



## Pedestrian Barriers Magstop

## Swing gate MPS 12

Technical Data:	Type	MPS 12
Drive		Torquemotor
Opening time	s	1,8
Opening angle	°	2 x 90
Voltage	VAC	230
Frequency	Hz	50
Current	A	0.4
Duty Cycle	%	100
Protection	IP	50
Weight	kg	40
Height	mm	1000
Diameter	mm	152

### Description

The MPS Series of swing gates have been developed to provide a user friendly access barrier for one-way and two-way, pedestrian traffic control. Operation in either a 1 x 90° or 2 x 90° bi-directional mode is obtained by pre-selecting the respective MUC Controller function. These gates are also used to complement our turnstile and retractable pedestrian barriers especially where passage of larger items is required. With an opening of up to 1 metre, items such as wheelchairs, trolleys and oversized packages are easily accommodated.

### Housing

The main body of the housing is constructed from a 152 mm diameter polished stainless steel tube with a brushed finish. A mounting flange is attached to the base, providing a suitable means of bolting the column to a finished floor surface. The drive unit is concealed and mounted within the main body of the housing which has a removable panel located in its lower portion. This panel is fitted with a water proof security lock and allows access to the connection terminals of the MUC controller. The rotating section of the column has 2 fixed flanges as a provision for the gate wing attachment. These flanges allow for the fixing of the standard gate wing as well as specially designed and customised gate wings. The dimensions of these can be varied to suit most applications and are available upon request.

### Technology

The MPS 12 swing barrier is operated by our well-known motor drive technology. The drive system incorporates our 3-phase Magnetic Torque Motor and self locking system which are controlled by our Magnetic Universal Controller (MUC).

The 3 phase Magnetic Torque Drive is extremely quiet and utilises a shaft encoder for speed and positioning feedback to the MUC Controller. Limit switches and end stops are not required. The torque drive mechanism ensures smooth rotation of the gate wing with both 1 x 90° or 2 x 90° operation. The special feature of dynamic ramping is incorporated into our system to ensure smooth start, rotation and slow end position approach of the gate wing. Also incorporated in our design is an electromagnetic disc brake. This brake energizes to lock the gate in its closed and open positions. In the event of a power failure, the electromagnetic disc brake de-energizes to allow free rotation of the gate wing. The MPS swing gates can be operated in either normally open or normally closed modes.

### Features

The MUC Controller is designed to ensure constant power and torque is supplied to the MPS drive system. This preset power and torque can be set low enough to ensure the gate will operate safely in all pedestrian environments. If the gate wing was to be forced in either direction or stalled during operation, no damage to the drive

system would be experienced. If the gate wing was to be in its locked position and forced open, the electric clutch mechanism would slip to prevent damage to the drive and locking mechanisms.

In such cases, the in-built shaft encoder would detect the irregularity and the controller would provide both an audible and relay alarm output from the MUC controller. After such a situation, the gate would automatically reset to its home position and lock again. The total drive unit has been designed to be maintenance free and therefore ensures a long operational life span.

### Safety

The MPS 12 has been designed to operate with a closing force of less than 150 Nm and falls within the guidelines of relevant authorities. In the case of emergency, a pressure force to the gate wing of approximately 300 Nm will disengage the disc brake, and the gate can be pushed open. No damage would be experienced by either the gate mechanism or disc brake. The alarm outputs on the MUC Controller would then be activated.

### Options

IP54 Ingress Protection (see price list)  
Gate extensions up to a total length of 1200 mm (see price list)

