

# Multifunctional Gate Box MGB



# EUCHNER

More than safety.



Headquarters in Leinfelden-Echterdingen



Logistics center in Leinfelden-Echterdingen



Production location in Unterböhringen

## Internationally successful – the EUCHNER company

EUCHNER GmbH + Co. KG is a world-leading company in the area of industrial safety technology. EUCHNER has been developing and producing high-quality switching systems for mechanical and systems engineering for more than 60 years.

The medium-sized family-operated company based in Leinfelden, Germany, employs around 750 people around the world.

18 subsidiaries and other sales partners in Germany and abroad work for our international success on the market.

## Quality and innovation – the EUCHNER products

A look into the past shows EUCHNER to be a company with a great inventive spirit. We take the technological and ecological challenges of the future as an incentive for extraordinary product developments.

EUCHNER safety switches monitor safety doors on machines and installations, help to minimize dangers and risks and thereby reliably protect people and processes. Today, our products range from electromechanical and electronic components to intelligent integrated safety solutions. Safety for people, machines and products is one of our dominant themes.

We define future safety technology with the highest quality standards and reliable technology. Extraordinary solutions ensure the great satisfaction of our customers. The product ranges are subdivided as follows:

- ▶ Transponder-coded Safety Switches
- ▶ Transponder-coded Safety Switches with guard locking
- ▶ Multifunctional Gate Box MGB
- ▶ Access management systems (Electronic-Key-System EKS)
- ▶ Electromechanical Safety Switches
- ▶ Magnetically coded Safety Switches
- ▶ Enabling Switches
- ▶ Safety Relays
- ▶ Emergency Stop Devices
- ▶ Hand-Held Pendant Stations and Handwheels
- ▶ Safety Switches with AS-Interface
- ▶ Joystick Switches
- ▶ Position Switches

 **made  
in  
Germany**

## Multifunctional Gate Box MGB

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## 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 evaluation module (as interlocking module or locking module) includes numerous functions. Whether interlocking, guard locking, escape release or other functions such as pushbuttons for start/stop, emergency stop, etc. – the MGB meets all your requirements for safety-related applications.

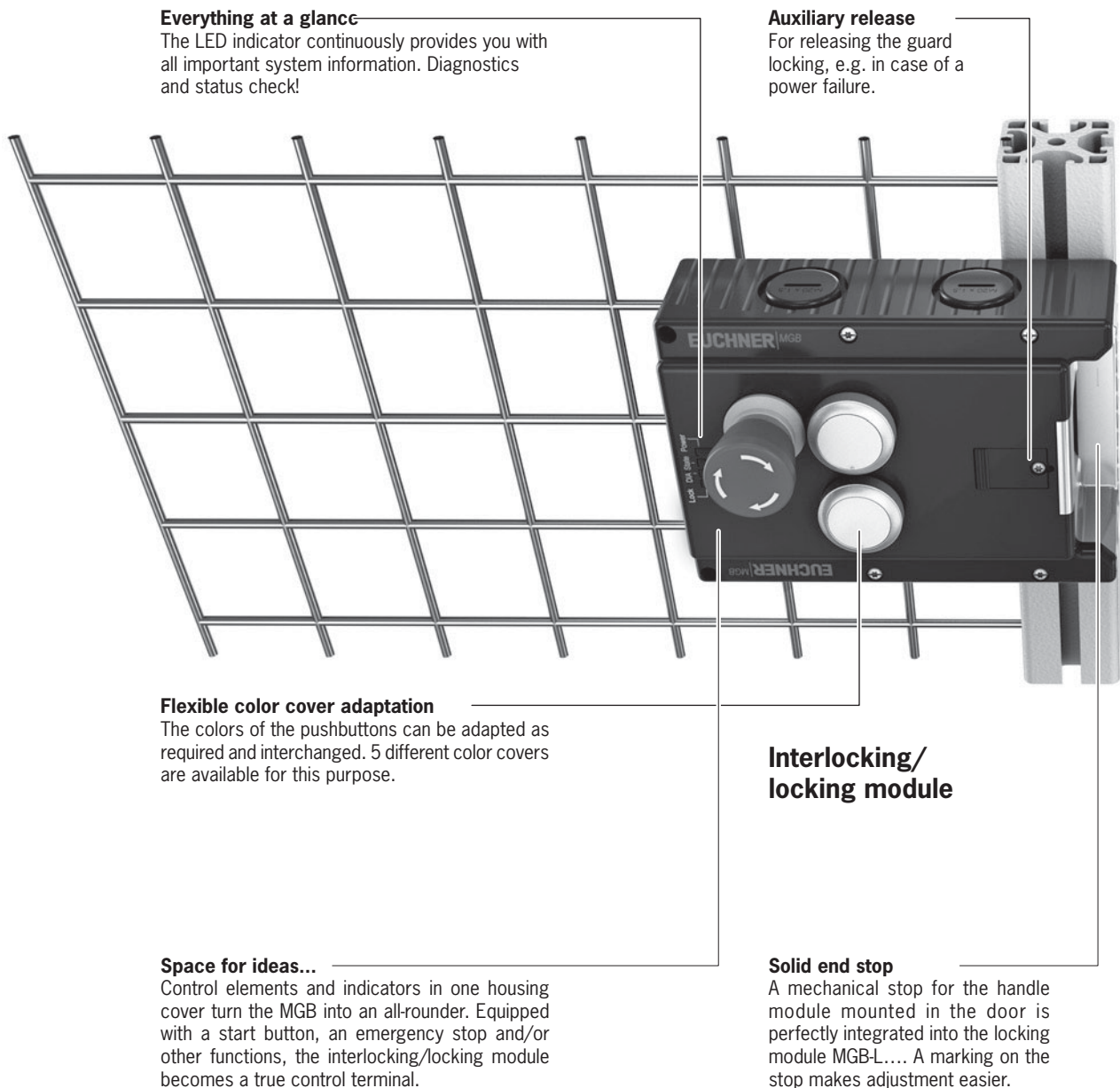
And if your needs grow, the MGB system grows with them. Due to the sophisticated modular design, the evaluation module can quickly become a small control panel.

### Or with an additional control module straight away

In the wide variety of different MGBs, you will definitely find the right one for your application. If not, using the control module you can add lamps, pushbuttons or even completely different operating functions. The control module is permanently fastened to the evaluation module using the connection set.

### Be certain of compliance with standards

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



### Everything at a glance

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

### Auxiliary release

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

### Flexible color cover adaptation

The colors of the pushbuttons can be adapted as required and interchanged. 5 different color covers are available for this purpose.

### Space for ideas...

Control elements and indicators in one housing turn the MGB into an all-rounder. Equipped with a start button, an emergency stop and/or other functions, the interlocking/locking module becomes a true control terminal.

### Interlocking/locking module

### Solid end stop

A mechanical stop for the handle module mounted in the door is perfectly integrated into the locking module MGB-L.... A marking on the stop makes adjustment easier.

**Safety remains the most important goal**

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

For protection when working in the danger zone you can block the bolt tongue using up to 3 padlocks in the integrated lockout mechanism. Unintentional activation of the interlocking/guard locking is prevented. Is the lockout mechanism to extend automatically when the door is open? No problem with the right handle module.

**Easy to mount and sophisticated design**

All MGB modules 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. Both mounting and changing the actuating direction can be undertaken particularly quickly and easily. Usage on safety doors that are not constructed of profiles, works of course just as well.

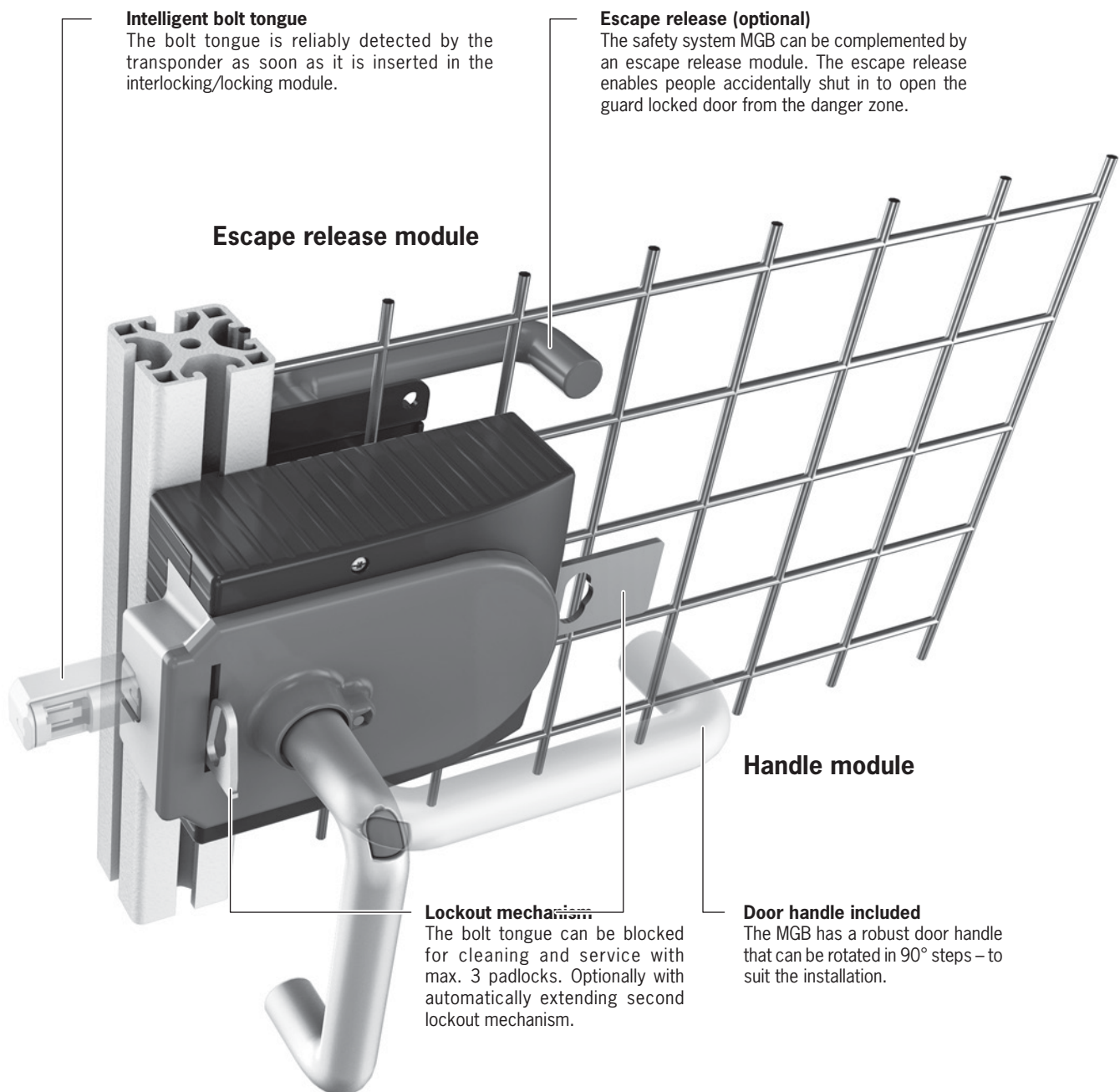
The adjustment of safety doors in fences changes over time. With  $\pm 4$  mm tolerance in the x direction as well as  $\pm 5$  mm in the z direction, the MGB is right there where the problem starts. Nevertheless, if a safety door should be even more out of adjustment, the large funnel in the evaluation 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. Do you use hinged doors or sliding doors? The MGB is suitable for both. This aspect eases spare parts stockholding.

**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.

(Read on the next page what else there is in the MGB!)



**Intelligent bolt tongue**

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

**Escape release (optional)**

The safety system MGB can be complemented by an escape release module. The escape release enables people accidentally shut in to open the guard locked door from the danger zone.

**Escape release module**

**Handle module**

**Lockout mechanism**

The bolt tongue can be blocked for cleaning and service with max. 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.

## Sophisticated accessories

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

## Economical wiring according to standards

All devices in the family AR can be wired directly in series in a so-called AR series connection without reducing safety or the PL. As a consequence evaluation units are saved. AR devices are also available in the EUCHNER series CES and CET.

The family MGB-AP is particularly suitable for the protection of individual safety doors. If series connection is not necessary, wiring can then be saved. This version has different timing to the AR version.

## Seamless integration by means of bus connection

In the PROFINET version 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 PROFINET input and output bytes required.

Comprehensive diagnostic information in the form of PROFINET messages makes troubleshooting quick and specific. Due to the typical ease with which parameters can be set in PROFINET, even the replacement of the system in case of service is a simple matter and can be undertaken in a few minutes.

## Interlocking or guard locking?

### Functions of the versions MGB-LO, MGB-L1 and MGB-L2 compared

#### Interlocking devices (MGB-LO, without guard locking)

Together with a handle module, the interlocking module makes it possible to interlock the control of movable guards. The combination also serves as a mechanical door stop at the same time.

The following switch-on condition applies to the safety outputs FO1A and FO1B (see also System status table):

- ▶ Guard closed (but can be opened at any time)
- ▶ Bolt tongue inserted in the interlocking module

The interlocking module detects the position of the guard and the position of the bolt tongue.

The bolt tongue in the handle module is moved into and out of the interlocking module by actuating the door handle.

## Guard locking devices (MGB-L1 and MGB-L2)

Together with a handle module, the locking module makes it possible to lock movable guards. The combination also serves as a mechanical door stop at the same time.

The following switch-on condition applies to the safety outputs FO1A and FO1B (see also System status table):

- ▶ Guard closed
- ▶ Bolt tongue inserted in the locking module
- ▶ Locking arm in locking position (the door cannot be opened)

The locking module detects the position of the guard and the position of the bolt tongue. The position of the guard locking is also monitored.

The bolt tongue in the handle module is moved into and out of the locking module by actuating the door handle.

When the bolt tongue is fully inserted in the locking module, the locking arm locks the bolt tongue in this position. Depending on the version, this locking is by spring force or solenoid force.

- ▶ **Version MGB-L1:**The locking arm is held in the locked position by spring force and is unlocked by solenoid force (closed-circuit current principle, mechanically locked).
- ▶ **Version MGB-L2:**The locking arm is held in the locked position by solenoid force and is unlocked by spring force when the solenoid is switched off (open-circuit current principle, electrically locked).

#### Warning!

The guard can be opened immediately in the event of interruption of the solenoid power supply with the version MGB-L2-...!

This type may be used only in special cases after strict assessment of the accident risk (see EN ISO 14119:2013, section 5.7.1)!

Example: If the risk of accidental locking inside a guard during a power failure is higher than the risk of ineffective guard locking.

## Flexible adaptation through configuration

The evaluation module can be configured with the aid of DIP switches. Depending on the setting, the evaluation module behaves like an MGB-AP or MGB-AR device. In addition, guard lock monitoring can be switched on or off, if guard locking is installed.

From V2.2.0, an unlocking monitoring function can be activated that signals whether the auxiliary release or escape release was actuated when guard lock monitoring is active.

## Connection to evaluation units or safe control systems

The safety system MGB can be connected to almost any safe evaluation unit or to any safe control system. For this purpose the cross circuit monitoring on the control system is disabled – this function is performed by the MGB. Performance Level e is of course retained.

## The advantages of the Multifunctional Gate Box MGB

- ▶ Suitable for all profiles (optimized for mounting on profiles)
- ▶ Tolerance  $\pm 4$  mm in x direction,  $\pm 5$  mm in z direction
- ▶ Locking force 2000 N
- ▶ The MGB withstands forces amounting up to 300 Joule
- ▶ Optional escape release with door handle
- ▶ Optional pushbuttons and indicators can be integrated directly into the housing
- ▶ Stable metal stop prevents damage with bolt tongue extended
- ▶ Marking on the evaluation 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, fiber glass reinforced plastic
- ▶ Escape release can also be used on doors with double rebate




## These features are available in all devices in the families MGB-AP and MGB-AR

- ▶ Emergency release
- ▶ Connection by cable entry, max. 1.5 mm<sup>2</sup> or plug connector
- ▶ Plug connector connection, either M23 or M12 12-pin
- ▶ Series connection (only with system family AR, for description see above)
- ▶ Connection of pushbuttons to common power supply DC 24 V
- ▶ Connection of lamps to common ground
- ▶ Operation of guard locking via IMP as control input on PLC (only 3 mA)
- ▶ Monitoring outputs
  - ▶ OD = Door closed
  - ▶ OT = Bolt tongue inserted in the evaluation module (in case of guard locking devices ready for operation of the solenoid)
  - ▶ OL = Guard locking solenoid kept in locked position
  - ▶ OI = Diagnostics, there is a fault

## System families at a glance

The tables on this page provide you with a quick overview of the features and strengths of the related product family as well as the possible expansions.

### What system families are available?

System family	Symbol	Use
MGB-AP		If series connection is not necessary, the number of terminals can be reduced using this system family.
MGB-AR		Linking of several 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.
MGB-PN		How to utilize the maximum functionality of the MGB in a Profinet environment. Ease of replacement and flexibility are in the foreground here.

It is possible to switch between the MGB-AP and MGB-AR families using DIP switches.

## System families compared

The tables provide you with a quick overview of the features and strengths of the related product family as well as the possible expansions.

Feature / special aspect	System family		
	MGB-AP	MGB-AR	MGB-PN
Separate operation	●	○	–
Series connection	–	●	–
Bus connection	–	–	●
Simple diagnostics	○	○	●
Little wiring	●	○	●

Key:

● Particularly suitable    ○ Suitable    – Not applicable/not possible

Function / expansion	System family		
	MGB-AP	MGB-AR	MGB-PN
Evaluation module with additional functions	● Selection from existing versions, customer-specific version possible *	● Selection from existing versions, customer-specific version possible *	● Selection from existing versions, customer-specific version possible *
Control module with additional functions	○ Flexible configuration due to kit MGB-C (only devices with cable entry)	○ Flexible configuration due to kit MGB-C (only devices with cable entry)	○ Configuration from factory by EUCHNER
Mounting plates	○	○	●
Connection for enabling switch	○ Available in some versions	○	○ Available in some versions
Escape release	Already contained in some sets, can be upgraded at any time.		

Key:



● Standard    ○ Optional or on request    – Not possible

\*) Note minimum order quantity of 50 pieces!

**Approvals**




To demonstrate conformity, the Machinery Directive also includes the possibility of type examination. Although all relevant standards are taken into account during development, we have all our safety switches subjected to additional type examinations by a notified body.

Many of the devices listed in this catalog have been tested by the German Social Accident Insurance association (DGUV), formerly the employers' liability insurance association (BG), and are given in the lists from the DGUV. With the aid of the approval symbols listed below you can quickly see which approvals are available for the related devices:




	Devices with this symbol are type examined by the German Social Accident Insurance association (DGUV) – formerly the employers' liability insurance association (BG)
	All MGB devices comply with the stipulations of Underwriter Laboratories (UL) and carry the symbol

**Explanation of symbols**




**System families**













	System family MGB-AP for separate operation
	System family MGB-AR for separate operation or series connection with other AR devices
	System family MGB-PN for operation in PROFINET environment

**Safety category/guard locking**

	Suitable up to category 4 or Performance Level e in accordance with EN ISO 13849-1
	Guard locking for personnel protection
	Guard locking for process protection

**Controls and indicators**

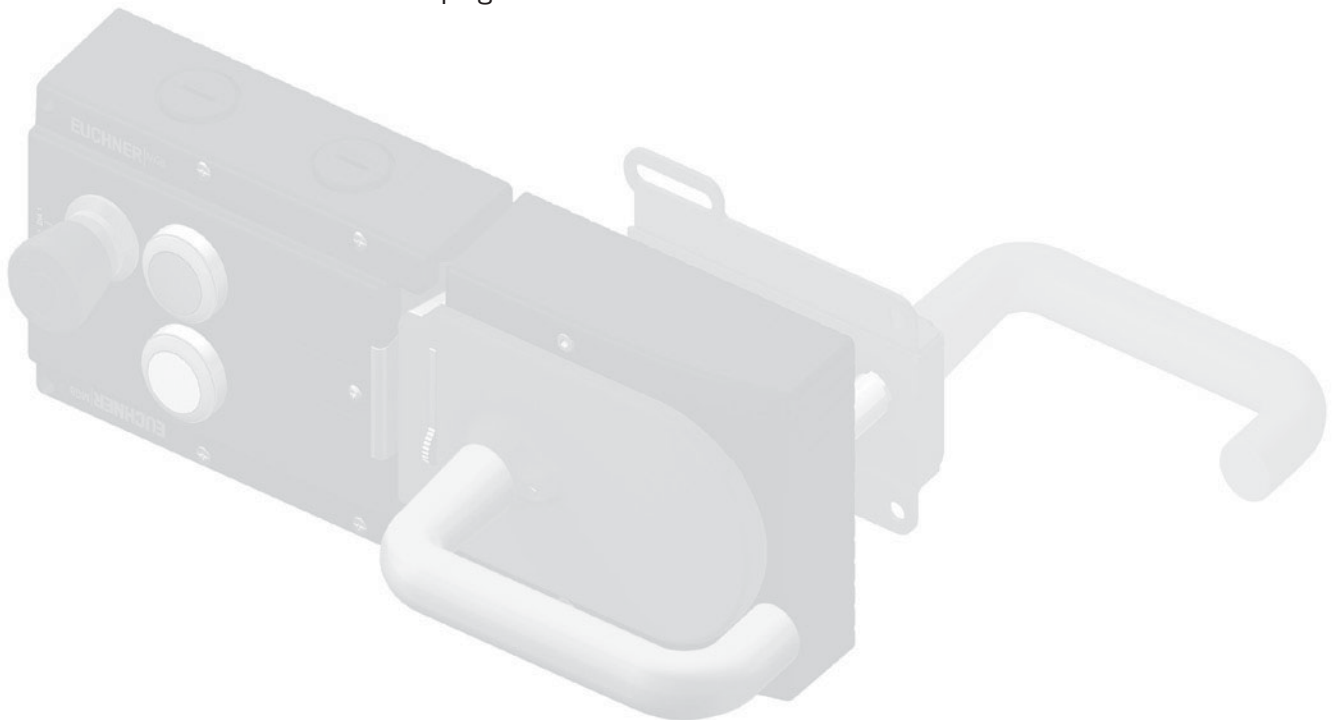
	Emergency stop according to ISO 13850
	Illuminated emergency stop
	Emergency stop with monitoring contact

	Machine stop (black-silver)
	Machine stop (black-silver) with monitoring contact
	Illuminated pushbutton
	Pushbutton not illuminated
	LED
	Selector switch form V
	Selector switch form V illuminated
	Key-operated selector switch form V
	Key-operated selector switch form L
	Pushbutton labeling "Unlocked"
	Pushbutton labeling "Locked"
	Other possible button labels



**Complete sets system families MGB-AP/MGB-AR**

- ▶ Interlocking or guard locking with handle module
- ▶ With escape release
- ▶ With pushbuttons and emergency stop
- ▶ With plug connectors

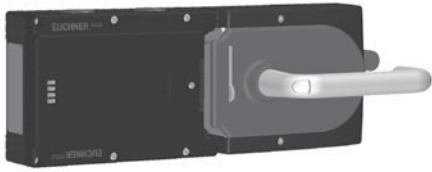


MGB-AP  
MGB-AR

<b>Interlocking sets MGB-L0-... (without guard locking)</b>	<b>10 - 15</b>
without controls and indicators	10
with 2 controls and indicators	12
with 3 controls and indicators	14
<b>Locking sets MGB-L1-... (guard locking by spring force)</b>	<b>16 - 36</b>
without controls and indicators	16
with 1 control and indicator	18
with 2 controls and indicators	20
with 3 controls and indicators	26
with 4 controls and indicators	34
<b>Locking sets MGB-L2-... (guard locking by solenoid force)</b>	<b>38 - 49</b>
without controls and indicators	38
with 2 controls and indicators	40
with 3 controls and indicators	44
with 4 controls and indicators	48
<b>Technical data</b>	<b>50</b>
<b>Dimension drawings</b>	<b>51</b>

## Interlocking sets MGB-LO-... without controls or indicators

Cat.  
4  
PLe


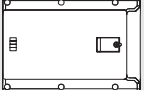
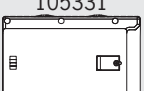


### Further information

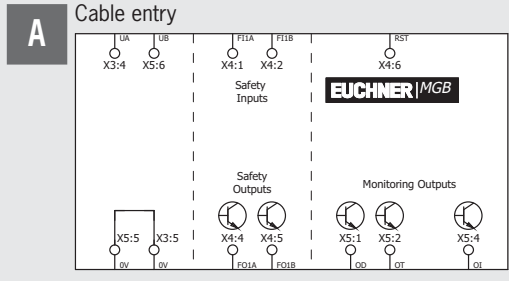
- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry

### Ordering table

Modules in the set							Ordering data, set			
Version/configuration scheme Order no. separate module	Locking module					Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4						
	 105331	-	-	-	-	A	100464	-	Right	<b>105778</b> MGB-LOH-AR-R-105778
	 105331	-	-	-	-		100465	-	Right	<b>105780</b> MGB-LOHE-AR-R-105780

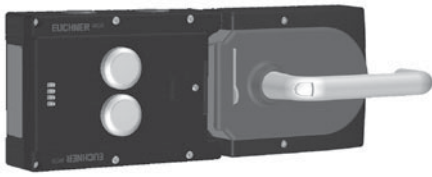
Block diagram



MGB-AP  
MGB-AR

## Interlocking sets MGB-LO-... with 2 controls or indicators

Cat. 4  
PLe



### Details

#### Lens set

The color of the pushbutton can be selected using the lens set 120344 included.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

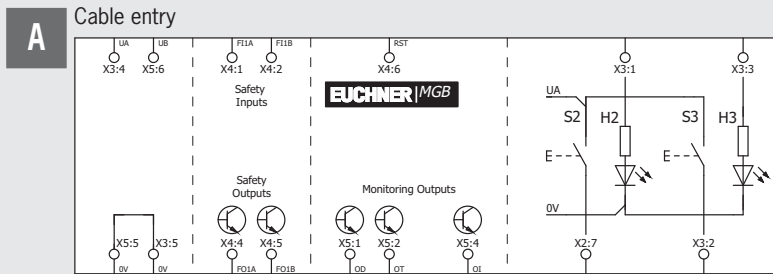
- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry
- ▶ Integrated controls and indicators

### Ordering table for complete sets

Modules in the set									Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module					Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4						
  121058	-	 *)	 *)	-	 A	100464	-	Right	 <b>121059</b> MGB-LOH-ARA-R-121059	

\* The color can be selected using the lens set included.

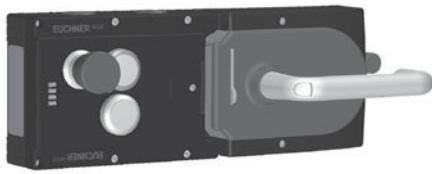
Block diagram and wiring diagram for controls and indicators



MGB-AP  
MGB-AR

## Interlocking sets MGB-LO-... with 3 controls or indicators

Cat. 4  
PLe



- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Details

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

#### Lens set

The color of the pushbutton can be selected using the lens set 120344 included.

#### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

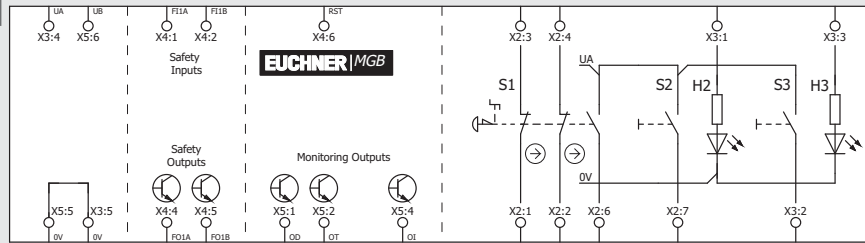
### Ordering table

Modules in the set							Ordering data, set		
Version/configuration scheme Order no. separate module	Locking module					Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram				
121232 							100465		<b>121233</b> MGB-LOHE-ARA-R-121233
121253  Incl. adhesive labels		*)	*)	-	<b>A</b>	100464		Right	<b>121254</b> MGB-LOH-ARA-R-121254
 121259  Incl. adhesive labels						106619		Left	<b>121260</b> MGB-LOH-ARA-L-121260
116300  Incl. adhesive labels				-	<b>B</b>	111157		Right	<b>110691</b> MGB-LOHE-ARA-R-110691
116302  Incl. adhesive labels		ye	wh			111158	100465	Left	<b>110692</b> MGB-LOHE-ARA-L-110692

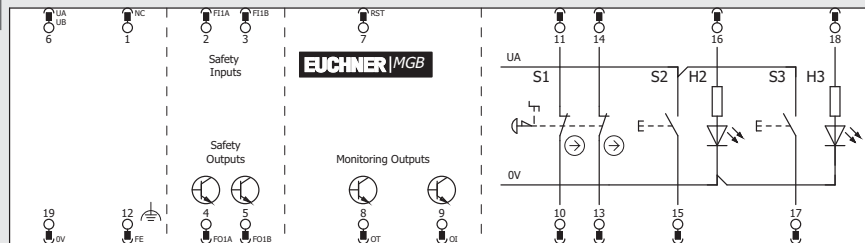
\* The color can be selected using the lens set included.

## Block diagram and wiring diagrams for controls and indicators

### A Cable entry



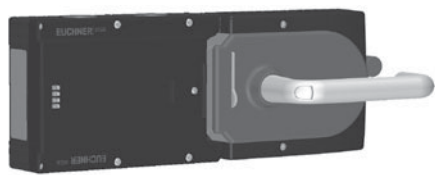
### B Plug connector M23



MGB-AP

MGB-AR

**Locking sets MGB-L1-... (guard locking by spring force) without control or indicator**


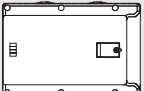
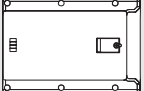
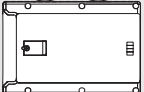


### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector

### Ordering table

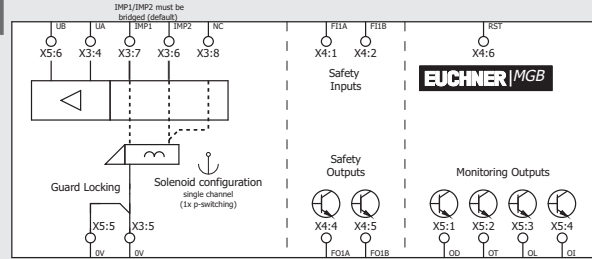
Modules in the set								Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
	 104302	-	-	-	<div style="background-color: #444; color: white; text-align: center; padding: 5px;">A</div>	100464	100465	Right	<b>105784</b> MGB-L1HE-AR-R-105784
							-		<b>105782</b> MGB-L1H-AR-R-105782
	 111071	-	-	-	<div style="background-color: #444; color: white; text-align: center; padding: 5px;">B</div>	106619	-	Left	<b>111070</b> MGB-L1H-AR-R-111070
 111074	-	-	-	<b>111073</b> MGB-L1H-AR-L-111073					



## Block diagram

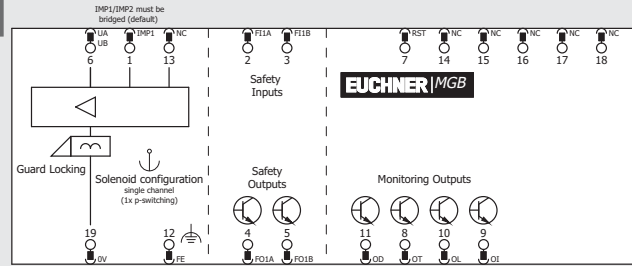
**A**

### Cable entry



**B**

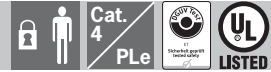
### Plug connector M23



MGB-AP

MGB-AR

**Locking sets MGB-L1-... (guard locking by spring force) with one control or indicator**



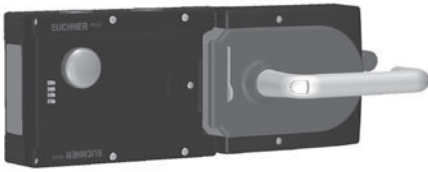
### Details

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)



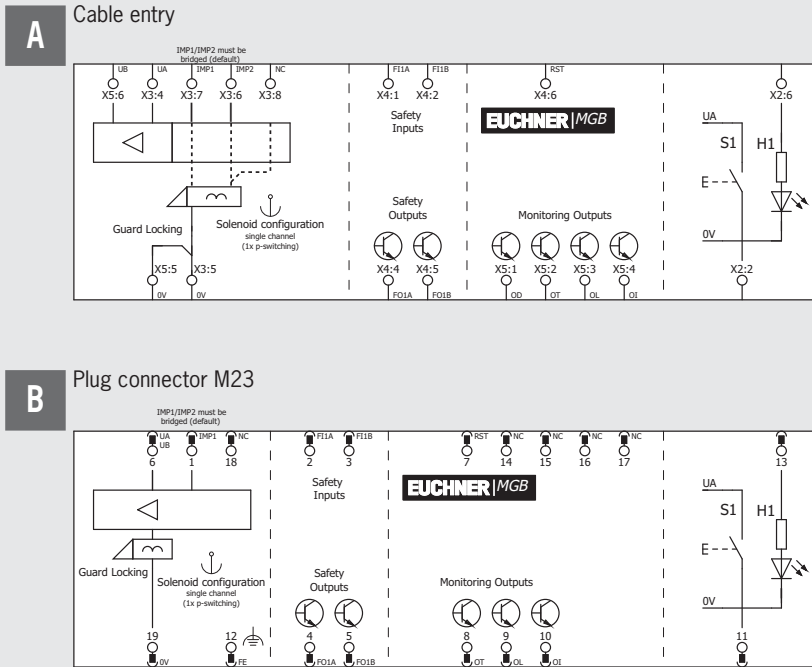
- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated control and indicator

### Ordering table

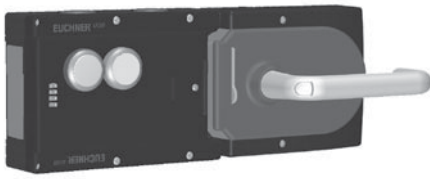
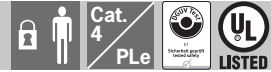
Modules in the set								Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
120990 					<b>A</b>	100464	100465	Right	<b>120991</b> MGB-L1HE-ARA-R-120991
121034 		-	-	-					
121039 					<b>B</b>	106619		Left	<b>121040</b> MGB-L1HE-ARA-L-121040

\* The color can be selected using the lens set included.

Block diagram and wiring diagrams for control and indicator



## Locking sets MGB-L1-... (guard locking by spring force) with 2 controls or indicators



- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Details

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

#### Key-operated rotary switch

- ▶ **Form L**, 90° angle of rotation with 2 positions. The key latches in both positions and can be removed in both positions. Devices with key-operated switch form L have degree of protection IP 54.
- ▶ **Form V**, 40° angle of rotation with 2 positions. The key latches in position 0 and can be removed in position 0.

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Modules in the set										Ordering data, set
Version/configuration scheme Order no. separate module	Locking module					Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4						
121130 			-	-	<b>A</b>	100464	100465	Right	<b>121131</b> MGB-L1HE-ARA-R-121131	
121050 			-	-	<b>B</b>	100464	-	Right	<b>121051</b> MGB-L1H-ARA-R-121051	
							100465		<b>121052</b> MGB-L1HE-ARA-R-121052	
124691 					<b>C</b>	100464		Right	<b>124098</b> MGB-L1H-ARA-R-124098	
124692 			-	-		106619		Left	<b>124099</b> MGB-L1H-ARA-L-124099	

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

Modules in the set							Ordering data, set		
Version/configuration scheme <small>Order no. separate module</small>	Locking module				Wiring diagram	Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
119806 					D	114655	100465	Right	<b>119807</b> MGB-L1HE-ARA-R-119807
IP 54			-	-		114656		Left	<b>119809</b> MGB-L1HE-ARA-L-119809
119808 									
IP 54									
AR 	121060 					100464	100465	Right	<b>121061</b> MGB-L1H-ARA-R-121061
									<b>121062</b> MGB-L1HE-ARA-R-121062
									<b>121087</b> MGB-L1HE-ARA-R-121087 (with lens set 120378)
	121086 								<b>121170</b> MGB-L1H-ARA-R-121170
	Incl. adhesive labels					E			<b>121171</b> MGB-L1H-ARA-L-121171
			*)	*)					<b>121089</b> MGB-L1HE-ARA-L-121089 (with lens set 120378)
								<b>121069</b> MGB-L1HE-ARA-L-121069	
121088 						106619	100465	Left	<b>121068</b> MGB-L1H-ARA-R-121068
Incl. adhesive labels									
121067 									

\* The color can be selected using the lens set included.


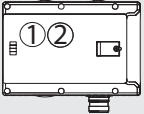


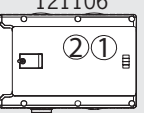


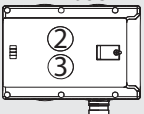


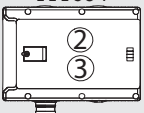


(Continued on next page)

MGB-AP  
MGB-AR

## Locking sets MGB-L1-... (guard locking by spring force) with 2 controls or indicators



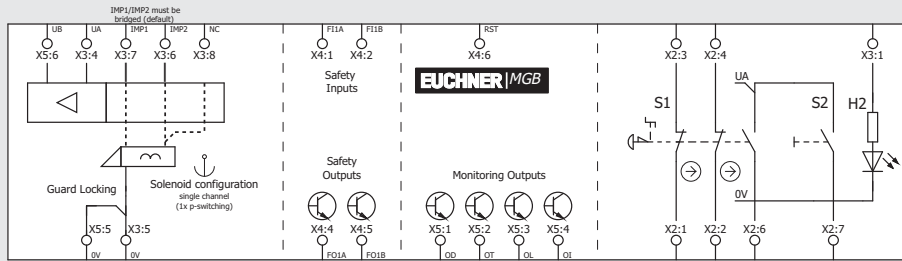
### Ordering table (continued)

Modules in the set							Ordering data, set			
Version/configuration scheme <small>Order no. separate module</small>	Locking module					Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item	
	S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram					
 121104  Incl. adhesive labels			-	-	<b>F</b>	100464	-	Right	<b>121105</b> MGB-L1H-ARA-R-121105	
121106  Incl. adhesive labels	 *)	 *)	-	-	<b>F</b>	106619	-	Left	<b>121107</b> MGB-L1H-ARA-L-121107	
111653  Incl. adhesive labels	-	 ye	 wh	-	<b>G</b>	100464	-	Right	<b>111655</b> MGB-L1H-ARA-R-111655	
111654  Incl. adhesive labels	-	 ye	 wh	-	<b>G</b>	106619	-	Left	<b>111656</b> MGB-L1H-ARA-L-111656	

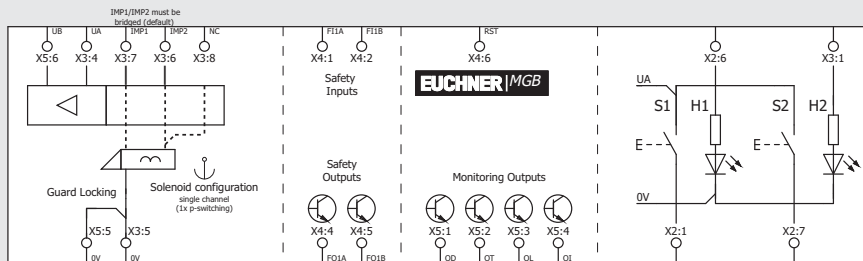
\* The color can be selected using the lens set included.

Block diagram and wiring diagrams for controls and indicators

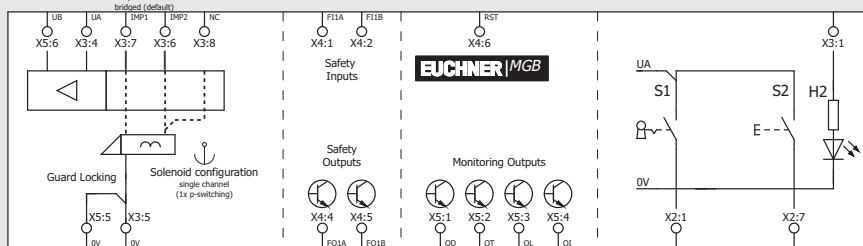
**A** Cable entry



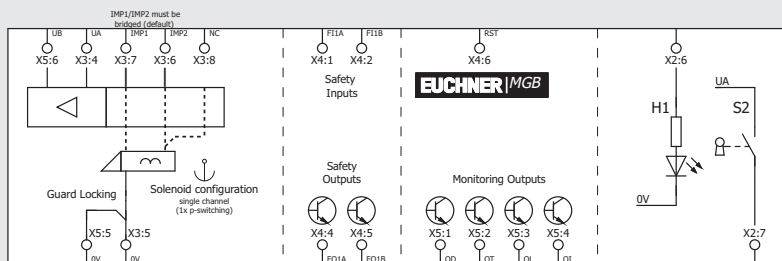
**B** Cable entry



**C** Cable entry



**D** Cable entry

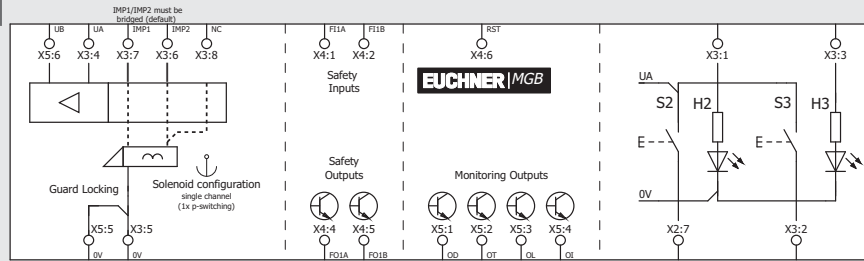


Locking sets MGB-L1-... (guard locking by spring force) with 2 controls or indicators

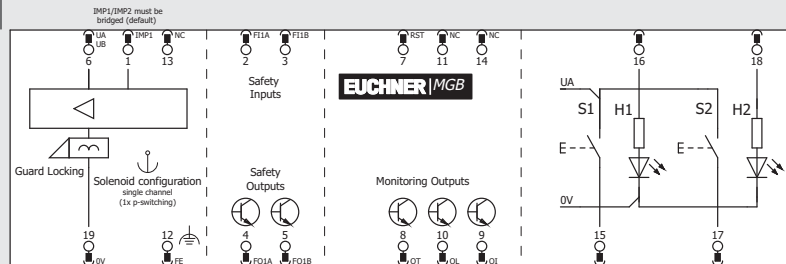


## Block diagram and wiring diagrams for controls and indicators

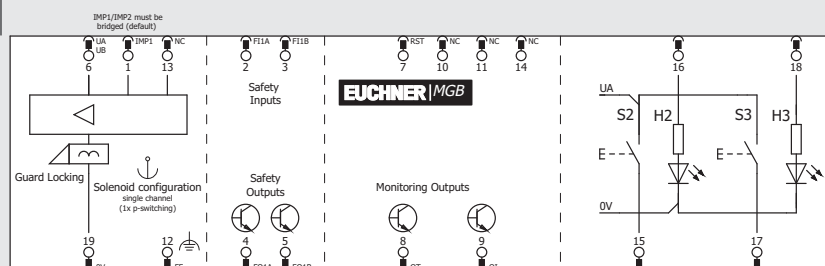
### E Cable entry



### F Plug connector M23



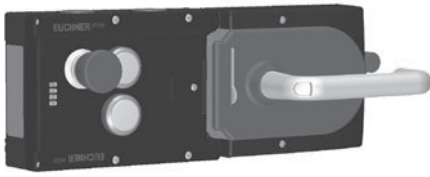
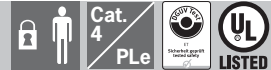
### G Plug connector M23







## Locking sets MGB-L1-... (guard locking by spring force) with 3 controls or indicators



- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Details

#### Release monitoring activated

When release monitoring is active, the system enters into a latching fault when the escape release or auxiliary release is actuated.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

#### Connection for enabling switch

The devices have an M12 plug connector for the direct connection of an enabling switch (e.g. ZSA, order no. 110560).

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

### Selector switch

Selector switch with 2 positions (form V, 90°). The switch latches in both positions.

### Machine stop

Version as emergency stop but in gray/yellow, e.g. as machine stop.

Important: Do not use as emergency stop!

### Further information




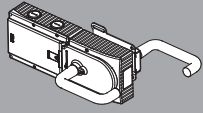

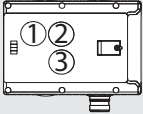




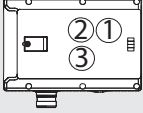
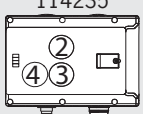




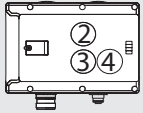

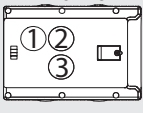










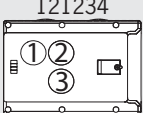
- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Modules in the set								Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
	 115224				 A	100464	-	Right	<b>115178</b> MGB-L1H-APA-R-115178
	 115225		 wh	 wh					
	 110585 Plug connector M12 for enabling switch, incl. adhesive labels	-				106619	Left	<b>110587</b> MGB-L1H-APA-R-110587	
	 110586 Plug connector M12 for enabling switch, incl. adhesive labels	-	 wh	 ye	 bu				106619

(Continued on next page)

Ordering table (continued)

		Modules in the set								Ordering data, set
		 Locking module					 Handle module Order no. separate module	 Escape release Order no. separate module	Door hinge (factory setting)	 Order no./item
Version/configuration scheme Order no. separate module	S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram					
 AP	115894 		 gn	 rd	-	 C	111157	-	Right	<b>115895</b> MGB-L1H-APA-R-115895
	115896 						111158		Left	<b>115897</b> MGB-L1H-APA-L-115897
	114235  Plug connector M12 for enabling switch	-	 wh	 ye	 bu	 D	111157	-	Right	<b>114236</b> MGB-L1H-APA-R-114236
	114237  Plug connector M12 for enabling switch						111158		Left	<b>114238</b> MGB-L1H-APA-L-114238
 AR	110219 		 ye	 wh	-	 E	100464	-	Right	<b>105783</b> MGB-L1H-AR-R-105783
	121255  Incl. adhesive labels						100465		Right	<b>110220</b> MGB-L1HE-AR-R-110220
	121255  Incl. adhesive labels		 *)	 *)	-	 E	100464	-	Right	<b>121256</b> MGB-L1H-ARA-R-121256
	121234 						100465		Right	<b>121236</b> MGB-L1HE-ARA-R-121236

\* The color can be selected using the lens set included.

(Continued on next page)

MGB-AP  
MGB-AR

## Locking sets MGB-L1-... (guard locking by spring force) with 3 controls or indicators



Ordering table (continued)

Modules in the set							Ordering data, set		
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
121261  Incl. adhesive labels				-	<b>E</b>	106619	-	Left	<b>121262</b> MGB-L1H-ARA-L-121262
121241  Incl. adhesive labels		 *)	 *)	-	<b>E</b>	106619	100465	Left	<b>121243</b> MGB-L1H-ARA-L-121243
109314  Incl. adhesive labels		 wh	 Form V 90°	-	<b>F</b>	100464	100465	Right	<b>109313</b> MGB-L1HE-AR-R-109313
 121411  Incl. adhesive labels				-	<b>E</b>	100464	-	Right	<b>121412</b> MGB-L1H-ARA-R-121412
121413  Incl. adhesive labels		 *)	 *)	-	<b>E</b>	106619	-	Left	<b>121414</b> MGB-L1H-ARA-L-121414
117310  Incl. adhesive labels				-	<b>G</b>	111157	-	Right	<b>117314</b> MGB-L1H-ARA-R-117314
117312  Incl. adhesive labels		 ye	 wh	-	<b>G</b>	111158	-	Left	<b>117316</b> MGB-L1H-ARA-L-117316

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

Modules in the set							Ordering data, set		
Version/configuration scheme <small>Order no. separate module</small>	Locking module				Wiring diagram	Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
121215  Incl. adhesive labels		*)	*)	-		100464	100465	Right	<b>121216</b> MGB-L1HE-ARA-R-121216
121217  Incl. adhesive labels						106619		Left	<b>121218</b> MGB-L1HE-ARA-L-121218
110792  Incl. adhesive labels				-		100464	-	Right	<b>110613</b> MGB-L1H-ARA-R-110613
 110793  Incl. adhesive labels						106619		Left	<b>110614</b> MGB-L1H-ARA-L-110614
116301  Release monitoring activated, incl. adhesive labels		ye	wh	-		111157	100465	Right	<b>110689</b> MGB-L1HE-ARA-R-110689
116303  Release monitoring activated, incl. adhesive labels						111158		Left	<b>110690</b> MGB-L1HE-ARA-L-110690

\* The color can be selected using the lens set included.

(Continued on next page)

## Locking sets MGB-L1-... (guard locking by spring force) with 3 controls or indicators



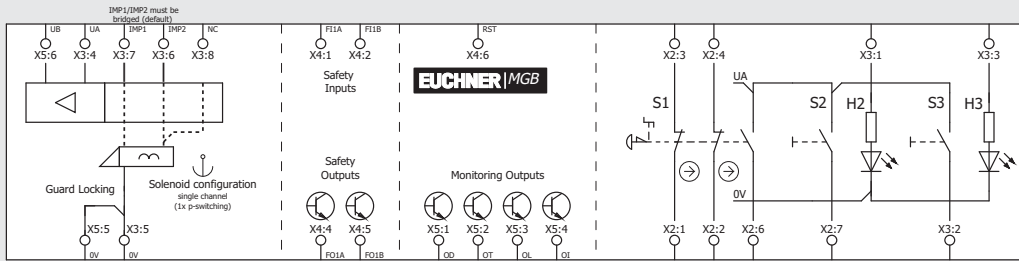
### Ordering table (continued)

Modules in the set							Ordering data, set		
Version/configuration scheme <small>Order no. separate module</small>	Locking module					Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram				
111101  Incl. adhesive labels	-					111739	-	Right	<b>111020</b> MGB-L1H-ARA-R-111020
111103  Incl. adhesive labels	-					111741	-	Left	<b>111022</b> MGB-L1H-ARA-L-111022
121208  Incl. adhesive labels				-		100464	-	Right	<b>121209</b> MGB-L1H-ARA-R-121209
121210  Incl. adhesive labels				-		106619	-	Left	<b>121211</b> MGB-L1H-ARA-L-121211

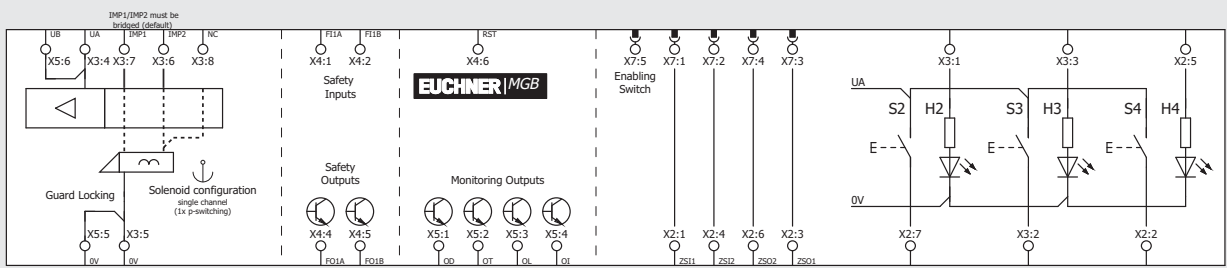
\* The color can be selected using the lens set included.

## Block diagram and wiring diagram for controls and indicators

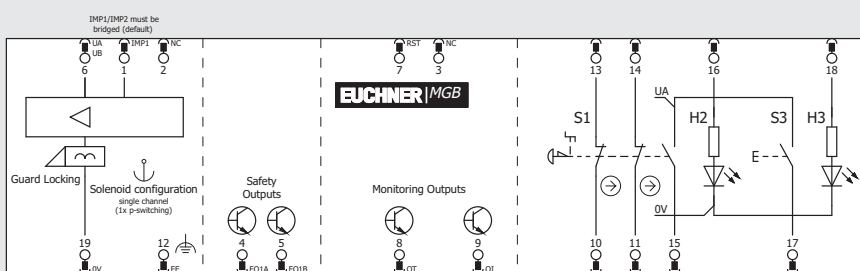
### A Cable entry



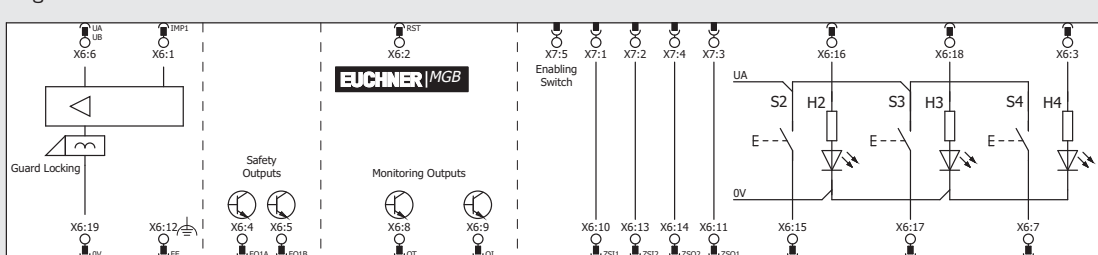
### B Cable entry



### C Plug connector M23



### D Plug connector M23



(Continued on next page)

## Locking sets MGB-L1-... (guard locking by spring force) with 3 controls or indicators

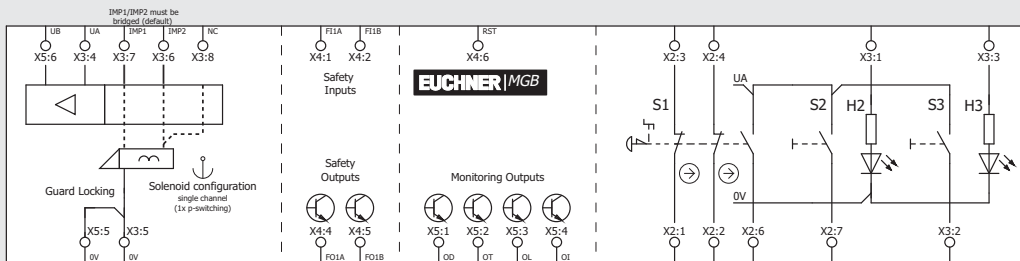


Cat. 4  
PLe

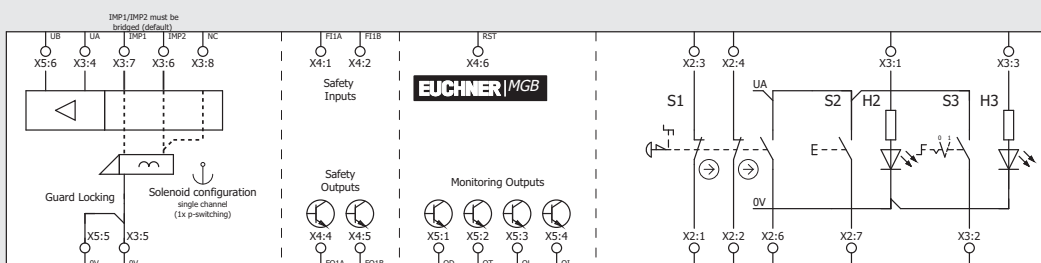


### Block diagram and wiring diagrams for controls and indicators (continued)

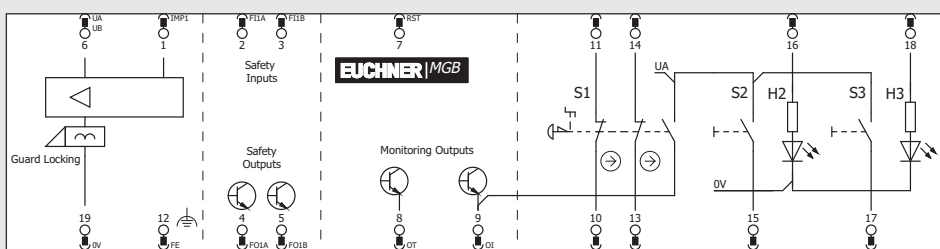
#### E Cable entry



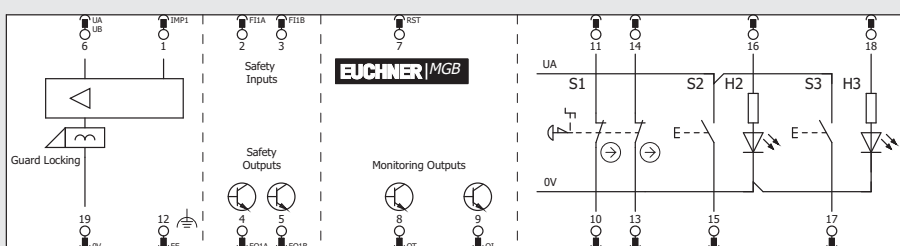
#### F Cable entry



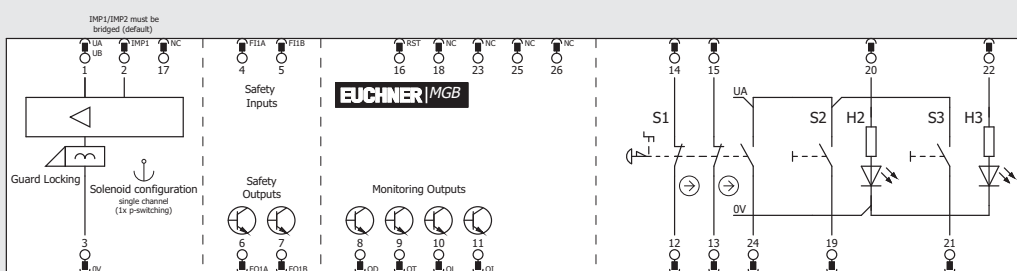
#### G Plug connector M23



#### H Plug connector M23



#### I Plug connector RC26



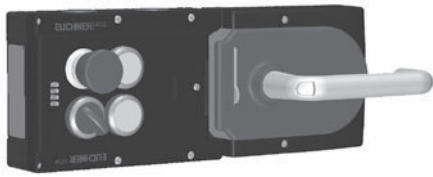
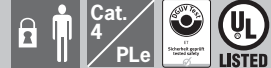




MGB-AP

MGB-AR

## Locking sets MGB-L1-... (guard locking by spring force) with 4 controls or indicators



### Details

#### Release monitoring activated

When release monitoring is active, the system enters into a latching fault when the escape release or auxiliary release is actuated.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

#### Selector switch, illuminated


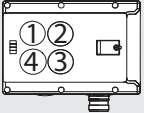





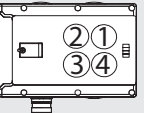

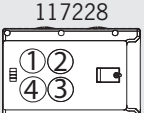





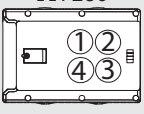
Selector switch with 2 positions (form V, 90°). The switch latches in both positions.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

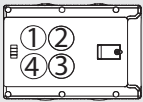





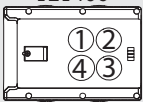
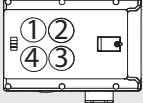





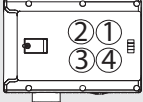
### Ordering table

Modules in the set									Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module					Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4						
 121812  Release monitoring activated, incl. adhesive labels		 wh	 rd	 gn		111838	106051	Right	<b>121813</b> MGB-L1HE-APA-R-121813 (Modules pre-assembled on mounting plates)	
										121814  Release monitoring activated, incl. adhesive labels
 117228 		 gn	 wh	 bu		100464	-	Right	<b>117229</b> MGB-L1H-ARAR-117229	
										117230 

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

Modules in the set							Ordering data, set		
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
 121404						100464	-	Right	<b>121405</b> MGB-L1H-ARA-R-121405
		*)	*)	Form V 90°					
 119923						100464	-	Right	<b>119924</b> MGB-L1H-ARA-R-119924
		gn	wh	bu					

\* The color can be selected using the lens set included.

MGB-AP

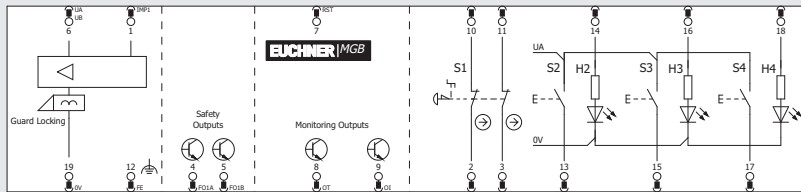
MGB-AR

## Locking sets MGB-L1-... (guard locking by spring force) with 4 controls or indicators

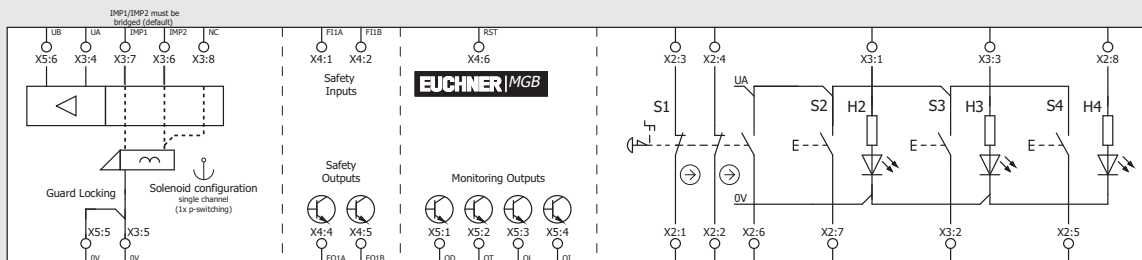


### Block diagram and wiring diagrams for controls and indicators

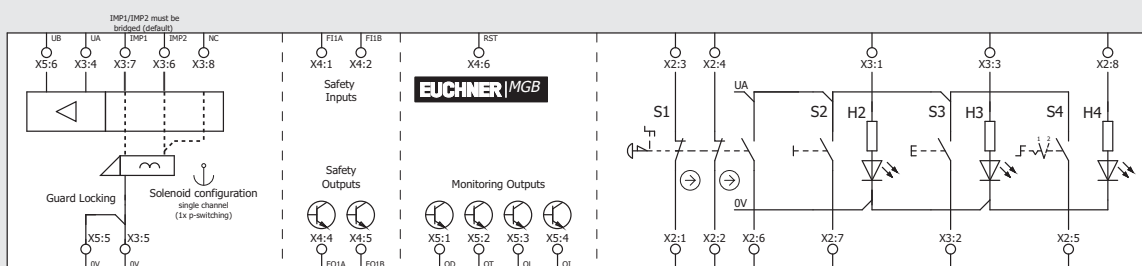
**A** Plug connector M23



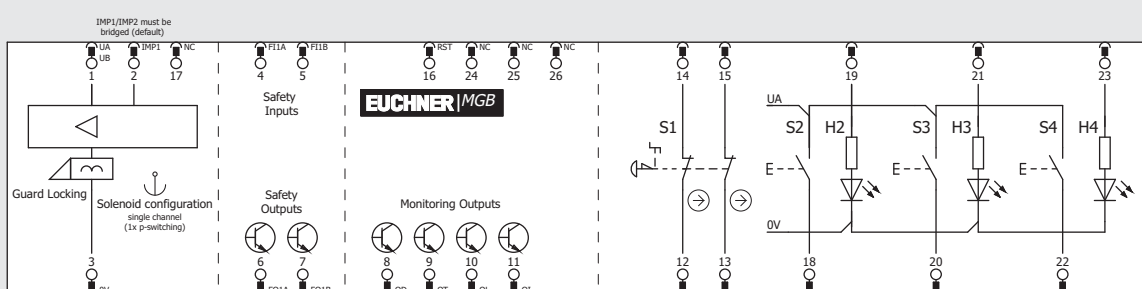
**B** Cable entry



**C** Cable entry



**D** Plug connector RC26

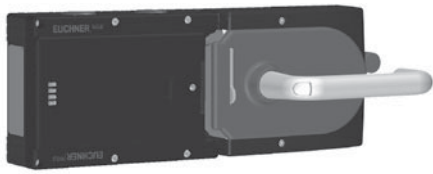
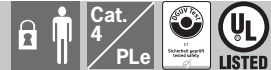




MGB-AP

MGB-AR

**Locking sets MGB-L2-... (guard locking by solenoid force) without control or indicator**


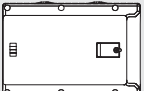
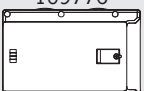
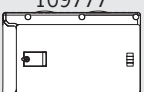


**Further information**

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector

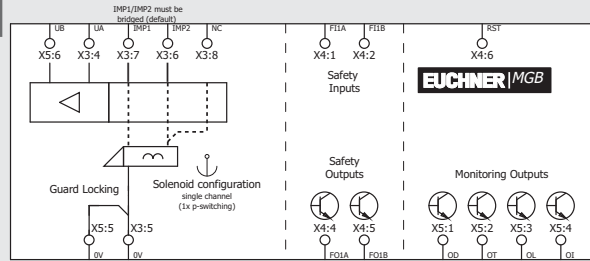
**Ordering table**

Modules in the set							Ordering data, set		
Version/configuration scheme <small>Order no. separate module</small>	Locking module				Wiring diagram	Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
	 104303				<b>A</b>		100465	Right	<b>105788</b> MGB-L2HE-AR-R-105788
						100464			<b>105786</b> MGB-L2H-AR-R-105786
	 109776	-	-	-	-			-	<b>109780</b> MGB-L2H-AR-R-109780
 109777					<b>B</b>	106619	Left	<b>109781</b> MGB-L2H-AR-L-109781	

## Block diagram

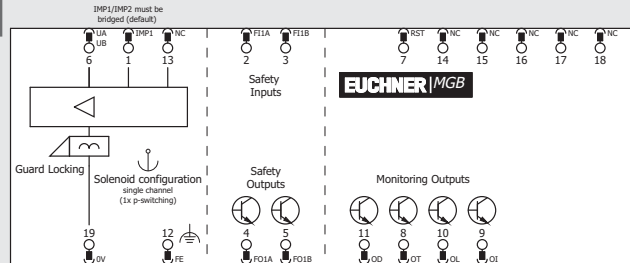
**A**

### Cable entry



**B**

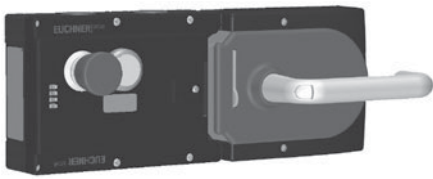
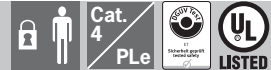
### Plug connector M23



MGB-AP

MGB-AR

## Locking sets MGB-L2-... (guard locking by solenoid force) with 2 controls or indicators



### Details

#### Guard lock monitoring switched off

As the default setting on delivery, the guard lock monitoring is switched off via the internal DIP switches with these evaluation modules. Consequently, the guard locking is suitable only for process protection. Safety outputs FO1A and FO1B do not depend on the state of guard locking.

**Notice:** Devices affected are marked with this symbol.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Ordering table


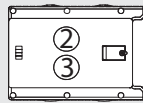
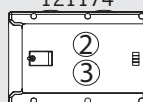
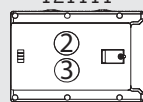


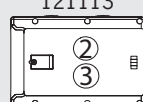
Modules in the set								Ordering data, set	
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
 121024 Guard lock monitoring switched off, incl. adhesive label					A	100464		Right	<b>121025</b> MGB-L2H-ARA-R-121025
	 121028 Guard lock monitoring switched off, incl. adhesive label		*)	-		-	106619		
 121064					B	100464	-	Right	<b>121065</b> MGB-L2H-ARA-R-121065
	 121070		*)	*)		-	106619	100465	
									<b>121071</b> MGB-L2H-ARA-L-121071
									<b>121072</b> MGB-L2HE-ARA-L-121072

\* The color can be selected using the lens set included.

(Continued on next page)



Ordering table (continued)

Modules in the set							Ordering data, set			
Version/configuration scheme <small>Order no. separate module</small>	Locking module				Wiring diagram	Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>	Door hinge <small>(factory setting)</small>	Order no./item	
	S1 H1	S2 H2	S3 H3	S4 H4						
	 121172 Incl. adhesive labels					100464		Right	<b>121173</b> MGB-L2H-ARA-R-121173	
	 121174 Incl. adhesive labels				<b>B</b>	106619		Left	<b>121175</b> MGB-L2H-ARA-L-121175	
	 121111 Incl. adhesive labels	-	 *)	 *)	-		100464		Right	<b>121112</b> MGB-L2H-ARA-R-121112
	 121113 Incl. adhesive labels				<b>C</b>	106619		Left	<b>121114</b> MGB-L2H-ARA-L-121114	

\* The color can be selected using the lens set included.

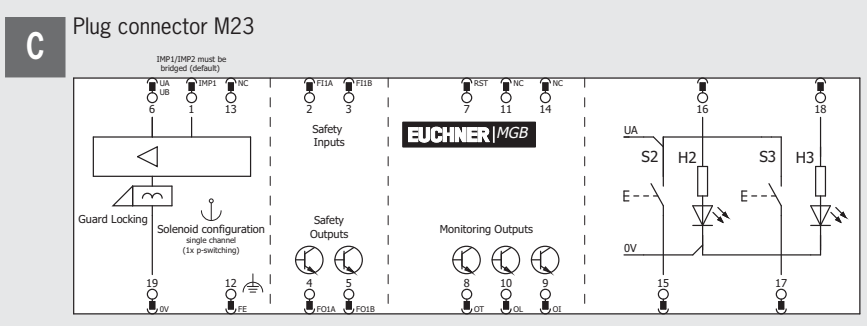
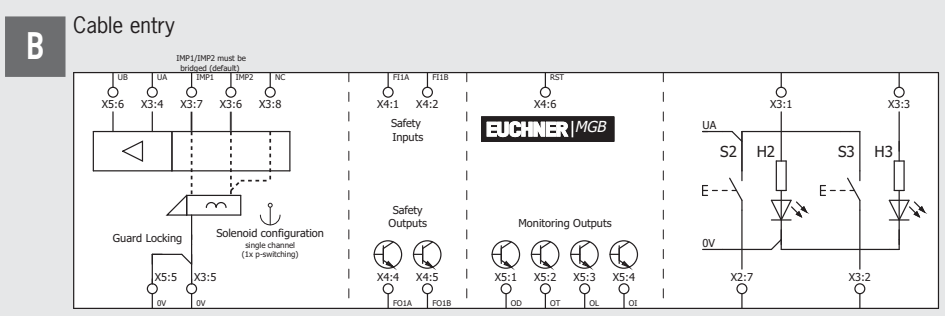
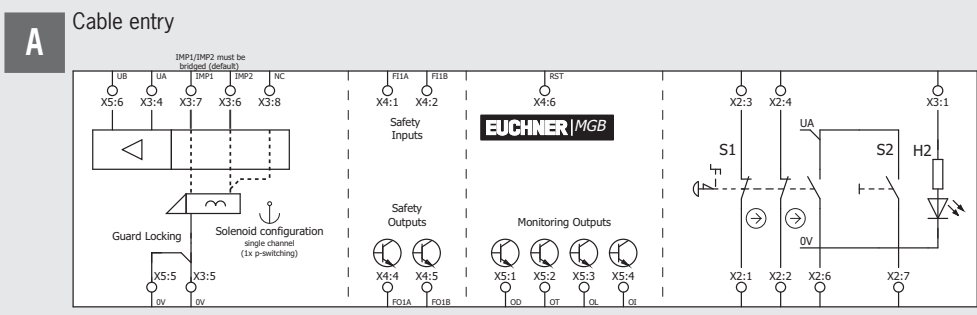
MGB-AP

MGB-AR

## Locking sets MGB-L2-... (guard locking by solenoid force) with 2 controls or indicators



### Block diagram and wiring diagrams for controls and indicators

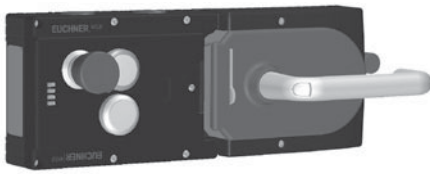
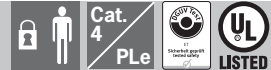




MGB-AP

MGB-AR

## Locking sets MGB-L2-... (guard locking by solenoid force) with 3 controls or indicators



- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Details

**Emergency stop with monitoring contact**  
Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

**Connection for enabling switch**  
The devices have an M12 plug connector for the direct connection of an enabling switch (e.g. ZSA, order no. 110560).

**Lens set**  
The color of the pushbuttons can be selected using the lens set 120344 included.

**Adhesive labels**  
Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

### Machine stop

Version as emergency stop but in gray/yellow, e.g. as machine stop.  
Important: Do not use as emergency stop!

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Modules in the set							Ordering data, set					
Version/configuration scheme Order no. separate module	Locking module					Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item			
	S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram							
 110544  Plug connector M12 for enabling switch, incl. adhesive labels	-				<b>A</b>	100464	-	Right	<b>110548</b> MGB-L2H-APA-R-110548			
		wh	ye	bu					106619	Left	<b>110549</b> MGB-L2H-APA-L-110549	
 121237  121244 				-	<b>B</b>	100464	-	Right	<b>121238</b> MGB-L2H-ARA-R-121238			
		*)	*)						106619	-	Left	<b>121245</b> MGB-L2H-ARA-L-121245
												100465

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

		Modules in the set								Ordering data, set
		Locking module							Door hinge (factory setting)	
Version/configuration scheme <small>Order no. separate module</small>		S1 H1	S2 H2	S3 H3	S4 H4	Wiring diagram	Handle module <small>Order no. separate module</small>	Escape release <small>Order no. separate module</small>		
	121257  Incl. adhesive labels				-	<b>B</b>	100464	-	Right	<b>121258</b> MGB-L2H-ARA-R-121258
	121263  Incl. adhesive labels		*)	*)			106619		Left	<b>121264</b> MGB-L2H-ARA-L-121264
	110708  Incl. adhesive labels				-	<b>C</b>	100464	-	Right	<b>110615</b> MGB-L2H-ARA-R-110615
	110709  Incl. adhesive labels		ye	wh			106619		Left	<b>110616</b> MGB-L2H-ARA-L-110616
	121190  Incl. adhesive labels				-	<b>D</b>	100464	100465	Right	<b>121191</b> MGB-L2HE-ARA-R-121191
	121194  Incl. adhesive labels		*)	*)			106619		Left	<b>121195</b> MGB-L2HE-ARA-L-121195
	111923  Incl. adhesive labels				-	<b>E</b>	100464	-	Right	<b>111924</b> MGB-L2H-ARA-R-111924
	111925  Incl. adhesive labels		gn	rd			106619		Left	<b>111926</b> MGB-L2H-ARA-L-111926

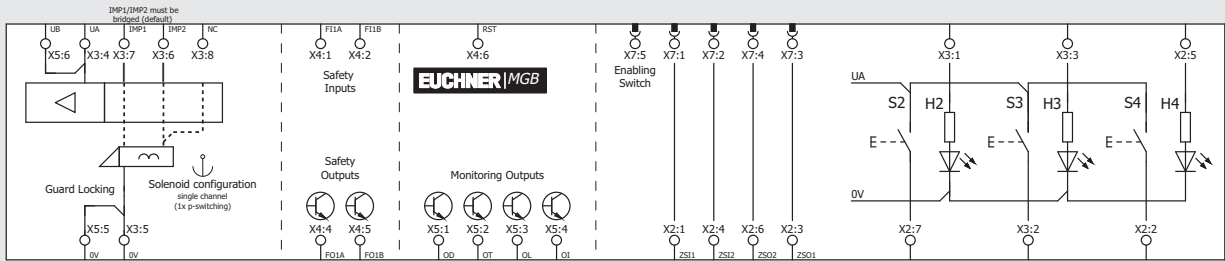
\* The color can be selected using the lens set included.

## Locking sets MGB-L2-... (guard locking by solenoid force) with 3 controls or indicators

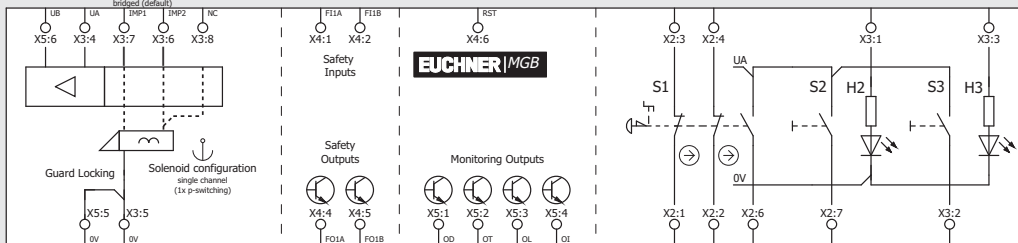


### Block diagram and wiring diagrams for controls and indicators

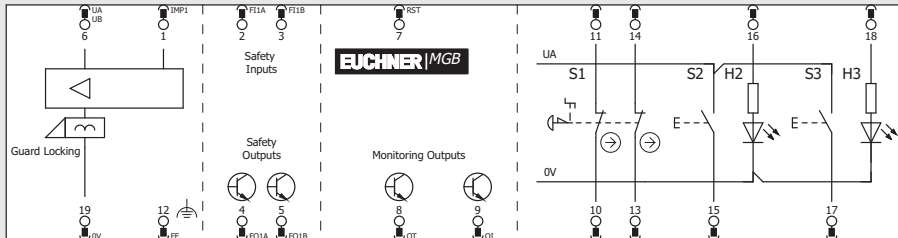
**A** Cable entry



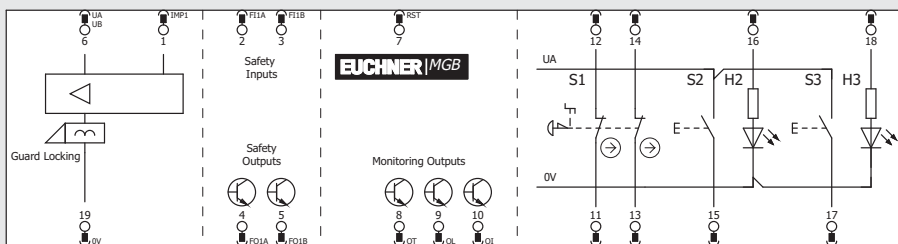
**B** Cable entry



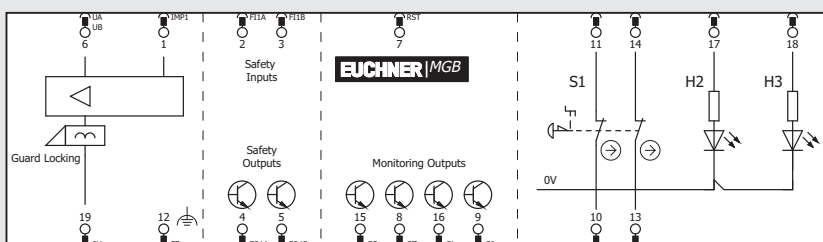
**C** Plug connector M23



**D** Plug connector M23

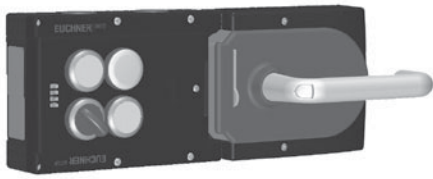
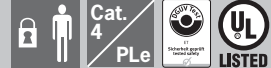


**E** Plug connector M23





## Locking sets MGB-L2-... (guard locking by solenoid force) with 4 controls or indicators



### Details

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

#### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

#### Key-operated switch form V

Form V, 40° angle of rotation with 2 positions. The key latches in position 0 and can be removed in position 0.

#### Selector switch


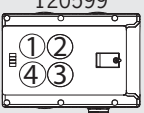





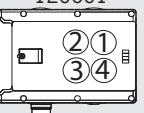

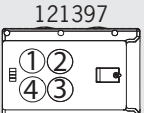





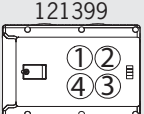
Selector switch with 2 positions (form V, 90°). The switch latches in both positions.

### Further information

- ▶ Dimension drawings see p. 51
- ▶ Technical data see p. 50
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With cable entry or plug connector
- ▶ Integrated controls and indicators

### Ordering table

Modules in the set							Ordering data, set		
Version/configuration scheme Order no. separate module	Locking module				Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S1 H1	S2 H2	S3 H3	S4 H4					
 120599  Incl. adhesive labels IP 54		 *)	 *)	 Form V 40°	 A	111157	100465	Right	<b>120600</b> MGB-L2HE-APA-R-120600
						120601  Incl. adhesive labels IP 54		111158	
 121397 	 *)	 ye	 *)	 Form V 90°	 B	100464	-	Right	<b>121398</b> MGB-L2H-ARA-R-121398
						121399 		106619	

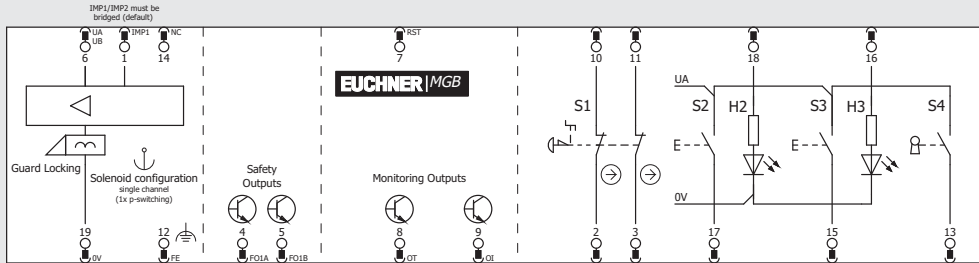
\* The color can be selected using the lens set included.



## Block diagram and wiring diagrams for controls and indicators

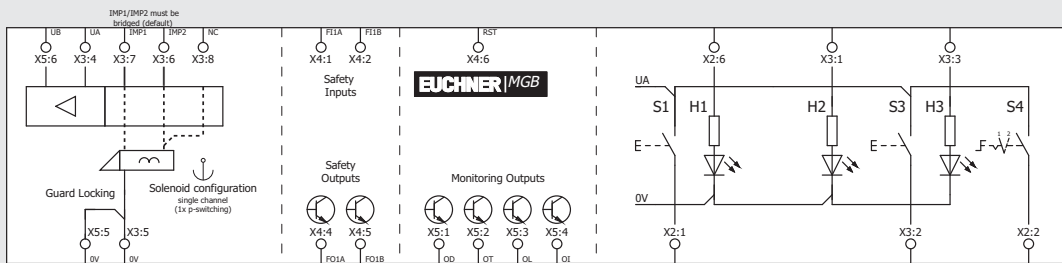
**A**

Plug connector M23



**B**

Cable entry



MGB-AP  
MGB-AR

## Technical data

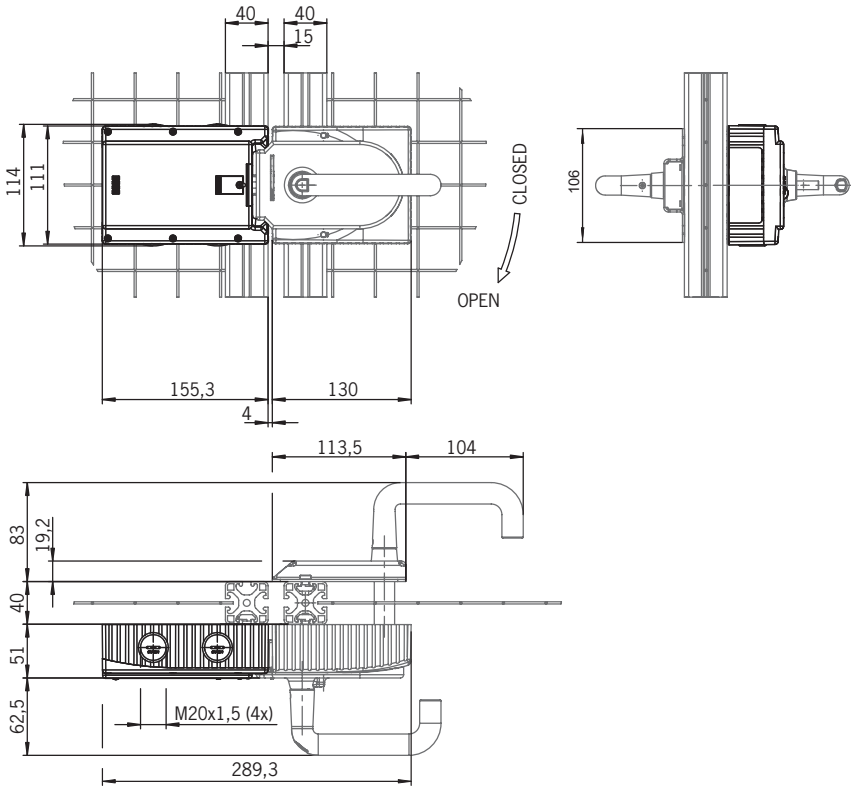
Parameter	Value	Unit
Housing material	Fiber glass reinforced plastic die-cast zinc, nickel-plated Stainless steel	
Dimensions	See dimension drawing	
Weight		
Locking module	0.75	kg
Handle module	1.00	
Escape release	0.50	
Ambient temperature at $U_B = DC 24 V$	-20 ... +55	°C
Degree of protection		
Cover not populated/populated with pushbuttons/ indicators	IP 65 IP 54	
Cover populated with key-operated switch		
Safety class	III	
Degree of contamination	3	
Installation position	Any	
Locking force $F_{zh}$ in accordance with GS-ET-19	2000	N
Connection	4 cable entries M20x1.5 or plug connector	
Conductor cross-section (rigid/flexible)	0.13 ... 1.5 (AWG 24 ... AWG 16)	mm <sup>2</sup>
- With ferrule according to DIN 46 228/1	0.25 ... 1.5	
- With ferrule with collar according to DIN 46228/1	0.25 ... 0.75	
Operating voltage $U_B$ (reverse polarity protected, regulated, residual ripple < 5%)	24 +10% / -15% (PELV)	V DC
Auxiliary voltage $U_A$ (reverse polarity protected, regulated, residual ripple < 5%)	24 +10% / -15% (PELV)	V DC
Current consumption $I_{UB}$ (no load on any outputs)	80	mA
Current consumption $I_{UA}$ - With energized guard locking solenoid and unloaded outputs OI, OL, OT and OD - Pushbutton S (unloaded, per LED)	350 5	mA
External fuse	See operating instructions	
Safety outputs FO1A/FO1B	Semiconductor outputs, p-switching, short circuit-proof	
Test duration after power on	AR < 1000 / AP < 300	µs
Output voltage $U_{FO1A} / U_{FO1B}$ <sup>1)</sup>		
HIGH $U_{FO1A} / U_{FO1B}$	$U_B - 2V ... U_B$	V DC
LOW $U_{FO1A} / U_{FO1B}$	0 ... 1	
Switching current per safety output	1 ... 200	mA
Utilization category according to EN IEC 60947-5-2	DC-13 24 V 200 mA Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.	
Monitoring outputs - Output voltage <sup>1)</sup> - Max. load	p-switching, short circuit-proof $U_A - 2V ... U_A$ Max. 50	mA
Rated insulation voltage $U_i$	30	V
Rated impulse withstand voltage $U_{imp}$	1.5	kV
Resilience to vibration	Acc. to EN IEC 60947-5-3	
Switching frequency	0.25	Hz
EMC protection requirements	Acc. to EN IEC 60947-5-3	
<b>Reliability values acc. to EN ISO 13849-1</b>		
Category	4	
Performance Level	PL e	
$PFH_d$	$3.1 \times 10^{-9} / h^{2)}$	
Mission time	20	years
<b>Controls and indicators</b>		
Operating voltage	5 ... 24	V
Operating current	1 ... 100	mA
Breaking capacity max.	250	mW
Power supply LED	24	V DC

1) Values at a switching current of 50 mA without taking into account the cable length.

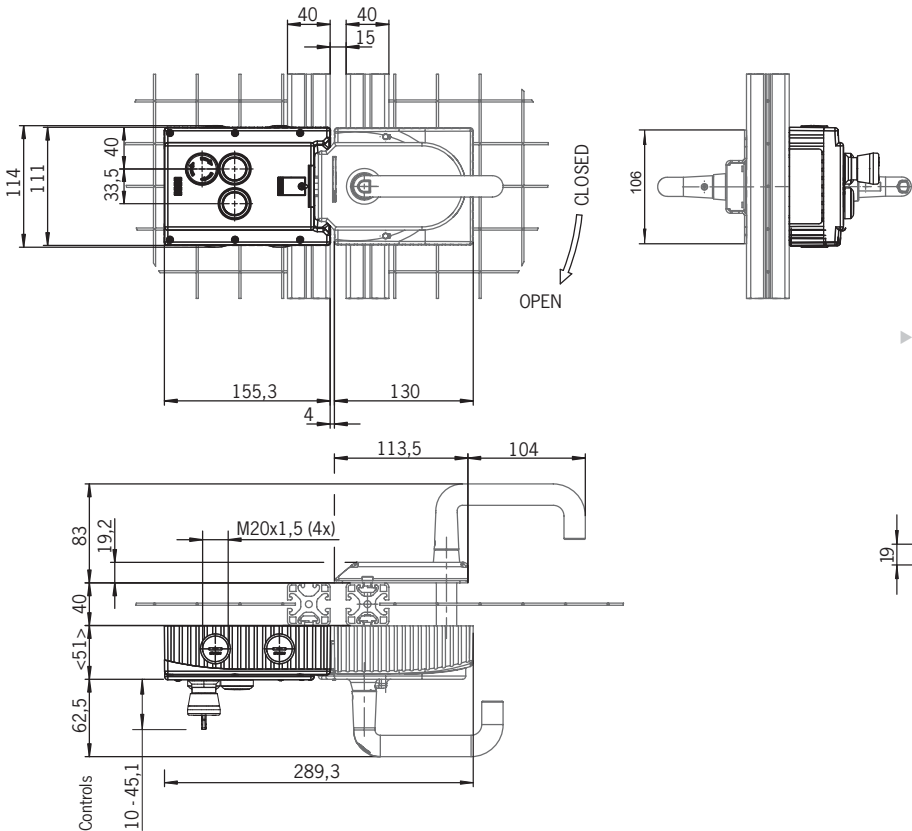
2) Applying the limit value from EN ISO 13849-1:2008, section 4.5.2 ( $MTTF_d = \max. 100 \text{ years}$ ), the employers' liability insurance association certifies a  $PFH_d$  of max.  $2.47 \times 10^{-9}$ .

Dimension drawings

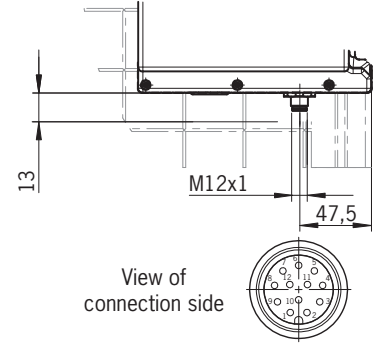
- ▶ MGB-... without additional controls and indicators



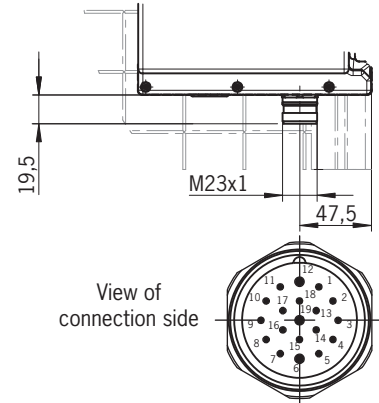
- ▶ MGB-... with additional controls and indicators



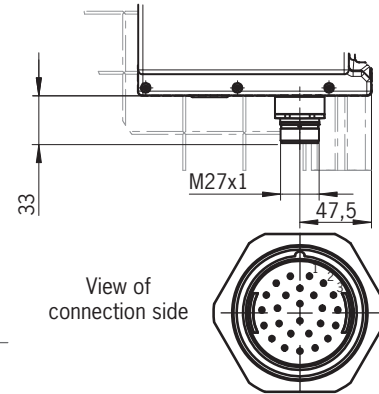
- ▶ Plug connector M12



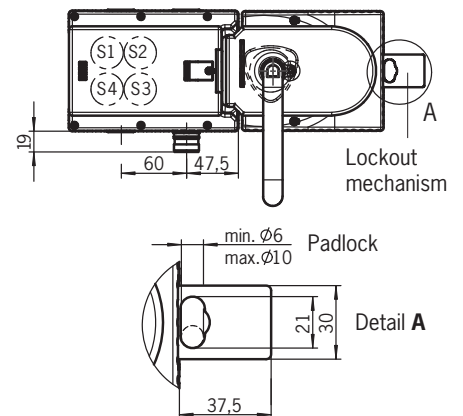
- ▶ Plug connector M23



- ▶ Plug connector RC26

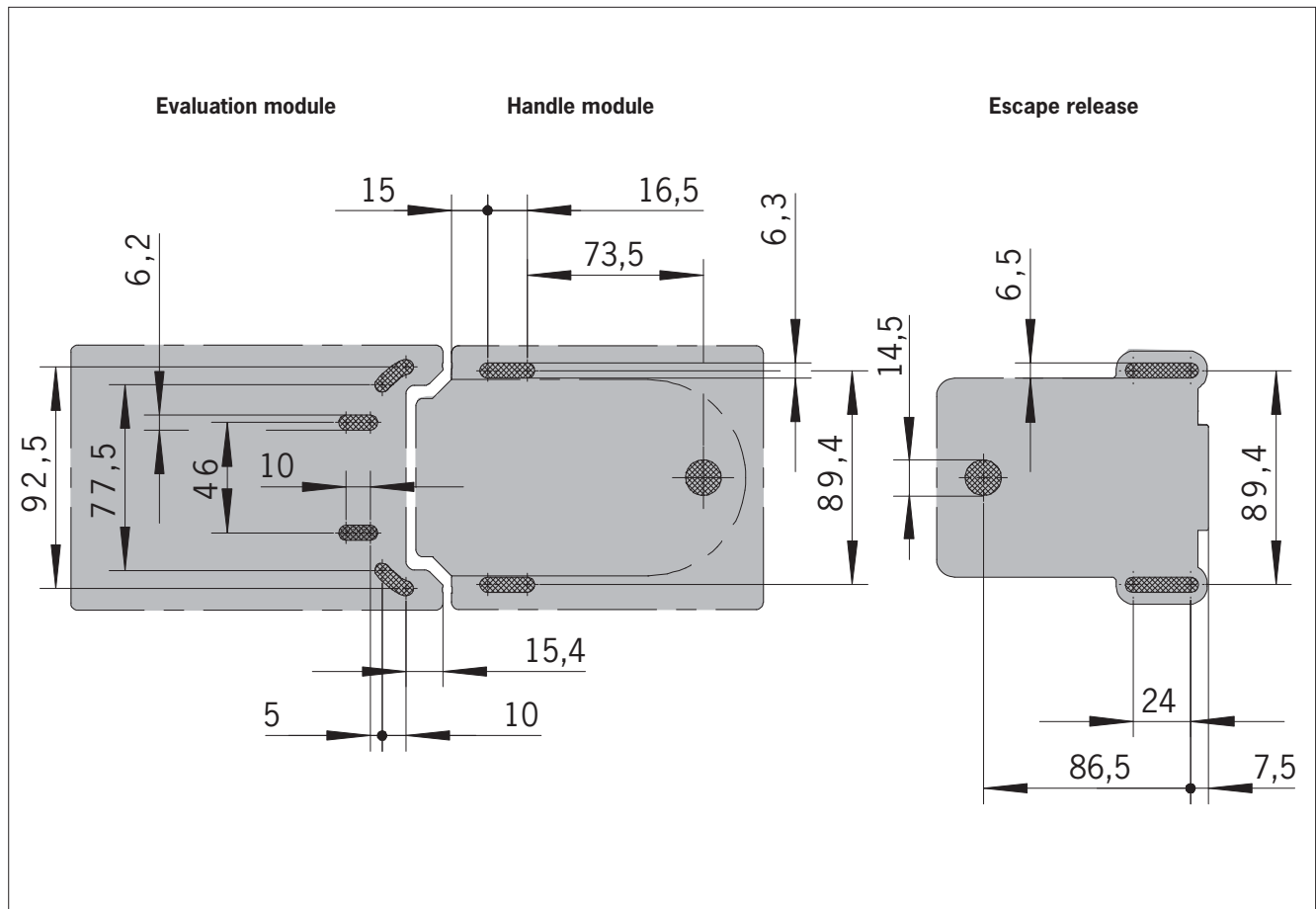


- ▶ Dimensions with plug connector M23 and automatically extending lockout mechanism (optional)



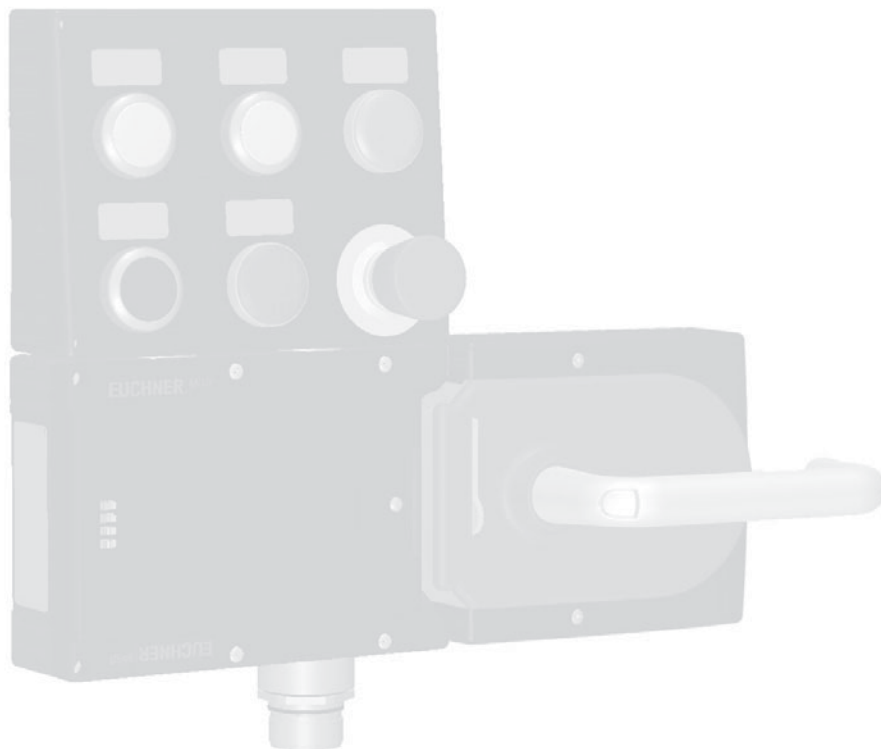
MGB-AP  
MGB-AR

**Drilling pattern**



**Complete sets system family MGB-AR with control module MGB-C**

- ▶ Interlocking or guard locking with handle module
- ▶ With pushbuttons and emergency stop
- ▶ With plug connectors



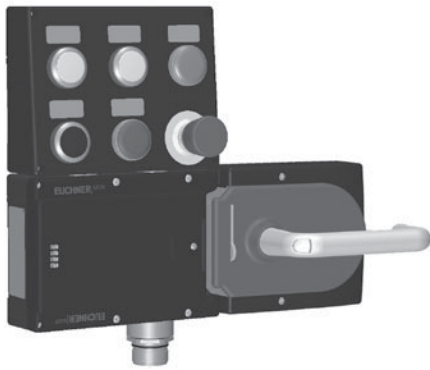
MGB-AR

<b>Interlocking sets MGB-LOC-AR... (without guard locking)</b>	<b>54</b>
with 6 controls and indicators	54
<b>Locking sets MGB-L1C-AR... (guard locking by spring force)</b>	<b>56</b>
with 6 controls and indicators	56
<b>Locking sets MGB-L2C-AR... (guard locking by solenoid force)</b>	<b>58</b>
with 6 controls and indicators	58
<b>Technical data</b>	<b>60</b>
<b>Dimension drawings</b>	<b>61</b>

## Interlocking sets MGB-LOC-AR... with 6 controls or indicators



Cat. 4  
PLe



### Details

#### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

### Further information

- ▶ Dimension drawings see p. 61
- ▶ Technical data see p. 60
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ With control module MGB-C
- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With plug connector

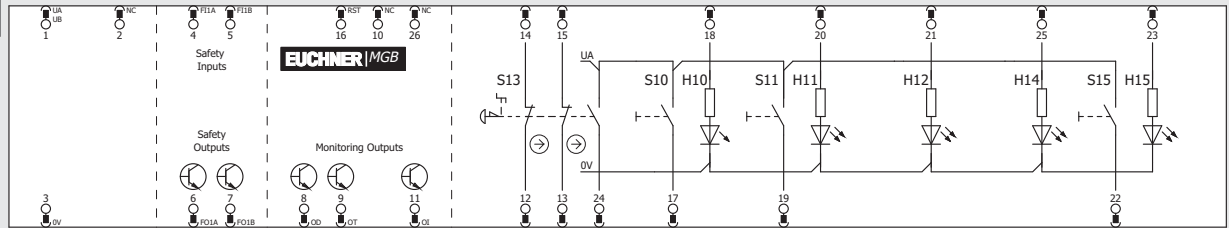
### Ordering table

Modules in the set								Ordering data, set			
Version/ configuration scheme Order no. separate module	Locking module with control module						Wiring diagram	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S10 H10	S11 H11	S12 H12	S13 H13	S14 H14	S15 H15					
110259 								111157		Right	<b>110255</b> MGB-LOHC-ARA-R-110255
Incl. adhesive labels 110260 							<b>A</b>	111158		Left	<b>110256</b> MGB-LOHC-ARA-L-110256

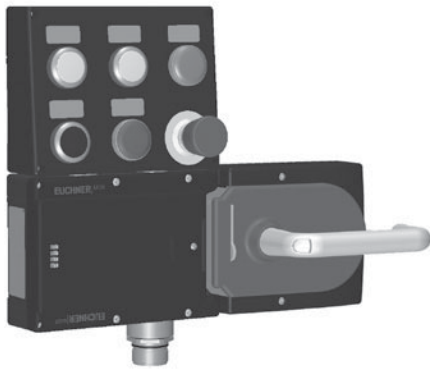
## Block diagram

**A**

Plug connector RC26



## Locking sets MGB-L1C-AR... (guard locking by spring force) with 6 controls or indicators



### Details

#### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

### Further information

- ▶ Dimension drawings see p. 61
- ▶ Technical data see p. 60
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

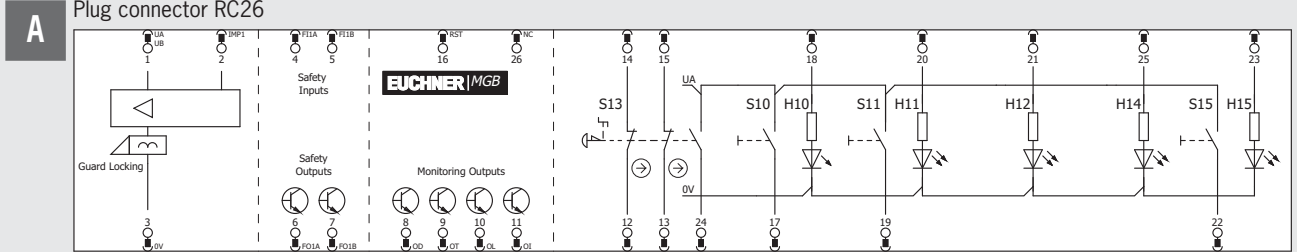
- ▶ With control module MGB-C
- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With plug connector

### Ordering table

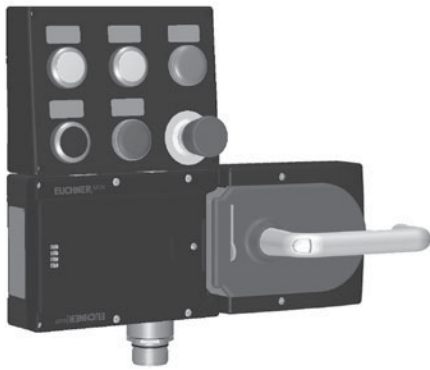
Modules in the set										Ordering data, set	
Locking module with control module								Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
Version/ configuration scheme Order no. separate module	S10 H10	S11 H11	S12 H12	S13 H13	S14 H14	S15 H15	Wiring diagram				
109798 								111157		Right	<b>109806</b> MGB-L1HC-ARA-R-109806
AR Incl. adhesive labels 109799 	⊗ wh	⊗ wh	⊗ gn	⊗ STOP	⊗ rd	⊗ bu	A	111158		Left	



## Block diagram



## Locking sets MGB-L2C-AR... (guard locking by solenoid force) with 6 controls or indicators



### Details

#### Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

#### Emergency stop with monitoring contact

Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

### Further information

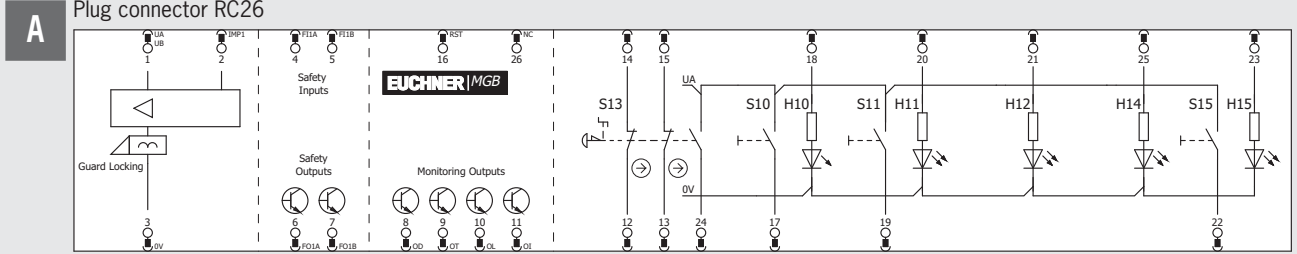
- ▶ Dimension drawings see p. 61
- ▶ Technical data see p. 60
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ With control module MGB-C
- ▶ Can be connected in series with other AR devices (e.g. CES-AR, CET-AR and CTP-AR)
- ▶ With plug connector

### Ordering table

Modules in the set										Ordering data, set	
Locking module with control module								Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
Version/ configuration scheme Order no. separate module	S10 H10	S11 H11	S12 H12	S13 H13	S14 H14	S15 H15	Wiring diagram				
112529 								111157		Right	<b>112531</b> MGB-L2HC-ARA-R-112531
AR Incl. adhesive labels 112530 	⊗ wh	⊗ wh	⊗ gn	⊗ STOP	⊗ rd	⊗ bu	A	111158		Left	

Block diagram



MGB-AR

## Technical data

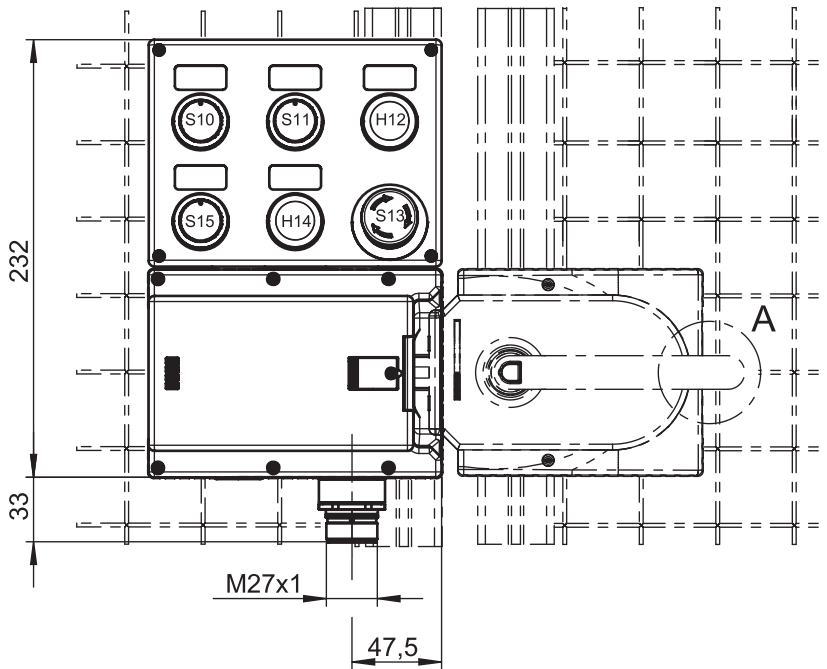
Parameter	Value	Unit
Housing material	Fiber glass reinforced plastic Die-cast zinc, nickel-plated Stainless steel	
Dimensions	See dimension drawing	
Weight		
Locking module	0.75	kg
Handle module	1.00	
Escape release	0.50	
Ambient temperature at $U_B = DC 24 V$	-20 ... +55	°C
Degree of protection		
Cover not populated/populated with pushbuttons/ indicators	IP 65 IP 54	
Cover populated with key-operated switch		
Safety class	III	
Degree of contamination	3	
Installation position	Any	
Locking force $F_{zh}$ in accordance with GS-ET-19	2000	N
Connection	4 cable entries M20x1.5 or plug connector	
Conductor cross-section (rigid/flexible)	0.13 ... 1.5 (AWG 24 ... AWG 16)	mm <sup>2</sup>
- With ferrule according to DIN 46 228/1	0.25 ... 1.5	
- With ferrule with collar according to DIN 46228/1	0.25 ... 0.75	
Operating voltage $U_B$ (reverse polarity protected, regulated, residual ripple < 5%)	24 +10% / -15% (PELV)	V DC
Auxiliary voltage $U_A$ (reverse polarity protected, regulated, residual ripple < 5%)	24 +10% / -15% (PELV)	V DC
Current consumption $I_{UB}$ (no load on any outputs)	80	mA
Current consumption $I_{UA}$ - With energized guard locking solenoid and unloaded outputs OI, OL, OT and OD - Pushbutton S (unloaded, per LED)	350 5	mA
External fuse	See operating instructions	
Safety outputs FO1A/FO1B	Semiconductor outputs, p-switching, short circuit-proof	
Test duration after power on	AR < 1000 / AP < 300	µs
Output voltage $U_{FO1A} / U_{FO1B}$ <sup>1)</sup>		
HIGH $U_{FO1A} / U_{FO1B}$	$U_B - 2V \dots U_B$	V DC
LOW $U_{FO1A} / U_{FO1B}$	0 ... 1	
Switching current per safety output	1 ... 200	mA
Utilization category according to EN IEC 60947-5-2	DC-13 24 V 200 mA Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.	
Monitoring outputs - Output voltage <sup>1)</sup> - Max. load	p-switching, short circuit-proof $U_A - 2V \dots U_A$ Max. 50	mA
Rated insulation voltage $U_i$	30	V
Rated impulse withstand voltage $U_{imp}$	1.5	kV
Resilience to vibration	Acc. to EN IEC 60947-5-3	
Switching frequency	0.25	Hz
EMC protection requirements	Acc. to EN IEC 60947-5-3	
<b>Reliability values acc. to EN ISO 13849-1</b>		
Category	4	
Performance Level	PL e	
$PFH_d$	$3.1 \times 10^{-9} / h$ <sup>2)</sup>	
Mission time	20	years
<b>Controls and indicators</b>		
Operating voltage	5 ... 24	V
Operating current	1 ... 100	mA
Breaking capacity max.	250	mW
Power supply LED	24	V DC

1) Values at a switching current of 50 mA without taking into account the cable length.

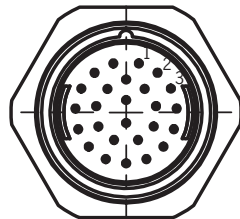
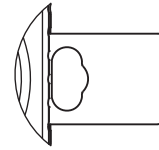
2) Applying the limit value from EN ISO 13849-1:2008, section 4.5.2 ( $MTTF_d = \max. 100 \text{ years}$ ), the employers' liability insurance association certifies a  $PFH_d$  of max.  $2.47 \times 10^{-9}$ .

Dimension drawings

► MGB-L.HC-AR



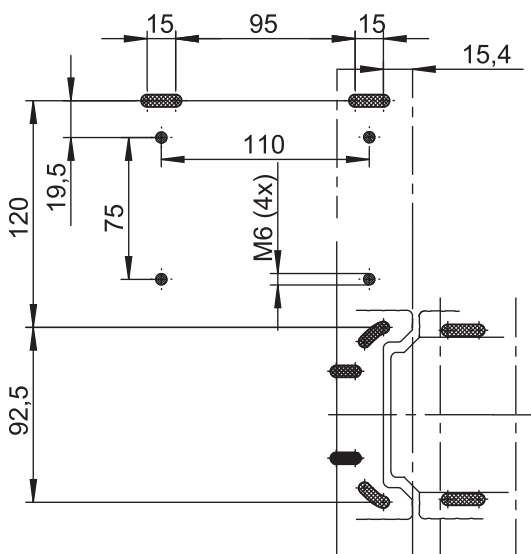
Detail A



Plug connector RC26

View of connection side

Drilling pattern

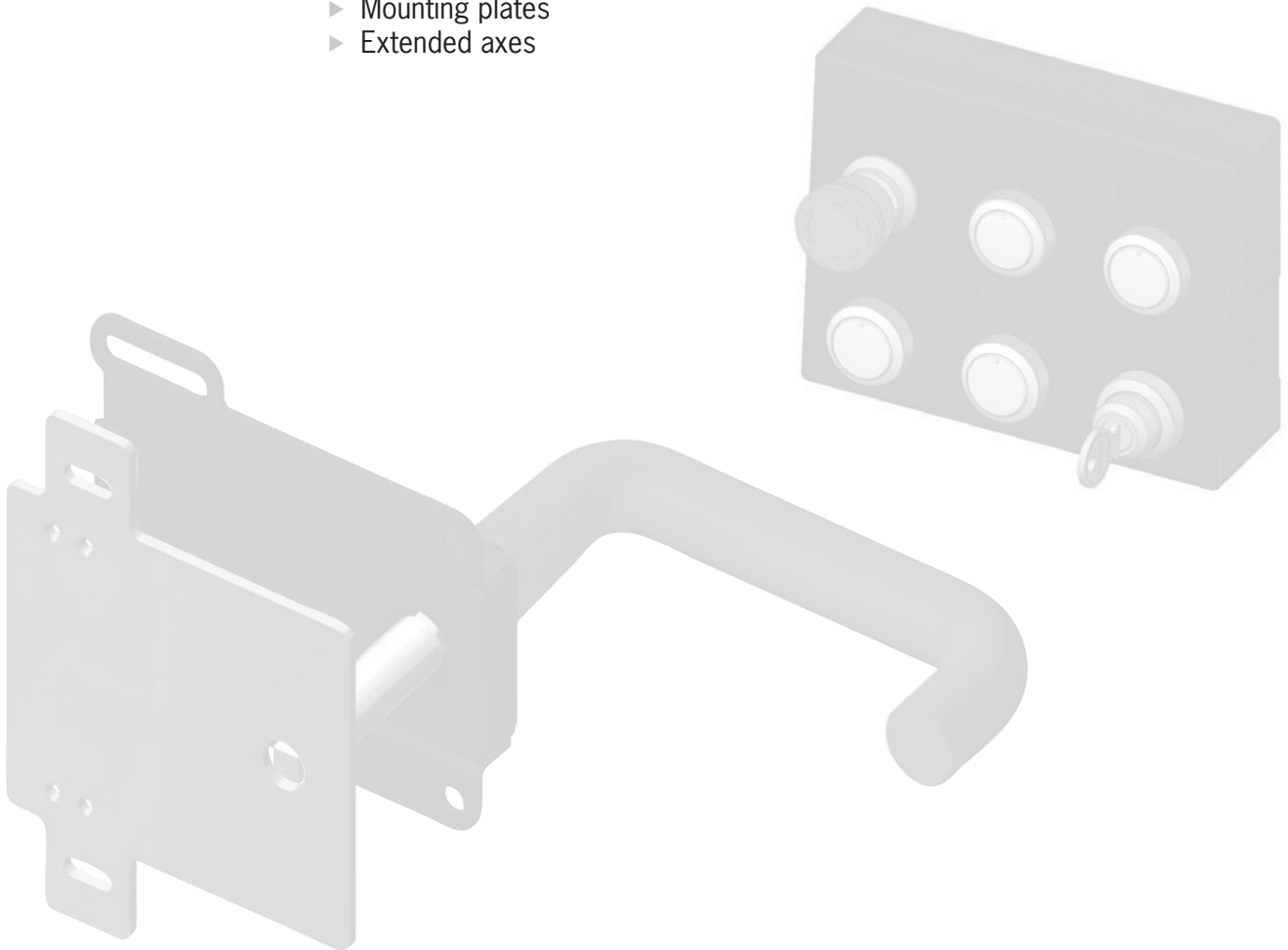


MGB-AR



**Accessories and spare parts for all MGB families**

- ▶ Plug connectors and cables
- ▶ Emergency unlocking for auxiliary release
- ▶ Adhesive labels
- ▶ Mounting plates
- ▶ Extended axes



<b>Handle module MGB-H...</b>	<b>64 - 66</b>
<b>Escape release MGB-E...</b>	<b>68</b>
<b>Emergency unlocking for auxiliary release/adhesive labels</b>	<b>69</b>
<b>Lens sets</b>	<b>70</b>
<b>Mounting plates for modules MGB-...-AR and MGB-...-AP</b>	<b>71 - 72</b>
<b>Plug connectors/ connection cables</b>	<b>73 - 76</b>
<b>Control modules MGB-C</b>	<b>77 - 83</b>
Dimension drawing and configuration example	79
Overview, controls and indicators	80
Combination options	81
Spare parts and accessories	82
Technical data	83

## Handle module MGB-H-... (from V3.0.0)



- ▶ Intelligent bolt tongue with transponder
- ▶ Fold-out lockout mechanism
- ▶ Door handle



### Bolt tongue

The bolt tongue is reliably detected by transponder as soon as it is inserted in the evaluation module.

### Lockout mechanism (fold-out)

For cleaning and service on the machine, the bolt tongue can be locked with max. 3 padlocks. The lockout mechanism is simply folded out and prevents the operation of the handle.

### Door handle

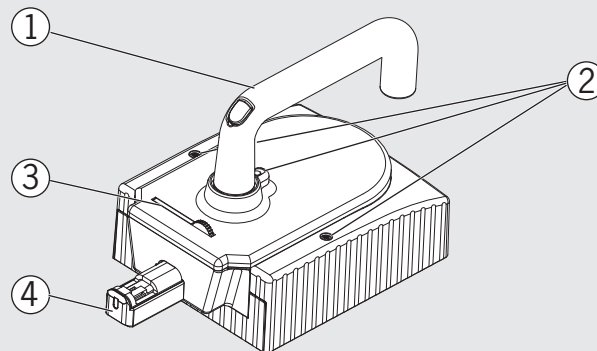
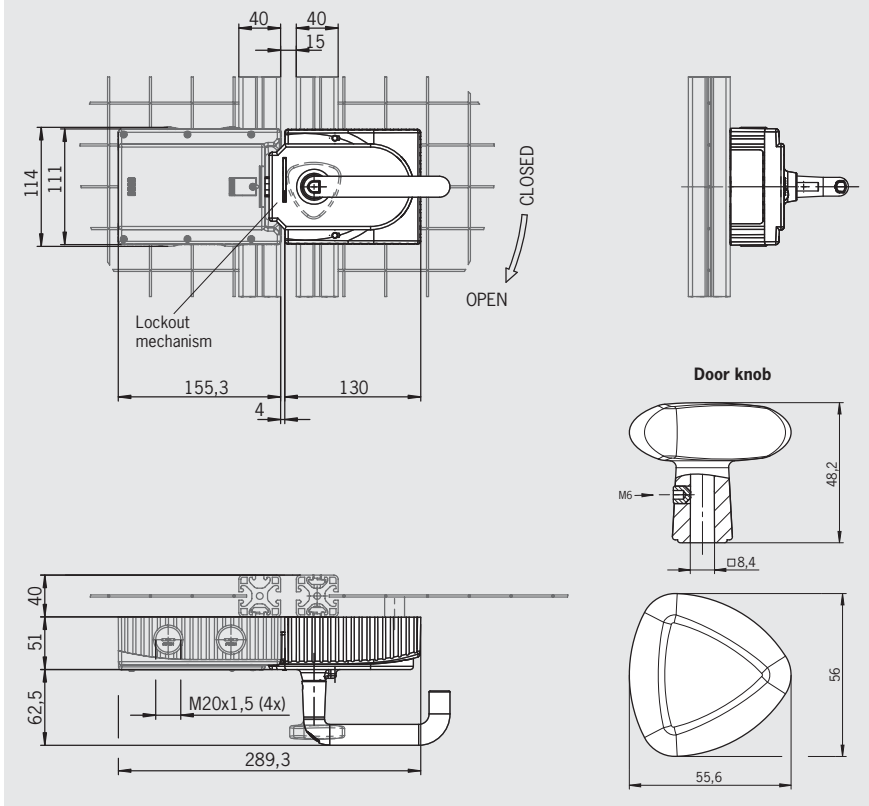
The MGB has a robust door handle that can be rotated in 90° steps to suit all installations. The actuating direction can be changed very easily for doors hinged on the left or right.

### Door knob

As an alternative to the door handle, the handle module can also be equipped with a door knob.

## Handle module MGB-H-... (from V3.0.0) with fold-out lockout mechanism

**Dimension drawing** (diagram shows door hinged on the right)



Scope of delivery:

- ① Door handle
- ② Locking pins for housing cover and handle adjustment
- ③ Lockout mechanism
- ④ Bolt tongue



**Ordering table handle module from V3.0.0**

Series	Version	Order no./item
<b>MGB-H...</b> Handle module right	With door handle and <b>fold-out</b> lockout mechanism, black housing with red cover	<b>100464</b> MGB-H-AA1A1-R-100464
	With door handle and <b>fold-out</b> lockout mechanism, <b>can be locked using escape release</b> , black housing with red cover	<b>114655</b> MGB-H-AA1B1-R-114655
	With door knob and <b>fold-out</b> lockout mechanism, black housing with red cover	<b>113201</b> MGB-H-AA1A7-R-113201
<b>MGB-H...</b> Handle module left	With door handle and <b>fold-out</b> lockout mechanism, black housing with red cover	<b>106619</b> MGB-H-AA1A1-L-106619
	With door handle and <b>fold-out</b> lockout mechanism, <b>can be locked using escape release</b> , black housing with red cover	<b>114656</b> MGB-H-AA1B1-L-114656
	With door knob and <b>fold-out</b> lockout mechanism, black housing with red cover	<b>121478</b> MGB-H-AA1A7-L-121478
<b>Door handle</b> Aluminum, silver anodized	From MGB-H V3.0.0	<b>123926</b> MGB-A-DOORHANDLE-S2-123926
<b>Door knob</b> Aluminum, silver anodized	From MGB-H V3.0.0	<b>124030</b> MGB-A-DOORKNOB-S2-124030

**Ordering table accessories for handle module up to V2.0.0**

Series	Version	Order no./item
<b>Door handle</b> Aluminum, silver anodized	Up to MGB-H V2.0.0	<b>110277</b> MGB-A-DOORHANDLE-S-110277
<b>Door knob</b> Aluminum, silver anodized	Up to MGB-H V2.0.0	<b>111460</b> MGB-A-DOORKNOB-111460

## Handle module MGB-H... with automatically extending lockout mechanism (from V3.0.0)



- ▶ Intelligent bolt tongue with transponder
- ▶ Fold-out lockout mechanism (as on standard version)
- ▶ Second automatically extending lockout mechanism
- ▶ Door handle



### Bolt tongue

The bolt tongue is reliably detected by transponder as soon as it is inserted in the evaluation module.

### Lockout mechanism (automatically extending and fold-out)

For cleaning and service on the machine, the bolt tongue can be locked with max. 3 padlocks. The lockout mechanism extends automatically on the actuation of the handle and prevents the operation of the handle in the safe state. In addition, the fold-out lockout mechanism can be used.

### Door handle

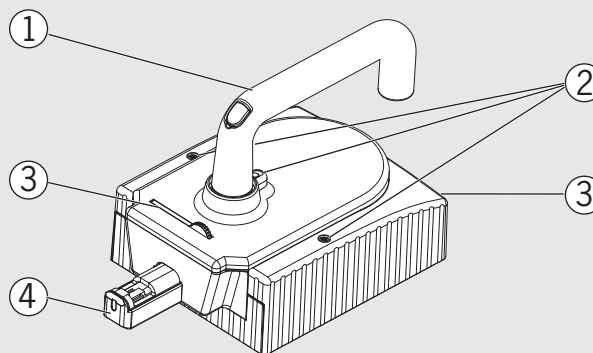
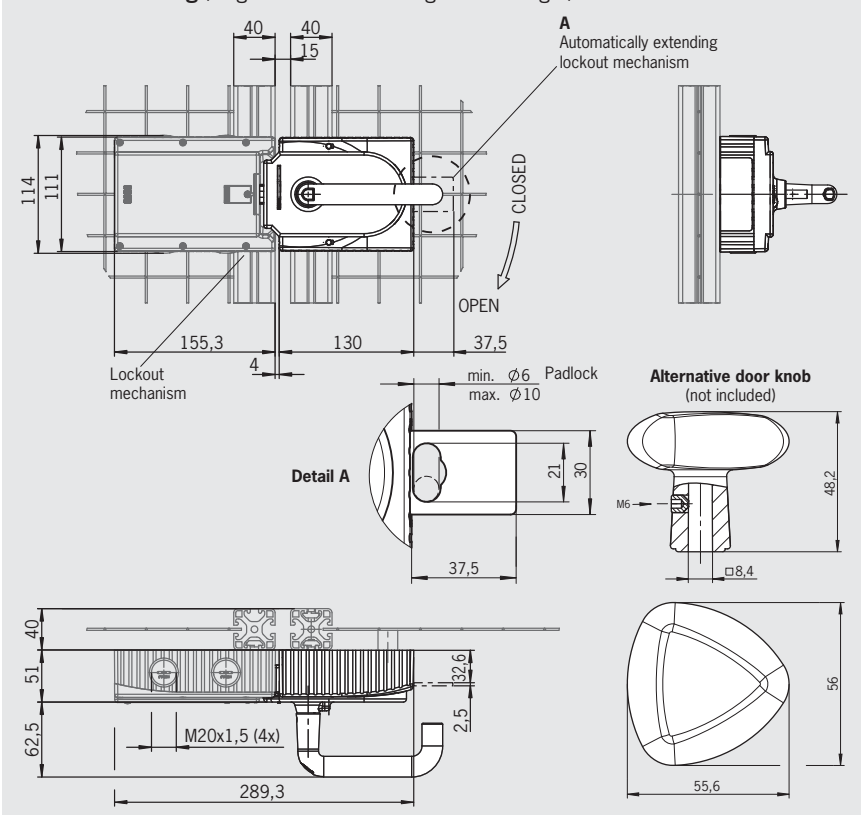
The MGB has a robust door handle that can be rotated in 90° steps to suit all installations. The actuating direction can be changed very easily for doors hinged on the left or right.

### Door knob

As an alternative to the door handle, the handle module can also be equipped with a door knob.

## Handle module MGB-H... (from V3.0.0) with automatically extending lockout mechanism

### Dimension drawing (diagram shows door hinged on the right)



### Scope of delivery:

- ① Door handle
- ② Locking pins for housing cover and handle adjustment
- ③ Lockout mechanism
- ④ Bolt tongue

## Ordering table

Series	Version	Order no./item
<b>MGB-H...</b> Handle module right	With <b>fold-out</b> and also second <b>automatically extending</b> lockout mechanism, black housing with red cover	<b>111157</b> MGB-H-AA1A3-R-111157
	With door handle and <b>fold-out</b> lockout mechanism, <b>can be locked using escape release</b> , black housing with red cover	<b>116813</b> MGB-H-AA1B2-R-116813
<b>MGB-H...</b> Handle module left	With <b>fold-out</b> and also second <b>automatically extending</b> lockout mechanism, black housing with red cover	<b>111158</b> MGB-H-AA1A3-L-111158
	With door handle and <b>fold-out</b> lockout mechanism, <b>can be locked using escape release</b> , black housing with red cover	<b>116814</b> MGB-H-AA1B2-L-116814
<b>Door handle</b> Aluminum, silver anodized	From MGB-H V3.0.0	<b>123926</b> MGB-A-DOORHANDLE-S2-123926
<b>Door knob</b> Aluminum, silver anodized	From MGB-H V3.0.0	<b>124030</b> MGB-A-DOORKNOB-S2-124030

## Escape release module MGB-E...



► Door handle red



### Escape release

The safety system MGB can be equipped with an escape release module. The escape release enables people shut in to open the guard locked door from the danger zone. It is only necessary to actuate the door handle.

The actuating direction automatically adapts to the actuating direction of the handle module and does not need to be changed.

The actuation axis supplied is suitable for profiles up to 40 mm.

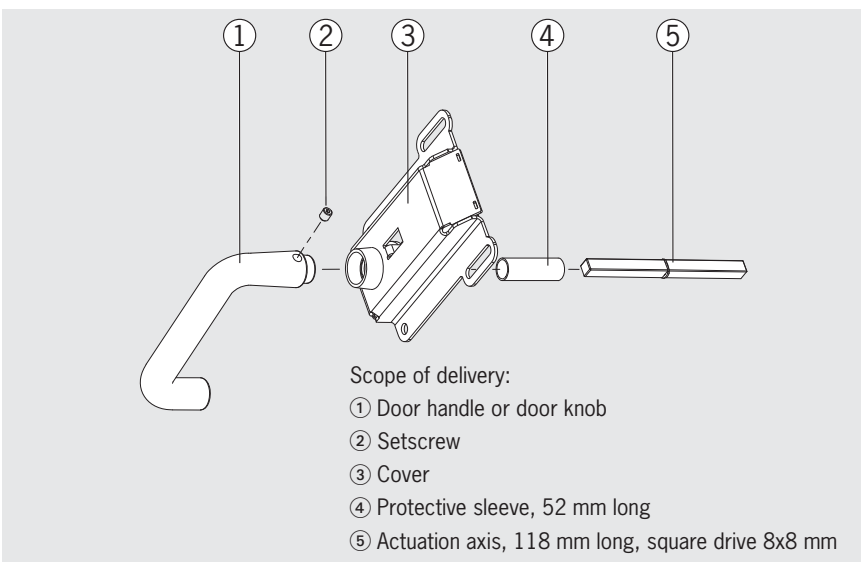
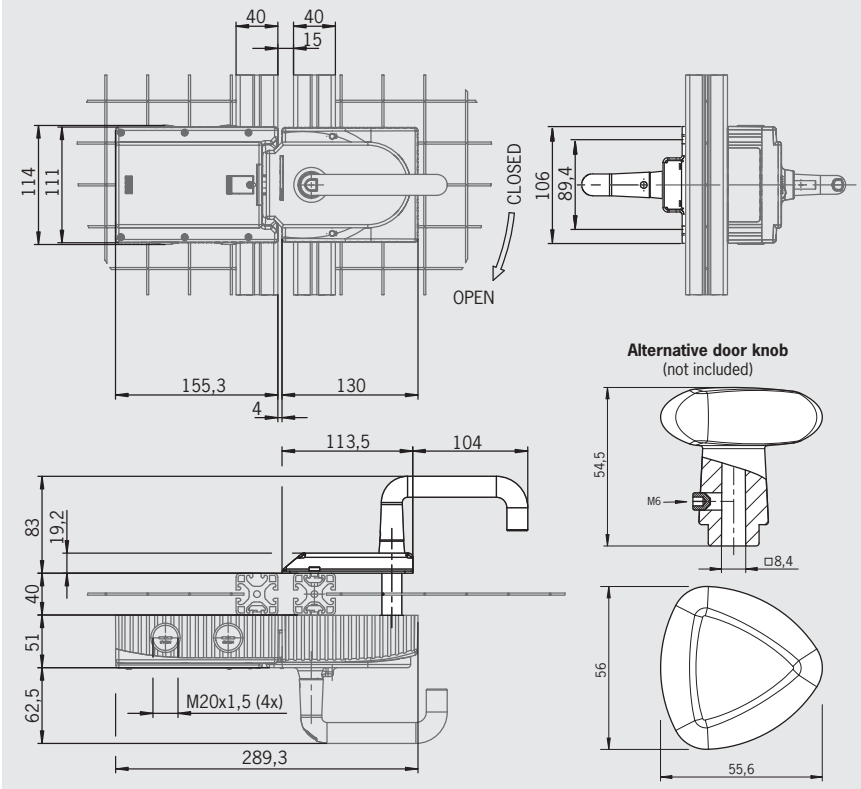
### Extended actuation axis

Optionally, a 250-mm long actuation axis (instead of 110 mm) can be ordered for thicker doors or profiles > 40 mm.

The axis can be shortened to the required dimension.

## Escape release module MGB-E...

Dimension drawing (diagram shows door hinged on the right)



### Ordering table

Series / designation	Version	Order no./item
<b>MGB-E...</b> Escape release	With red handle, 110 mm long	<b>100465</b> MGB-E-A-100465
	With red knob 110 mm long	<b>117126</b> MGB-E-A7-117126
<b>Extended actuation axis</b>	250 mm long, square 8 x 8 mm (with protective sleeve, 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
<b>Escape release MGB-E-A-100465</b> Pre-assembled on mounting plate	With red handle, 118 mm long	<b>106051</b> MGB-E-A2-106051
Door handle	Aluminum, red stove enameled	<b>110276</b> MGB-A-DOORHANDLE-R-110276
Door knob	Aluminum, red stove enameled	<b>114904</b> MGB-A-DOORKNOB-114904

**Emergency unlocking for auxiliary release/adhesive labels**

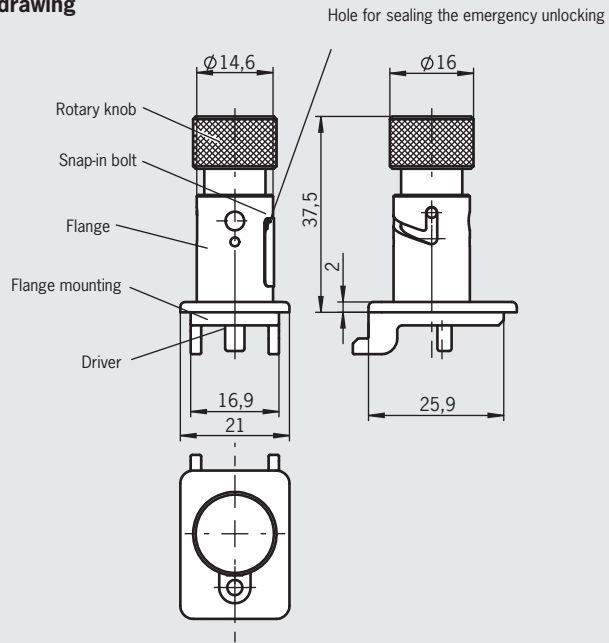
► **Emergency unlocking**

**Function**

The MGB can be unlocked manually using the emergency unlocking. The rotary knob is pushed and then turned by 90° to unlock. The snap-in bolt engages in the hole on the flange. To release the emergency unlocking, push the snap-in bolt inward and simultaneously turn the rotary knob back to its initial position. The emergency unlocking can be sealed in the free position.

**Emergency unlocking MGB-A...**

**Dimension drawing**

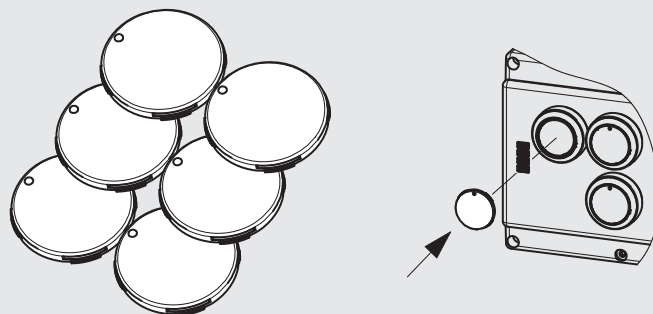


**Ordering table**

Series / designation	Usage/color	Order no./item
<b>Emergency unlocking</b> Sealable	For auxiliary release evaluation modules MGB	<b>112989</b> MGB-A-EMERGENCYRELEASE-112989
<b>Lead seal kit</b>	For emergency unlocking	<b>087256</b> Lead seal kit C1937
<b>Adhesive labels</b> Silver, blank (packaging unit 10 pcs.)	For evaluation modules MGB	<b>114529</b> MGB-A-PLATESET-NN01-114529
<b>Screw set</b> (packaging unit 5 pcs.)	For MGB cover	<b>156331</b> MGB-A-SCREW-156331/V5

**Lens sets**

**Lens set**



**Ordering table**

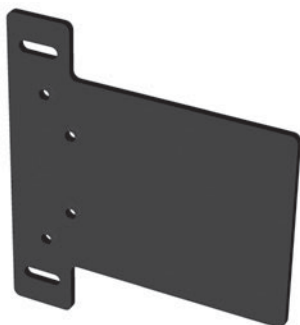
Series / designation	Usage/color	Order no./item
<b>Lens set</b> 3 pcs.	1 x GN Ⓞ      1 x YE ▲ 1 x WH Ⓢ	<b>126158</b> MGB-ALENSSET-SY03-126158
<b>Lens sets</b> 6 pcs.	2 x WH / 1 x BU / 1 x YE / 1 x GN / 1 x RD	<b>120344</b> MGB-ALENSSET-0001-120344
	1 x WH / 1 x BU / 1 x YE / 1 x GN / 1 x RD / 1 x BK	<b>120378</b> MGB-ALENSSET-0002-120378
	1 x WH Ⓢ      1 x WH Ⓢ 1 x GN Ⓢ      1 x WH Ⓢ 1 x WH        1 x WH Ⓢ	<b>120377</b> MGB-ALENSSET-SY01-120377
<b>Lens set</b> 15 pcs.	1 x WH      4 x BK 1 x WH Ⓢ      1 x WH Ⓢ 2 x WH Ⓢ      2 x WH ↓ 1 x WH OK      1 x WH ✓ 1 x WH Ⓢ <sub>2</sub> 1 x WH Ⓢ <sub>2</sub>	<b>125359</b> MGB-ALENSSET-SY02-125359

Mounting plates for modules MGB-...-AR... and MGB-...-AP...

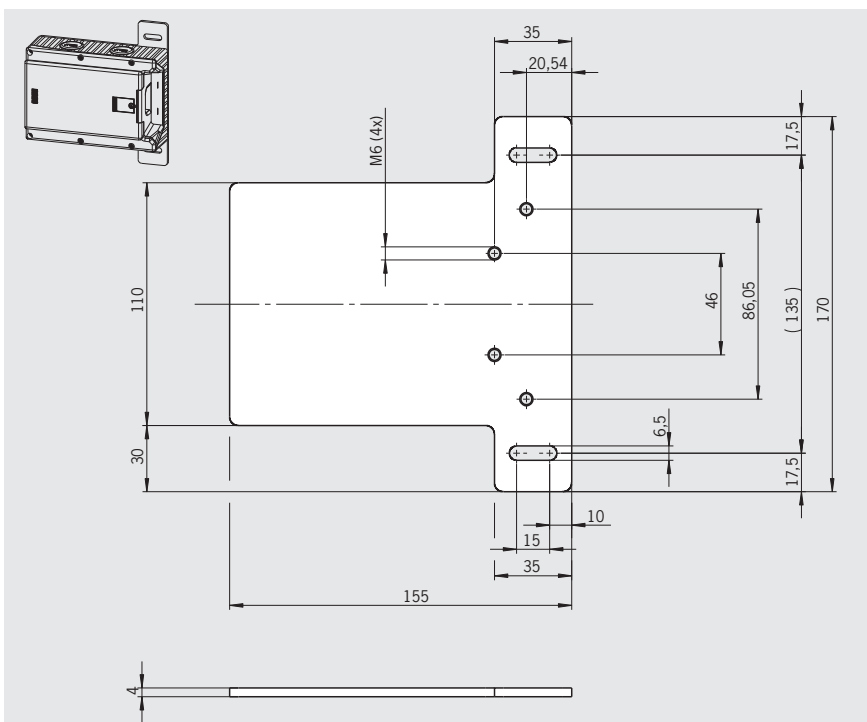
- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Robust stainless steel plate
- ▶ Suitable for doors hinged on the right or left

Mounting plate for evaluation module

Suitable for all interlocking or locking modules in the system families AR and AP. Two screws are sufficient for fastening the mounting plates. **Important:** Only use if the handle module is also fastened to a mounting plate.



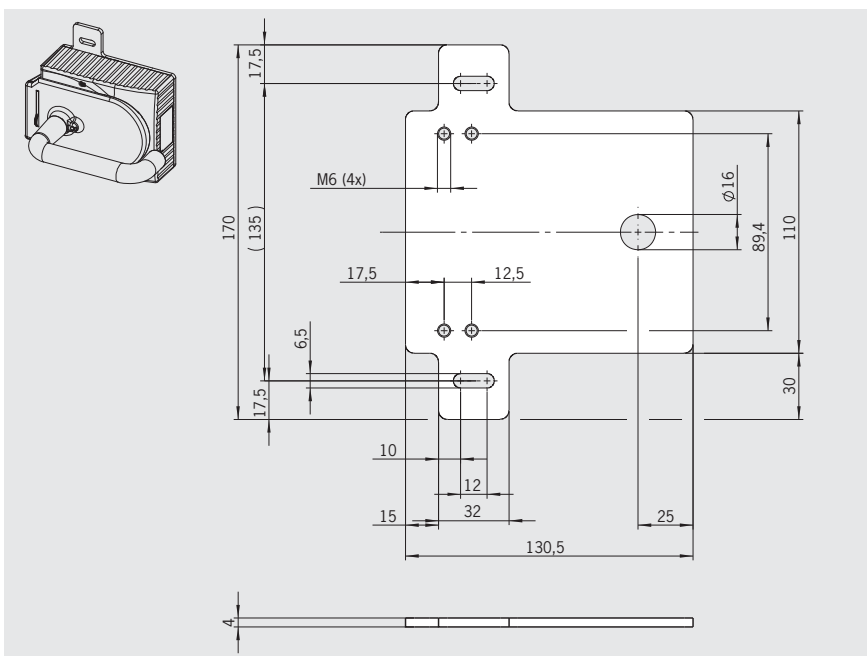
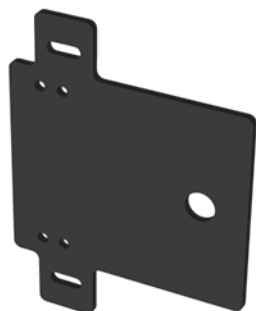
Mounting plate for evaluation module



Mounting plate for handle modules

Mounting plate for handle module

Suitable for all MGB handle modules. Two screws are sufficient for fastening the mounting plates. **Important:** Only use if the evaluation module is also fastened to a mounting plate.



Ordering table

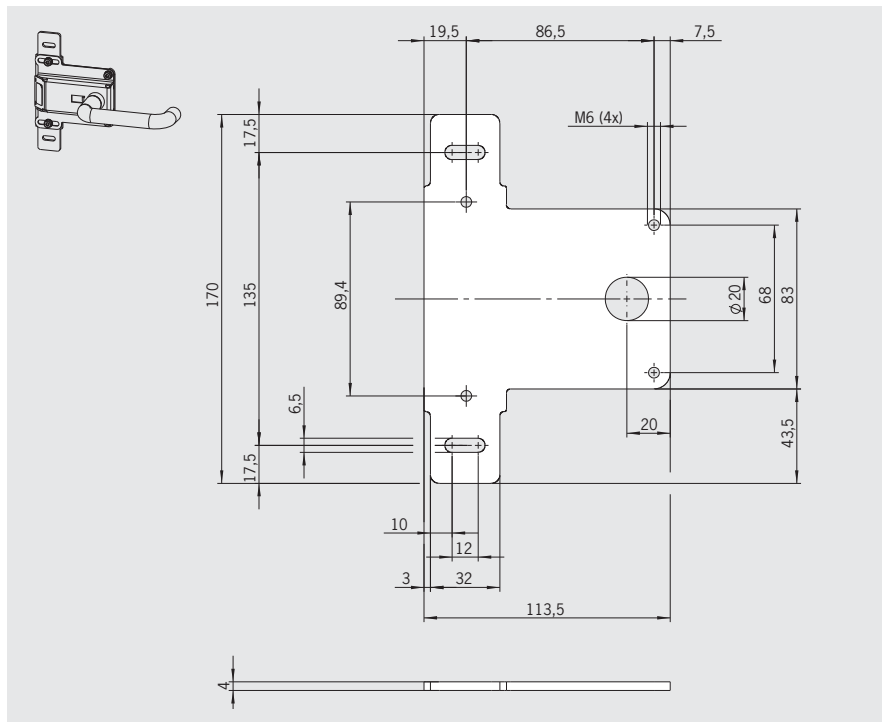
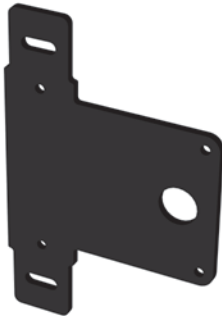
Series / designation	Version	Order no./item
Mounting plate for evaluation module	Suitable for all MGB-L-AR-... and MGB-L-AP-...	<b>109490</b> MGB-A-MOUNTINGPLATE-L-109490
Mounting plate for handle module	Suitable for all MGB handle modules	<b>109491</b> MGB-A-MOUNTINGPLATE-H-109491
Mounting plate for escape release	Suitable for all MGB escape releases	<b>109492</b> MGB-A-MOUNTINGPLATE-E-109492
Mounting plate for evaluation module-control module combination	Suitable for all MGB-L-AR-... and MGB-L-AP-... in combination with a control module MGB-C-...	<b>110072</b> MGB-A-MOUNTINGPLATE-LC-110072

Mounting plate for escape release

**Mounting plate for escape release**

Suitable for all MGB escape releases. Two screws are sufficient for fastening the mounting plates.

**Important:** Pay attention to length of the escape release actuation axis! You may need the longer axis (order no. 106761, see 68).

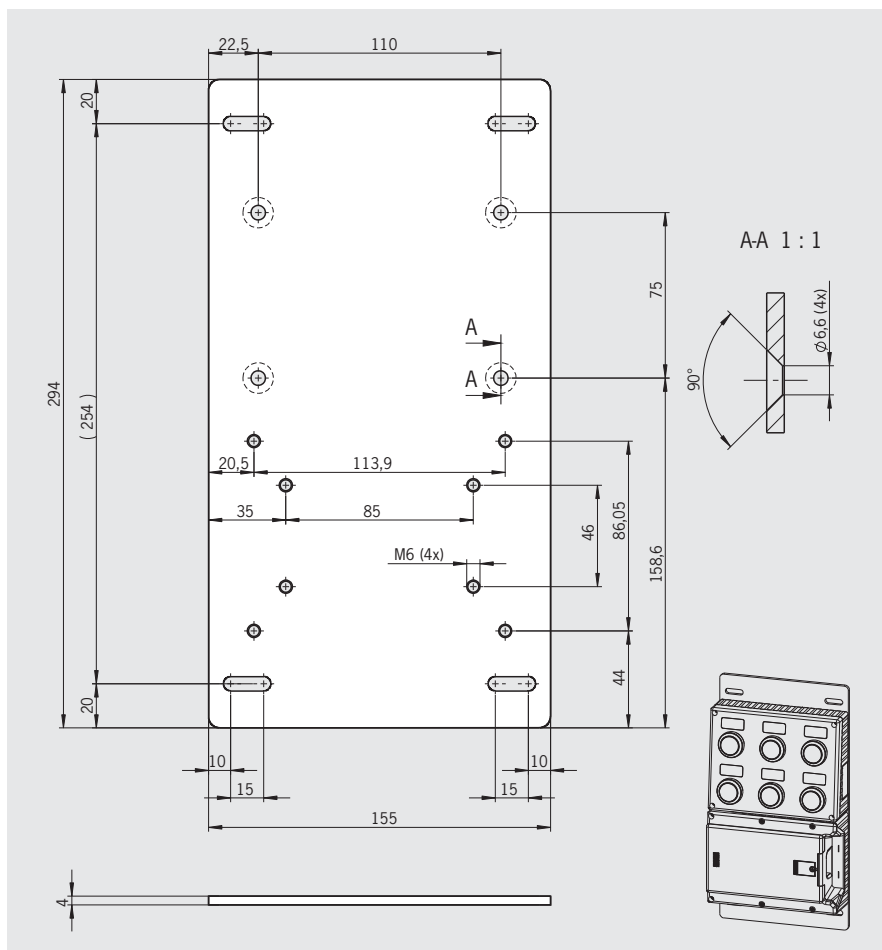


Mounting plate for evaluation module-control module combination

**Mounting plate for evaluation module-control module combination**

Suitable for all MGB combinations, comprising an evaluation module and a control module.

**Important:** Only use if the handle module is also fastened to a mounting plate.



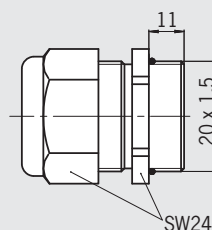


## Cable gland

- ▶ M20 x 1.5
- ▶ Material plastic
- ▶ Cable diameter 6 - 12 mm

**Cable gland EKPM20/06**  
Plastic

### Dimension drawing



## Plug connector RC18

- ▶ Cable optional
- ▶ Halogen-free cable optional

### Crimp contacts

With 16 crimp pins for conductor cross-section 0.38 - 0.5 mm<sup>2</sup> and 3 pins for conductor cross-section 0.75 - 1.0 mm<sup>2</sup> for control of the guard locking solenoid.

### PUR cable (optional)

Cable sleeve PUR, color black, conductor cross-section 0.5 mm<sup>2</sup> or 1.0 mm<sup>2</sup> (suitable for drag chain).

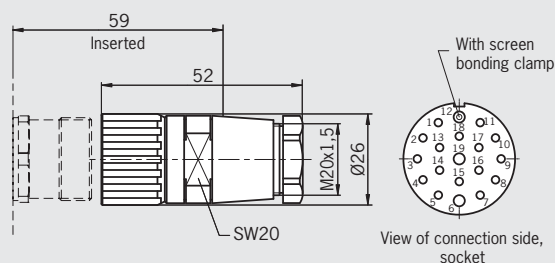
Depending on the cable version, either color-coded or with separately numbered, black cores.

### PUR cable, halogen-free (optional)

Cable sleeve PUR, color black, halogen-free, silicone-free. Reduction of toxic gases and smoke in case of fire (suitable for drag chain). Conductor cross-section 0.5 mm<sup>2</sup> or 1.0 mm<sup>2</sup>. Cores color-coded.

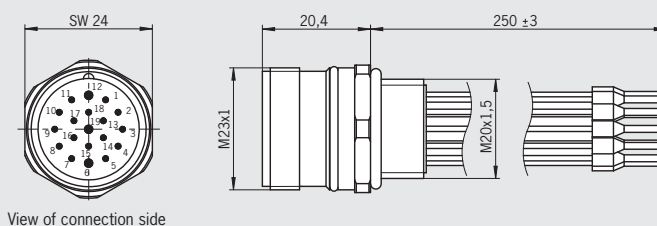
**Plug connector RC18 (M23)**  
19-pin

### Dimension drawing



**Built-in connector RC18 (M23)**  
19-pin

### Dimension drawing

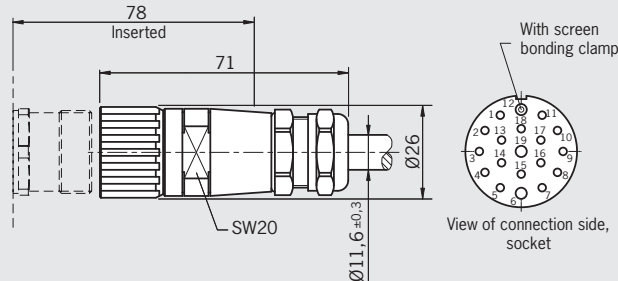


## Ordering table

Designation	Version	Order no./item
<b>Cable gland</b> M20 x 1.5	Material plastic Cable diameter 6 - 12 mm	<b>086223</b> EKPM20/06
<b>Plug connector RC18 (M23)</b> 19-pin	<b>EF-C1825</b> Female plug (Crimp contacts included)	<b>077025</b> RC18EF-C1825
	<b>Replacement pin crimp contacts</b> Conductor cross-section 16 x 0.38 - 0.5 mm <sup>2</sup> 3 x 0.75 - 1 mm <sup>2</sup>	<b>094310</b> Pin crimp contact RCM-C1825
<b>Built-in connector RC18 (M23)</b> 19-pin		<b>120403</b> MGB-A-PLUGCONNECTOR-RC18-1204035

**Connection cable PUR with plug connector M23**  
18-core + PE, color-coded

**Dimension drawing**



**Assignment of connection cable with plug connector M23**

Pin	Conductor coloring	Conductor cross-section [mm <sup>2</sup> ]	Pin	Conductor coloring	Conductor cross-section [mm <sup>2</sup> ]
1	VT	0.5	11	BK	0.5
2	RD	0.5	12	GN/YE	1.0
3	GY	0.5	13	PK	0.5
4	RD/BU	0.5	14	BN/GY	0.5
5	GN	0.5	15	BN/YE	0.5
6	BU	1.0	16	BN/GN	0.5
7	GY/PK	0.5	17	WH	0.5
8	GN/WH	0.5	18	YE	0.5
9	YE/WH	0.5	19	BN	1.0
10	GY/WH	0.5			

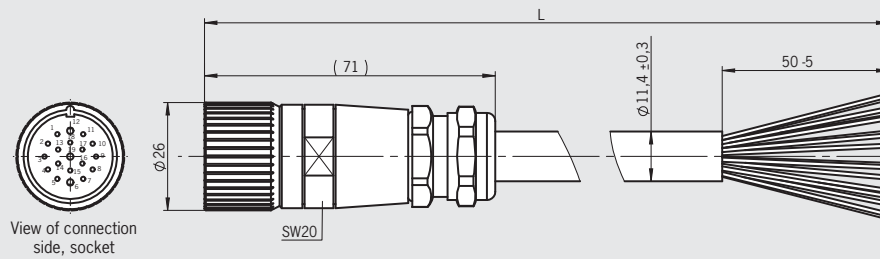
**Ordering table**

Designation	Cable length L [m]	Order no./item
<b>Connection cable PUR with plug connector M23</b> 18-core + PE, socket Cores color-coded	1.5	<b>092761</b> C-M23F19-19XDIFPU01,5-MA-092761
	3	<b>092816</b> C-M23F19-19XDIFPU03,0-MA-092816
	6	<b>077014</b> C-M23F19-19XDIFPU06,0-MA-077014
	8	<b>077015</b> C-M23F19-19XDIFPU08,0-MA-077015
	10	<b>092898</b> C-M23F19-19XDIFPU10,0-MA-092898
	15	<b>077016</b> C-M23F19-19XDIFPU15,0-MA-077016
	20	<b>092726</b> C-M23F19-19XDIFPU20,0-MA-092726
	25	<b>092727</b> C-M23F19-19XDIFPU25,0-MA-092727
	30	<b>095993</b> C-M23F19-19XDIFPU30,0-MA-095993
	40	<b>102490</b> C-M23F19-19XDIFPU40,0-MA-102490

**Connection cables with plug connector M23**

**Connection cable PUR with plug connector M23**  
19-core, numbered

**Dimension drawing**



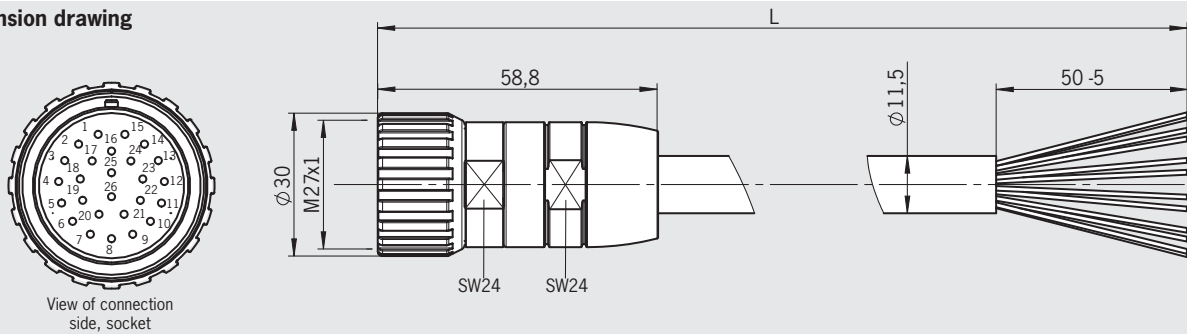
**Ordering table**

Designation	Cable length L [m]	Order no./item
<b>Connection cable PUR with plug connector M23</b> 19-core, socket Individual cores numbered, black, numbering corresponds to the pin number Conductor cross-section as for connection cable above	1.5	<b>110301</b> C-M23F19-PU01,5-MA-110301
	3	<b>110302</b> C-M23F19-PU03,0-MA-110302
	6	<b>110303</b> C-M23F19-PU06,0-MA-110303
	10	<b>110304</b> C-M23F19-PU10,0-MA-110304
	15	<b>110305</b> C-M23F19-PU15,0-MA-110305
	20	<b>110306</b> C-M23F19-PU20,0-MA-110306
	25	<b>110307</b> C-M23F19-PU25,0-MA-110307
	30	<b>122434</b> C-M23F19-PU30,0-MA-122434
	40	<b>122435</b> C-M23F19-PU40,0-MA-122435

**Connection cables with plug connector RC26**

**Connection cable PUR with plug connector RC26**  
26-core + PE, numbered

**Dimension drawing**



**Conductor cross-section of connection cable with plug connector RC26**

Pin	Conductor cross-section [mm <sup>2</sup> ]	Pin	Conductor cross-section [mm <sup>2</sup> ]	Pin	Conductor cross-section [mm <sup>2</sup> ]
1	1.0	10	0.5	19	0.5
2	1.0	11	0.5	20	0.5
3	1.0	12	0.5	21	0.5
4	0.5	13	0.5	22	0.5
5	0.5	14	0.5	23	0.5
6	0.5	15	0.5	24	0.5
7	0.5	16	0.5	25	0.5
8	0.5	17	0.5	26	0.5
9	0.5	18	0.5		

**Ordering table**

Designation	Cable length L [m]	Order no./item
<b>Connection cable TPE-U with plug connector RC26</b> 26-core, socket Individual cores numbered, black, numbering corresponds to the pin number	1.1	<b>114976</b> C-M27F26-PU01,1-MA-114976
	2	<b>111997</b> C-M27F26-PU02,0-MA-111997
	5	<b>111998</b> C-M27F26-PU05,0-MA-111998
	10	<b>111999</b> C-M27F26-PU10,0-MA-111999
	20	<b>112912</b> C-M27F26-PU20,0-MA-112912
	35	<b>123829</b> C-M27F26-PU35,0-MA-123829
	50	<b>123877</b> C-M27F26-PU50,0-MA-123877

## Expand your options - the control module for the MGB

- ▶ Space for up to 6 controls and indicators
- ▶ Ideal expansion solution for the MGB system
- ▶ A large amount of design flexibility

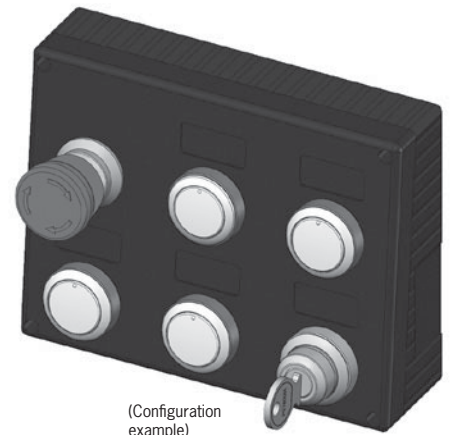
In the control module it is possible to integrate controls such as pushbuttons, emergency stop, key-operated switches, selector switches or even indicators as required. In this way a complete functional control panel can be built up.

Even the MGB basic system comprising handle module and interlocking/locking module includes numerous functions. And if requirements grow, the MGB system simply grows with them with the aid of the control module.

Furthermore, the control module forms an attractive unit together with the MGB. An elegant alternative to the gray switch boxes that were common in the past.

### Benefits for you

- ▶ Simple expansion of the MGB system
- ▶ Flexible configuration with standard components
- ▶ Attractive solution from one mold
- ▶ Functional unit, all control functions in one place
- ▶ Alternative to previous control terminals



(Configuration example)

## Control modules MGB-C...



(Configuration example)

### Details

**Emergency stop with monitoring contact**  
Additional normally open contact in the emergency stop, e.g. as monitoring contact for the control system.

### Further information

- ▶ Dimension drawings see p. 79
- ▶ Technical data see p. 83
- ▶ Accessories and spare parts see p. 82
- ▶ [www.euchner.com](http://www.euchner.com)

### ▶ Integrated controls and indicators

### Ordering table

Version/configuration scheme	S10 H10	S11 H11	S12 H12	S13 H13	S14 H14	S15 H15	Order no./item
<p>Empty housing incl. cover and 2 dummy plugs</p>	-	-	-	-	-	-	<b>109219</b> MGB-C-000000-A1-109219
<p>Empty housing incl. cover with holes, 6 slide-in labels (enclosed) and 2 dummy plugs</p>	Hole	Hole	Hole	Hole	Hole	Hole	<b>114268</b> MGB-C-0HHHHHH-A1-114268
<p>4 slide-in labels (enclosed), 2 inscribed slide-in labels</p>	Blind plug	Blind plug	Blind plug	Blind plug	Acknowledge protection zone bu	Safety door request ye	<b>112023</b> MGB-C-1BBBBPP-A3-112023
<p>1 slide-in label (enclosed), 4 inscribed slide-in labels</p>		Acknowledge emergency stop rd	WZW start wh	Blind plug	Acknowledge protection zone bu	Safety door request ye	<b>112022</b> MGB-C-1EPPBPP-A3-112022
Connection kit	- Printed circuit board with plug-in spring terminals - Pre-assembled wires and cable straps						<b>109858</b> MGB-A-LPSET-109858
Connection set	2 housing sleeves for gland M20 x 1.5						<b>109524</b> MGB-A-BUSH-109524

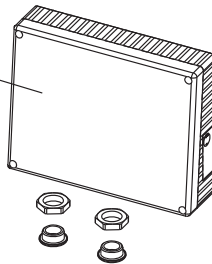
**Dimension drawing and configuration example**

Control module housing (MGB-C...)

Order No. 109219

Including:

- ▶ 1 x empty housing
- ▶ 1 x cover
- ▶ 2 x dummy plug

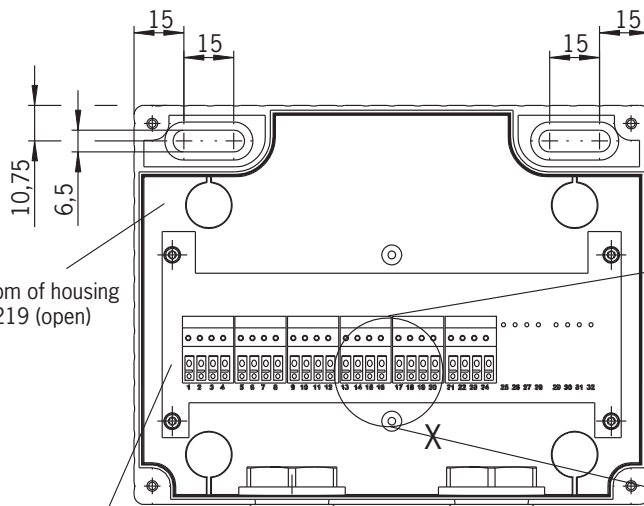
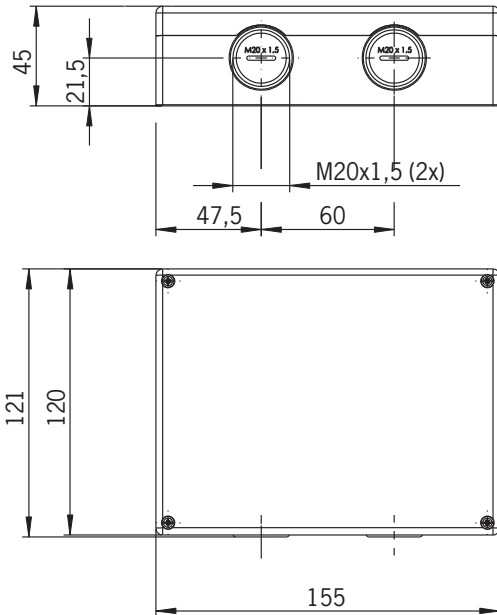
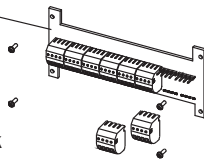


Connection kit

Order No. 109858

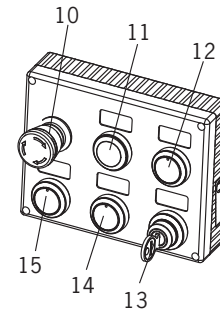
Including:

- ▶ 1 pc. printed circuit board with plug-in spring terminals
- ▶ 4 pcs. fixing screws for printed circuit board
- ▶ 7 pcs. flexible wires complete 0.34 mm<sup>2</sup> red
- ▶ 7 pcs. flexible wires complete 0.34 mm<sup>2</sup> blue
- ▶ 16 pcs. flexible wires complete 0.34 mm<sup>2</sup> black
- ▶ 6 pcs. cable straps

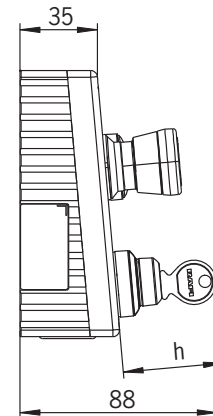


Printed circuit board with connection terminals 109858

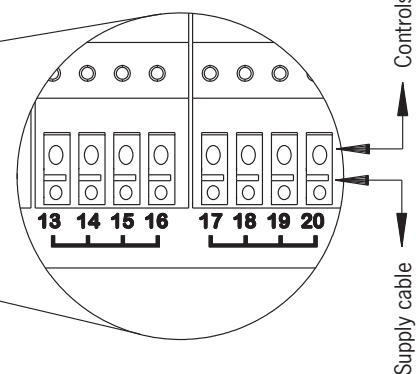
Configuration example



Item	Version	h [mm]
10	Emergency stop pushbutton	33.4
11	Cover for indicators, red	10
12	Cover for indicators, green	
13	Key-operated rotary switch	45.1
14	Illuminated pushbuttons	10
15	Illuminated pushbuttons	

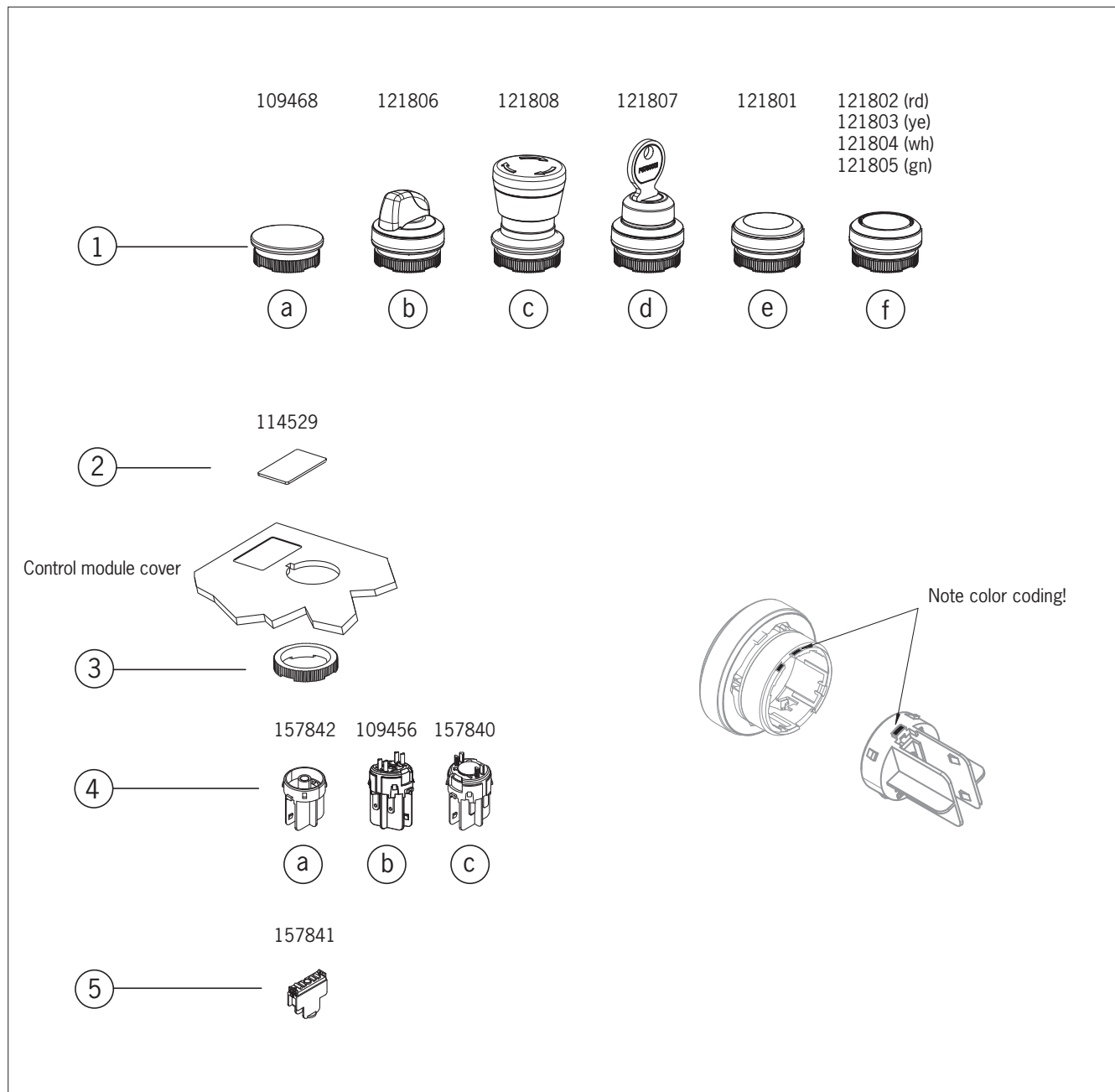


X 1.5 : 1



## Overview, controls and indicators

(suitable only for use in the control module)



### ① Controls/indicators

- a Blind plug
- b Selector switch, 2 positions, latching
- c Emergency stop, turn-to-reset
- d Key-operated switch, 2 positions, latching  
(key removable in both positions)
- e Pushbutton, illumination with 157841
- f Cover for indicators, different colors, illumination with 157841

### ② Adhesive label

### ③ Knurled nut (included with item 1)






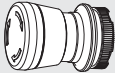






### ④ Switching element/LED holder

- a LED holder
- b Switching element, 2 positively driven NC contacts, 1 NO contact
- c Switching element, 1 NO contact

### ⑤ LED element, white



**Combination options**

	 Switching element Order no. 157840	 Switching element Order no. 109456	 LED holder Order no. 157842
	— —		
 LED Order no. 157841	X	-	●
 Emergency stop Order no. 121808 Latching with turn-to-reset	-	●	-
 Key-operated switch (2 positions) Order no. 121807 Incl. 2 keys Key removable in both positions	● <sup>1)</sup>	-	-
 Selector switch (2 positions) Order no. 121806	●	-	-
 Pushbutton (illuminated) Order no. 121801	●	-	-
 Cover for indicators Order no. 121802 (rd) Order no. 121803 (ye) Order no. 121804 (wh) Order no. 121805 (gn)	-	-	●
 Adhesive label Order no. 114529		●	
 Blind plug Order no. 109468		-	

















x= Optional

—= Not combinable

●= Combinable

<sup>1)</sup> Not in combination with 157841 (LED)

Spare parts and accessories

Designation	Description	Order No.	Item	
Blind plug		109468	MP-A-B-00-00-00-109468	
Cover for indicators (without LED holder)	Transparent - (rd) red - (ye) yellow - (wh) white - (gn) green	121802 121803 121804 121805	MP-B-L-RD-00-121802 MP-B-L-RO-YE-00-121803 MP-B-L-RO-WH-00-121804 MP-B-L-RO-GN-00-121805	
Pushbutton (without switching element)		121801	MP-B-P-RT-NC-A1-121801	
Emergency stop (without switching element)	Latching, turn-to-reset	121808	MP-B-E-RD-00-A4-121808	
Selector switch (without switching element)	2 positions, latching in 2 positions	121806	MP-B-S-RR-00-A2-121806	
Key-operated switch (without switching element)	Incl. 2 keys 2 positions; key removable in each position	121807	MP-B-K-RR-00-A3-121807	
Adhesive labels	Silver, blank (packaging unit = 10 pcs.)	114529	MGB-A-PLATESET-NN01-114529	
Connection set	2 housing sleeves for gland M20x1.5	109524	MGB-A-BUSH-109524	
Switching element with LED holder	- 2 positively driven NC contacts, 1 NO contact - 1 NO contact (expandable with LED element)	109456 157840	MP-A-C-GM-21-00-109456 MP-A-C-GU-01-00-157840	
LED holder		157842	MP-A-C-CH-00-00-157842	
LED element	LED, white	157841	MP-A-C-LC-WH-00-157841	
Lens set 3 pcs.	1 x GN  1 x YE 	126158	MGB-A-LENSET-SY03-126158	
	1 x WH 			
Lens sets 6 pcs.	2 x WH/1 x BU/ 1 x YE/ 1 x GN/ 1 x RD		120344	MGB-A-LENSET-0001-120344
	1 x WH/1 x BU/ 1 x YE/ 1 x GN/ 1 x RD/1 x BK		120378	MGB-A-LENSET-0002-120378
	1 x WH  1 x WH 	120377	MGB-A-LENSET-SY01-120377	
	1 x GN  1 x WH 			
1 x WH  1 x WH 				
Lens set 15 pcs.	1 x WH	4 x BK	125359	MGB-A-LENSET-SY02-125359
	1 x WH  1 x WH 			
	2 x WH  2 x WH 			
	1 x WH OK 1 x WH 			
	1 x WH  1 x WH 			

## Technical data

### Empty housing

Parameter	Value
Housing material	Reinforced thermoplastic
Ambient temperature	-20 ... 55 °C
Degree of protection according to EN 60529	IP 65
Degree of contamination/material group	3 (industrial)
External connection	2 x cable entry M20x1.5
Internal connection (plug-in spring terminals)	0.2 ... 1.5 mm <sup>2</sup>

### Controls

Parameter	Value
Mech. life	
- Pushbutton	1x10 <sup>6</sup>
- Emergency stop	5x10 <sup>4</sup>
- Selector switch	3x10 <sup>5</sup>
- Key-operated switch	3x10 <sup>4</sup>
Ambient temperature	-20 ... 55 °C
Degree of protection according to EN 60529	IP 65 (fitted), key-operated switch IP 54

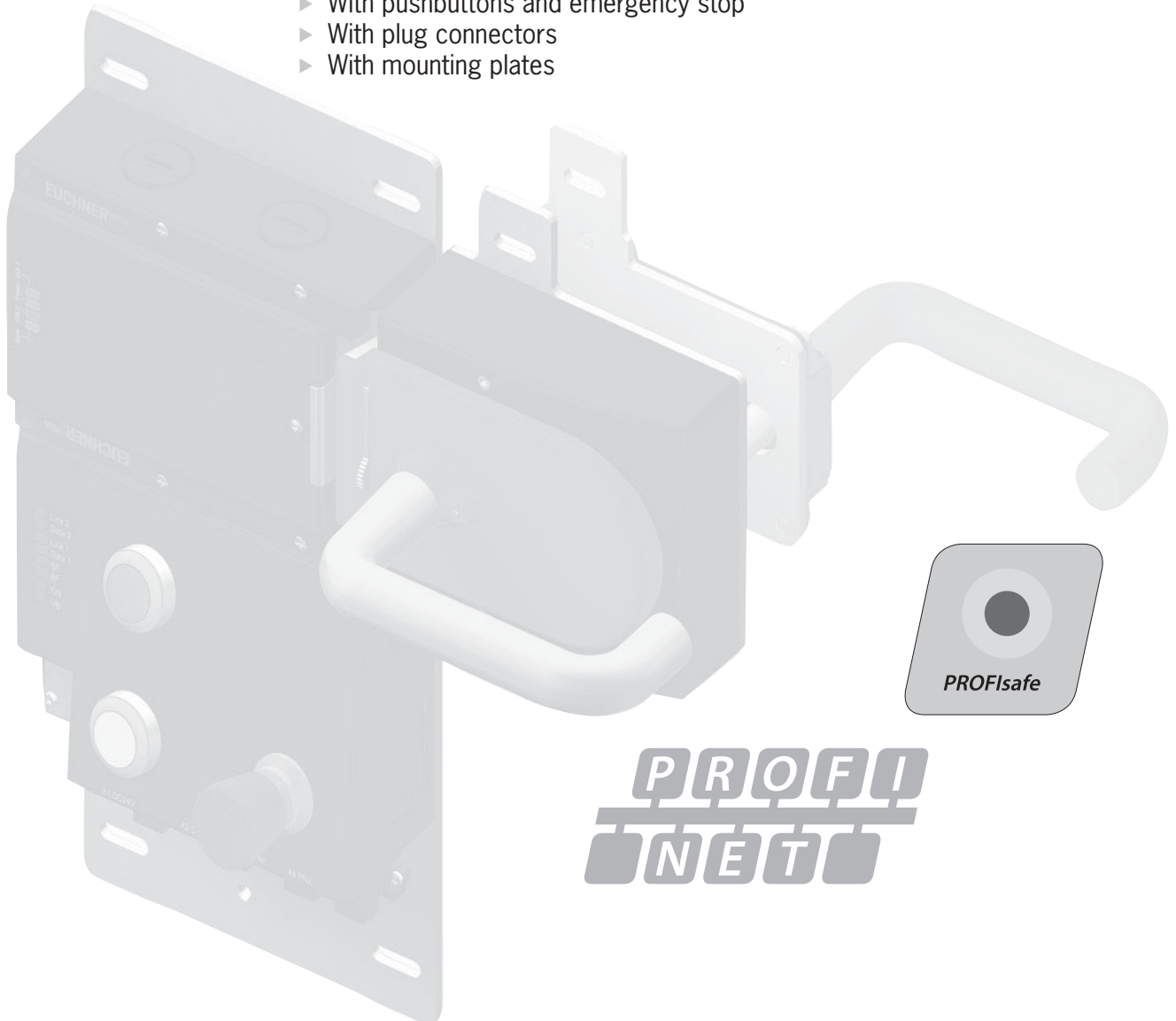
### Switching elements, LED

Parameter	Value
Mechanical life at 10 mA/24 V DC	
...-GU...	1x10 <sup>6</sup>
...-GM...	5x10 <sup>4</sup>
Ambient temperature	-20 ... 55 °C
Operating voltage	
- Switching elements	5 ... 35 V
- LED	24 V
Operating current	
- Switching elements	1 ... 100 mA
- LED	max. 30 mA permissible
Breaking capacity max.	250 mW
Connection	Connector 2.8 x 0.8 mm
Contact material	Au
Shock resistance according to IEC 60068-2-27	15 g
Vibration resistance IEC 60068-2-6	5 g (10 ... 500 Hz)
Positively driven ...GM...	According to IEC 60947-5-1 (positively driven NC contact)



**Complete sets system family MGB-PN**

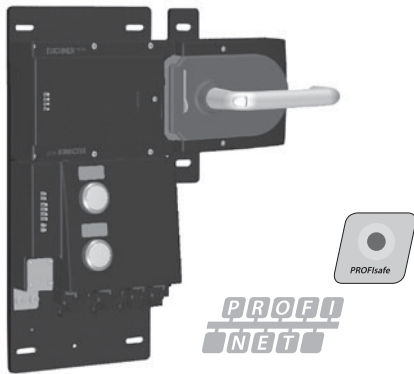
- ▶ Profinet and Profisafe
- ▶ With pushbuttons and emergency stop
- ▶ With plug connectors
- ▶ With mounting plates



MGB-PN

<b>Locking sets MGB-L1-PN... (guard locking by spring force)</b>	<b>86 - 96</b>
with 2 controls and indicators	86
with 3 controls and indicators	90
with 4 controls and indicators	94
<b>Locking sets MGB-L2-PN... (guard locking by solenoid force)</b>	<b>98 - 112</b>
without controls and indicators	98
with 3 controls and indicators	102
with 6 controls and indicators	106
<b>Control modules MGB-...-PN</b>	<b>114</b>
<b>Assignment of the terminal plugs</b>	<b>118</b>
<b>Technical data</b>	<b>120</b>
<b>Dimension drawing</b>	<b>121</b>

## Locking sets MGB-L1...-PN... (guard locking by spring force) with 2 controls or indicators



- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Lens set

The color of the pushbutton can be selected using the lens set 120344 included.

### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 88
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Modules in the set					Ordering data, set		
Version/configuration scheme Order no. module combination	Controls and indicators		Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S90 H90	S95 H95					
 121831 Incl. adhesive labels	⊗	⊗	<b>A</b>	106049	-	Right	<b>121832</b> MGB-L1HB-PNA-R-121832 (Modules pre-assembled on mounting plates)
	*)	*)					
 121833 Incl. adhesive labels							

\* The color can be selected using the lens set included.

## Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

### PROFINET data bytes (unsafe input/output area)



#### Assignment in input area of the bus master

Slot 1/byte 0	-	-	S95.1	-	-	-	-	S90.1
Slot 1/byte 1	-	-	-	-	-	-	-	-
Slot 2/byte 0	ÜK	SK	-	-	-	R	R	T
Slot 3/byte 0	I24	-	-	-	-	I19	I18	I17
Slot 1/byte 0	Pushbutton S90 - S95 1st contact							
Slot 1/byte 1	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 0	Locking module							
Slot 3/byte 0	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 0	-	-	H95	-	-	-	-	H90
Slot 2/byte 0	-	-	-	-	-	-	-	Sol.
Slot 3/byte 0	-	-	-	-	-	-	O18	O17
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	Guard locking solenoid							
Slot 3/byte 0	Diagnostic module							

### PROFIsafe data bytes (safe input/output area)



#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	SI5	SI4	SI3	-	-
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

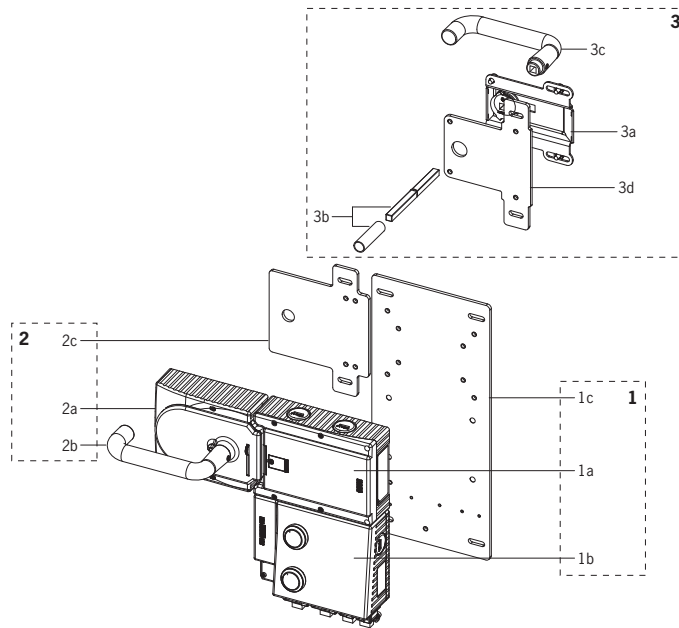
## Locking sets MGB-L1...-PN... (guard locking by spring force) with 2 controls or indicators



Cat. 4  
PLe



### System components and spare parts



### Ordering table for system components, spare parts and accessories

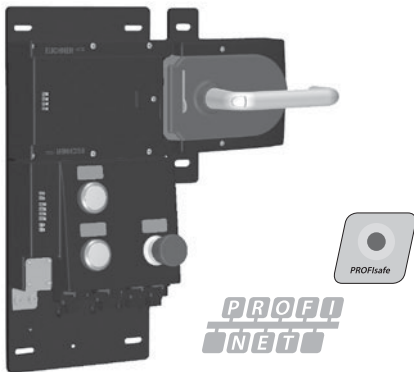
Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L1B-...</b> (guard locking by spring force)	For doors hinged on the left	<b>121833</b> MGB-L1B-PNA-L-121833	
		For doors hinged on the right	<b>121831</b> MGB-L1B-PNA-R-121831	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate	-		
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>106221</b> MGB-H-AA1A2-L-106221	
		For doors hinged on the right	<b>106049</b> MGB-H-AA1A2-R-106049	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
	<b>2c</b>	- Mounting plate	For handle module MGB-H-... <b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square 8x8 mm + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red <b>110276</b> MGB-A-DOORHANDLE-R-110276	
	<b>3d</b>	- Mounting plate	For escape release MGB-E-... <b>109492</b> MGB-A-MOUNTINGPLATE-E-109492	





## Locking sets MGB-L1...-PN... (guard locking by spring force) with 3 controls or indicators



- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14, or 7/8" plugs according to ANSI/B93.55M-1981 and M12 plugs according to IEC 61076-2-101.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

#### Lens set

The color of the pushbutton can be selected using the lens set 120344 included.

#### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 93
- ▶ [www.euchner.com](http://www.euchner.com)

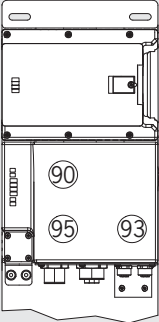



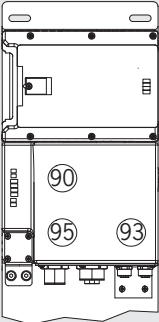
### Ordering table

Modules in the set					Ordering data, set		
Version/configuration scheme Order no. module combination	Controls and indicators	Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item	
							Evaluation module and bus module
121851  Incl. adhesive labels, push-pull plugs 	S93	S90	S95	106049	Right	<b>121852</b> MGB-L1HB-PNA-R-121852 (Modules pre-assembled on mounting plates)	
	H93	H90	H95				A
121855  Incl. adhesive labels, push-pull plugs				106221	Left	<b>121856</b> MGB-L1HB-PNA-L-121856 (Modules pre-assembled on mounting plates)	

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

Modules in the set				Ordering data, set				
Version/configuration scheme Order no. module combination	Controls and indicators			Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S93 H93	S90 H90	S95 H95					
<p>121857</p>  <p>Pre-assembled on mounting plate, incl. adhesive labels, 7/8" plugs and M12 plugs</p>		 <p>*)</p>	 <p>*)</p>	A	106049 Pre-assembled on mounting plate	-	Right	<p><b>121858</b> MGB-L1HB-PNA-R-121858</p>
<p>121861</p>  <p>Pre-assembled on mounting plate, incl. adhesive labels, 7/8" plugs and M12 plugs</p>					106221 Pre-assembled on mounting plate		Left	<p><b>121862</b> MGB-L1HB-PNA-L-121862</p>

\* The color can be selected using the lens set included.

## Locking sets MGB-L1...-PN... (guard locking by spring force) with 3 controls or indicators



Cat. 4  
PLe



### Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

#### PROFINET data bytes

(unsafe input/output area)

**A**

#### Assignment in input area of the bus master

Slot 1/byte 0	-	-	S95.1	-	-	-	-	S90.1
Slot 1/byte 1	-	-	-	-	-	-	-	-
Slot 2/byte 0	-	-	-	-	-	-	-	S93
Slot 3/byte 0	ÜK	SK	-	-	-	R	R	T
Slot 4/byte 0	I24	-	-	-	-	I19	I18	I17
Slot 1/byte 0	Pushbutton S90 - S95 1st contact							
Slot 1/byte 1	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 0	Emergency stop monitoring contact							
Slot 3/byte 0	Locking module							
Slot 4/byte 0	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 0	-	-	H95	-	-	-	-	H90
Slot 2/byte 0	-	-	-	-	-	-	-	H93
Slot 3/byte 0	-	-	-	-	-	-	-	Sol.
Slot 4/byte 0	-	-	-	-	-	-	018	017
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	Emergency stop LED							
Slot 3/byte 0	Guard locking solenoid							
Slot 4/byte 0	Diagnostic module							

#### PROFIsafe data bytes

(safe input/output area)

**A**

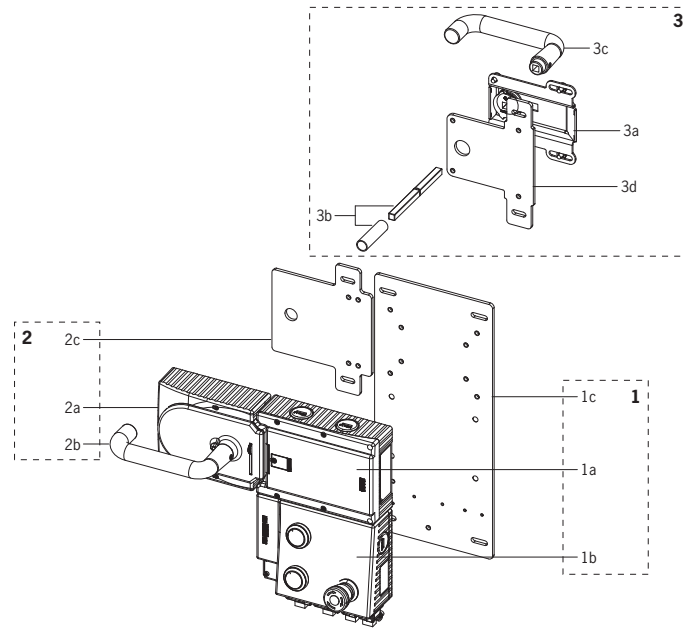
#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	SI5	SI4	SI3	-	SI1
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI1	Emergency stop S93							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

System components and spare parts



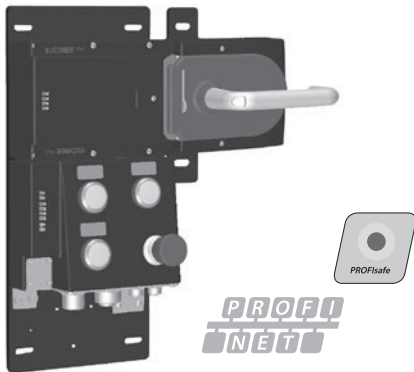
Ordering table for system components, spare parts and accessories

Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item		
1	<b>System unit MGB-L1B-...</b> (guard locking by spring force)	For doors hinged on the left	<b>121855</b> MGB-L1B-PNAL-121855		
		For doors hinged on the right	<b>121861</b> MGB-L1B-PNAL-121861		
	comprising:				
	<b>1a</b>	- Evaluation module		-	
<b>1b</b>	- Bus module		-		
<b>1c</b>	- Mounting plate				
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>106221</b> MGB-HAA1A2-L-106221		
		For doors hinged on the right	<b>106049</b> MGB-HAA1A2-R-106049		
	<b>2a</b>	- Handle module		-	
	<b>2b</b>	- Door handle	Color silver	<b>123926</b> MGB-A-DOORHANDLE-S2-123926	
<b>2c</b>	- Mounting plate	For handle module MGB-H-...	<b>109491</b> MGB-A-MOUNTINGPLATE-H-109491		
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051		
		<b>3a</b>	- Escape release		-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square 8x8 mm + sleeve)		-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250	
	<b>3c</b>	- Door handle	Color red	<b>110276</b> MGB-A-DOORHANDLE-R-110276	
<b>3d</b>	- Mounting plate	For escape release MGB-E-...	<b>109492</b> MGB-A-MOUNTINGPLATE-E-109492		

MGB-PN

## Locking sets MGB-L1...-PN... (guard locking by spring force) with 4 controls or indicators



- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Details

#### Profinet connection

Connection via 7/8" plugs according to ANSI/B93.55M-1981 and M12 plugs according to IEC 61076-2-101.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

#### Lens set

The color of the pushbutton can be selected using the lens set 120344 included.

#### Multicode evaluation

Every suitable handle module is detected by the safety switch.

#### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 96
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Modules in the set					Ordering data, set				
Version/configuration scheme Order no. module combination	Controls and indicators				Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S93 H93	S90 H90	S92 H92	S95 H95					
121865  Incl. adhesive labels 					A	111838	-	Right	<b>121866</b> MGB-L1HB-PNC-R-121866 (Modules pre-assembled on mounting plates)
121867  Incl. adhesive labels 		*)	*)	*)	A	111839	-	Left	<b>121868</b> MGB-L1HB-PNC-L-121868 (Modules pre-assembled on mounting plates)

\* The color can be selected using the lens set included.

## Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
 GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

### PROFINET data bytes (unsafe input/output area)



#### Assignment in input area of the bus master

Slot 1/byte 0	-	-	S95.1	-	-	S92.1	-	S90.1
Slot 1/byte 1	-	-	-	-	-	-	-	-
Slot 2/byte 0	-	-	-	-	-	-	-	S93
Slot 3/byte 0	ÜK	SK	-	-	-	R	R	T
Slot 4/byte 0	I24	-	-	-	-	I19	I18	I17
Slot 1/byte 0	Pushbutton S90 - S95 1st contact							
Slot 1/byte 1	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 0	Emergency stop monitoring contact							
Slot 3/byte 0	Locking module							
Slot 4/byte 0	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 0	-	-	H95	-	-	H92	-	H90
Slot 2/byte 0	-	-	-	-	-	-	-	H93
Slot 3/byte 0	-	-	-	-	-	-	-	Sol.
Slot 4/byte 0	-	-	-	-	-	-	O18	O17
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	Emergency stop LED							
Slot 3/byte 0	Guard locking solenoid							
Slot 4/byte 0	Diagnostic module							

### PROFIsafe data bytes (safe input/output area)



#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	SI5	SI4	SI3	-	SI1
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI1	Emergency stop S93							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

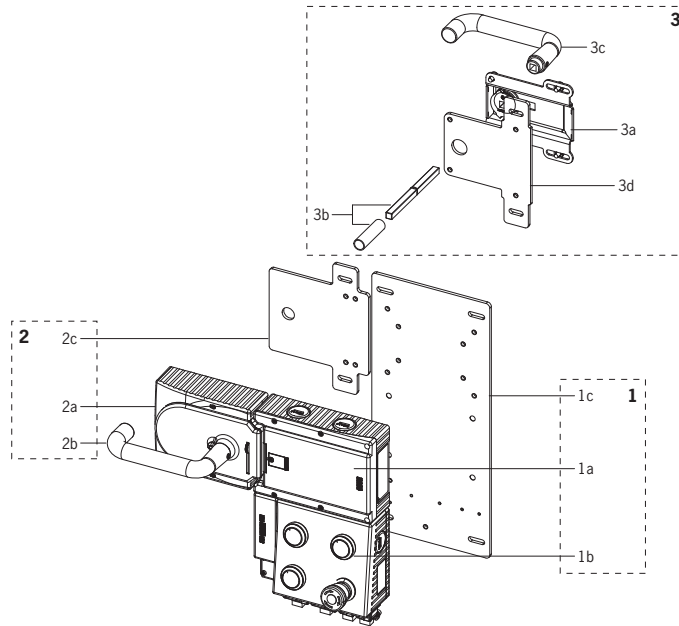
## Locking sets MGB-L1...-PN... (guard locking by spring force) with 4 controls or indicators



Cat. 4  
PLe



### System components and spare parts



### Ordering table for system components, spare parts and accessories

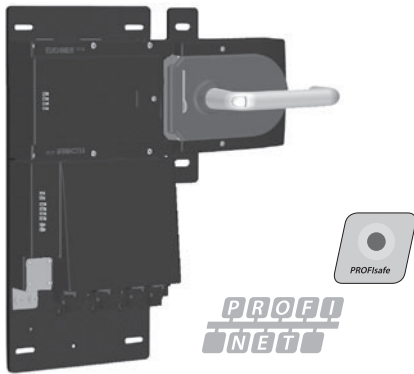
Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L1B-...</b> (guard locking by spring force)	For doors hinged on the left	<b>121867</b> MGB-L1B-PNC-L-121867	
		For doors hinged on the right	<b>121865</b> MGB-L1B-PNC-R-121865	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate	-		
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>111839</b> MGB-H-AA1A6-L-111839	
		For doors hinged on the right	<b>111838</b> MGB-H-AA1A6-R-111838	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
	<b>2c</b>	- Mounting plate	For handle module MGB-H-... <b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square 8x8 mm + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red <b>110276</b> MGB-A-DOORHANDLE-R-110276	
	<b>3d</b>	- Mounting plate	For escape release MGB-E-... <b>109492</b> MGB-A-MOUNTINGPLATE-E-109492	





## Locking sets MGB-L2...-PN... (guard locking by solenoid force) without controls or indicators



### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 100
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Ordering table

Modules in the set					Ordering data, set
Version/configuration scheme Order no. module combination	Controls and indicators	Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)
114044 					
114045 					
PROFINET PN	-	A	106049		Right
			106221		Left
					<b>113988</b> MGB-L2HB-PNA-R-113988 (Modules pre-assembled on mounting plates)
					<b>113989</b> MGB-L2HB-PNA-L-113989 (Modules pre-assembled on mounting plates)

## Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

### PROFINET data bytes (unsafe input/output area)



#### Assignment in input area of the bus master

Slot 1/byte 1	ÜK	SK	-	-	-	R	R	T
Slot 2/byte 1	I24	-	-	-	-	-	I18	I17
Slot 1/byte 1	Locking module							
Slot 2/byte 1	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 1	-	-	-	-	-	-	-	Sol.
Slot 2/byte 1	-	-	-	-	-	-	O18	O17
Slot 1/byte 1	Guard locking solenoid							
Slot 2/byte 1	Diagnostic module							

### PROFIsafe data bytes (safe input/output area)



#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	SI5	SI4	SI3	-	-
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

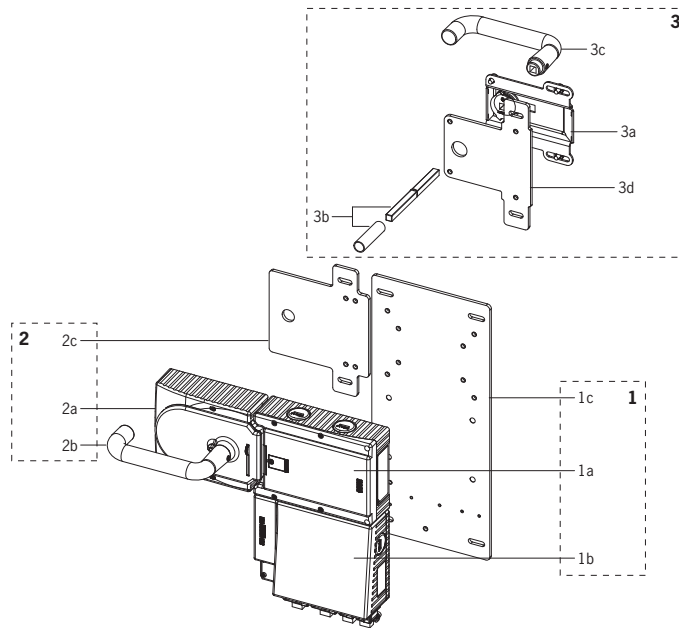
## Locking sets MGB-L2...-PN... (guard locking by solenoid force) without controls or indicators



Cat. 4  
PLe



### System components and spare parts



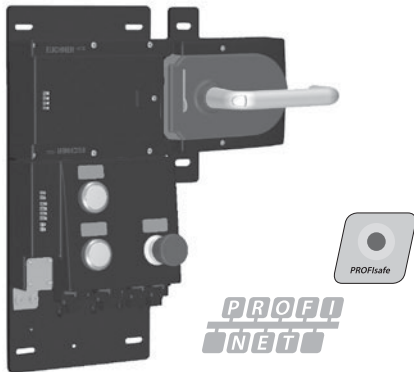
### Ordering table for system components, spare parts and accessories

Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L2B-...</b> (guard locking by solenoid force)	For doors hinged on the left	<b>114044</b> MGB-L2B-PNA-L-114044	
		For doors hinged on the right	<b>114045</b> MGB-L2B-PNA-R-114045	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate	-		
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>106221</b> MGB-H-AA1A2-L-106221	
		For doors hinged on the right	<b>106049</b> MGB-H-AA1A2-R-106049	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
<b>2c</b>	- Mounting plate	For handle module MGB-H-...	<b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red	<b>110276</b> MGB-A-DOORHANDLE-R-110276
<b>3d</b>	- Mounting plate	For escape release MGB-E-...	<b>109492</b> MGB-A-MOUNTINGPLATE-E-109492	



## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 3 controls or indicators



### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14, or 7/8" plugs according to ANSI/B93.55M-1981 and M12 plugs according to IEC 61076-2-101.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

#### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

#### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 105
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch


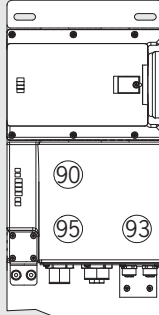







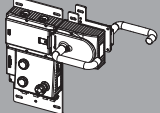
### Ordering table

Modules in the set					Ordering data, set			
Version/configuration scheme Order no. module combination	Controls and indicators			Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S93 H93	S90 H90	S95 H95					
121848  Incl. adhesive labels, push-pull plugs				A	106049	-	Right	<b>121849</b> MGB-L2HB-PNA-R-121849 (Modules pre-assembled on mounting plates)
121853  Incl. adhesive labels, push-pull plugs		*)	*)	A	106221	-	Left	<b>121854</b> MGB-L2HB-PNA-L-121854 (Modules pre-assembled on mounting plates)

\* The color can be selected using the lens set included.

(Continued on next page)

Ordering table (continued)

Modules in the set				Ordering data, set				
Version/configuration scheme Order no. module combination	Controls and indicators			Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S93 H93	S90 H90	S95 H95					
 <div style="text-align: center;">  <p>121859</p> <p>Pre-assembled on mounting plate, incl. adhesive labels, 7/8" plugs and M12 plugs</p> </div>		 *)	 *)	<div style="text-align: center;">  <p>A</p> </div>	<div style="text-align: center;">  <p>106049 Pre-assembled on mounting plate</p> </div>	<div style="text-align: center;">  <p>106221 Pre-assembled on mounting plate</p> </div>	<div style="text-align: center;">  <p>Right</p> </div>	<div style="text-align: center;">  <p><b>121860</b> MGB-L2HB-PNA-R-121860</p> </div>

\* The color can be selected using the lens set included.

## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 3 controls or indicators



Cat. 4  
PLe



### Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

#### PROFINET data bytes

(unsafe input/output area)

**A**

#### Assignment in input area of the bus master

Slot 1/byte 0	-	-	S95.1	-	-	-	-	S90.1
Slot 1/byte 1	-	-	-	-	-	-	-	-
Slot 2/byte 0	-	-	-	-	-	-	-	S93
Slot 3/byte 0	ÜK	SK	-	-	-	R	R	T
Slot 4/byte 0	I24	-	-	-	-	I19	I18	I17
Slot 1/byte 0	Pushbutton S90 - S95 1st contact							
Slot 1/byte 1	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 0	Emergency stop monitoring contact							
Slot 3/byte 0	Locking module							
Slot 4/byte 0	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 0	-	-	H95	-	-	-	-	H90
Slot 2/byte 0	-	-	-	-	-	-	-	H93
Slot 3/byte 0	-	-	-	-	-	-	-	Sol.
Slot 4/byte 0	-	-	-	-	-	-	018	017
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	Emergency stop LED							
Slot 3/byte 0	Guard locking solenoid							
Slot 4/byte 0	Diagnostic module							

#### PROFIsafe data bytes

(safe input/output area)

**A**

#### Assignment of PROFIsafe in input area of the bus master

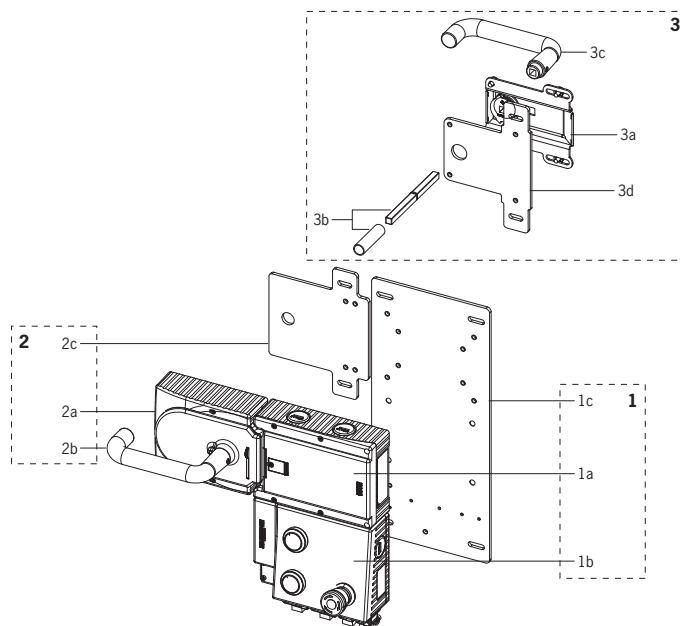
Byte n+0	-	-	-	SI5	SI4	SI3	-	SI1
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI1	Emergency stop S93							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							



## System components and spare parts



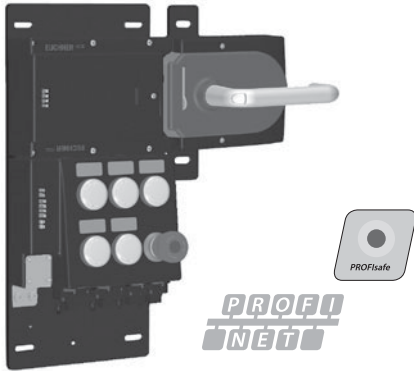
## Ordering table for system components, spare parts and accessories

Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L2B-...</b> (guard locking by solenoid force)	For doors hinged on the left	<b>121853</b> MGB-L2B-PNA-L-121853	
		For doors hinged on the right	<b>121863</b> MGB-L2B-PNA-L-121863	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate			
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>106221</b> MGB-HAA1A2-L-106221	
		For doors hinged on the right	<b>106049</b> MGB-HAA1A2-R-106049	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
	<b>2c</b>	- Mounting plate	For handle module MGB-H-... <b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red	<b>110276</b> MGB-A-DOORHANDLE-R-110276
	<b>3d</b>	- Mounting plate	For escape release MGB-E-...	<b>109492</b> MGB-A-MOUNTINGPLATE-E-109492

MGB-PN

## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 6 controls or indicators



### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

### Lens set

The color of the pushbuttons can be selected using the lens set 120344 included.

### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 108
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Ordering table

Modules in the set							Ordering data, set				
Version/configuration scheme Order no. module combination	Controls and indicators						Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (factory setting)	Order no./item
	S93 H93	S90 H90	S91 H91	S92 H92	S94 H94	S95 H94					
121836  Incl. adhesive labels							A	118838	-	Right	<b>121837</b> MGB-L2HB-PNA-R-121837 (Modules pre-assembled on mounting plates)
121838  Incl. adhesive labels		*)	*)	*)	*)	*)					

\* The color can be selected using the lens set included.

## Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

### PROFINET data bytes (unsafe input/output area)

**A**

#### Assignment in input area of the bus master

Slot 1/byte 0	–	–	S95.1	S94.1	–	S92.1	S91.1	S90.1
Slot 1/byte 1	–	–	–	–	–	–	–	–
Slot 2/byte 0	–	–	–	–	–	–	–	S93
Slot 3/byte 0	ÜK	SK	–	–	–	R	R	T
Slot 4/byte 0	I24	–	–	–	–	I19	I18	I17
Slot 1/byte 0	Pushbutton S90 - S95 1st contact							
Slot 1/byte 1	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 0	Emergency stop monitoring contact							
Slot 3/byte 0	Locking module							
Slot 4/byte 0	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 0	–	–	H95	H94	–	H92	H91	H90
Slot 2/byte 0	–	–	–	–	–	–	–	H93
Slot 3/byte 0	–	–	–	–	–	–	–	Sol.
Slot 4/byte 0	–	–	–	–	–	–	O18	O17
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	Emergency stop LED							
Slot 3/byte 0	Guard locking solenoid							
Slot 4/byte 0	Diagnostic module							

### PROFIsafe data bytes (safe input/output area)

**A**

#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	–	–	–	SI5	SI4	SI3	–	SI1
Byte n+1	–	–	–	–	–	–	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI1	Emergency stop S93							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	–	–	–	–	–	–	–	S01
Byte n+1	–	–	–	–	–	–	–	–
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

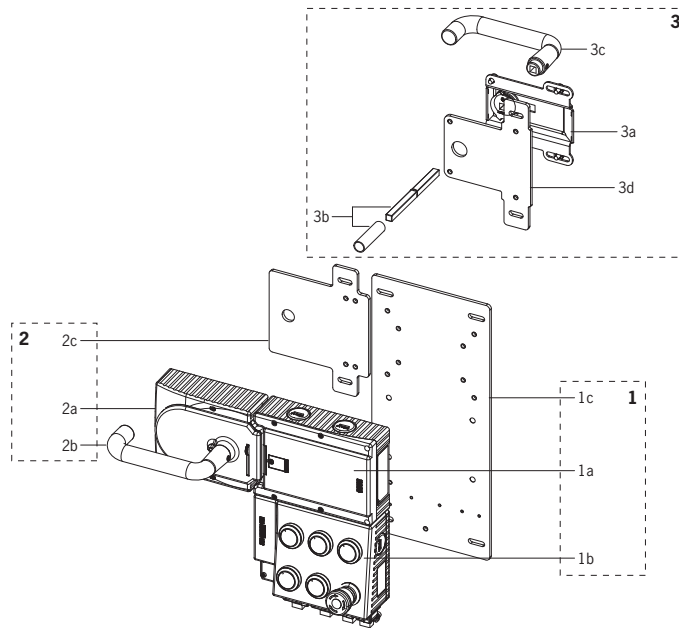
## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 6 controls or indicators



Cat.  
4  
PLe



### System components and spare parts



### Ordering table for system components, spare parts and accessories

Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

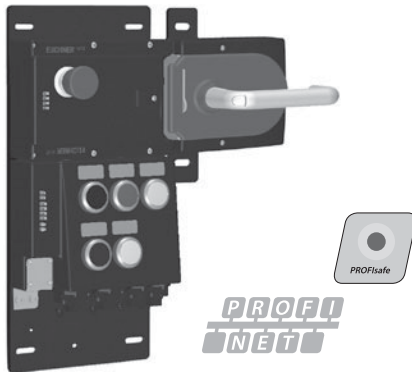
Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L2B-...</b> (guard locking by spring force)	For doors hinged on the left	<b>121838</b> MGB-L2B-PNA-L-121838	
		For doors hinged on the right	<b>121836</b> MGB-L2B-PNA-R-121836	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate	-		
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>111839</b> MGB-H-AA1A6-L-111839	
		For doors hinged on the right	<b>111838</b> MGB-H-AA1A6-R-111838	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
	<b>2c</b>	- Mounting plate	For handle module MGB-H-... <b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square 8x8 mm + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red <b>110276</b> MGB-A-DOORHANDLE-R-110276	
	<b>3d</b>	- Mounting plate	For escape release MGB-E-... <b>109492</b> MGB-A-MOUNTINGPLATE-E-109492	



## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 6 controls or indicators



Cat. 4  
PLe



### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible usage as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, usage can be as either interlocking or guard locking (with or without monitoring).

#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

### Further information

- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 112
- ▶ [www.euchner.com](http://www.euchner.com)

- ▶ Integrated controls and indicators
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Ordering table

Modules in the set							Ordering data, set				
Version/configuration scheme Order no. module combination	Controls and indicators						Data ranges	Handle module Order no. separate module	Escape release Order no. separate module	Door hinge (Factory setting)	Order no./item
	S1 H1	S90	S91	H92	S94 H94	S95 H94					
113133  Incl. adhesive labels							106049		Right	<b>113134</b> MGB-L2HB-PNA-R-113134 (Modules pre-assembled on mounting plates)	
113990  Incl. adhesive labels		gn	rd	ye	wh	bu	A	106221	Left	<b>113991</b> MGB-L2HB-PNA-L-113991 (Modules pre-assembled on mounting plates)	

## Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:  
GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

### PROFINET data bytes (unsafe input/output area)

**A**

#### Assignment in input area of the bus master

Slot 1/byte 1	-	-	S95.1	S94.1	-	-	S91.1	S90.1
Slot 1/byte 2	-	-	-	-	-	-	-	-
Slot 2/byte 1	-	-	-	-	-	-	-	S1
Slot 4/byte 1	I24	-	-	-	-	I19	I18	I17
Slot 1/byte 1	Pushbutton S90 - S95 1st contact							
Slot 1/byte 2	Pushbutton S90 - S95 2nd contact							
Slot 2/byte 1	Emergency stop monitoring contact							
Slot 4/byte 1	Diagnostic module							

#### Assignment in output area of the bus master

Slot 1/byte 1	-	-	H95	H94	-	H92	-	-
Slot 2/byte 1	-	-	-	-	-	-	-	H1
Slot 3/byte 1	-	-	-	-	-	-	-	Sol.
Slot 4/byte 1	-	-	-	-	-	-	O18	O17
Slot 1/byte 1	LEDs H90 - H95							
Slot 2/byte 1	Emergency stop LED							
Slot 3/byte 1	Guard locking solenoid							
Slot 4/byte 1	Diagnostic module							

### PROFIsafe data bytes (safe input/output area)

**A**

#### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	SI5	SI4	SI3	-	SI1
Byte n+1	-	-	-	-	-	-	SI10	SI9
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SI1	Emergency stop S1							
SI3	Door position (T)							
SI4	Bolt position (R)							
SI5	Guard locking (Z)							
SI9	SK (T AND R)							
SI10	ÜK (T AND R AND Z)							

#### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	S01
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
S01	Guard locking solenoid							

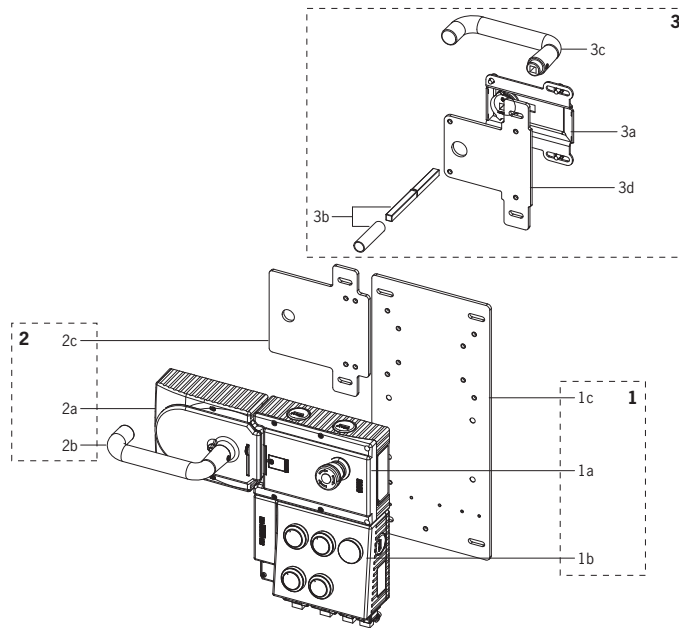
## Locking sets MGB-L2...-PN... (guard locking by solenoid force) with 6 controls or indicators



Cat.  
4  
PLe



### System components and spare parts



### Ordering table for system components, spare parts and accessories

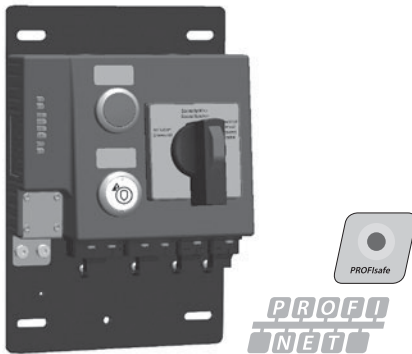
Notice: It is only possible to order spare parts that are given in the following ordering table with an order number.

Item	Designation	Use/description	Order No./item	
1	<b>System unit MGB-L2B-...</b> (guard locking by solenoid force)	For doors hinged on the left	<b>113990</b> MGB-L2B-PNA-L-113990	
		For doors hinged on the right	<b>113133</b> MGB-L2B-PNA-R-113133	
	comprising:			
	<b>1a</b>	- Evaluation module	-	
	<b>1b</b>	- Bus module	-	
<b>1c</b>	- Mounting plate	-		
2	<b>Handle module MGB-H-...</b> comprising:	For doors hinged on the left	<b>106221</b> MGB-H-AA1A2-L-106221	
		For doors hinged on the right	<b>106049</b> MGB-H-AA1A2-R-106049	
	<b>2a</b>	- Handle module	-	
	<b>2b</b>	- Door handle	Color silver <b>123926</b> MGB-A-DOORHANDLE-S2-123926	
	<b>2c</b>	- Mounting plate	For handle module MGB-H-... <b>109491</b> MGB-A-MOUNTINGPLATE-H-109491	
3	<b>Escape release MGB-E-...</b> comprising:		<b>106051</b> MGB-E-A2-106051	
		<b>3a</b>	- Escape release	-
	<b>3b</b>	- Escape release shaft	Standard length 118 mm (square + sleeve)	-
		- Long escape release shaft (instead of item 3b)	Length 250 mm (square 8x8 mm + sleeve 182 mm long)	<b>106761</b> MGB-A-ESCAPERELEASESHAFT 250
	<b>3c</b>	- Door handle	Color red	<b>110276</b> MGB-A-DOORHANDLE-R-110276
	<b>3d</b>	- Mounting plate	For escape release MGB-E-...	<b>109492</b> MGB-A-MOUNTINGPLATE-E-109492





## Control modules MGB-...-PN



- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch

### Details

#### Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117, variant 14.

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Selector switch

- ▶ Selector switch with 3 positions (form V, 2x45°). The switch latches in all three positions.
- ▶ Selector switch illuminated with 3 positions (form V, 2x60°). The switch latches in three positions. Switch position only left and right. Both contacts are open in center position.

### Further information


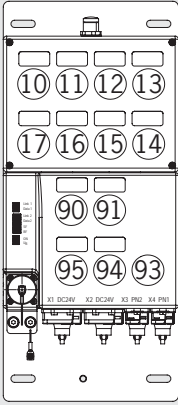













- ▶ Dimension drawings see p. 121
- ▶ Technical data see p. 120
- ▶ Accessories and spare parts see p. 63
- ▶ [www.euchner.com](http://www.euchner.com)

### Ordering table

Bus module and/or control module									Data ranges	Order no./item
Version/configuration scheme	Controls and indicators									
<p>Pre-assembled on mounting plate, incl. adhesive labels</p>	H90	S92	S91	-	-	-	-	-	A	<b>123759</b> MGB-B-A1W2A2- PN-123759
		H92								
			Form V 2x45° 	-	-	-	-	-		

(Continued on next page)

Ordering table (continued)

Bus module and/or control module 		Controls and indicators								Data ranges	Order no./item
Version/configuration scheme											
 <p>Pre-assembled on mounting plate, plug connector X14 for enabling switch ZSB077029, socket X6 for stacklight indicator, incl. adhesive labels</p>	S10	S11	S12	S13	S14	S15	S16	S17	B	<b>114744</b> MGB-CB-PN-114744	
	H10	H11	H12	H13	H14	H15	H16	H17			
	 wh	 wh	 wh	 wh	Form V, 2x60° 	Form V, 2x60° 	Form V, 2x60° 	Form V, 2x60° 			
	S93	S90	S91	S94	S95	-	-	-			
	H90	H91	H94	H95	-	-	-				
	 STOP	 wh	 wh	Form V, 2x60° 	Form V, 2x60° 	-	-	-			

MGB-PN

## Control modules MGB-...-PN

### Data ranges

You will require the corresponding GSD file in GSDML format in order to integrate the MGB system:

GSDML-Vx.x-EUCHNER-MGB\_110026-YYYYMMDD.xml

You will find the GSD file in the download area at [www.euchner.com](http://www.euchner.com).

Prior to setup, the GSD file must be imported into the configuration software of the control system (see manual for your control system).

#### PROFINET data bytes

(unsafe input/output area)

#### PROFIsafe data bytes

(safe input/output area)

**A**

#### With data structure A

##### Assignment in input area of the bus master

Slot 1/byte 0	-	-	-	-	-	-	-	-
Slot 1/byte 1	-	-	-	-	S92	-	-	-
Slot 1/byte 2	-	-	I22	-	-	-	-	I17
Slot 1/byte 1	Pushbutton S92							
Slot 1/byte 2	Diagnostic module							

##### Assignment in output area of the bus master

Slot 1/byte 0	-	-	-	-	-	-	-	-
Slot 1/byte 1	-	-	-	-	H92	H90	-	-
Slot 1/byte 2	-	-	-	-	-	-	-	O17
Slot 1/byte 1	LEDs H91 and H92							
Slot 1/byte 2	Acknowledgment							

**A**

##### Assignment of PROFIsafe in input area of the bus master

Byte n+0	SI8	SI7	SI6	-	-	-	-	-
Byte n+1	SI16	-	-	-	-	-	-	-
Byte n+2	-	-	-	-	-	-	-	-
Byte n+3	-	-	-	-	-	-	-	-
Byte n+4	PROFIsafe internal (control byte)							
Byte n+5	PROFIsafe internal (ser. no.)							
Byte n+6	PROFIsafe internal (CRC2)							
Byte n+7	PROFIsafe internal (CRC2)							
SI6	Pushbutton S91 position S91.1 (left)							
SI7	Pushbutton S91 position S91.2 (center)							
SI8	Pushbutton S91 position S91.3 (right)							
SI16	Pushbutton S92 (not safe!)							

##### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	-
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							

#### With data structure C

##### Assignment in input area of the bus master

Slot 1/byte 0	-	-	-	-	-	S92	-	-
Slot 1/byte 1	-	-	-	-	-	-	-	-
Slot 2/byte 0	-	-	-	-	-	S91.3	S91.2	S91.1
Slot 3/byte 0	-	-	I22	-	-	-	-	I17
Slot 3/byte 1	-	-	-	-	-	-	-	-

##### Assignment in output area of the bus master

Slot 1/byte 0	-	-	-	-	-	-	-	H90
Slot 2/byte 0	-	-	-	-	-	-	-	-
Slot 3/byte 0	-	-	-	-	-	-	-	O17
Slot 3/byte 1	-	-	-	-	-	-	-	-
Slot 1/byte 0	LED H90							
Slot 3/byte 0	Acknowledgment							

##### Assignment of PROFIsafe in input area of the bus master

Byte n+0	SI8	SI7	SI6	-	-	-	-	-
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	-	SI23	SI22	-	-	-	-	-
Byte n+3	-	-	-	-	-	-	-	-
Byte n+4	PROFIsafe internal (control byte)							
Byte n+5	PROFIsafe internal (ser. no.)							
Byte n+6	PROFIsafe internal (CRC2)							
Byte n+7	PROFIsafe internal (CRC2)							
SI6	Pushbutton S91 position S91.1 (left)							
SI7	Pushbutton S91 position S91.2 (center)							
SI8	Pushbutton S91 position S91.3 (right)							
SI22	Acknowledgment pushbutton S91 position S91.1 (left)							
SI23	Acknowledgment pushbutton S91 position S91.2 (center)							

##### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	SO4	-	-	-	-
Byte n+1	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)							
Byte n+3	PROFIsafe internal (ser. no.)							
Byte n+4	PROFIsafe internal (CRC2)							
Byte n+5	PROFIsafe internal (CRC2)							
SO4	External reset							

## PROFINET data bytes (unsafe input/output area)

**B**

### Assignment in input area of the bus master

Slot 1/byte 0	-	-	S95.1	S94.1	-	-	S91.1	S90.1
Slot 1/byte 1	-	-	S95.2	S94.2	-	-	-	-
Slot 2/byte 0	S17.1	S16.1	S15.1	S14.1	S13.1	S12.1	S11.1	S10.1
Slot 2/byte 1	S17.2	S16.2	S15.2	S14.2	-	-	-	-
Slot 4/byte 1	-	-	-	-	-	-	-	S93
Slot 5/byte 0	+ & -	ZT -	ZT +	-	-	-	-	ZTM
Slot 6/byte 0	-	-	-	-	I20	I19	-	I17
Slot 1/byte 0	Pushbutton S90 - S91 and S94 - S95 1st contact							
Slot 1/byte 1	Pushbutton S94 - S95 2nd contact							
Slot 2/byte 0	Pushbutton S10 - S17 1st contact							
Slot 2/byte 1	Pushbutton S10 - S17 2nd contact							
Slot 4/byte 0	Emergency stop monitoring contact (NHM)							
Slot 5/byte 0	Enabling switch +/- and monitoring contact (ZTM)							
Slot 6/byte 0	Diagnostic module							

### Assignment in output area of the bus master

Slot 1/byte 0	-	-	H95	H94	-	-	H91	H90
Slot 2/byte 0	H17	H16	H15	H14	H13	H12	H11	H10
Slot 3/byte 0	-	-	-	O21	O20	O19	O18	O17
Slot 4/byte 1	-	-	-	-	-	-	-	-
Slot 5/byte 0	-	-	-	-	-	-	ZT -	ZT +
Slot 6/byte 0	-	-	-	-	-	-	-	O17
Slot 1/byte 0	LEDs H90 - H95							
Slot 2/byte 0	LEDs H10 - H17							
Slot 3/byte 0	Stacklight module O17 - O21							
Slot 4/byte 0	LED for possible emergency stop (not used)							
Slot 5/byte 0	Enabling switch LEDs +/- (ZT)							
Slot 6/byte 0	Diagnostic module							

## PROFIsafe data bytes (safe input/output area)

**B**

### Assignment of PROFIsafe in input area of the bus master

Byte n+0	-	-	-	-	-	-	-	S12	S11
Byte n+1	-	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)								
Byte n+3	PROFIsafe internal (ser. no.)								
Byte n+4	PROFIsafe internal (CRC2)								
Byte n+5	PROFIsafe internal (CRC2)								
S11	Emergency stop S93								
S12	Enabling switch X14								

### Assignment of PROFIsafe in output area of the bus master

Byte n+0	-	-	-	-	-	-	-	-	-
Byte n+1	-	-	-	-	-	-	-	-	-
Byte n+2	PROFIsafe internal (control byte)								
Byte n+3	PROFIsafe internal (ser. no.)								
Byte n+4	PROFIsafe internal (CRC2)								
Byte n+5	PROFIsafe internal (CRC2)								

## Assignment of the terminal plugs

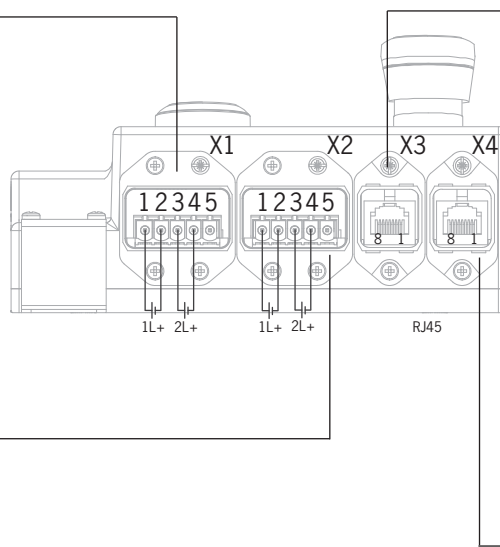
### Terminal assignment for version with push-pull plugs

Pin	Description
X1.1	1L+ operating voltage DC 24 V
X1.2	1M operating voltage 0 V
X1.3	2L+ auxiliary voltage* DC 24 V
X1.4	2M auxiliary voltage* 0 V
X1.5	Function earth

X2: For looping through for connected devices

X2.1	1L+ operating voltage DC 24 V
X2.2	1M operating voltage 0 V
X2.3	2L+ auxiliary voltage* DC 24 V
X2.4	2M auxiliary voltage* 0 V
X2.5	Function earth

\* The auxiliary voltage is not required for the MGB system



Pin	Description
X3.1	Receive Data +RD
X3.2	Receive Data -RD_N
X3.3	Transmit Data +TD
X3.4	Ground GND (RJ45)
X3.5	Ground GND (RJ45)
X3.6	Transmit Data -TD_N
X3.7	Ground GND (RJ45)
X3.8	Ground GND (RJ45)

X4: For looping through for connected devices (integrated RT switch)

X4.1	Receive Data +RD
X4.2	Receive Data -RD_N
X4.3	Transmit Data +TD
X4.4	Ground GND (RJ45)
X4.5	Ground GND (RJ45)
X4.6	Transmit Data -TD_N
X4.7	Ground GND (RJ45)
X4.8	Ground GND (RJ45)

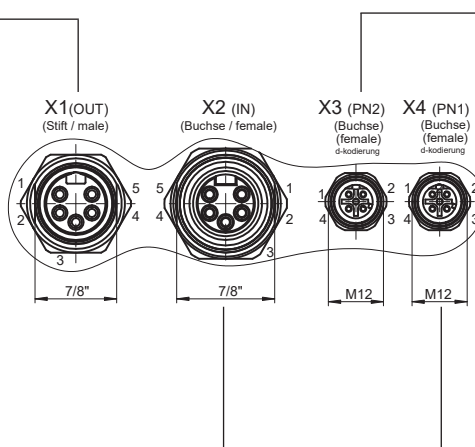
### Terminal assignment for version with 7/8" and M12 plugs

Pin	Description
X1.1	N2 auxiliary voltage *0 V
X1.2	N1 operating voltage 0 V
X1.3	Function earth
X1.4	L1 operating voltage DC 24 V
X1.5	L2 auxiliary voltage* DC 24 V

X2: For looping through for connected devices

X2.1	N2 auxiliary voltage *0 V
X2.2	N1 operating voltage 0 V
X2.3	Function earth
X2.4	L1 operating voltage DC 24 V
X2.5	L2 auxiliary voltage* DC 24 V

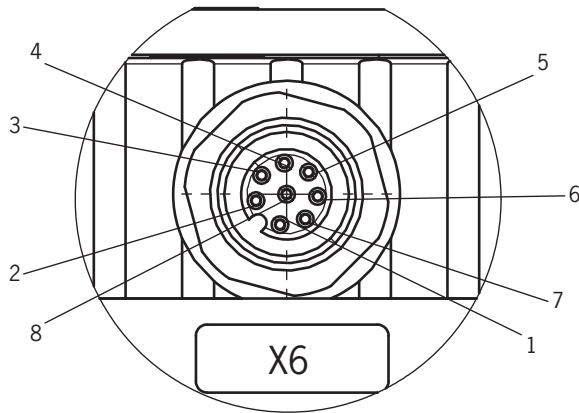
\* The auxiliary voltage is not required for the MGB system



Pin	Description
X3.1	Transmit Data +TD
X3.2	Receive Data +RD
X3.3	Transmit Data -TD_N
X3.4	Receive Data -RD_N
Function earth on plug housing	

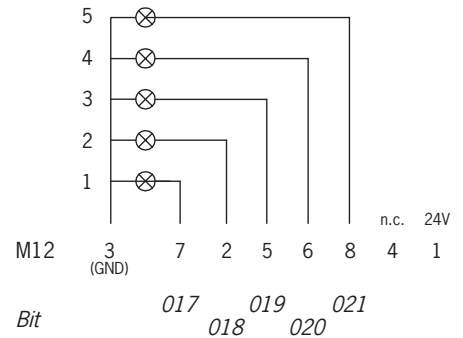
Pin	Description
X4.1	Transmit Data +TD
X4.2	Receive Data +RD
X4.3	Transmit Data -TD_N
X4.4	Receive Data -RD_N
Function earth on plug housing	

Terminal assignment, plug connector X6 for stacklight module

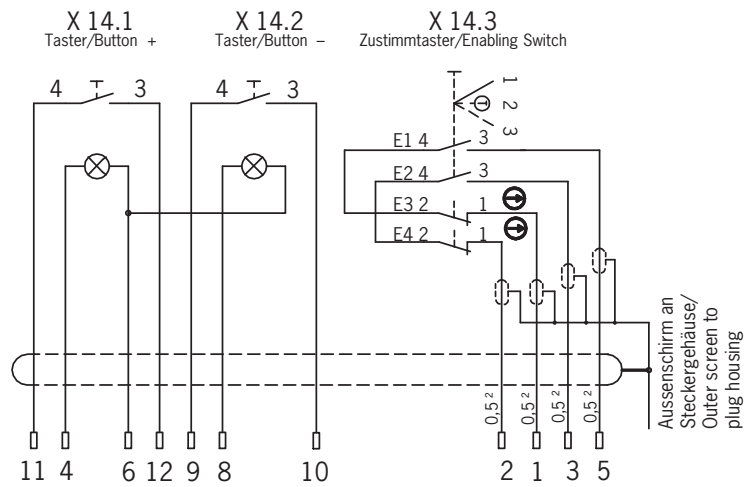


M 12

Built-in plug connector (8-pin/socket), aligned  
View of connection side



Terminal assignment, plug connector X14 for enabling switch (e.g. ZSB077029)



MGB-PN

## Technical data

Parameter	Value
$s_{gr}$ max. door position	65 mm
Housing material	Fiber glass reinforced plastic Die-cast zinc, nickel-plated, stainless steel, powder-coated sheet steel
Dimensions	See dimension drawing
Weight of MGB-L.B (bus module, locking module, and operating module with mounting plate)	4.05 kg
Weight of handle module with mounting plate	1.20 kg
Weight of escape release module with mounting plate	1.15 kg
Ambient temperature	-20 ... +55 °C
Degree of protection	IP 54
Safety class	III
Degree of contamination	3
Installation position	Any
Locking force $F_{zh}$	2000 N
Connection options, power supply	2 x push-pull power <sup>1)</sup> or 2 x plug connector 7/8" according to ANSI/B93.55M-1981
Connection, bus	2 x RJ 45, push-pull, according to IEC 61076-3-117 variant 14, screened <sup>1)</sup> or 2 x M12 plug connector (d-coded) according to IEC 61076-2-101
Connection cable, bus	Profinet I/O cable, at least cat. 5e
Operating voltage $U_b$	DC 24 V +10% / -15% (PELV – see electrical connection)
Current consumption, max.	500 mA
Max. feed-in current in the connection block (push-pull plug connector)	4000 mA
Fuse protection for power supply, external	Min. 1 A slow-blow
Safety outputs	Profisafe according to IEC 61784-3-3
Rated insulation voltage $U_i$	75 V
Rated impulse withstand voltage $U_{imp}$	0.5 kV
Resilience to vibration and shock	In accordance with EN 60947-5-3
EMC protection requirements	In acc. with EN 61000-4 and DIN EN 61326-3-1
Switching frequency max.	1 Hz
Risk times, max. (switch-off times <sup>2)</sup>	
- Emergency stop	250 ms
- Enabling switch	250 ms
- Operating mode selector switch	220 ms
- Door position	550 ms
- Bolt position	550 ms
- Guard locking	550 ms
<b>Reliability values acc. to EN ISO 13849-1</b>	
Category	4 (EN 13849-1:2008-12)
Performance Level	PL e (EN 13849-1:2008-12)
MTTF <sub>d</sub> <sup>3)</sup>	91 years
DC	99%
Mission time	20 years
PFH <sub>d</sub> <sup>3)</sup>	$2.54 \times 10^{-8}$ / h
PFH <sub>d</sub> for the evaluation of the emergency stop	$2.5 \times 10^{-8}$ / h
$B_{10d}$ <sup>4)</sup>	
- Emergency stop	$1 \times 10^5$
- Enabling switch	According to switch information from manufacturer

1) The document *PROFINET Cabling and Interconnection Technology* from the PNO aids in the correct selection of wiring.

2) The risk time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.

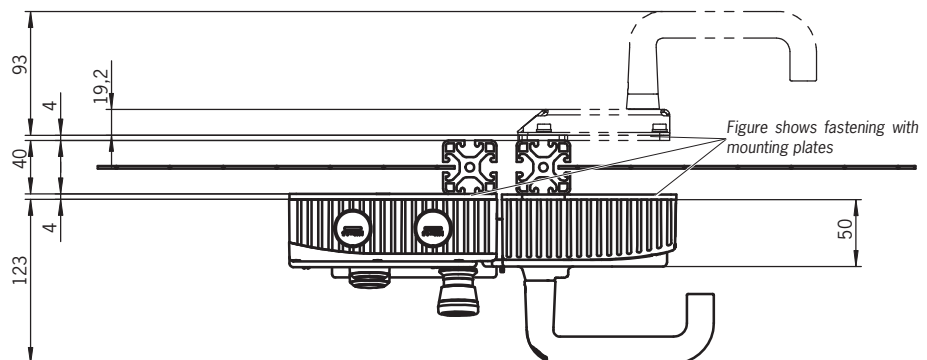
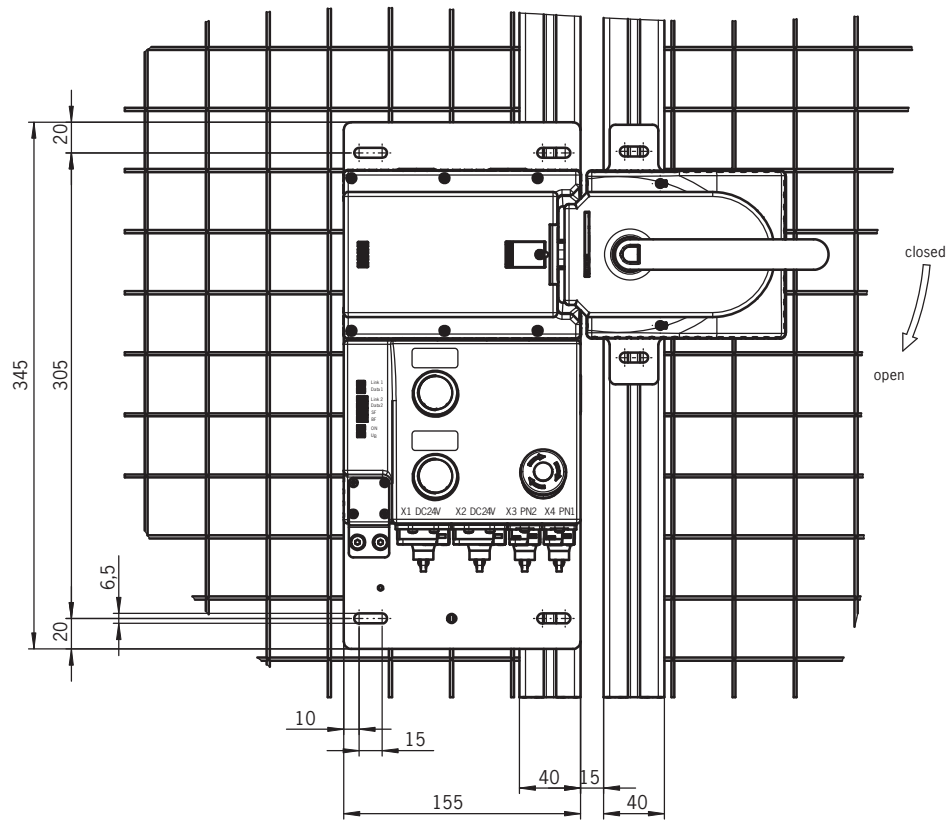
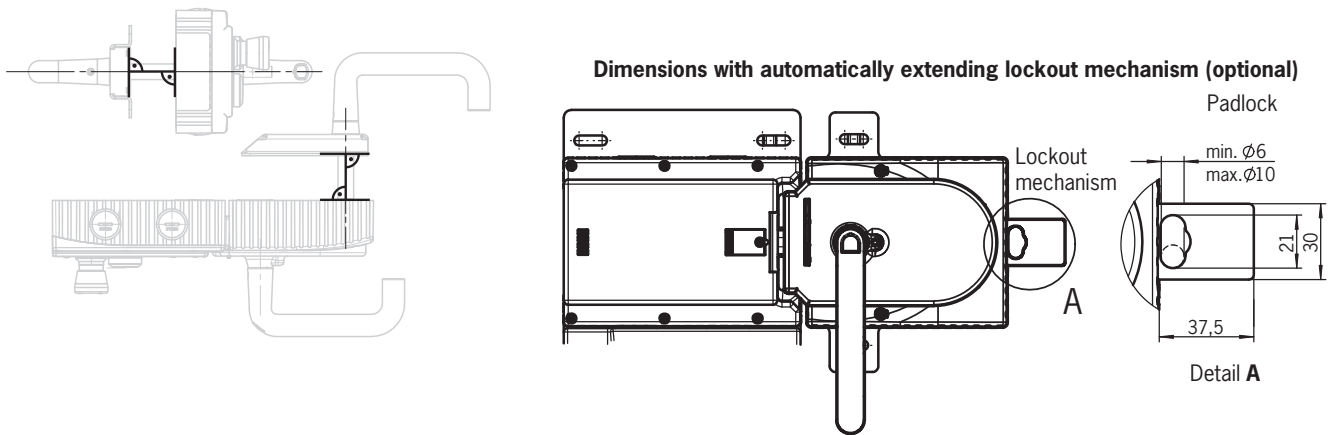
3) Fixed failure rate without consideration of faults in wearing parts.

4) Information regarding wearing parts without consideration of fixed failure rates in electronic components.



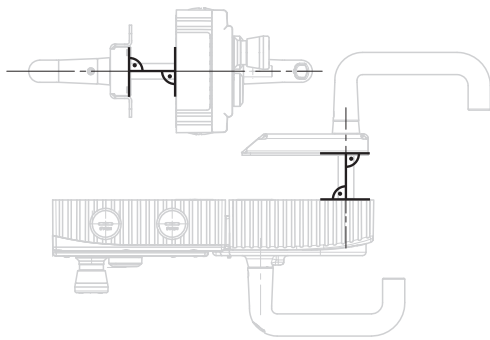
Dimension drawings

Locking set

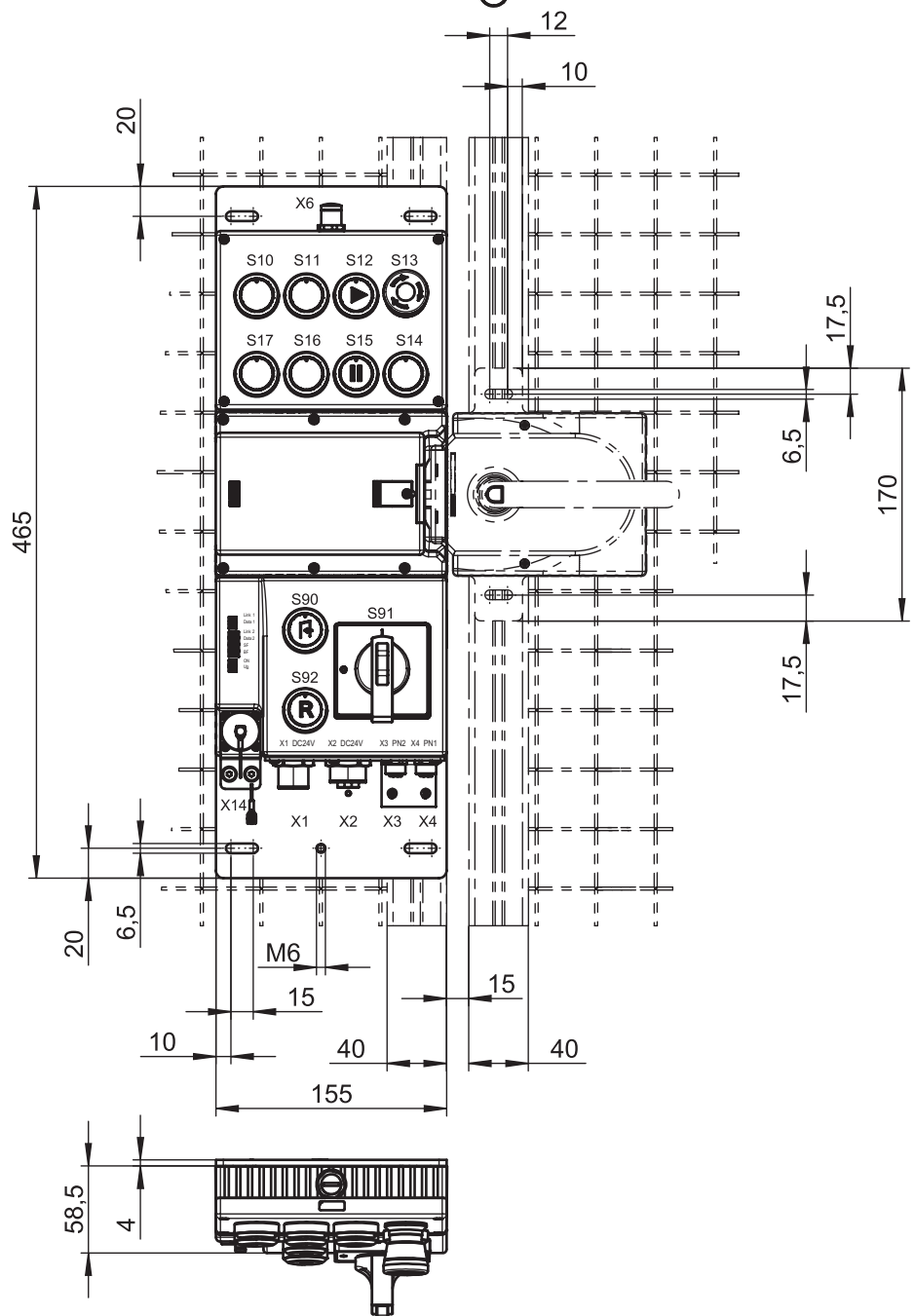
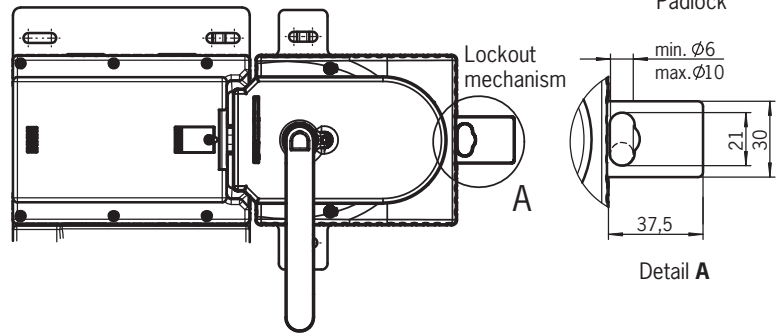


(Figure shows version for doors hinged on the right, pre-assembled on mounting plates)

Locking set

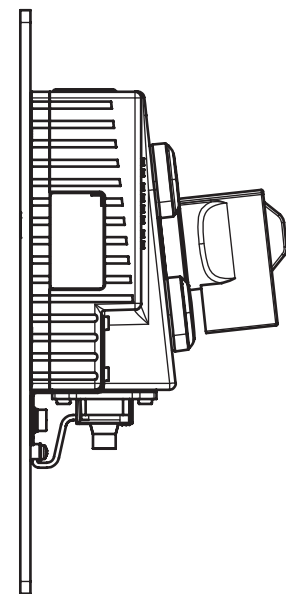
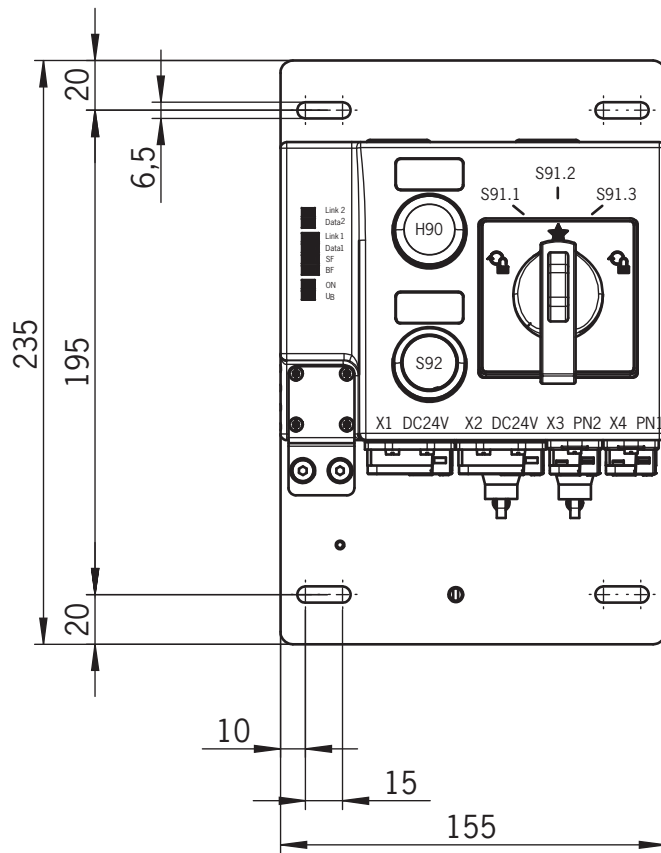
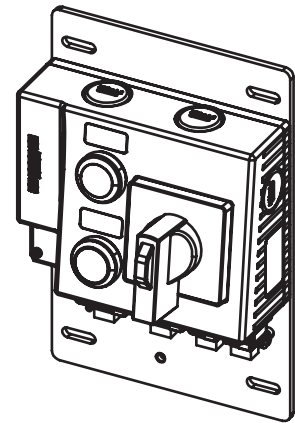


Dimensions with automatically extending lockout mechanism (optional)



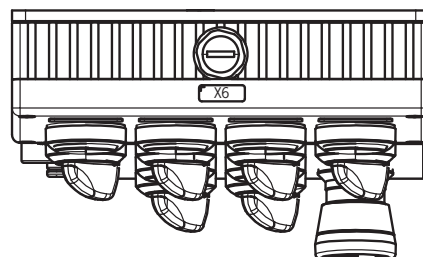
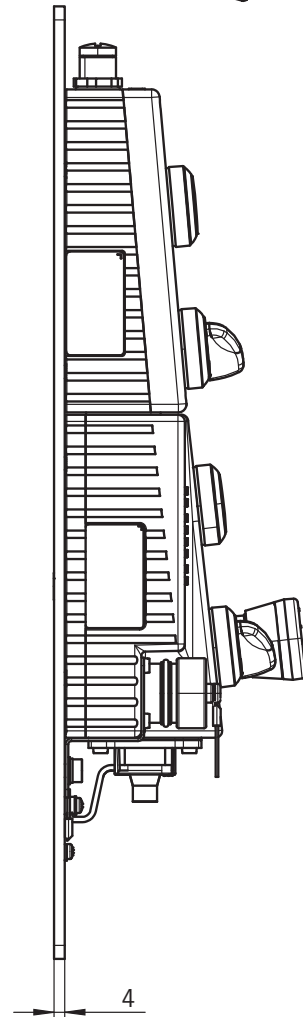
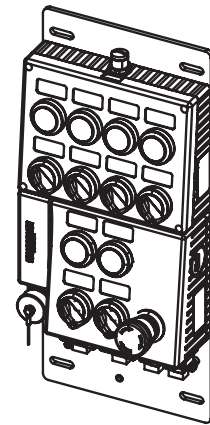
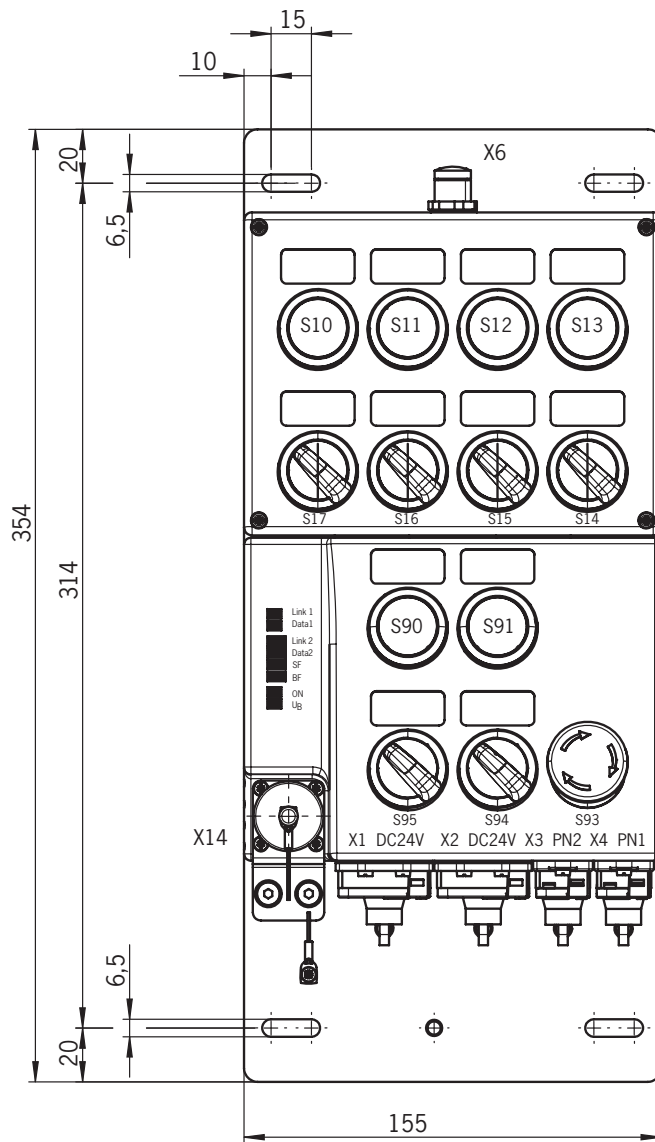
(Figure shows version for doors hinged on the right, pre-assembled on mounting plates)

**Control module MGB-B-...-PN on mounting plate**  
 (example based on MGB-B-A1W2A2-PN-123759)



MGB-PN

Control module MGB-CB-...-PN on mounting plate  
(example based on MGB-CB-PN-114744)





## Index by item designation

Item	Order no.	Page	Item	Order no.	Page
C-M23F19-19XDIFPU01,5-MA-092761	092761	74	MGB-A-SCREW-156331/V5	156331	69
C-M23F19-19XDIFPU03,0-MA-092816	092816	74	MGB-B-A1W2A2-PN-123759	123759	114
C-M23F19-19XDIFPU06,0-MA-077014	077014	74	MGB-C-000000-A1-109219	109219	78
C-M23F19-19XDIFPU08,0-MA-077015	077015	74	MGB-C-OHHHHHH-A1-114268	114268	78
C-M23F19-19XDIFPU10,0-MA-092898	092898	74	MGB-C-1BBBBPP-A3-112023	112023	78
C-M23F19-19XDIFPU15,0-MA-077016	077016	74	MGB-C-1EPPBPP-A3-112022	112022	78
C-M23F19-19XDIFPU20,0-MA-092726	092726	74	MGB-CB-PN-114744	114744	115
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121035	MGB-L1HE-ARA-R-121035	18	121836	MGB-L2B-PNA-R-121836	108
121040	MGB-L1HE-ARA-L-121040	18	121837	MGB-L2HB-PNA-R-121837	106
121051	MGB-L1H-ARA-R-121051	20	121838	MGB-L2B-PNA-L-121838	108
121052	MGB-L1HE-ARA-R-121052	20	121839	MGB-L2HB-PNA-L-121839	106
121059	MGB-LOH-ARA-R-121059	12	121848	MGB-L2B-PNA-R-121848	105
121061	MGB-L1H-ARA-R-121061	21	121849	MGB-L2HB-PNA-R-121849	102
121062	MGB-L1HE-ARA-R-121062	21	121851	MGB-L1B-PNA-R-121851	93
121065	MGB-L2H-ARA-R-121065	40	121852	MGB-L1HB-PNA-R-121852	90
121066	MGB-L2HE-ARA-R-121066	40	121853	MGB-L2B-PNA-L-121853	105
121068	MGB-L1H-ARA-R-121068	21	121854	MGB-L2HB-PNA-L-121854	102
121069	MGB-L1HE-ARA-L-121069	21	121855	MGB-L1B-PNA-L-121855	93
121071	MGB-L2H-ARA-L-121071	40	121856	MGB-L1HB-PNA-L-121856	90
121072	MGB-L2HE-ARA-L-121072	40	121857	MGB-L1B-PNA-R-121857	93
121087	MGB-L1HE-ARA-R-121087	21	121858	MGB-L1HB-PNA-R-121858	91
121089	MGB-L1HE-ARA-L-121089	21	121859	MGB-L2B-PNA-R-121859	105
121105	MGB-L1H-ARA-R-121105	22	121860	MGB-L2HB-PNA-R-121860	103
121107	MGB-L1H-ARA-L-121107	22	121861	MGB-L1B-PNA-L-121861	93
121112	MGB-L2H-ARA-R-121112	41	121862	MGB-L1HB-PNA-L-121862	91
121114	MGB-L2H-ARA-L-121114	41	121863	MGB-L2B-PNA-L-121863	105
121131	MGB-L1HE-ARA-R-121131	20	121864	MGB-L2HB-PNA-L-121864	103
121170	MGB-L1H-ARA-R-121170	21	121865	MGB-L1B-PNC-R-121865	96
121171	MGB-L1H-ARA-L-121171	21	121866	MGB-L1HB-PNC-R-121866	94
121173	MGB-L2H-ARA-R-121173	41	121867	MGB-L1B-PNC-L-121867	96
121175	MGB-L2H-ARA-L-121175	41	121868	MGB-L1HB-PNC-L-121868	94
121191	MGB-L2HE-ARA-R-121191	45	122434	C-M23F19-PU30,0-MA-122434	75
121195	MGB-L2HE-ARA-L-121195	45	122435	C-M23F19-PU40,0-MA-122435	75
121209	MGB-L1H-ARA-R-121209	30	123759	MGB-B-A1W2A2-PN-123759	114
121211	MGB-L1H-ARA-L-121211	30	123829	C-M27F26-PU35,0-MA-123829	76
121216	MGB-L1HE-ARA-R-121216	29	123877	C-M27F26-PU50,0-MA-123877	76
121218	MGB-L1HE-ARA-L-121218	29	123926	MGB-A-DOORHANDLE-S2-123926	65, 67, 88, 93, 96, 100, 105, 108, 112
121233	MGB-LOHE-ARA-R-121233	14	124030	MGB-A-DOORKNOB-S2-124030	65, 67
121236	MGB-L1HE-ARA-R-121236	27	124098	MGB-L1H-ARA-R-124098	20
121238	MGB-L2H-ARA-R-121238	44	124099	MGB-L1H-ARA-L-124099	20
121239	MGB-L2HE-ARA-R-121239	44	125359	MGB-A-LENSSET-SY02-125359	70, 82
121243	MGB-L1H-ARA-L-121243	28	126158	MGB-A-LENSSET-SY03-126158	70, 82
121245	MGB-L2H-ARA-L-121245	44	156331	MGB-A-SCREW-156331/V5	69
121246	MGB-L2HE-ARA-L-121246	44	157840	MP-A-C-GU-01-00-157840	81, 82
121254	MGB-LOH-ARA-R-121254	14	157841	MP-A-C-LC-WH-00-157841	81, 82
121256	MGB-L1H-ARA-R-121256	27	157842	MP-A-C-CH-00-00-157842	81, 82
121258	MGB-L2H-ARA-R-121258	45			
121260	MGB-LOH-ARA-L-121260	14			
121262	MGB-L1H-ARA-L-121262	28			
121264	MGB-L2H-ARA-L-121264	45			
121398	MGB-L2H-ARA-R-121398	48			

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# EUCHNER

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[www.euchner.com](http://www.euchner.com)

# How to find “your” MGB:


## Considerations in relation to the output family

	MGB-AP for separate operation
	MGB-AR for separate operation or series connection with other AR devices
	MGB-PN for operation in PROFINET environment








### Step 1 Interlocking or guard locking?

-	MGB-LO...: Interlocking (Only monitoring of the door position)
	MGB-L1...: Guard locking by spring force (Closed-circuit current principle)
	MGB-L2...: Guard locking by solenoid force (Open-circuit current principle)

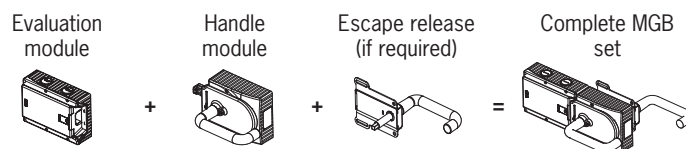
### Step 2 Select number of controls/indicators required

Contact assembly/ counting direction	
---	--

### Step 3 Select type of controls and indicators

	Emergency stop according to ISO 13850
	Illuminated emergency stop / emergency stop with monitoring contact
	Machine stop / machine stop with monitoring contact
	Pushbutton, illuminated / not illuminated (Different colors available)
	LED (Different colors available)
	Selector switch form V, 2-stage, optionally illuminated (Different versions available. For details see ordering table and description of the details)
	Key-operated selector switch form L or V, 2-stage (Different versions available. For details see ordering table and description of the details)

### Step 4 Select complete MGB set with the required configuration



Have you not been able to find the configuration you require?



You will find further information at [www.euchner.com](http://www.euchner.com). Alternatively our product consultants are available to assist you from the factory or on site.

For an explanation of symbols, see also Page 8.

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