

ITEM 136776 MGB2-L1-MLI-U-Y0000-BJ-136776

Description	Technical data	Accessories	Downloads
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## Features

- › Guard locking for protection of persons or processes
- › Locking module MGB2 for connection to a bus module MBM
- › Locking with monitored guard locking
- › Category 4/PL e for the evaluation of all safety functions
- › Open version (without blanking covers)
- › Adjustable door hinge; factory setting: right
- › Unicode
- › Compatible with all Modular devices

## Guard locking type

**MGB2-** Guard locking by spring force. Release by applying voltage to the  
**L1...** guard locking solenoid. (Closed-circuit current principle)

## Door hinge

On the locking modules, the door hinge can be changed from right to left and vice versa at any time with little effort.

## Approvals



## Mechanical values and environment

Housing material	Fiber glass reinforced plastic, die-cast zinc, nickel plated
Weight	
	Net 1,0 kg
Ambient temperature	
	At $U_B = 24V DC$ -25 ... 55 °C
Degree of protection	IP65 [1]
Resilience to vibration	In acc. with EN 60947-5-3
Mechanical life	
	$1 \times 10^6$
In case of use as door stop, and 1 Joule impact energy	$0,1 \times 10^6$
Reaction time	See operating instructions for bus module MBM-...
Switching frequency	0,25 Hz
Guard locking principle	Closed-circuit current principle
Locking force $F_{Zh}$	2000 N

## Electrical connection ratings

Current consumption	max.350 mA
Rated insulation voltage $U_i$	75 V
Rated impulse withstand voltage $U_{imp}$	1,5 kV
EMC protection requirements	EMC directive 2014/30/EU
Degree of contamination (external, according to EN 60947-1)	3
Safety class	III
Transponder coding	Unicode
	<b>Power supply MLI</b>
Operating voltage DC	
	MLI 24 V DC -25% ... 15% [2]
Auxiliary voltage DC	
	MLI 24 V DC -25% ... 15%

## Reliability values acc. to EN ISO 13849-1

	<b>Monitoring of guard locking and the safety guard position</b>
Category	4
Performance Level	PL e

PFH <sub>D</sub>	7.212 x 10 <sup>9</sup> [3]
Diagnostic Coverage (DC)	99
	<b>Control of the guard locking</b>
Category	4
Performance Level	PL e
PFH <sub>D</sub>	7.212 x 10 <sup>9</sup>

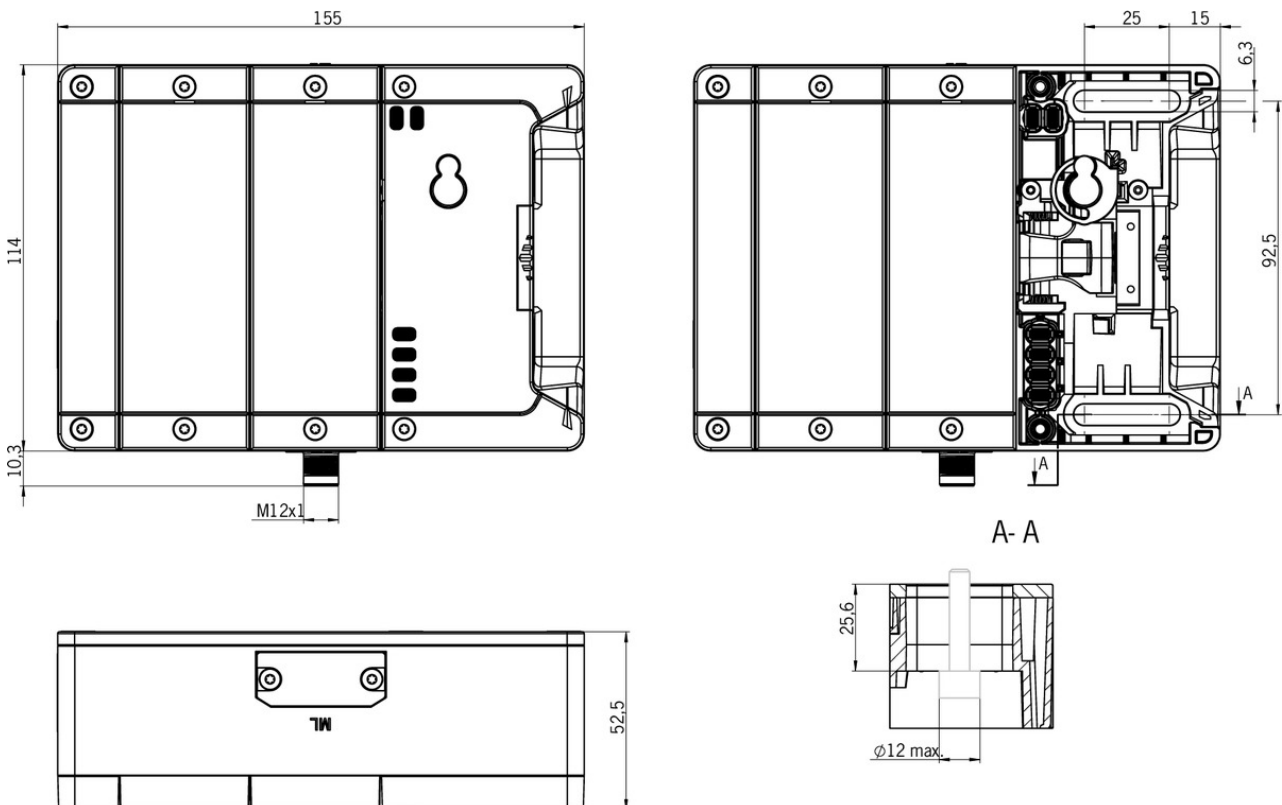
Safety Integrity Level	SIL 3 (EN 62061:2005)
Mission time	20

[1] This is the case only in the closed state with correctly mounted connecting cables and submodules.

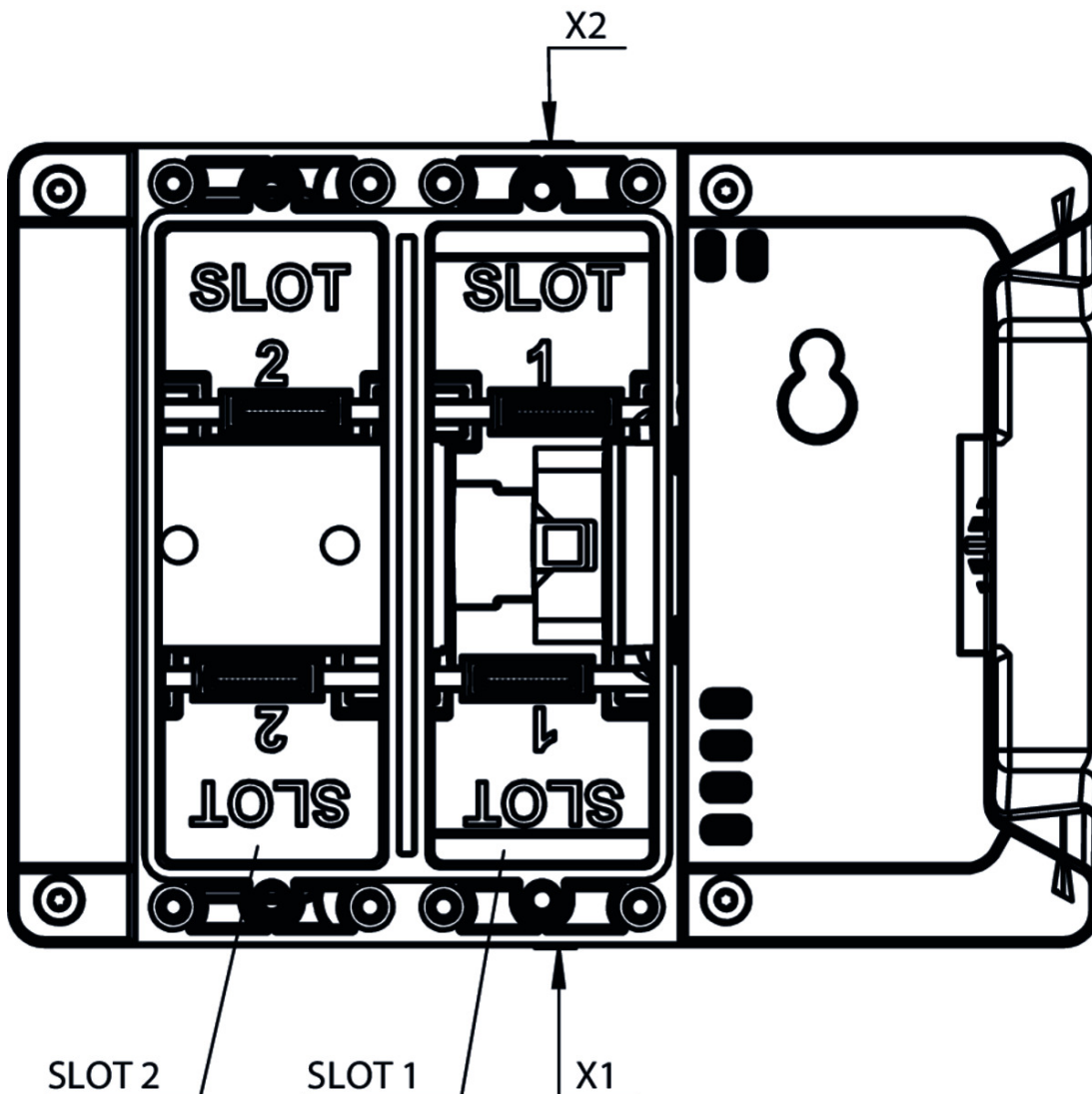
[2] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

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

### Dimension drawing



## Dimension drawing



## Submodules

- ✓ Submodule MSM-1-P-CA-BPP-A1 (illuminated emergency stop, two illuminated pushbuttons)



**136687** MSM-1-P-CA-BPP-A1-136687

### ✓ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: P
- › One illuminated emergency stop according to ISO 13850
- › Two illuminated pushbuttons
- › incl. lens set

- ✓ Submodule MSM-1-P-CA-B0P-B5 (illuminated emergency stop, illuminated pushbutton)



**137738** MSM-1-P-CA-B0P-B5-137738

### ✓ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: P
- › One illuminated emergency stop according to ISO 13850
- › One illuminated pushbutton

› incl. lens set

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- ▼ Submodule MSM-1-P-CS-BPP-A5 (illuminated emergency stop with protection, two illuminated pushbuttons)



**126381** MSM-1-P-CS-BPP-A5-126381

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › One illuminated emergency stop according to ISO 13850
  - › Two illuminated pushbuttons
  - › incl. lens set
- 

- ▼ Submodule MSM-1-P-CS-B0P-A2 (illuminated emergency stop with protection, illuminated pushbutton)



**137020** MSM-1-P-CS-B0P-A2-137020

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › One illuminated emergency stop according to ISO 13850
  - › One illuminated pushbutton
  - › incl. lens set
- 

- ▼ Submodule MSM-1-P-CA-PPP-A9 (three illuminated pushbuttons)



**127040** MSM-1-P-CA-PPP-A9-127040

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › Three illuminated pushbuttons
  - › incl. lens set
- 

- ▼ Submodule MSM-1-P-CA-P0P-B6 (two illuminated pushbuttons, top/bottom)



**137740** MSM-1-P-CA-P0P-B6-137740

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › Two illuminated pushbuttons
  - › incl. lens set
- 

- ▼ Submodule MSM-1-P-CA-PP0-B7 (two illuminated pushbuttons, middle, top/bottom)



**137742** MSM-1-P-CA-PP0-B7-137742

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › Two illuminated pushbuttons, middle, top/bottom
  - › incl. lens set
-

▼ Submodule MSM-1-P-CA-0P0-B8 (illuminated pushbutton, middle)



**137744** MSM-1-P-CA-0P0-B8-137744

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › One illuminated pushbutton, middle
  - › incl. lens set
- 

▼ Submodule MSM-1-P-CA-P00-B9 (illuminated pushbutton, top/bottom)



**137746** MSM-1-P-CA-P00-B9-137746

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › One illuminated white pushbutton, top/bottom
  - › incl. lens set
- 

▼ Submodule MSM-1-P-CA-L00-C1 (white cover for indicators, top/bottom)



**137748** MSM-1-P-CA-L00-C1-137748

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › White cover for indicators, top/bottom
- 

▼ Submodule MSM-1-P-CA-0L0-A3 (white cover for indicators, middle)



**126062** MSM-1-P-CA-0L0-A3-126062

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › Cover for indicators, white, middle
- 

▼ Submodule MSM-1-P-CA-KPP-C3 (one selector switch 90°, form V, illuminated, two illuminated pushbuttons)



**137752** MSM-1-P-CA-KPP-C3-137752

▼ Features

- › Function expansion for modules MGB2 and MCM
  - › Connection type: P
  - › One selector switch 1 x 90°, form V, illuminated
  - › Two illuminated pushbuttons
  - › incl. lens set
- 

▼ Submodule MSM-1-P-DA-M00-A6 (M12 plug connector for enabling switch)



**137596** MSM-1-P-DA-M00-A6-137596

▼ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: P
- › One plug connector M12 for connecting an enabling switch

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▼ Submodule MSM-1-N-AA-000-A4 (dummy cover)



**126372** MSM-1-N-AA-000-A4-126372

▼ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: N
- › Blanking cover

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▼ Submodule MSM-1-N-AA-QQQ-B1(blanking cover with three slide-in labels)



**137610** MSM-1-N-AA-QQQ-B1-137610

▼ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: N
- › Three cut-outs for slide-in labels
- › Incl. transparent label holder (AY-C-A1-156732)
- › Incl. slide-in labels

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▼ Submodule MSM-1-P-CA-RRR-C5 (three acknowledgment buttons, illuminated)



**157218** MSM-1-P-CA-RRR-C5-157218

▼ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: P
- › Three illuminated acknowledgment buttons

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▼ Submodule MSM-1-P-CA-TTT-C7 (three selector switches 1 x 90°, form V, illuminated)



**158906** MSM-1-P-CA-TTT-C7-158906

▼ Features

- › Function expansion for modules MGB2 and MCM
- › Connection type: P
- › Three selector switches 1 x 90°, form V, illuminated

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## Connection material

▼ Module connector MLI (M12), 5-pin, plug



**157024** AC-MC-SB-M-A-157024

▼ Features

- › Module plug connector MLI (M12), straight
- › Number of pins: 5-pin , plug

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▼ Module connector MLI, 5-pin, socket



**157025** AC-MC-SB-F-B-157025

▼ Features

- › Module plug connector MLI, straight

- › Directly pluggable (without thread)
  - › Number of pins: 5-pin, socket
- 

▼ Module connector MLI (M12), 5-pin, socket



**157028** AC-MC-SB-F-A-157028

▼ Features

- › Module plug connector MLI (M12), straight
  - › With thread
  - › Number of pins: 5-pin, socket
- 

▼ Cover for unused MLI connections



**156718** AC-MC-00-0-B-156718

▼ Features

- › Cover for unused connections
  - › incl. fixing screws
  - › incl. seal
- 

▼ Connection cable with 2 plug connectors M12, 5-pin, 20m



**119971** C-M12F05-05X034PU20,0-M12M05-119971

▼ Features

- › M12 female plug to M12 plug connector, 5-pin
  - › Straight female plug and plug connector
  - › PUR cable
  - › Cable length 20 m
- 

▼ Connection cable with 2 plug connectors M12, 5-pin, 10m



**119947** C-M12F05-05X034PU10,0-M12M05-119947

▼ Features

- › M12 female plug to M12 plug connector, 5-pin
  - › Straight female plug and plug connector
  - › PUR cable
  - › Cable length 10 m
- 

▼ Connection cable with 2 plug connectors M12, 5-pin, 5m



**119932** C-M12F05-05X034PU05,0-M12M05-119932

▼ Features

- › M12 female plug to M12 plug connector, 5-pin
  - › Straight female plug and plug connector
  - › PUR cable
  - › Cable length 5 m
- 

## Modules

▼ Handle module MGB2-H-BA1A3-R (door handle, with automatic lockout mechanism, door hinge:



right)



**136691** MGB2-H-BA1A3-R-136691

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Door handle
  - › Adjustable door hinge; factory setting: right
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- ▼ Handle module MGB2-H-BA1A5-R (door knob, with automatic lockout mechanism, door hinge: right)



**157019** MGB2-H-BA1A5-R-157019

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Door knob
  - › Adjustable door hinge; factory setting: right
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- ▼ Handle module MGB2-H-BA1A8-R (door handle, with automatic lockout mechanism, lockable from the inside when escape release is used, door hinge: right)



**157021** MGB2-H-BA1A8-R-157021

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Lockable from the inside
  - › Door handle
  - › Door hinge: right
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- ▼ Handle module MGB2-H-BA1A1-L (door handle, door hinge: left)



**156396** MGB2-H-BA1A1-L-156396

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Door handle
  - › Adjustable door hinge; factory setting: left
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- ▼ Handle module MGB2-H-BA1A3-L (door handle, with automatic lockout mechanism, door hinge on left)



**156394** MGB2-H-BA1A3-L-156394

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Door handle
  - › Adjustable door hinge; factory setting: left
-

- ▼ Handle module MGB2-H-BA1A5-L (door handle, with automatic lockout mechanism, door hinge: left)



**157020** MGB2-H-BA1A5-L-157020

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Door knob
  - › Adjustable door hinge; factory setting: left
- 

- ▼ Handle module MGB2-H-BA1A8-L (door handle, with automatic lockout mechanism, lockable from the inside when escape release is used, door hinge: left)



**157022** MGB2-H-BA1A8-L-157022

▼ Features

- › Intelligent bolt tongue
  - › Fold-out lockout mechanism
  - › Second automatically extending lockout mechanism
  - › Lockable from the inside
  - › Door handle
  - › Door hinge: left
- 

## Function expansion

- ▼ Expansion module MCM-MLI-YA4A4A4A4-JA (with four slots for submodules, one MLI connection)



**157774** MCM-MLI-YA4A4A4A4-JA-157774

▼ Features

- › Function expansion for bus module MBM and locking module MGB2-L.-MLI
  - › Four slots for mounting submodules
  - › Category 4/PL e for the evaluation of all safety functions
  - › Four blanking covers
  - › Submodule connection type: N/P
  - › Compatible with all Modular devices
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- ▼ Extension module MCM-MLI-Y00000000-JJ-157854 (open version without submodules, with four slots, one MLI connection)



**157854** MCM-MLI-Y00000000-JJ-157854

▼ Features

- › Function expansion for bus module MBM and locking module MGB2-L.-MLI
  - › Four slots for mounting submodules
  - › Category 4/PL e for the evaluation of all safety functions
  - › Open version (without submodules)
  - › Submodule connection type: N/P
  - › Compatible with all Modular devices
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## Instructions

- ▼ Betriebsanleitung Verriegelungs-/Zuhaltemodule MGB2-I..-MLI-... / MGB2-L..-MLI-... (Modular) ab V1.00.0

	Doc. no.	Version	Language	Download
Betriebsanleitung Verriegelungs-/Zuhaltemodule MGB2-I..-MLI-... / MGB2-L..-MLI-... (Modular) ab V1.00.0	2500234	02-09/18		 4.4 MB
Mode d'emploi Modules de verrouillage / interverrouillage MGB2-I..-MLI-... / MGB2-L..-MLI-... (Modular) et À partir de V1.00.0	2500234	02-09/18		 4.4 MB
Manual de instrucciones Módulos de enclavamiento o bloqueo MGB2-I..-MLI-.../MGB2-L..-MLI-... (Modular) y V1.00.0 o superior	2500234	02-09/18		 4.4 MB
Operating Instructions Interlocking/Locking Modules MGB2-I..-MLI-... / MGB2-L..-MLI-... (Modular) and from V1.00.0	2500234	02-09/18		 4.4 MB

## Catalogs

- ▼ Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular

	Doc. no.	Version	Language	Download
Multifunctional Gate Box MGB2 Modular	159037	02-09/18		 14.3 MB
Multifunctional Gate Box MGB2 Modular	159050	02-09/18		 14.4 MB
Multifunctional Gate Box MGB2 Modular	159051	02-09/18		 14.4 MB
Multifunctional Gate Box MGB2 Modular	159039	02-09/18		 14.4 MB