



Barriers MAGSTOP

MIB 40

Technical data:	Type	MIB 40
Maximum boom length	mm	6000
Opening and closing time	s	4.0
Supply Voltage	V	230
Frequency	Hz	50
Power consumption	W	120
Housing: width	mm	350
Depth	mm	350
Height	mm	1010
Weight (not including barrier boom)	kg	50

Technical Description

The combination of our proven and reliable electric motor with a lever system represents a simple and extremely reliable drive solution. It permits fast opening and closing times without the barrier boom bouncing in the end positions. The lever system locks the barrier boom at both end positions. In the event of a power failure, it can still be moved easily by hand.

The complete drive system is attached to the barrier housing as a single unit, and can easily be removed from the housing by removing the mounting screws.

A built in spring mechanism provides a precise counterbalance for the barrier boom. The springs are factory set to correspond with the boom length prior to delivery. If necessary, the springs can be easily reset in situ during assembly, for example, if the barrier boom is shortened or if signs are attached to the boom. It is also a simple matter to change the handing on-site from right-axial to left-axial.

The Drive Unit

The barrier is driven by a torque motor mounted on a central cast aluminium support. This support also contains the bearings for the drive shaft, the gear box and the mounting for the counterbalance springs. The torque motor is designed for alternating current.

It requires neither limit switches nor a friction clutch. It is maintenance-free and can be stalled in any position without the risk of damage. In the end positions the motor remains under power assisting the mechanical locking of the barrier boom via the lever system. This reduces the power consumption to a minimum. This power is dissipated in the form of heat, which prevents the occurrence of condensation and corrosion. This guarantees reliable and problem-free operation, especially in cold climatic conditions.

The built-in position sensor provides precise barrier boom status information to the associated controller. The self-learning control device guarantees optimum braking, without the barrier boom bouncing or swinging out of the end position. The barrier is factory wired, tested, ready to connect and supplied with all necessary mounting accessories.

The Housing

The housing is manufactured from 2 mm zinc plated sheet steel on to a base frame of stainless steel, then phosphate and powder coat finished for maximum protection against corrosion.

Control devices are mounted onto a removable zinc plated sheet steel panel. All of the components within the barrier housing are readily accessible through the maintenance door and removable top cover. The housing is supplied in an RAL 2000 orange colour finish as standard. Other colours are available on request, at extra cost.

Available Versions

Barriers may be supplied with the barrier boom fitted to either the right or left hand side. In its standard configuration the maintenance access door is positioned at the front, although on request it can be any one of the other sides.

The Barrier Boom

The barrier boom is extruded from highly stable aluminium alloy to produce an octagonal profile of 100 mm x 55 mm x 1.6 mm and finished with an RAL 9010 white powder coat then applied with bright red reflective tape strips. If the barrier boom is to be any longer than 3.5 metres, it is necessary to fit either a pendulum support or fixed support post.

If the available vertical height is restricted, the barrier can, at extra cost, be supplied with an articulated boom. In order to calculate the dimensions of the articulated boom, the barrier length ($D=$) and height ($H=$) must be supplied.

The Control Device

The MLC controller was especially developed by Magnetic. Using microprocessor technology to ensure a flexible, modern approach to the control techniques, it possesses all appropriate expansion options including an I/O box and serial communications interface.

The MLC and ancillary control devices are fitted on to the fold out mounting plate.

Safety

The following safety instructions and country-specific accident prevention regulations are to be observed for installing and operating Magnetic barriers:

1. The concrete foundation must be produced by the customer in accordance with Magnetic Foundation Info MF 5115.
2. The minimum required distance between the end of the barrier boom and the nearest building is 500 mm.
3. The customer must fit all permanent barrier installations with an all-pole main switch which can be locked up.
4. The closing and opening actions must be observed. The mounting of operating elements outside the field of view is not permissible; there must be a line of visibility between the barrier and the control system.
5. It is forbidden for persons or goods to be anywhere within the swing zone of the barrier boom while it is in operation.
6. If the barrier boom is any longer than 3.5m, a pendulum support or a support post must be mounted.
7. The barrier boom fixture can withstand winds of up to a maximum of force 10 on the Beaufort scale ($=500 \text{ N/m}^2$).

The Electrical Connection

Electrical connections are carried out in accordance with factory circuit diagrams. Our control devices may necessitate the application of special connection diagrams for certain configurations. This can be supplied by us on request.

