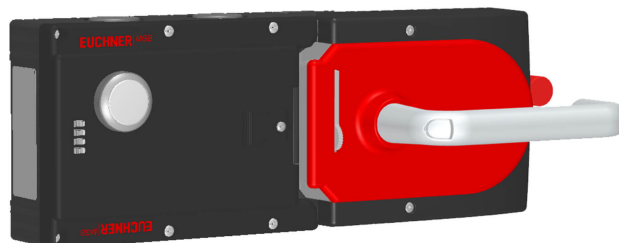


MGB-L1HE-ARA-R-120991 (ORDER NO. 120991)

Locking set MGB-L1HE-ARA..., (guard locking by spring force) with 1 push button

- ▶ Guard locking with guard lock monitoring
- ▶ Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- ▶ With cable entry
- ▶ With lens set, 6 pcs.
- ▶ 1 pushbuttons (illuminated)
- ▶ With escape release
- ▶ Unicode



Description

Guard locking type

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).

Door stop

A mechanical door stop is permanently integrated into the evaluation module of the MGB. A marking on the stop makes adjustment easier.

LED indicator

The LED indicator indicates all important system and status information.

Monitoring outputs

- OD ON when the door is closed
- OT Bolt tongue inserted into the evaluation module
- OL Guard locking solenoid in locked position
- OI Diagnostics; there is a fault

Pushbutton

S1 1 NO contact, illuminated

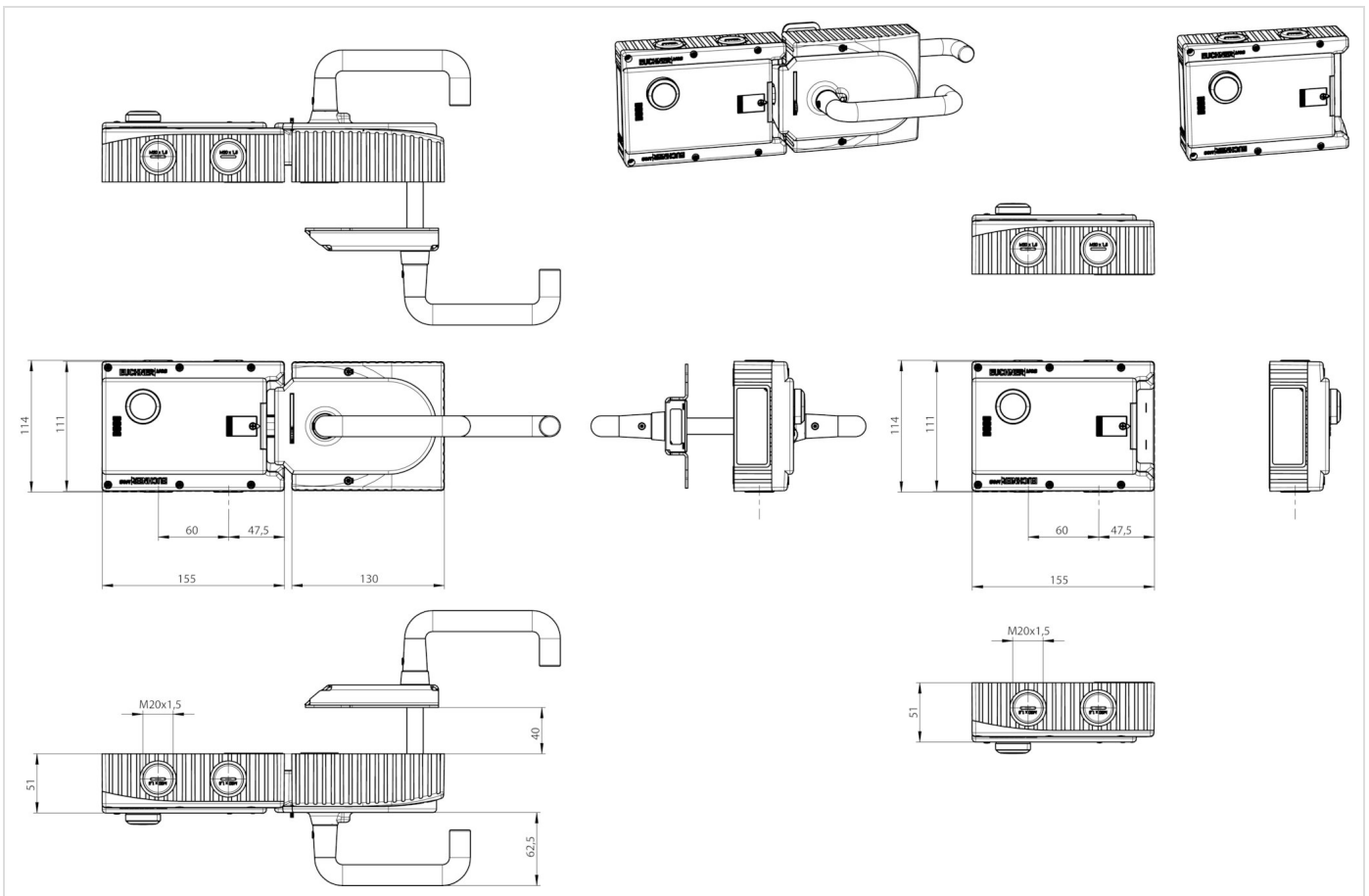
Lens set

The color of the pushbutton can be selected using the lens set included (5 colors). Item no.: 120344 (see Accessories)

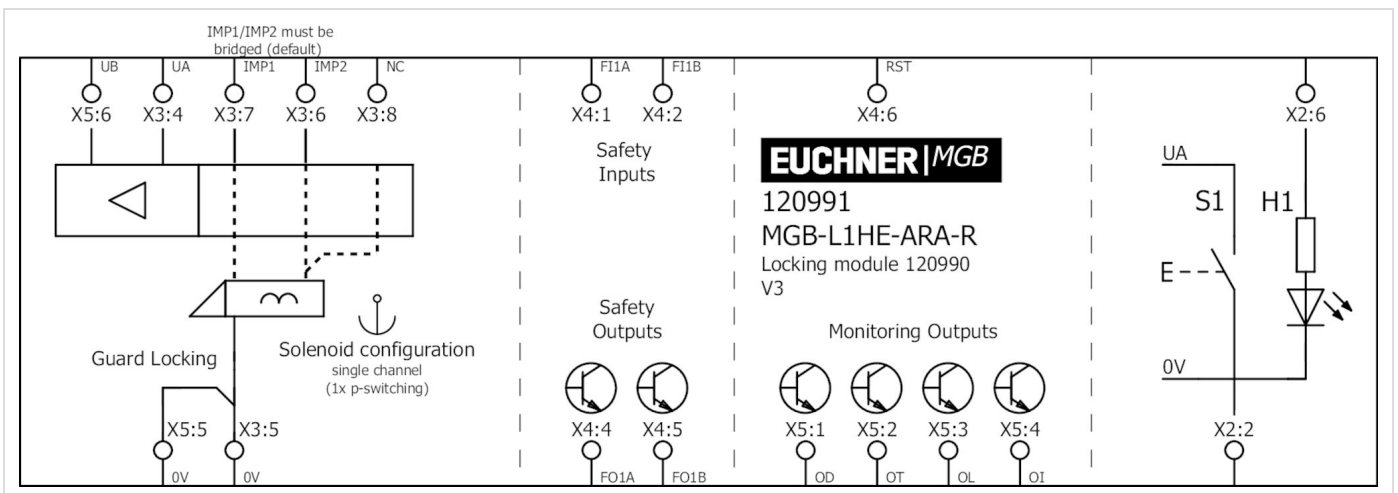
Escape release

The escape release enables people accidentally shut in to open the guard locked door from the danger zone.

Dimension drawing



Cable entry



Technical data

Locking module MGB-L1-ARA-AK1A1-M-R-120990 (Order no. 120990)



Mechanical values and environment

Housing material	Housing	Reinforced plastic; die-cast zinc nickel-plated, stainless steel
Weight	Net	0,75 kg
Ambient temperature	At $U_B = 24V$ DC	-20 ... 55 °C
Degree of protection		IP65
Mechanical life		1 x 10 ⁶
	In case of use as door stop, and 1 Joule impact energy	0,1 x 10 ⁶
Installation orientation		Door hinge DIN right
Switching frequency		0,25 Hz
Connection		Cable entries M20x1.5
Guard locking principle		Closed-circuit current principle
Locking force F_{Zh}		2000 N

Electrical connection ratings

Utilization category acc. to EN 60947-5-2

	DC-13	24V 200mA (Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.)
Rated insulation voltage U_i		30 V
Rated impulse withstand voltage U_{imp}		1,5 kV
Degree of contamination (external, according to EN 60947-1)		3
Connection cross-section		
	(Rigid/flexible) with cable end sleeve with collar according to DIN 46 228/1	0,25 ... 0,75 mm ²
	(Rigid/flexible) with cable end sleeve according to DIN 46 228/1	0,25 ... 1,5 mm ²
	(Rigid/flexible)	0,13 ... 1,5 mm ² ((AWG 24 ... AWG 16))
Safety class		III
Discrepancy time		
	Between FO1A and FO1B	max.10 ms
Risk time according to EN 60947-5-3		max.350 ms
Transponder coding		Unicode
		Power supply U_B
Operating voltage DC		
	U_B	24 V DC -15% ... 10% ((Reverse polarity protected, regulated, residual ripple <5%, PELV))
Current consumption		
	I_{UB}	max.80 mA ((no load on outputs))
		Power supply U_A
Operating voltage DC		
	U_A	24 V DC -15% ... 10% ((Reverse polarity protected, regulated, residual ripple <5%, PELV))
Current consumption		
	I_{UA}	max.375 mA

((With energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V))

Safety outputs F01A, F01B	
Test pulses	max.1 ms
Test-pulse interval	min.100 ms
Type of output	Semiconductor outputs, p-switching, short circuit-proof
Output voltage	
	U_{F01A} / U_{F01B} HIGH UB-2V ... UB V DC (Value at a switching current of 50mA without taking into account the cable lengths)
	U_{F01A} / U_{F01B} LOW 0 ... 1 V DC
Output current	
	Per safety output F01A / F01B 1 ... 200 mA

Monitoring outputs OD, OT, OL, OI	
Type of output	Semiconductor outputs, p-switching, short circuit-proof
Output voltage	UA-2V ... UA V DC (Value at a switching current of 50mA without taking into account the cable lengths)
Output current	max.50 mA

Controls and indicators	
Switching voltage	U_A V
Switching current	1 ... 10 mA
Breaking capacity	max.0,25 W
Power supply LED	24 V DC

Solenoid control input IMP1, IMP2, IMM	
Test pulses	max.5 ms
Test-pulse interval	min.100 ms

Other

Additional feature	Incl. cover set ID. No. 120344
Product version number	V4.0.0

Reliability values according to EN ISO 13849-1

Monitoring of guard locking and the safety guard position	
Category	4
Performance Level	PL e
PFH _D	3.7×10^{-9}
Control of the guard locking	
Category	4
Performance Level	PL e
PFH _D	2.8×10^{-9}
Mission time	20 y

Handle module MGB-H-AA1A1-R-100464 (Order no. 100464)



Mechanical values and environment

Housing material

Housing Reinforced plastic, die-cast zinc nickel-plated, stainless steel

Weight

Net 1,00 kg

Ambient temperature

-20 ... 55 °C

Degree of protection

IP65

Installation orientation

Door hinge DIN right

Other

Product version number

V3.0.0

Escape release MGB-E-A-100465 (Order no. 100465)



Mechanical values and environment

Housing material

Housing Die-cast zinc/stainless steel powder-coated

Weight

Net 0,75 kg

Ambient temperature

-20 ... 55 °C

Mechanical life

1 x 10⁶

Installation orientation

Any

Other

Product version number

V2.0.0

Components



120990

Locking module MGB-L1-ARA-AK1A1-M-R-120990

- ▶ Guard locking with guard lock monitoring
- ▶ Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- ▶ 1 pushbuttons (illuminated)
- ▶ With lens set, 6 pcs.
- ▶ With cable entry
- ▶ Unicode



100464

Handle module MGB-H-AA1A1-R-100464

- ▶ Intelligent bolt tongue
- ▶ Lockout mechanism
- ▶ Door handle



100465

Escape release MGB-E-A-100465

- ▶ Escape release from the danger zone
- ▶ Door handle signal red
- ▶ Extended actuation axis for thicker doors (available optionally)

Accessories

Connection material

Built-in connector RC18

120403
MGB-A-PLUGCONNECTOR-RC18-
120403

- ▶ For all MGB with cable entry

Function expansion

Door handle for MGB-E...



110276
MGB-A-DOORHANDLE-R1-110276

- ▶ Aluminum, red painted
- ▶ For mounting on all MGB escape release modules MGB-E up to version 1.0

Door handle for MGB-H...



110277
MGB-A-DOORHANDLE-S1-110277

- ▶ Aluminum, silver anodized
- ▶ For mounting on all MGB handle modules MGB-H up to V2.0.0



123926
MGB-A-DOORHANDLE-S2-123926

- ▶ Aluminum, silver anodized
- ▶ For mounting on all MGB handle modules MGB-H from V3.0.0

Door knob for MGB-E...



114904
MGB-A-DOORKNOB-R1-114904

- ▶ Aluminum, red painted
- ▶ For mounting on all MGB escape release modules MGB-E up to version 1.0
- ▶ e.g. on sliding doors

Door knob for MGB-H...



111460
MGB-A-DOORKNOB-S1-111460

- ▶ Aluminum, silver anodized
- ▶ For mounting on all MGB handle modules MGB-H... up to V2.0.0
- ▶ e.g. on sliding doors



124030
MGB-A-DOORKNOB-S2-124030

- ▶ Aluminum, silver anodized
- ▶ For mounting on all MGB handle modules MGB-H... from V3.0.0
- ▶ e.g. on sliding doors

Emergency unlocking for safety system MGB



112989
MGB-A-EMERGENCYRELEASE-112989

- ▶ Quick emergency release
- ▶ sealable

Escape release MGB-E-A...



100465
MGB-E-A-100465

- ▶ Escape release from the danger zone
- ▶ Door handle signal red
- ▶ Extended actuation axis for thicker doors (available optionally)

Extended actuation axis for MGB-E...



106761
AY-ERS-250-106761

Miscellaneous accessories

Lens set 5 colors



120344
AY-SET-LNS-0001-120344



163284
AY-SET-LNS-0003-163284

Lens set 6 colors



120378
AY-SET-LNS-0002-120378

Lens set labeled



120377
AY-SET-LNS-SY01-120377



125359
AY-SET-LNS-SY02-125359



126158
AY-SET-LNS-SY03-126158



158307
AY-SET-LNS-SY04-158307



160049
AY-SET-LNS-SY05-160049

Mounting accessories

Mounting plate for all MGB handle modules



109491
MGB-A-MOUNTINGPLATE-H-109491

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right or left

Mounting plate for escape release



109492
MGB-A-MOUNTINGPLATE-E-109492

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right or left

Mounting plate for evaluation modules MGB-L.-AR.-... and MGB-L.-AP.-...



109490
MGB-A-MOUNTINGPLATE-L-109490

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right or left

Spare parts

Handle module MGB-H-...



100464
MGB-H-AA1A1-R-100464

- ▶ Intelligent bolt tongue
- ▶ Lockout mechanism
- ▶ Door handle

Locking module MGB-L1-ARA..., (guard locking by spring force) with 1 push button



120990
MGB-L1-ARA-AK1A1-M-R-120990

- ▶ Guard locking with guard lock monitoring
- ▶ Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- ▶ 1 pushbuttons (illuminated)
- ▶ With lens set, 6 pcs.
- ▶ With cable entry
- ▶ Unicode

Contacts

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