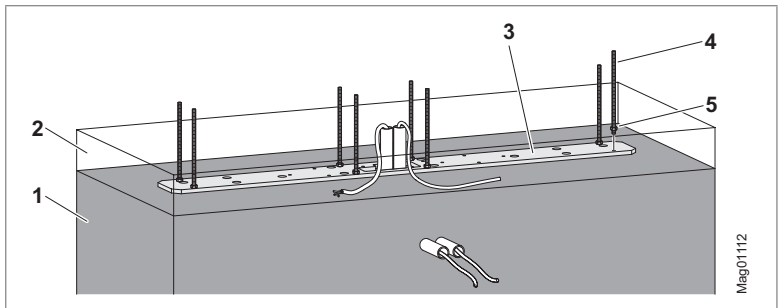


Fig. 23: Mounting the base frame and threaded rods

- 1 Foundation / unfinished floor
- 2 Planned finished floor
- 3 Base frame FURA100
- 4 Threaded rods 5/16" dia. x 13" long (M8 x 330), stainless steel, (8 x)
- 5 Nut 5/16" (M8), 8 x

### Installation and mounting

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.

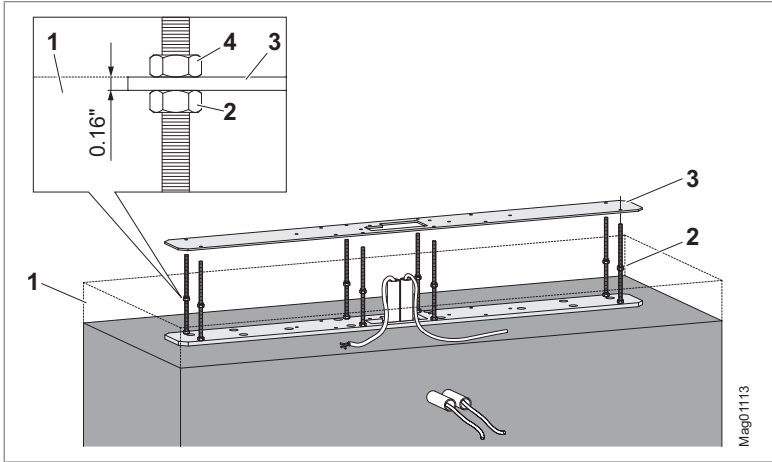


Fig. 24: Positioning the FlowMotion base plate

- 1 Planned finished floor
- 2 Nut 5/16" dia. (M8) below the planned finished floor (8 x)
- 3 Base plate FlowMotion
- 4 Nut 5/16" (M8) 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.

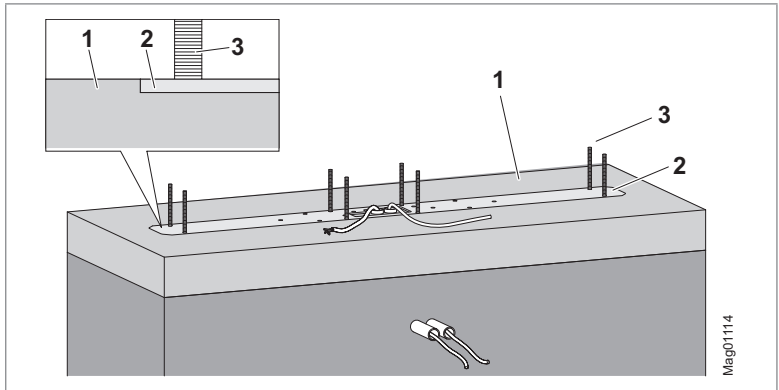


Fig. 25: FlowMotion base plate in the finished floor

- 1 Finished floor
- 2 FlowMotion base plate, flush with finished floor
- 3 Threaded rods 5/16" dia x 13.0" long (M8 x 330), stainless steel, (8 x)

1. Cut off the threaded rods 0.8" above the finished floor (angle grinder)

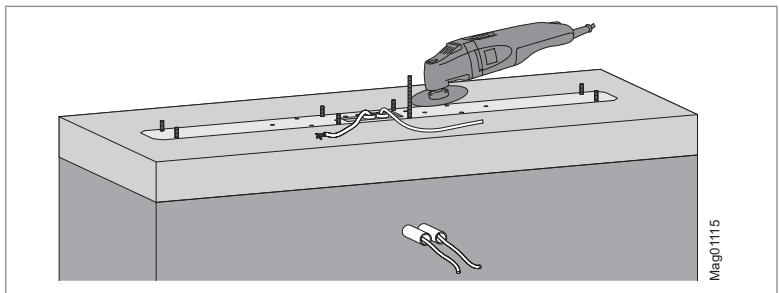


Fig. 26: Flexing off threaded rods

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 7.5 ft-lbs. torque (10 Nm).
7. If necessary, seal the housing with a silicone joint.
8. Arrange electrical connections. ↗ Page 70, chapter 8.
9. Assemble the mWing. ↗ Page 64, chapter 7.11.

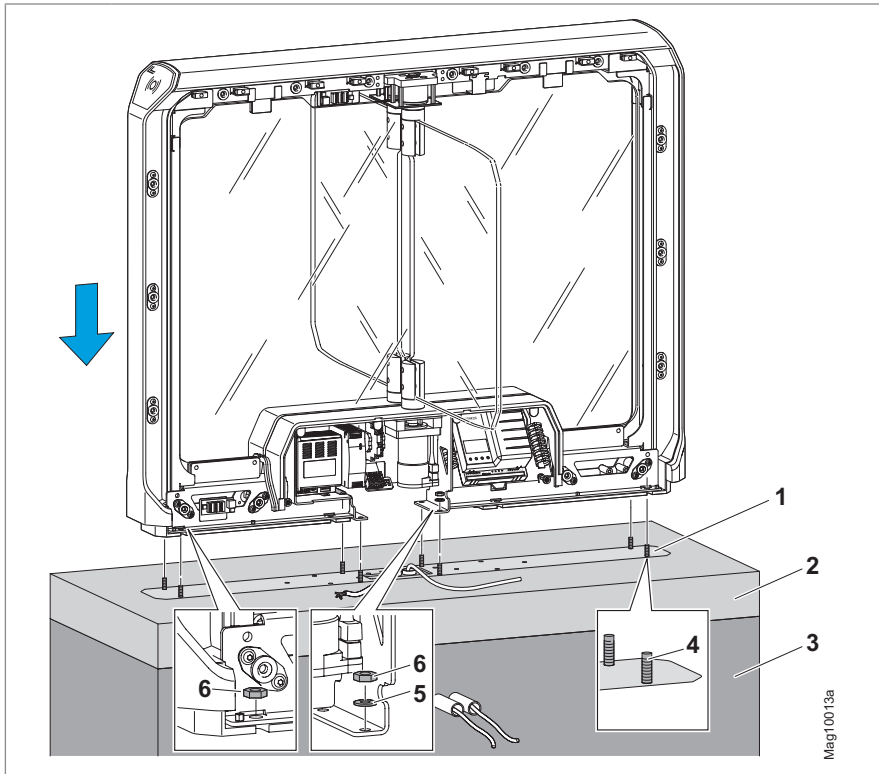


Fig. 27: Mounting variant 2

- 1 Base plate FlowMotion
- 2 Finished floor
- 3 Unfinished floor / foundation
- 4 Threaded rods 5/16" dia. x 13.0" long (M8 x 330), stainless steel, (8 x)
- 5 Washer 3/8", stainless steel (4 x)
- 6 Nut 5/16" (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 5/16" x 7/8" long stainless steel
- › Screw 5/16" x 5/8" long, stainless steel
- › Washer 3/8" dia., 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:

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

Base frame FURA100: ↗ Page 44, Fig. 16.

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.

## Installation and mounting

---

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.

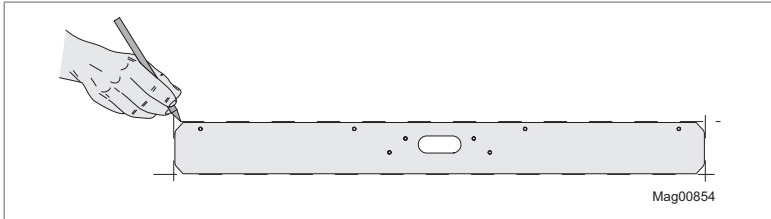


Fig. 28: Mark outline

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.
7. 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.

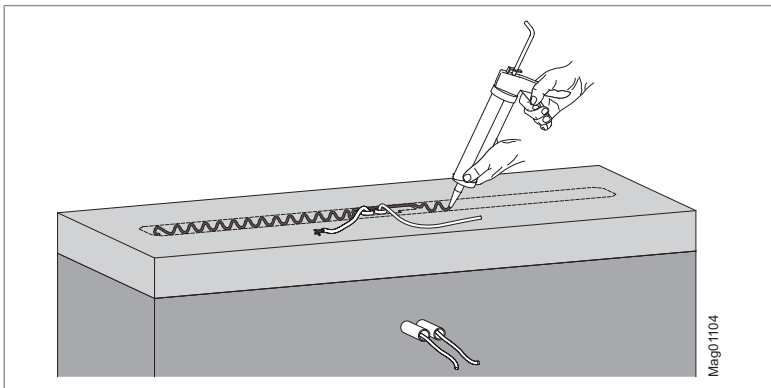


Fig. 29: Applying construction adhesive

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

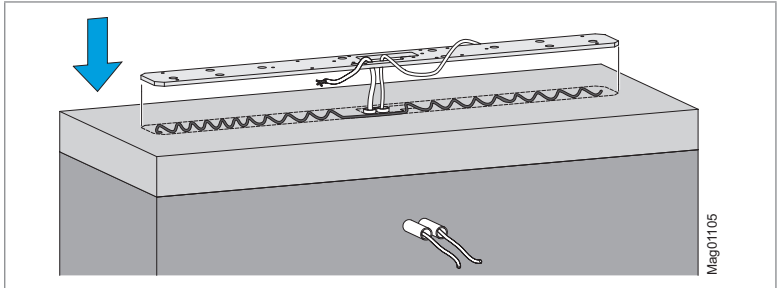


Fig. 30: Placing base frame

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.
10. 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 5/16" x 5/8" and 5/16" x 7/8" screws . Do not use the M 8 x 30 screws supplied.
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.
18. Arrange electrical connections. ↗ Page 70, chapter 8.
19. Assemble the mWing. ↗ Page 64, chapter 7.11.

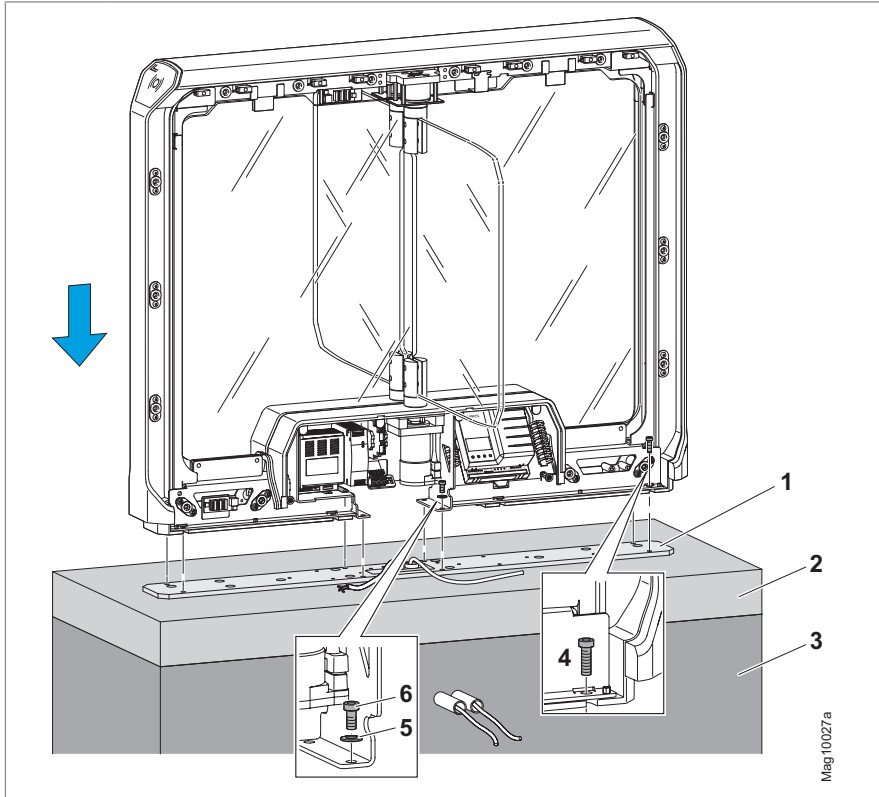


Fig. 31: Mounting variant 3

- 1 Base frame FURA100
- 2 Finished floor
- 3 Unfinished floor / foundation
- 4 Screw 5/32" x 7/8" long, stainless steel, (8 x)
- 5 Washer 3/8", stainless steel (4 x)
- 6 Screw 5/32" x 5/8" long, 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 5/16" x 1.25" long, stainless steel
- › Washer 3/8" dia, 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:

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

Base frame FURA102: ↗ Page 45, Fig. 18.

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

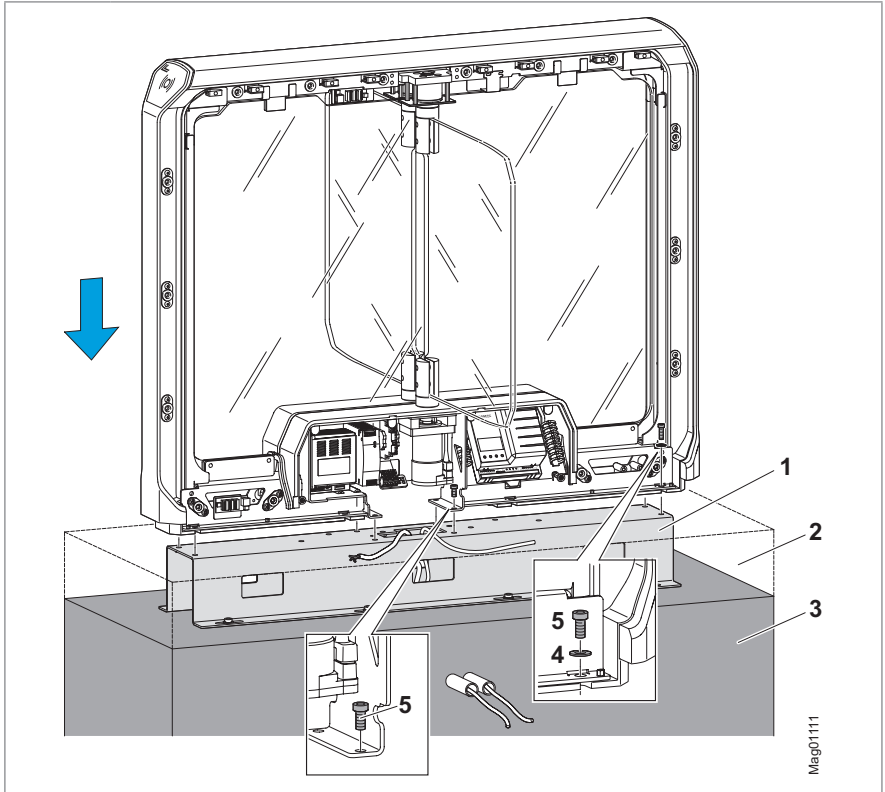
##### **NOTICE**

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.
- 8. Arrange electrical connections. ↗ Page 70, chapter 8.
- 9. Assemble the mWing. ↗ Page 64, chapter 7.11.



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Fig. 32: Mounting variant 4

- 1 Base frame FURA102
- 2 Planned finished floor such as interlocking paving stones
- 3 Concrete foundation
- 4 Washer 3/8" dia stainless steel (4 x)
- 5 Screw 5/16" x 1.25" long, 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.

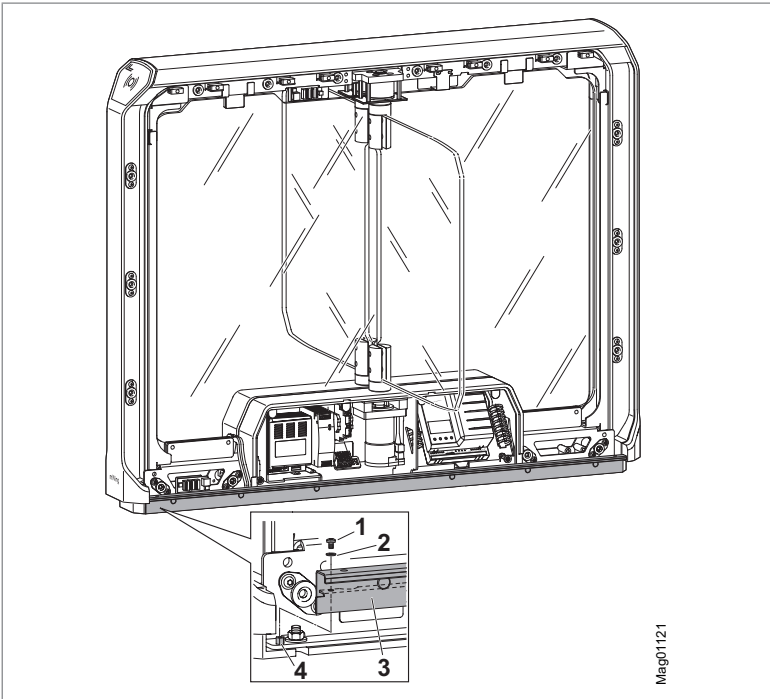


Fig. 33: Mount the strips, here mWing with swing wing at standard height

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



2. 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.

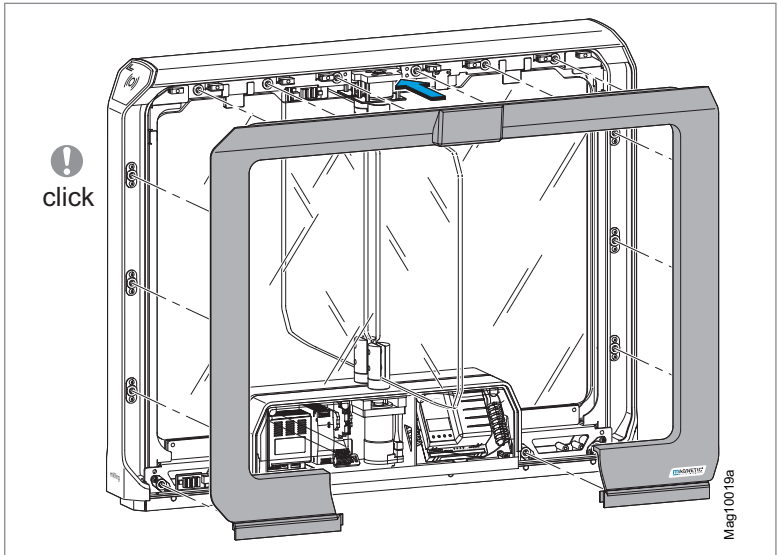


Fig. 34: Fit side part, here mWing with swing wing at standard height

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.

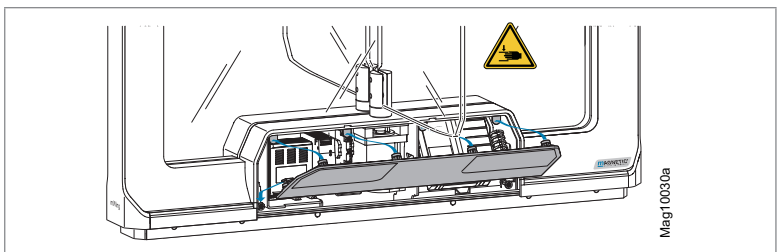


Fig. 35: Fit cover, here mWing with swing wing at standard height

### 7.12 Mounting swing wing

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

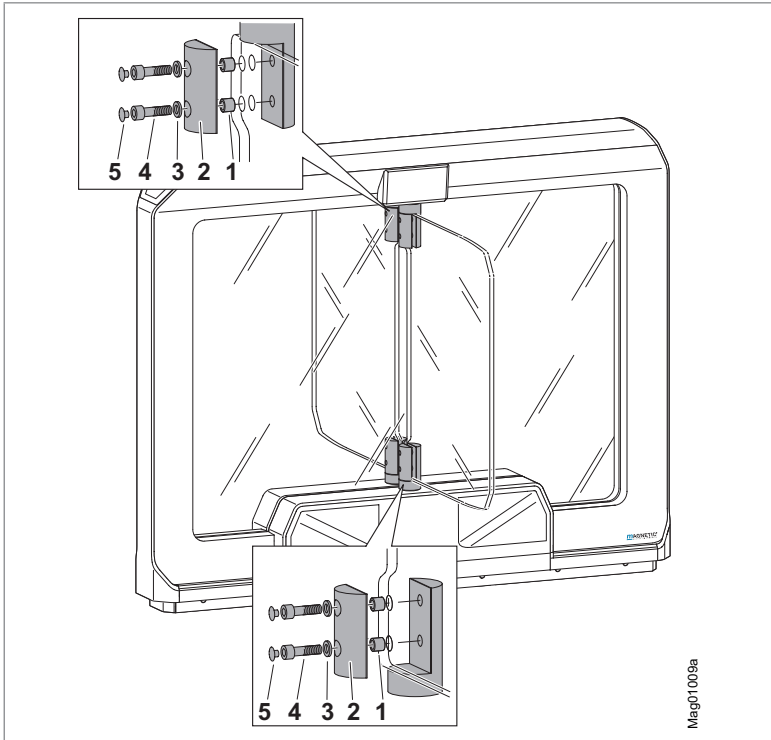


Fig. 36: Mounting the swing wing at standard height

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

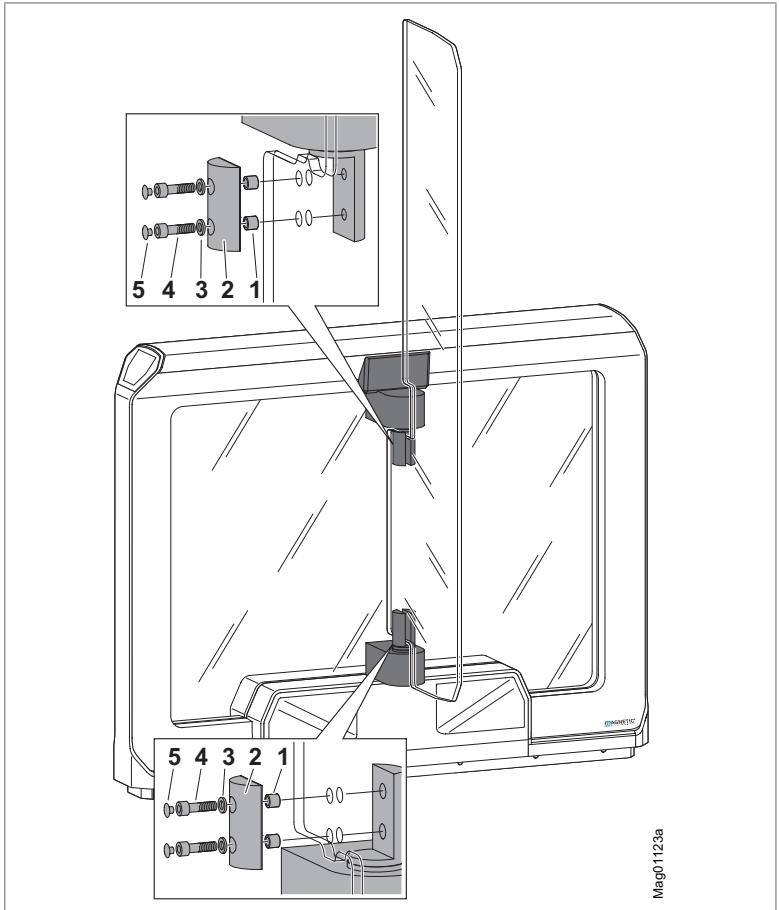


Fig. 37: Mounting high version of the swing wing

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

2. 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 dismantle 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.
5. Unhook the cover.

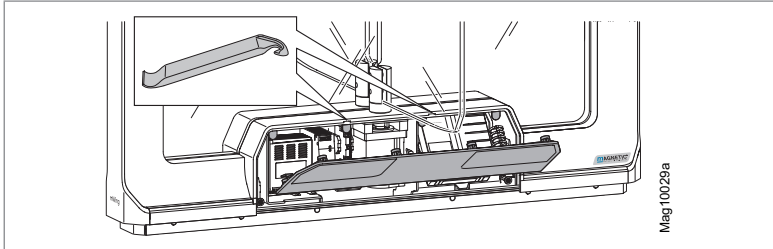


Fig. 38: Dismounting the cover with tool

### Mounting of the cover

1. Hook in the cover.

**⚠ 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.

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

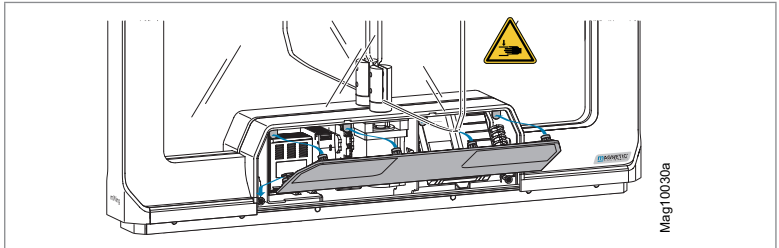


Fig. 39: Fit cover, here mWing with swing wing at standard height

## 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
- › Manufacturer service expert
- ↗ Page 12, chapter 2.3.2.

#### Personal protective equipment

Wear the following personal protective equipment:

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

 <b>DANGER</b>	
	<p><b>Electric voltage</b></p> <p>Touching live parts can be lethal. Damage to the insulation or to individual components can be lethal.</p> <ul style="list-style-type: none"><li>› Only qualified electricians or electrical safety experts may carry out work on the electrical system.</li><li>› Before commencing any work, switch off power supply and secure against restarting. Test for absence of voltage.</li><li>› Keep moisture and dust away from live parts. Moisture or dust may cause a short circuit.</li><li>› 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.</li><li>› 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.</li><li>› Observe the information on the type plate.</li><li>› Close all covers after all work is completed.</li></ul>

**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

 <b>DANGER</b>	
	<p><b>Incorrect connection of the mains connection cable between master and slave!</b></p> <p>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.</p> <ul style="list-style-type: none"><li>› Connect the mains connection cable on the master to terminals X1 and on the slave to terminals XD1. ↗ <a href="#">Wiring diagram, separate document.</a></li></ul>

<b>NOTICE</b>	
	<p><b>Incorrect connection of the mains connection cable between master and slave!</b></p> <p>Incorrect connection of the mains connection cable between master and slave will cause the pedestrian gate to malfunction.</p> <ul style="list-style-type: none"><li>› Connect the mains connection cable on the master to terminals X1 and on the slave to terminals XD1. ↗ <a href="#">Wiring diagram, separate document.</a></li></ul>



### 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 .002" and .006" sq inch (1.5 and 4 mm<sup>2</sup>). 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.

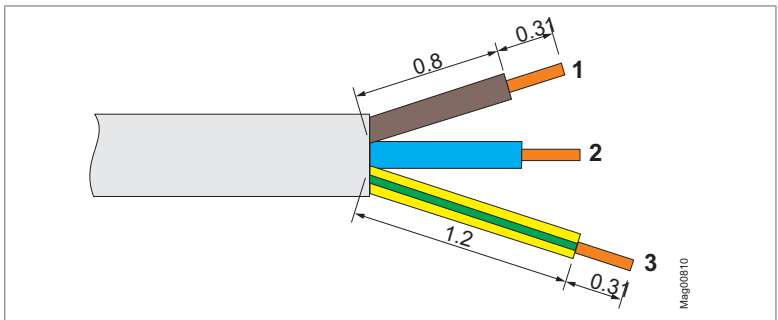


Fig. 40: Stripping (dimensions in inches)

- 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.

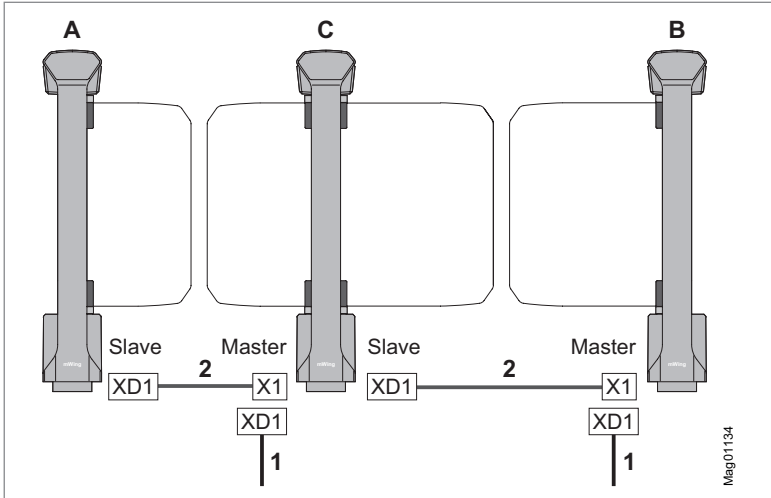


Fig. 41: Mains cables and mains connection cables

- 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

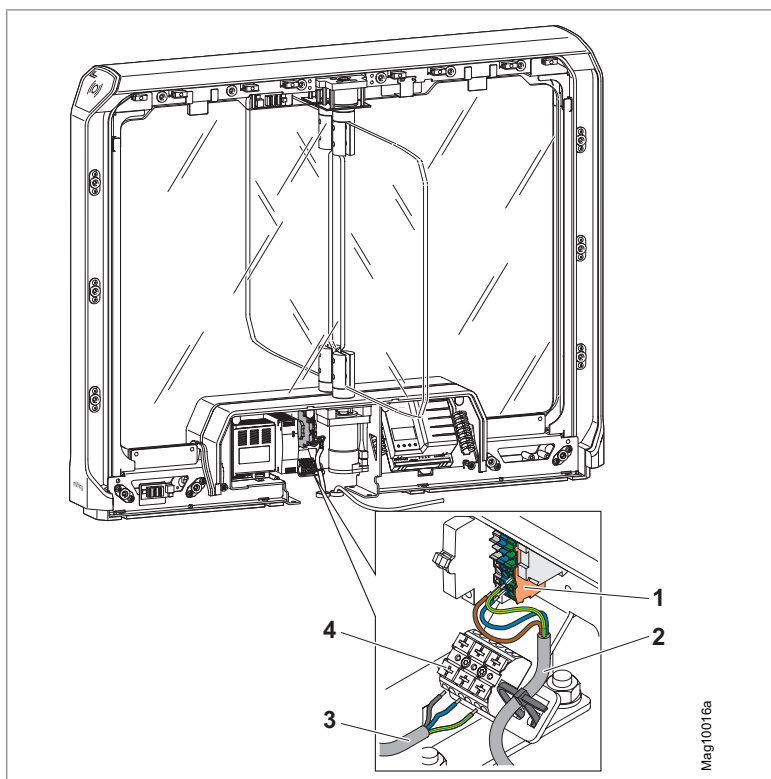



Fig. 42: Connecting the mains cable and mains connection cable - Example C-module, master connection side

- 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](#)
  
- 1. Disconnect the system from the power supply. Ensure absence of voltage. Secure against reactivation.  
 **DANGER**  
Mortal danger by electric voltage!
- 2. 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](#)
  
- 1. 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.

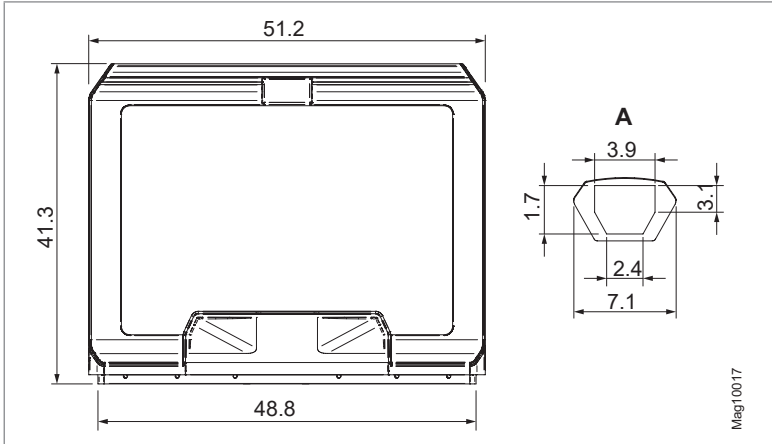


Fig. 43: Installation space for access-control device (dimensions in inches)

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

- › Manufacturer 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	
	<p><b>Restarting quickly!</b></p> <p>Restarting the pedestrian gate too quickly can lead to damage of the equipment!</p> <p>› Wait for at least 10 seconds after switching off the pedestrian gate before you switch the mains power on again.</p>

1. Dismount of the cover. ↗ Page 68, chapter 7.13.
2. Switch the pedestrian gate on or off using the on/off switch.

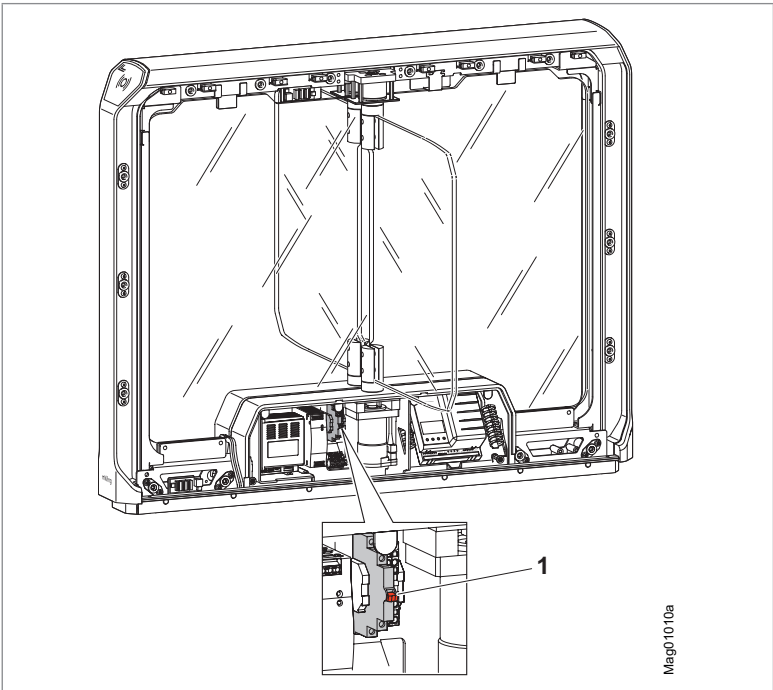




Fig. 44: Switching the mWing on and off

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



## 9.4 Parameterising the pedestrian gate

 <b>WARNING</b>	
	<p><b>Parameterization by unqualified persons!</b> Parameterization by unqualified persons can lead to an unintended behavior of the swing wings.</p> <ul style="list-style-type: none"><li>› Only Manufacturer service experts are allowed to carry out the parameterisation.</li></ul>



### 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	
	<p><b>Aggressive cleaning aids and substances!</b></p> <p>Aggressive detergents and consumables may damage or destroy components, electric cables, or the coating of the pedestrian gate.</p> <p>› Do not use cleaning agents with aggressive ingredients.</p>

#### 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
- › Manufacturer 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.
4. 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
- › Manufacturer 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. ↗ Page 85, chapter 16.2.
1. Disassemble the pedestrian gate into individual components.
  2. 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 dismantled and disposed of.

# EU-Declaration of Conformity



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

Designation	<b>Pedestrian gate FlowMotion®</b>
Type	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  
Griematt 20-28  
D-79650 Schopfheim

Authorized for documentation  
Mr Stefan Wellinger



Schopfheim, 04/02/2021

Place and date

Signature





## Index

### A

Access-control devices	
Connect .....	77
Installing .....	77

### B

Base frame	
FURA100 .....	44
FURA102 .....	45
Base plate .....	44

### C

Changes .....	10
Cleaning .....	83
Commissioning .....	79
Connection. See Electrical connection	
Overview .....	74
Control lines	
Connect .....	77
Control unit MGCplus .....	21, 22
Technical data .....	20
Corrective action .....	84
Cover .....	21, 22
Customer service .....	84

### D

Decommissioning .....	85
Design .....	21
Dismounting .....	86
Cover .....	68
Disposal .....	86
Distances	
Min. ....	18

### E

Electrical connection .....	70
Check .....	78
Technical data .....	19
Emergency opening .....	77
Emissions .....	19
Empty conduit plan .....	43
Empty conduits	
Requirements .....	38

EU-Declaration of Conformity .....	87
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### F

Foundation	
Build .....	38
Requirements .....	37
FURA100 .....	44
FURA102 .....	45

### I

Installation .....	34
Intended use .....	10

### L

Line configuration .....	18
Log book .....	81

### M

Manufacturer service	
expert .....	12
Mains cable	
Connect .....	72
Mains connection cable	
Connect .....	72
Maintenance schedule .....	83
Master	
Connect .....	76
Misuse .....	10
Modifications .....	10
Mounting .....	34, 49
Check .....	69
Cover .....	69
mWing .....	64
Mounting variants	
1 (direct mounting) .....	49
2 (base frame and plate) .....	52
3 (glue) .....	57
4 (base frame) .....	61
Overview .....	35

### N

Notice	
Illustration .....	8

### O

Operating conditions .....	19
----------------------------	----

Operation ..... 82

Operator  
    Responsibility..... 11

**P**

Parameterisation ..... 81

Personal protective equipment ..... 13

Personnel  
    Qualification ..... 12

Protective devices  
    Install ..... 71

**Q**

Qualification  
    Personnel..... 12

**R**

Receipt of goods..... 28

Repair ..... 84

**S**

Safety..... 10

Scope of delivery ..... 32

Slave  
    Connect ..... 76

Spare parts ..... 84

Storage ..... 30

Switching off..... 80

Switching on ..... 80

**T**

Target groups..... 11

Technical data ..... 16

Transport ..... 29

Type plate ..... 33

**U**

Unpacking..... 31

**W**

Warning Notes  
    Illustration..... 8



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