

YOUR ACCESS TO REVOLUTION

mAGNETIC®
ACCESS TO PROGRESS



MAGNETIC AUTOCONTROL GMBH
www.magnetic-access.com

FlowMotion®
Pedestrian Gates

*"If you are truly innovating,
you don't have a prototype you can refer to."*
Jonathan Ive



YOUR ACCESS TO REVOLUTION

Development of pedestrian gates has long been a matter of evolution. Reading devices have become wireless, biometric recognition methods have sprung up, and personal data on authorised users are now digitalised and centrally administrated. Nothing very much has changed regarding the pedestrian gates themselves: housings made of steel sheet still stand in the way of authorised users.

We here at Magnetic have now set a new course towards revolution and completely reinterpreted security in buildings – with the FlowMotion® product line of pedestrian gates. We no longer see access control systems as artificially superimposed security mechanisms, but as integral components of buildings. They are no longer external barriers, but paths within that welcome those entering the building and show them the way. We therefore not only increase user acceptance – we also make a major contribution towards greater security in buildings through the consistent and systematic assessment of all persons entering them.

In order to achieve this reinterpretation we have started again from scratch and fundamentally redeveloped our access systems from the bottom up. The result is a unique design whose flowing lines and wide range of colours permit seamless integration in the demanding architectures of companies, cultural institutions and public facilities. The prerequisite for the extraordinary design is a new material: mDure is not only extremely tough and long-lived, but its warm and friendly feel also gives visitors a comfortable first contact. And because we see our access systems as the path into buildings we have equipped them with versatile illumination that shows visitors the way and intuitively guides them through the access process.

Even if revolutions radically challenge what is old, in one regard we have remained true to our former concept: as before, you can rely on our energy-efficient, reliable and extremely long-lived drive and control technology.

COME ON IN!

A large family

The FlowMotion® range of models



mTripod / mTripod short	mSwing	mWing	mTwing	mSlide	mFlap
<p>The comfortable one: its smooth drive and sensitive impact detection make passage through the mTripod and mTripod short particularly simple and comfortable.</p>	<p>The versatile one: you not only design optically appealing entrances with the mSwing swing door, it is also our specialist for wheelchair-friendly access and safe escape routes.</p>	<p>The elegant one: an open housing, short opening times and flowing non-contact passage – no access solution is safer and more elegant than mWing.</p>	<p>The transparent one: the glass barrier elements and railing system provide a clear view into the building. But not just a view: they also prevent undercrawling and ensure reliable individualisation.</p>	<p>The secure one: nobody gets past this one – and certainly not over it. The barrier elements on the mSlide are up to 1800mm tall and separate sensitive areas with continuous glass panels.</p>	<p>The quick one: unbeatable! mFlap offers the fastest opening and closing speeds of all our FlowMotion® pedestrian gates. They thus inspect large numbers of visitors in the shortest of times.</p>
<p>Barrier technology Turnstile</p>	<p>Barrier technology Swing door</p>	<p>Barrier technology Pedestrian passageway with wing gates</p>	<p>Barrier technology Half-height turnstile</p>	<p>Barrier technology Pedestrian passageway with sliding doors</p>	<p>Barrier technology Pedestrian passageway with wing flaps</p>
<p>Opening and closing speed Medium</p>	<p>Opening and closing speed Low</p>	<p>Opening and closing speed High</p>	<p>Opening and closing speed Low</p>	<p>Opening and closing speed High</p>	<p>Opening and closing speed High</p>
<p>Security level Low</p>	<p>Security level Low</p>	<p>Security level Medium to high (depending on the barrier element)</p>	<p>Security level Low</p>	<p>Security level Medium to high (depending on the barrier elements)</p>	<p>Security level Low</p>

FlowMotion®

Fascinating aesthetics...

Access control

The pedestrian gates of the FlowMotion® series can be controlled with all common reading devices. The front faces allow installation of numerous card-reading models, ensuring maximum flexibility.

Comfortable passage

The smoothly operating motor drive makes the access process particularly comfortable, and its sensitive impact detection ensures maximum user safety.

Unobstructed escape routes

FlowMotion® gates provide free passage if there is a power outage or alarm signal. They automatically resume operation when the alarm is over or power has been restored.

Secure access control

Light sensors (optional) raise the alarm if someone climbs over or crawls under the pedestrian gates. Interlocking in the closed state (optional) prevents any forced entry.

Comprehensive functions

An emergency release routine, pulse counter, and random generator for screening users are standard in the FlowMotion® series, directly integrated in the control system.

Illumination

Frame-edge illumination (optional) not only underlines the slender design, but also shows that this system is ready for passage. Floor illumination (optional) further contributes towards reliable user guidance.

Haptics

Unlike stainless steel, mDure is not cold and hard but instead feels comfortably warm and nice to touch. A friendly reception for visitors is thus provided on entering the building.

Material

The housing consists of the specially developed two-component polymer mDure. This new material opens up previously impossible design potentials.

Design

The FlowMotion® series is characterised by its extremely slender silhouette, shapely form and flowing lines. The lean design harmonically integrates itself in architecturally demanding surroundings, and its inviting shape increases user acceptance.

FlowMotion®

...excellent inner values...

Control system

The MGC control system is at the heart of all FlowMotion® gates. It enables direct access to all functions, parameters and information – not even a notebook is required, thanks to the integrated display and control buttons. By the way, the same control system and drive technology are also used in Magnetic's vehicle barriers. This considerably reduces system diversity and training requirements for sales partners, commissioning engineers and plant operators.

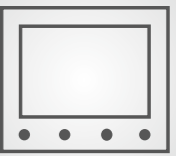
Drive

The thousand-fold proven MHTM™ drive technology ensures particularly comfortable passage. It is maintenance-free, energy-efficient and quiet – and forms the basis for a long service life because it is designed for more than 10,000,000 opening and closing cycles.



Rapid installation

Our pedestrian gates are supplied ready for installation. All the selected options have already been installed, and the corresponding parameters pre-set, before delivery to the point of use. This, and the drilling templates, considerably shorten commissioning times.



Simple parameterisation

All the MGC control system functions and settings can be located and edited very quickly via the display, the four buttons, and the well-thought-out user navigation. No workaround involving a notebook and connection cable is required.



Complete documentation

Construction specifications, floor plans, dimensional drawings and technical data – our customers receive all relevant documentation. They are thus always on the safe side during project planning, commissioning, and certification of conformity.



Comprehensive training

We are training sales partners, commissioning engineers, and service technicians at our Academy. This ensures high installation quality and excellent service.

Construction

The systems basically consist of a frame made of mDure in which all components are integrated. The side panels are attached to the frame without any visible connecting elements, and thus create the impression of seamless construction.



FlowMotion®

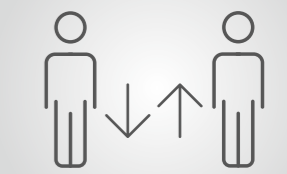
...and unique options.

Frame-edge illumination

The elegant integrated light elements offer flexible use to show operational readiness, the direction of passage, or the validity of access authorisation.

Passage direction indicator

The light elements in the front face show visitors at a glance if passage is open to them and whether they have valid access authorisation.



Full flexibility

Visitor flows into the building in the morning, out of the building in the evening, and coming and going between the two – FlowMotion® gates offer flexible use thanks to their bi-directional operation.



Large visitor numbers

It makes sense to use several parallel lines if large numbers of visitor authorisations need confirmation within a very short time. All FlowMotion® pedestrian gates are suitable for the straight-forward setting up of multiple applications thanks to their uniform stylistic language and control technology.



Wheelchair-friendly access

Variants of the FlowMotion® gates are available with large passage widths for wheelchair users, the transport of material, and many other requirements. mSwing swing doors offer another alternative for providing wheelchair-friendly access.



Unobstructed escape routes

All the gates in the FlowMotion® series automatically allow free passage in the case of a power outage or an alarm signal. mSwing swing doors allow the setting up of particularly wide, officially approved escape routes.

Ethernet interface

Today's connections for the buildings of tomorrow: FlowMotion® gates can be integrated into building control systems via the Ethernet interface.

Floor illumination

The white floor illumination gives the gates the appearance of floating in a cloud of light and simplifies orientation in the entrance area for visitors.

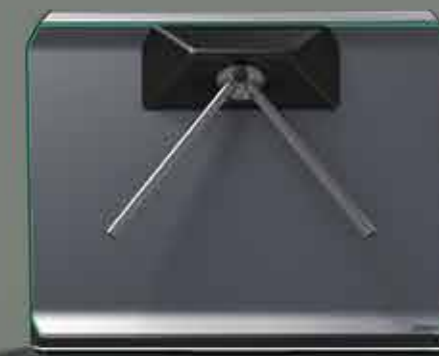
Interlocking

The gate elements can be locked in the closed state. This effectively prevents attempts to wilfully or forcefully gain access.

Base frame

The base frame can be installed straight after completion of the bare floor. It not only reserves the space for subsequent installation of the FlowMotion® pedestrian gate, but also considerably simplifies the laying down of electricity and data cables.





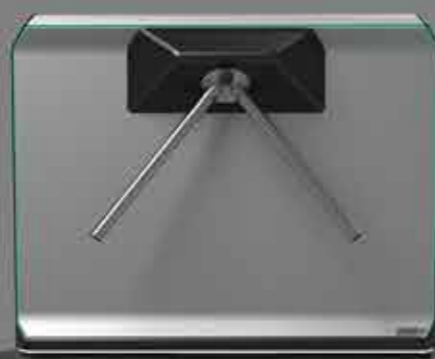
*They don't match
everything.*

Just your precise requirements.



Seamless integration in demanding architectures – we developed the design of FlowMotion® with this goal in mind. This, however, not only includes the housing shape, but also its colour. This is why we offer all the products in our FlowMotion® family with a wide range of colour tones and effect finishes.

WHICH COLOUR IS YOURS?



Security in series

With customised multiple applications



Access solutions that meet your needs

High visitor numbers, wheelchair-friendly access, escape routes during emergencies – a single gate is often insufficient to meet all the requirements. But here, too, the extremely slender design and uniform stylistic language of FlowMotion® gates prove advantageous because they allow the particularly simple implementation of space-saving multiple applications.

Several gates can be arranged in rows to enable the rapid and reliable control of large numbers of visitors. With mWing, mSlide and mFlap we offer left, central and right modules with adapted barrier elements; a housing is available for mTripod without barrier elements for the end of a row.

Wheelchair-enabled access requires a larger passage width so that users, as well as delivery services, have sufficient space for passage. The three pedestrian passageways – mWing, mSlide and mFlap – are available in wider variants, permitting passage widths of up to 960 mm.

Escape routes must comply with special legal and technical requirements. They must be readily identifiable and easy to open. They must also offer a particular passage width depending on the number of persons in the building. The mSwing swing door is our specialist for escape routes: as a single installation it provides a passageway width of 1200 mm, and as much as 2400 mm as a double installation.



AN INNOVATIVE MATERIAL FOR INNOVATIVE PRODUCTS

An extremely slender silhouette, soft flowing lines, and a warm gentle feel – this has all been made possible because we have moved away from the stainless steel panels used up to now and turned to a new material: **mDure**.

mDure is a polyurethane and thus consists of two components. During its production, polyols and isocyanates react to make long-chain molecules that form spatial links with one another. The end-product can be precisely adapted to meet particular

requirements because thousands of combinations of different polyols and isocyanates are possible. In many respects, **mDure** far surpasses the performance of the previous standard material.

By the way: although we are taking new paths we are not experimenting. Comparable high-performance polyurethanes are used for housings in medical and laboratory technology, for vehicle dashboards, and for cladding on high-speed trains. Could **mDure** have better references?

- > **mDure** is created by a chemical reaction that takes place directly in the forming tool. This provides extraordinary design freedom.
- > **mDure** is highly resistant to impacts, scratches and abrasion. It can cushion mechanical effects without suffering any lasting deformation.
- > **mDure** is a thermal and electrical insulator. This simplifies electrical installation, as well as operation under difficult climatic conditions.
- > **mDure** is extremely durable and chemically resistant – against disinfectants and detergents, as well as against aggressive chemicals, UV radiation and corrosion.
- > **mDure** contains no solvents or softening agents so it does not give off any harmful emissions to its surroundings. It also offers low flammability, and is therefore ideal for indoor use.
- > **mDure** is free of pollutants and can be recycled, disposed of as household waste, or burnt without polluting the environment.



mTripod

Three-arm turnstile

- > Revolutionary design, won German Design Award 2018
- > Extensive functions and intuitive operation
- > Drop-arm mechanism (optional) permits passage during power outages or alarms
- > Ethernet plug-in module for IP connection (optional)
- > Designed for more than 10,000,000 opening and closing cycles



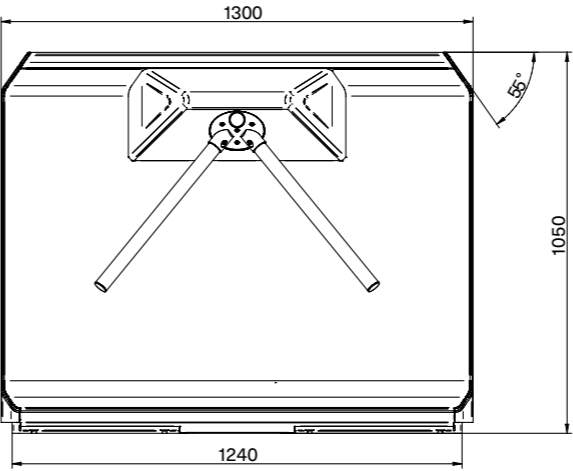
Technical data	mTripod	mTripod short
Housing variants	Long	Short
Application	Indoor and outdoor	Indoor and outdoor
Passage width	515 mm	515 mm
Drive technology	MHTM™	MHTM™
Control system	MGC	MGC
Voltage	100 – 240 VAC, 50/60 Hz	100 – 240 VAC, 50/60 Hz
Power consumption	Typical 30 W	Typical 30 W
Duty cycle	100%	100%
Housing material	mDure	mDure
Housing dimensions (L x W x H)	1300 x 290 x 1050 mm	730 x 290 x 1050 mm
Enclosure rating	IP 54	IP 54
Weight	About 70 kg	About 57 kg
Temperature range	–30 to +55 °C	–30 to +55 °C

Equipment	
Standard colour	Basalt (sides) Anthracite (frame)
Direction of passage	Uni- or bi-directional
Emergency release	On power outage or closing of alarm contacts
Random generator	Integrated in control system
Throughput data acquisition and event log	Integrated in control system

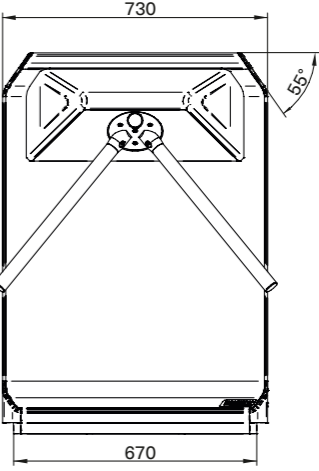
Options	
Special colours	More than 20 colour tones available according to pricelist
Passage direction indicator	✓
Floor illumination	✓
Frame-edge illumination	✓
Drop-arm	✓
Warning on forced entry	✓
Interlock against forced entry	✓
Climb-over protection	✓
Crawl-under protection	✓
Ethernet connection	✓

Accessories	
Emergency button	For triggering the alarm contacts and unlocking the turnstile or initiating the drop-arm process (optional)
Base frame	For integration in new buildings, height adjustable between 10 and 15 cm
Escape routes and wide passageways	mSwing swing door for escape routes and wide passageways
User guidance and separation of access areas	mGuide railing system for user guidance and the separation of controlled and uncontrolled areas
Adhesive plate	For adhesive mounting on finished floors

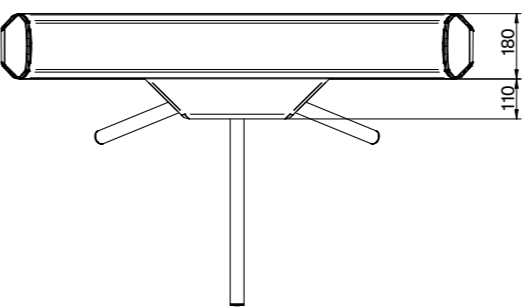
mTripod view from side



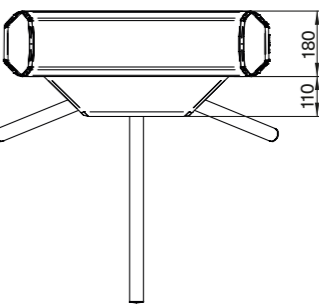
mTripod short view from side



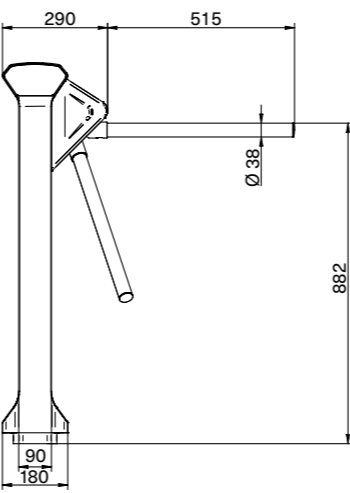
mTripod view from above



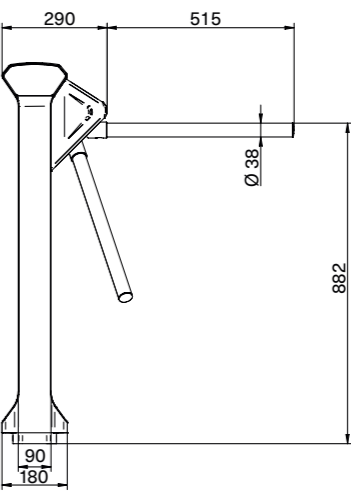
mTripod short view from above



mTripod view from front

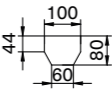


mTripod short view from front



Potential applications	

Mounting space for reading devices for mTripod and mTripod short (without passage indicator, mounting depth 40 mm)



mWing

Pedestrian passageway with wing gates

- > High visitor throughput thanks to rapid opening times and preset travel function
- > Open-gate mode for extra throughput acceleration
- > For maximum security requirements in monitored and unmonitored areas
- > Low impact forces for maximum personal safety
- > Freely turning on power outages
- > Designed for 10,000,000 opening and closing cycles

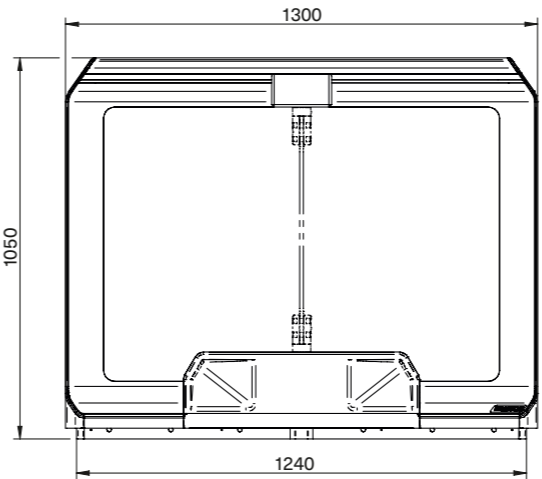


Technical data	mWing
Application	Indoor and outdoor
Passage width	Standard: 600 mm Wide Lane: 900 mm (more on request)
Total width for 1 line	960 mm (with 600 mm passage width) 1260 mm (with 900 mm passage width)
Height of barrier elements	Standard: 889 mm High: 1800 mm (more on request)
Opening/closing time	0.6 –1 s, depending on barrier element dimensions
Drive technology	MHTM™
Control system	MGC
Voltage	100–240 VAC, 50/60 Hz
Power consumption	Maximum 45 W
Duty cycle	100%
Housing material	mDure
Housing dimensions (L x W x B)	1300 x 1050 x 180 mm
Enclosure rating	IP 54
Weight	About 120 kg per module
Temperature range	–30 to +55 °C

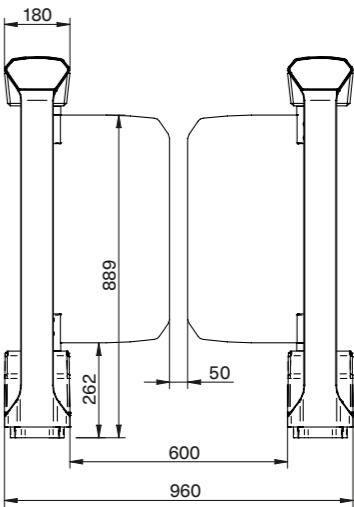
Options	
Special colours	More than 20 colour tones available according to pricelist
Barrier elements	Glass wing made of single-layer safety glass (ESG) or acrylic glass, customer-specific barrier elements
Wide passageway	Wide-lane configuration, 900 mm width
Passage direction indicator	✓
Floor illumination	✓
Frame-edge illumination	✓
Warning on forced entry	✓
Interlock against forced entry	✓
Ethernet connection	✓

Accessories	
Emergency button	For triggering the alarm contacts and unlocking the barrier elements
Base frame	For integration in new buildings, height adjustable between 10 and 15 cm
Escape routes and wide passage-ways	mSwing swing door for escape routes and wide passageways
Separation of access areas	mGuide railing system for the separation of controlled and uncontrolled areas
Adhesive plate	For adhesive mounting on finished floors

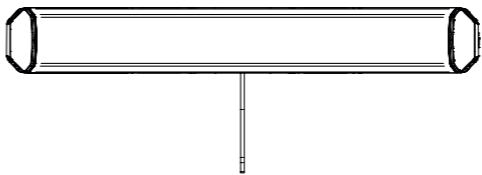
mWing view from side



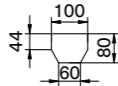
mWing view from front



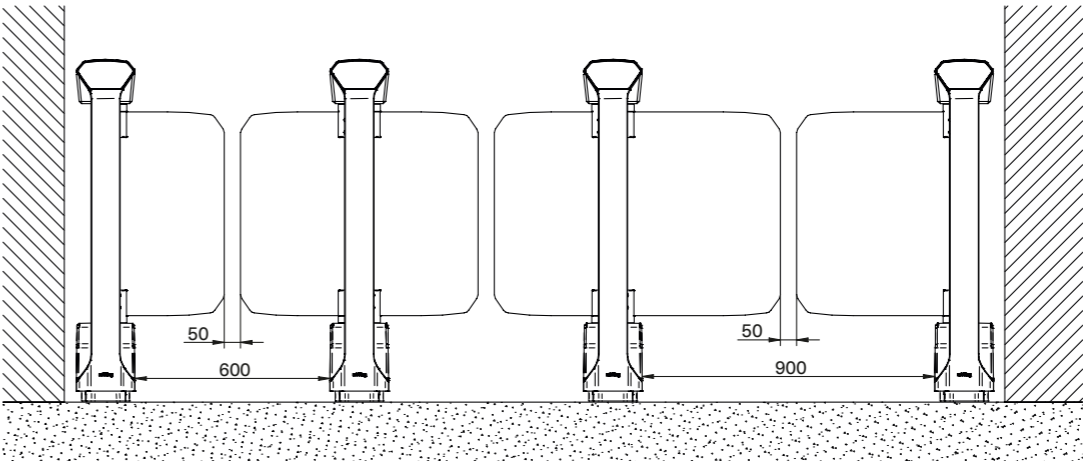
mWing view from above (1 module)



Mounting space for reader devices (without optional passage indicator, mounting depth 40 mm)



Line configuration of mWing with passage in standard width and with wide passageway



Potential applications

Equipment	
Standard colour	Basalt (sides) Anthracite (frame)
Direction of passage	Uni- or bi-directional
Escape routes	mSwing swing doors for escape routes
Emergency release	On power outage or closing of alarm contacts
Random generator	Integrated in control system
Throughput data acquisition and event log	Integrated in control system

mSwing

Swing doors

- > As single or double doors for visitor entrances, passage with baggage, transport routes and wheelchair-friendly access
- > For unobstructed escape routes in emergencies
- > Ideally complements the mTripod access control system
- > Compact accommodation of drive and control systems in the centre column
- > Low impact forces for maximum personal safety
- > Freely turning on power outages
- > Designed for 10,000,000 opening and closing cycles

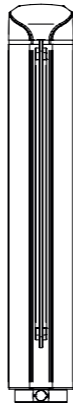


Technical data	mSwing
Application	Indoor and outdoor
Passage width	Standard: 1000 mm Wide Lane: 1200 mm (more on request)
Barrier element height	Standard: 994 mm (more on request)
Opening/closing time	1.5 – 4 s, depending on barrier element dimensions
Opening angle	Adjustable from 0 – 300°
Drive technology	MHTM™
Control system	MGC
Voltage	100 – 240 VAC, 50/60 Hz
Power consumption	Maximum 45 W
Duty cycle	100%
Housing material	Aluminium
Housing height	1092 mm
Housing diameter	Maximum 183 mm
Enclosure rating	IP 54
Approvals	Approved for escape and rescue routes
Weight	About 40 kg
Temperature range	–30 to +55 °C

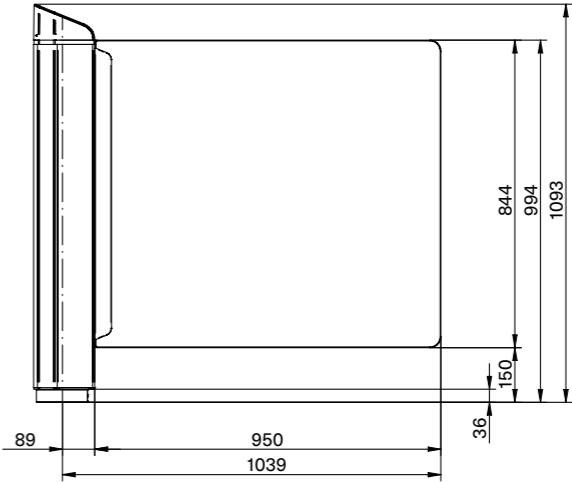
Options	
Special colours	More than 20 colour tones available according to pricelist
Barrier elements	Glass doors made of single-layer safety glass (ESG) or acrylic glass, customer-specific barrier elements
Passage width	2400 mm as double swing doors
Floor illumination	✓
Glass edge illumination	✓
Warning on forced entry	✓
Ethernet connection	✓

Equipment	
Standard colours	Basalt (column) Anthracite (cover)
Interlock against forced entry	✓
Direction of passage	Uni- or bi-directional
Emergency release	Can be parameterised: fixed position or freely turning
Reaction on power outage	Freely turning
Random generator	Integrated in control system
Throughput data acquisition and event log	Integrated in control system

mSwing view from side



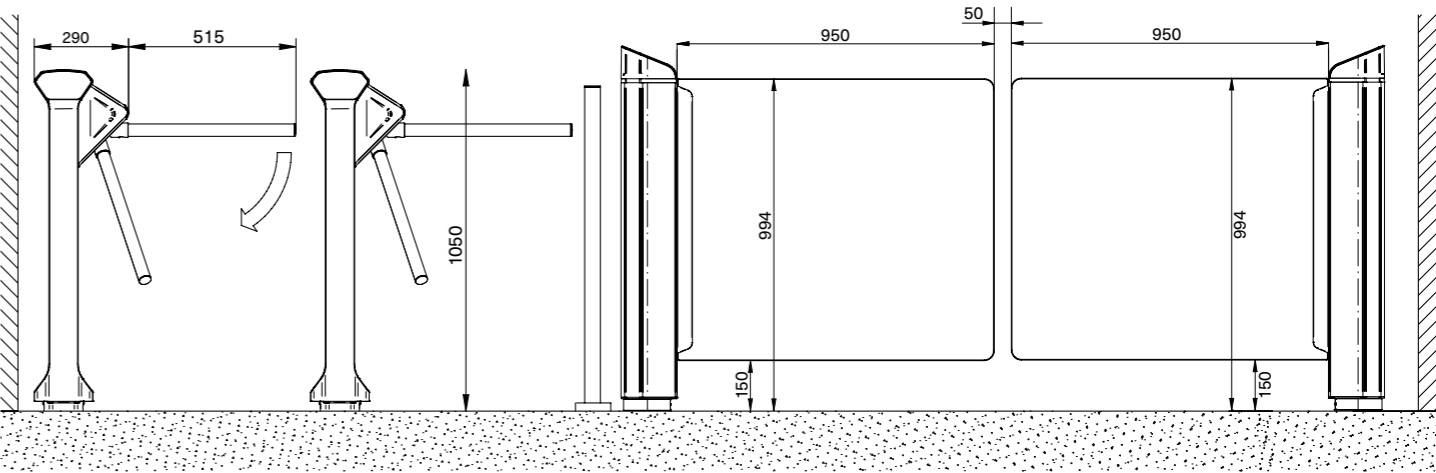
mSwing view from front



mSwing view from above



Line configuration with mTripod and mSwing as double swing gate



Potential applications				

Accessories	
Integration of card readers	mPost card reader column
Passage direction indicator	Passage direction indicator for mPost
Emergency button	For triggering the alarm contacts and unlocking the barrier elements
Foundation frame	For integration in new buildings, height adjustable between 10 and 15 cm
Separation of access areas	mGuide railing system for the separation of controlled and uncontrolled areas

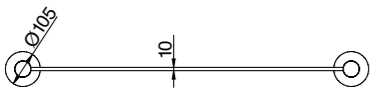
- > Separation of areas for controlled and freely accessible zones
- > Ideal supplement as user guidance system for the FlowMotion® pedestrian gates
- > Clear transparent design seamlessly integrates into demanding architectures
- > Individually adaptable to point of use thanks to flexible width
- > Safety glass provides maximum user safety



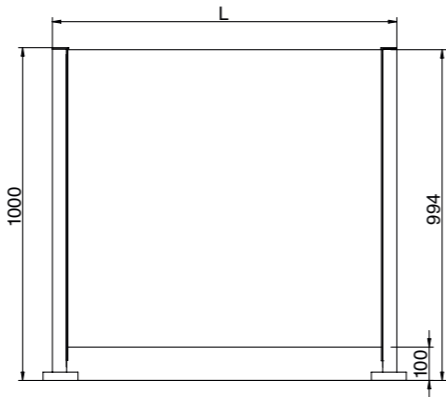
Technical data	mGuide
Barrier width	Up to 1300 mm
Barrier element thickness	10 mm
Housing material	Stainless steel V2A
Housing height	1000 mm
Housing diameter	105 mm at base, 42 mm on columns

Options	
Barrier elements	Glass panels made of single-layer safety glass (ESG) or acrylic glass, customer-specific barrier elements

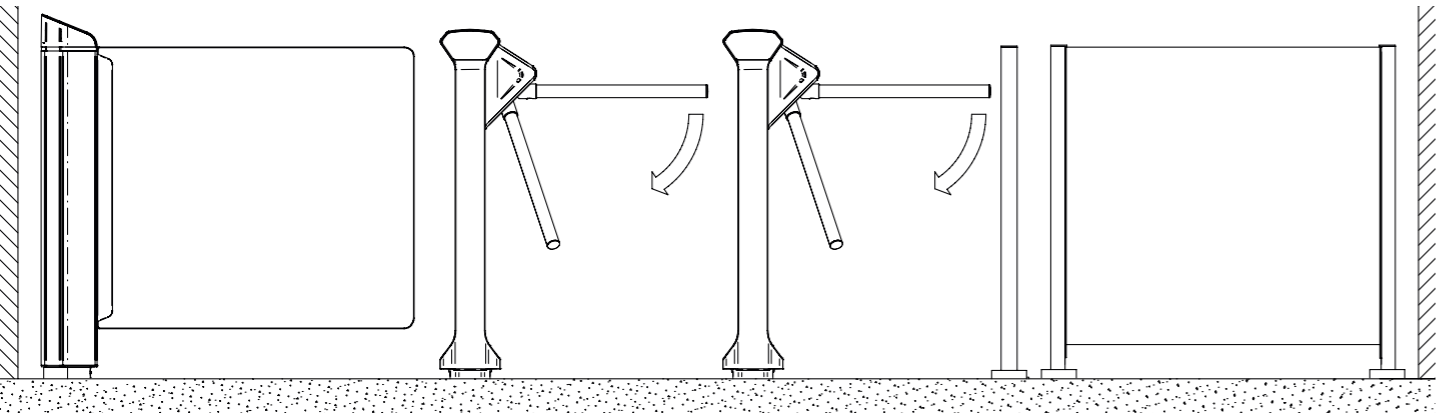
mGuide view from above



mGuide view from front



Line configuration with mSwing, mTripod and mGuide as user guidance and barrier element

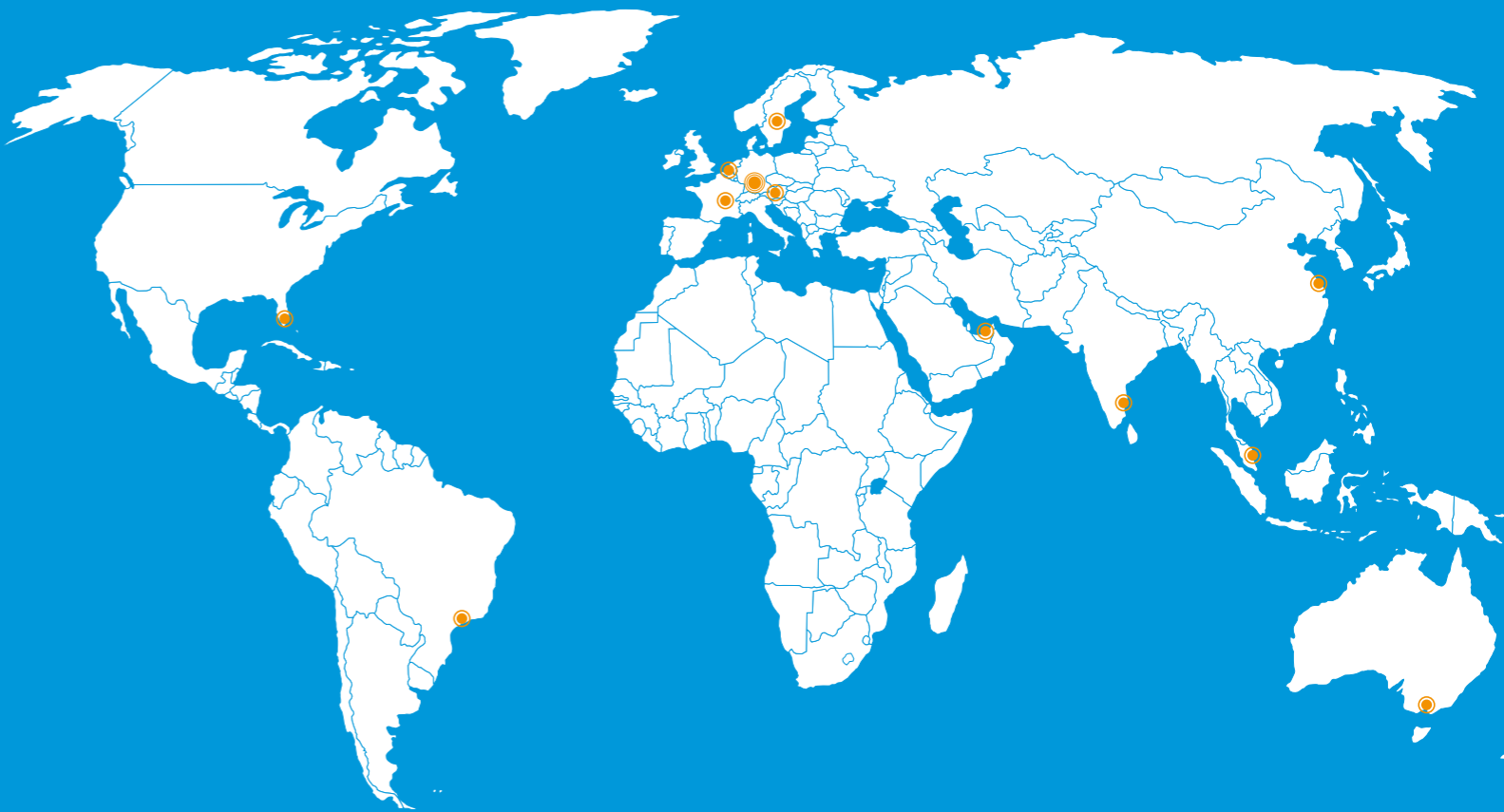


MAGNETIC – YOUR ACCESS TO PROGRESS

Magnetic Autocontrol stands for pioneering products and solutions – in every way. Our pedestrian gates and vehicle barriers open the path for thousands of people every day – in buildings, stations and airports, just as in car parks and at toll stations. Our technology is also pioneering: excellent

functionality and user-friendliness, extraordinarily long service lives, and a high level of safety take our customers that extra step further. That is why our motto is “Access to Progress”.

Try us out! We are available for you worldwide.



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Competence in access control

Revolutions question existing systems; but revolutions are also always built upon their predecessors. This also applies for FlowMotion®. Our new generation of pedestrian gates is very different from our earlier products – but our decades of experience in the development of drive and control systems still remain at the heart of every FlowMotion® gate. This not only ensures comfortable passage, maximum personal safety and particularly low operating costs, but is also responsible for the unique robustness and long service lives for which the Magnetic brand has stood for decades.

Find out more about FlowMotion® at
www.flowmotion-access.com



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