



Pedestrian High Door Gate for Low to Medium Security Access Applications

MPH 112

Technical Data	Type
Motor Drive	
Voltage	V
Frequency	Hz
Power consumption	W
Power consumption	W
Power consumption	W
Gate opening/closing time	s
Retractable panel height	mm
Weight for one lane ²	kg
Housing length	mm
Protection class	IP
Throughput	per minute
Operating temperature	°C
Passage width	mm

MPH 112 Standard Lane	
	MHTM®
	110-240
	50-60
maximum peak	100
typical	90
stand-by	80
typical	0.6-1.2
	1200, 1500, 1800
approximately	150
	1300
	32
	Up to 40
	0 / +45
	520

MPH 112 Wide Lane	
	MHTM®
	110-240
	50-60
maximum peak	300
typical	160
stand-by	60
typical	1.0-1.4
	1200, 1500, 1800
approximately	240
	1300
	32
	Up to 40
	0 / +45
	910

Product description

The MPH MPH (Magnetic Pedestrian High Door) Series pedestrian barrier was developed to control the access of persons under low to medium security requirements. Closure takes place immediately after passage or after an adjustable hold-open time. The opening and closing times can be programmed to be different from each other, the times depend on the height of the glass flaps. In its initial position the barrier is closed; it can be operated in one direction only, or in both directions.

MPH barriers are available in two versions. The standard version permits unimpeded passage for persons. The Widelane has a greater lane width and provides optimum passage for persons with luggage and for wheel chairs. A line or installation consists of at least two modules.

Typical fields of application

- ▶ Commercial buildings
- ▶ Sports Stadiums
- ▶ Museums
- ▶ Corporate entries
- ▶ Public facilities
- ▶ Airports

Housing

The housing is made of stainless steel grade 1.4301 (V2A) and is built up from several segments whose width can be varied to suit the customers requirements. Various optional access-control systems (e.g. card readers) can be readily integrated into the stainless steel front panels. These are located in every end segment of the barrier. Pictogram displays (red cross and green arrow) are installed on both end segments to indicate the direction in which passage is permitted. As an alternative to the stainless steel housing, a powder-coated version can be supplied. The housing complies with degree of protection IP32 and is suitable for indoor applications, or for outdoor use under a roof (but only with additional heating).

Drive system

The maintenance-free Magnetic High Torque Motor MHTM® is the core of our patented, gearless direct drive system. This provides numerous advantages, such as silent operation, low dynamic forces, obstacle detection, and very quick opening and closing times. In the inactive state, the motor has a very low power requirement. The heat generated prevents condensation and enables use of the barrier in extreme ambient conditions. In combination with the MBC-110 logic controller, the system provides functions for a multitude of applications.

Safety

Persons passing through the barrier are monitored by eight photocells. They detect the direction of passage and prevent closure as long as a person or object is within the safety zone of the barrier. Immediately the lane is clear, the barrier closes automatically. The combination of photocells and low forces from the barrier ensures a high standard of safety for users.

Unauthorised attempts at access/passage are detected and can trigger an alarm signal, e.g. at a safety control centre or a video system.

To prevent the barrier being forced open, the barriers are locked in their closed position. In the event of a power failure or in an emergency the barrier opens to provide free passage.

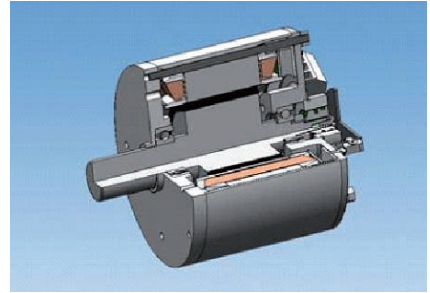
Motor technology

MHTM® Pat. No. DE 103 53 366

The reliable, maintenance-free direct drive operates almost silently; it consists of an MHTM® - "Magnetic High Torque Motor" with precision position feedback. The high torque provides rapid acceleration and braking; together with the gentle, harmonic motion, this is one of the main features of the barrier.

When no power is applied, the glass flap can be moved freely.

The MHTM® is designed to have a useful life of more than **10 million cycles** or at least **10 years** in applications as a pedestrian barrier.



Motor controller MMC-120

The motor controller permits precise regulation of the motor taking account of parameters such as torque, speed, acceleration and braking in any position.

Main features of the motor controller:

- ▶ CAN bus for integration in a network
- ▶ Safety release, e.g. by a fire alarm system
- ▶ Precision position regulation
- ▶ Adjustable acceleration and braking ramps
- ▶ LEDs for diagnosis
- ▶ Dimensions: 220 mm (L) x 141 mm (W) x 62 mm (H)



Logic controller MBC-110

The logic controller offers a high degree of functionality and flexibility to meet customer-specific requirements. It can control the pedestrian barrier either by means of serial commands from a communication point, or using digital inputs and outputs.

The MBC-110 controls all functions of the barrier independently. It accepts opening commands from an external access-control system such as a card reader or a finger-print reader, etc.

Main features of the logic controller:

- ▶ CAN bus or serial interface for integration in a network
- ▶ Control extensions via RS232/RS422/RS485/CAN bus/I=C bus
- ▶ 9 digital inputs, 6 relay outputs, 4 MOSFET outputs
- ▶ Functions: open, direction of passage, emergency, wrong direction, counting impulse, card-reader locking
- ▶ LEDs and display for service and diagnosis purposes
- ▶ DIP switches for simple selection of operating modes and functions
- ▶ Dimensions: 220 mm (L) x 185 mm (B) x 60 mm (H)



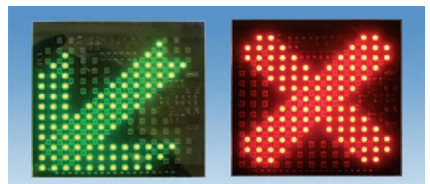
Gate end displays

The pictogram displays show, independently for each direction, whether the line is generally ready for a passage or not. Two symbols can be displayed:

- ▶ a green arrow
- ▶ a red cross

Declaration of Conformity

The barriers and controllers comply with CE requirements. On request barriers can be supplied with UL or other certification.



Dimensions and configurations:

MPH112 Horizontal Flap Barriers are available with three different flap heights. The choice of 1200 mm, 1500 mm or 1800 mm flap height depends on the security standard demanded.

Magnetic recommends 1200 mm flaps for low security requirements. For medium security, we recommend 1500 mm or 1800 mm flaps to make climbing over more difficult.

The glass flaps are made from toughened safety glass (TSG).

An access line is built up from modules (start, end, central and transition modules).

