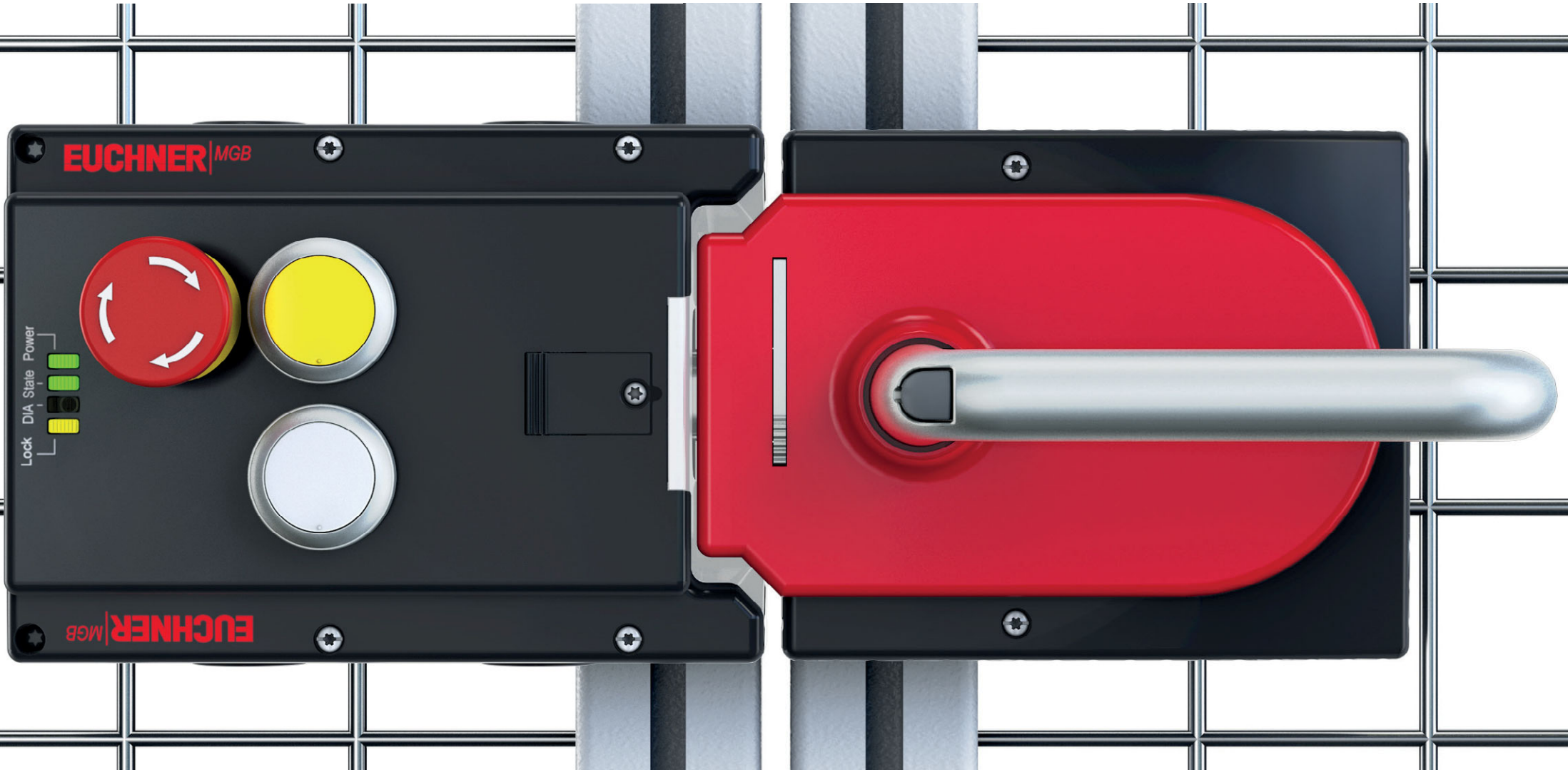


# MGB

Keeping a handle on everything!  
Multifunctional Gate Box



**EUCHNER**  
More than safety.

## Multifunctional Gate Box – MGB

# A handle on the future

The MGB (Multifunctional Gate Box) is a unique interlocking or guard locking system for the protection of safety doors on machines and systems.

### The MGB offers that little bit more:

it is more than a safety switch, more than a bolt, and offers a lot more functionality!

### A system that can grow with your needs

Even the basic system comprising handle module and interlocking/locking module includes numerous functions. Whether interlocking, guard locking, escape release or other functions such as buttons for start/stop, emergency stop, etc. – The MGB meets all your requirements for safety-related applications.

And if your needs grow, the MGB system grows with them. Due to the sophisticated modular design, the interlocking/locking module can quickly become a small operator panel.

### Be certain of compliance with new standards

Performance Level e in accordance with EN ISO 13849-1 or SIL3 in accordance with EN 62061 – even with the basic system you can comply with all these requirements. Also the requirements of EN ISO 14119 for protection against tampering are met automatically, as each interlocking/locking module is permanently assigned to a handle module.

### Safety remains the most important goal

Are you locked in, inside the danger area? The optional escape release is intuitive to operate! Whether in the event of a power failure or active guard locking – the red door handle is simply pressed down to leave the danger area quickly.

For protection when working in the danger area you can block the bolt tongue using up to 3 padlocks in the integrated lockout bar. Unintentional activation of the interlocking/guard locking is prevented.

### Easy to mount and sophisticated design

All MGB components are optimized for use on fences made of aluminum profiles or steel frames. The MGB is equally suitable for doors hinged on the left or right as well as for sliding doors. Both mounting and changing the actuating direction can be undertaken particularly quickly and easily.

The adjustment of safety doors in fences changes over time. With  $\pm 4$  mm tolerance in the x direction as well as  $\pm 5$  mm in the z direction, the MGB is right there where the problem starts. Nevertheless, if a safety door should be even more out of adjustment, the large funnel in the interlocking/locking module „catches“ the bolt tongue and guides it into the center position.

Bolt tongue, bolt guide and insertion funnel will also withstand occasional slamming of the door. Robust metal parts protect the MGB against this problem as well. To prevent injuries, the bolt tongue remains retracted with the door open.

### You always have an overview

Four built-in LEDs continuously provide all the necessary system information: Power supply available, door closed, bolt tongue inserted, guard locking activated, diagnostics messages – everything can be seen clearly at a glance. This information is of course also available to the control system.

### Sophisticated accessories

Whether you need mounting plates for easier attachment, pre-assembled cables or a long escape release actuator axis (as the safety door need to be very thick), you will find all you need in the accessories section.

### Seamless integration by means of bus connection

In the PROFINET and EtherNet/IP versions we now also make the wiring easier for you. You define which element is to be integrated and the related function. The MGB supplies the protocol frame with the necessary PROFIsafe or CIP Safety input and output bytes required. Comprehensive diagnostics information in the form of PROFINET as well as EtherNet/IP messages makes troubleshooting quick and specific. Due the typical ease with which parameters can be set in PROFINET or EtherNet/IP, even the replacement of the system in case of service is a simple matter and can be undertaken in a few minutes.

### Everything at a glance

The LED indicator continuously provides you with all important system information. Diagnostics and status check at a glance!

### Mechanical release

For releasing the guard locking, e.g. in case of a power failure.

### Intelligent bolt tongue

The bolt tongue is reliably detected by an RFID transponder as soon as it is inserted in the interlocking/locking module.

### Escape release (optional)

An escape release module can be added to the MGB. The escape release enables accidentally trapped persons to unlock and open the guard.



### Flexible color cover adaptation

The colors of the pushbuttons can be individually adapted and changed. For this purpose five different color covers are available.

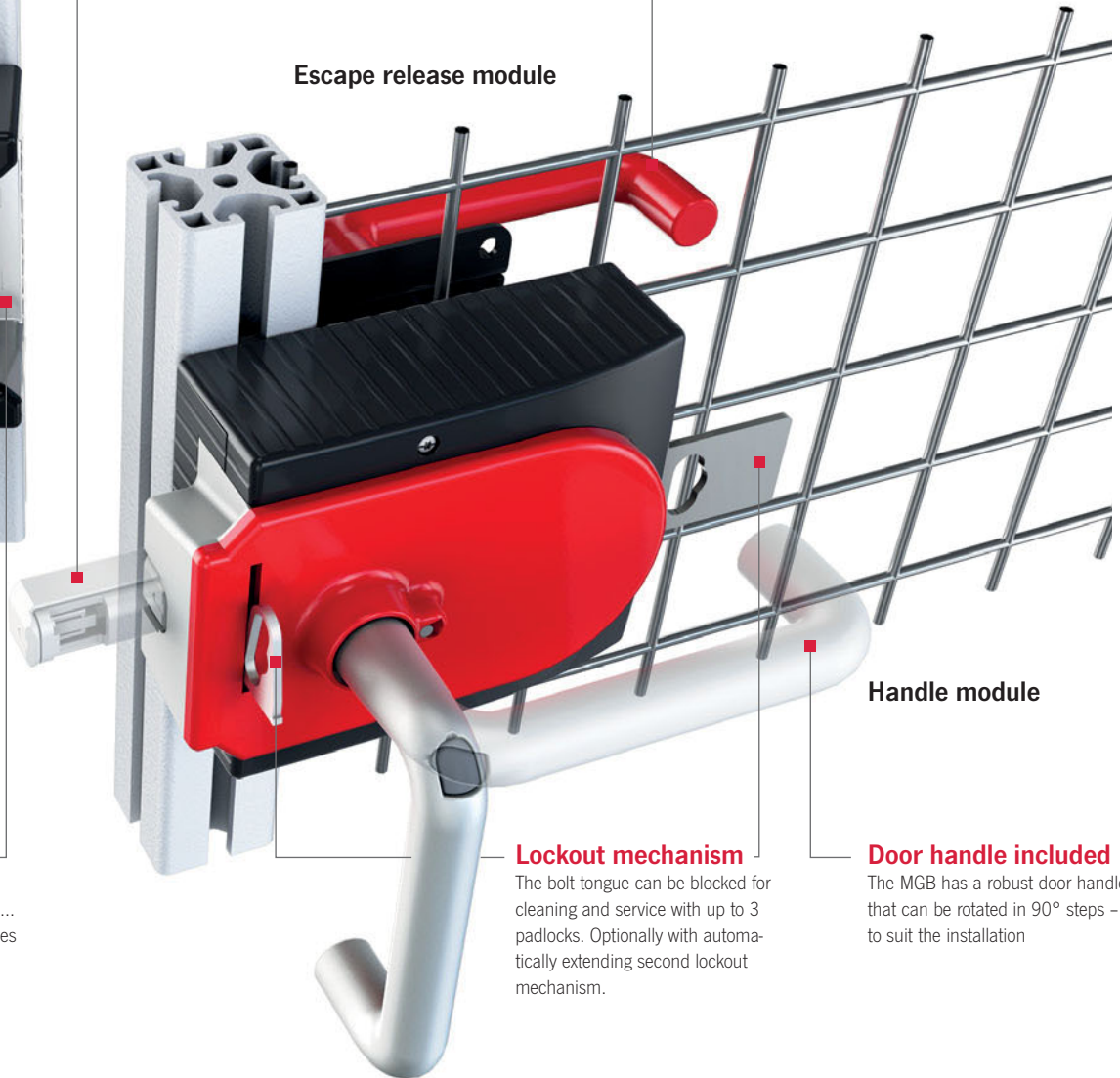
### Interlocking/locking module

### Space for ideas...

Controls and indicators in the housing cover make the MGB an all-rounder. With start button, enable and emergency stop or other functions, the interlocking/locking module becomes a small control terminal.

### Solid door stop

A mechanical door stop is permanently integrated in the locking module MGB-L.... There is a marking on the stop that makes adjustment easier.



### Escape release module

### Handle module

### Lockout mechanism





The bolt tongue can be blocked for cleaning and service with up to 3 padlocks. Optionally with automatically extending second lockout mechanism.

### Door handle included

The MGB has a robust door handle that can be rotated in 90° steps - to suit the installation

## Multifunctional Gate Box – MGB

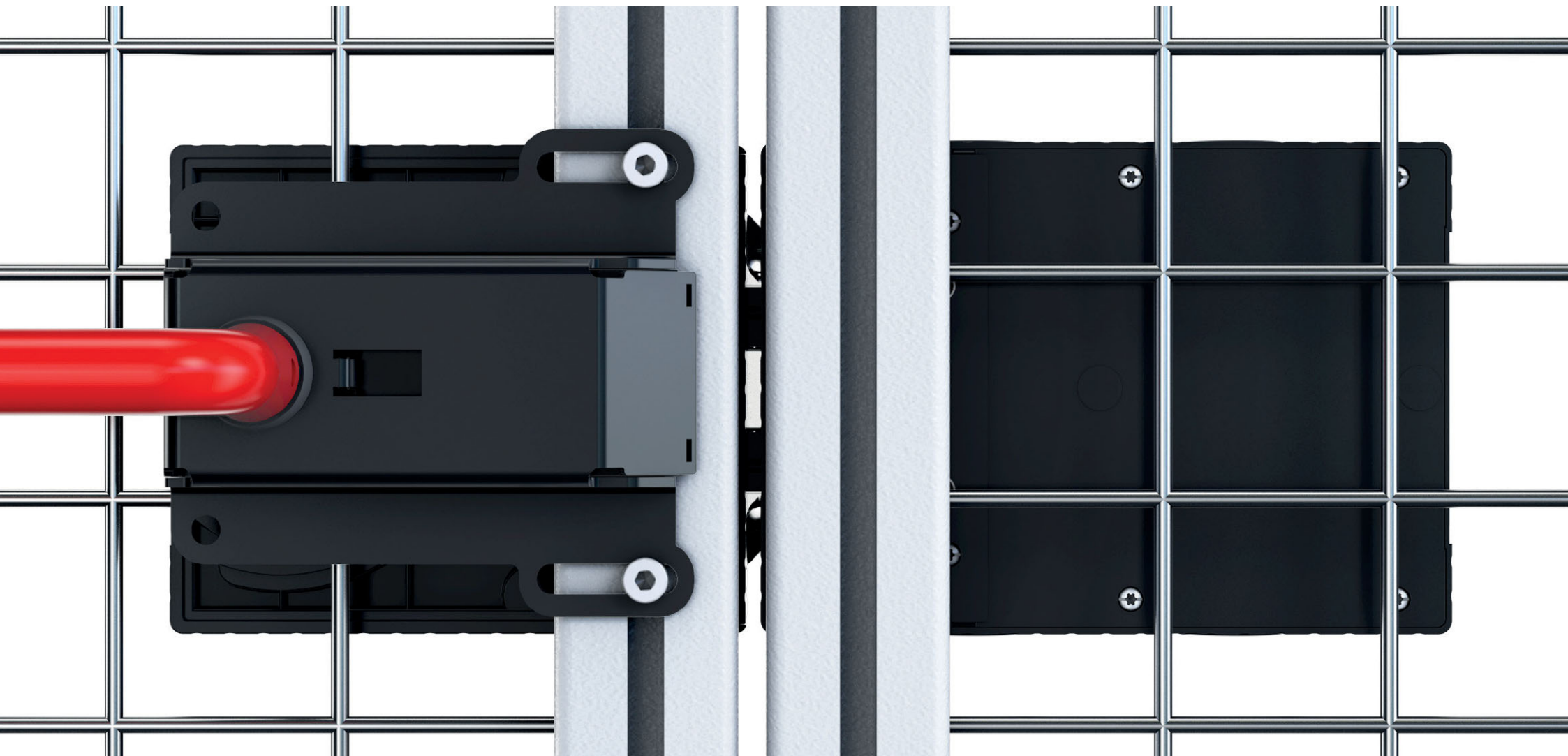
# System families at a glance

System family	Symbol	Use
<b>MGB-AP</b>		If series connection is not necessary, the number of terminals can be reduced using this system family.
<b>MGB-AR</b>		Linking of several safety guards on one shutdown path. As a consequence several safety doors can be very simply polled using one evaluation unit or two control system inputs.
<b>MGB-PN</b>		How to utilize the maximum functionality of the MGB in a PROFINET-environment. Ease of replacement and flexibility are in the foreground here.
<b>MGB-EI</b>		How to utilize the maximum functionality of the MGB in a EtherNet/IP-environment. Ease of replacement and flexibility are in the foreground here.

## The advantages of the Multifunctional Gate Box MGB

- EUCHNER RFID transponder technology: up to PL e in accordance with EN ISO 13849-1
- Optimized for easy mounting on profiles
- Complies with all the requirements of EN ISO 14119
- Plug connector versions for easy Plug & Play
- Diagnostic function via 4 status LED
- ± 4 mm tolerance in x direction, ± 5 mm in z direction
- Integrated lockout mechanism
- Optional escape release with door handle
- Optional buttons and indicators can be integrated directly into the housing
- Stable metal stop prevents damage with bolt tongue extended
- System family AP/AR can be changed via internal DIP switches
- Degree of protection up to IP 65
- Marking on the interlocking/locking module as adjustment aid
- The actuating direction is easy to change without disassembly
- Hidden mounting holes with slots and metal mounting surfaces
- Housing material made of high quality, reinforced plastic
- Escape release can also be used on doors with double rebate
- Locking force 2000 N
- The MGB withstands forces amounting up to 300 Joule
- Suitable for hinged doors as well as sliding doors

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