# MGB-L2-ARA-AM5A1-S1-L-121203 (ORDER NO. 121203)

Locking module MGB-L2-ARA..., (guard locking by solenoid force) with 2 push buttons, emergency stop, incl. label carrier, RC18

- Guard locking with guard lock monitoring
- Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- Emergency stop according to ISO 13850
- 2 pushbuttons (illuminated)
- With lens set, 6 pcs.
- Incl. adhesive labels
- plug connector RC18
- Unicode
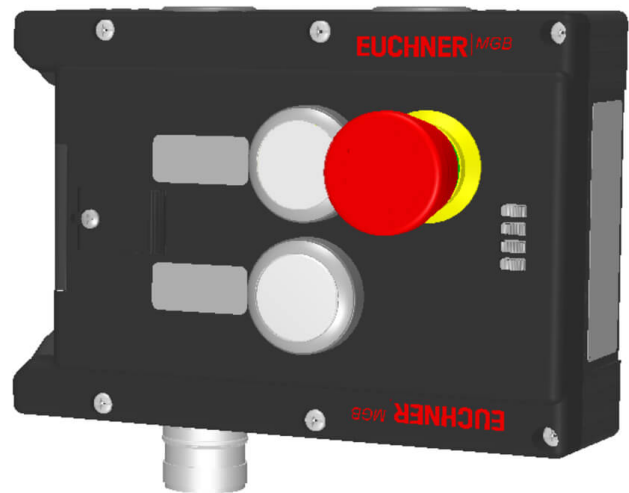
Description

Guard locking type

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).

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

OL   Guard locking solenoid in locked position
OI   Diagnostics; there is a fault

Emergency stop device

S1 2 positively driven contacts, emergency stop with turn-to-reset, not illuminated

Pushbutton

S2 1 NO contact, illuminated
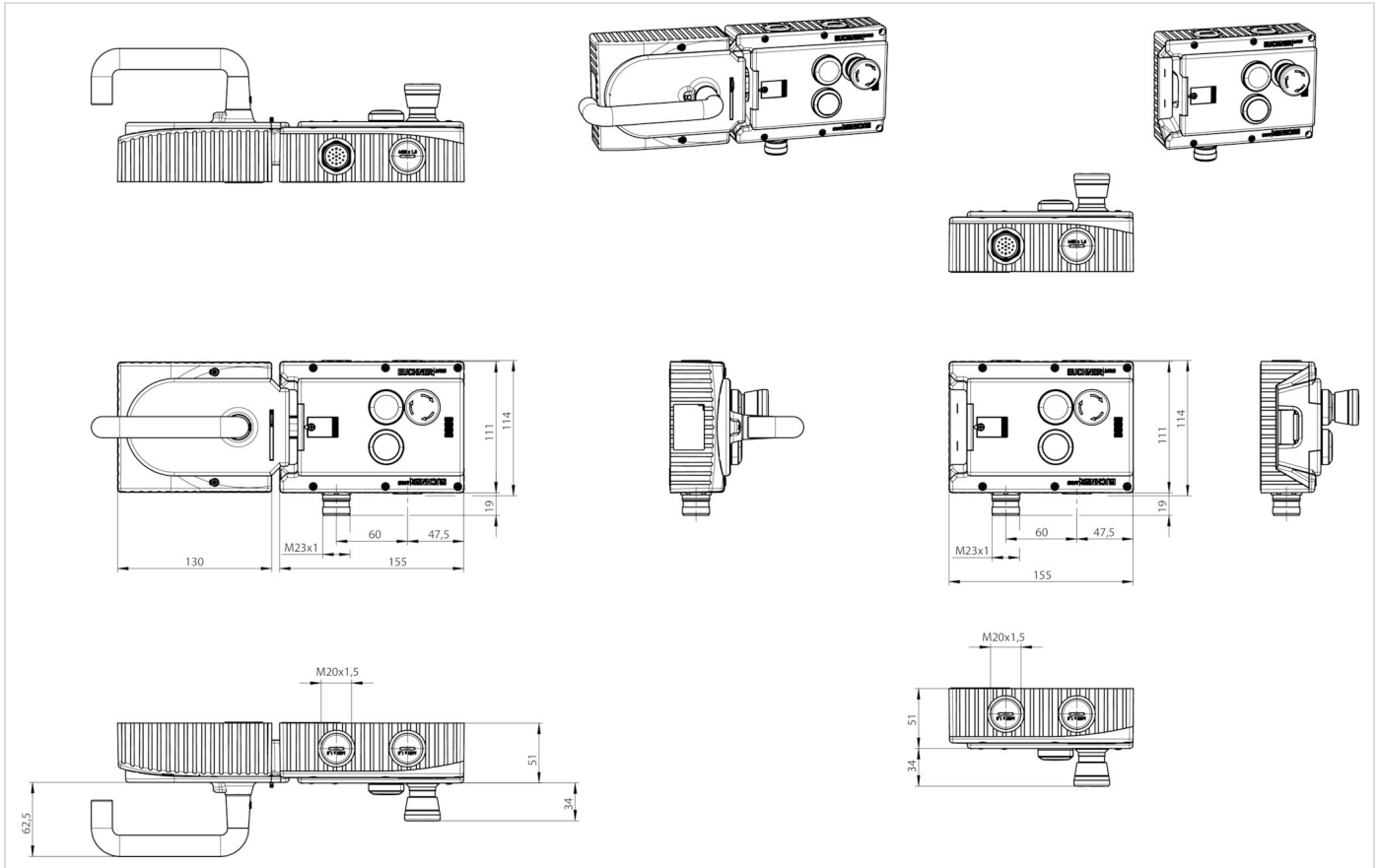S3 1 NO contact, illuminated

Lens set

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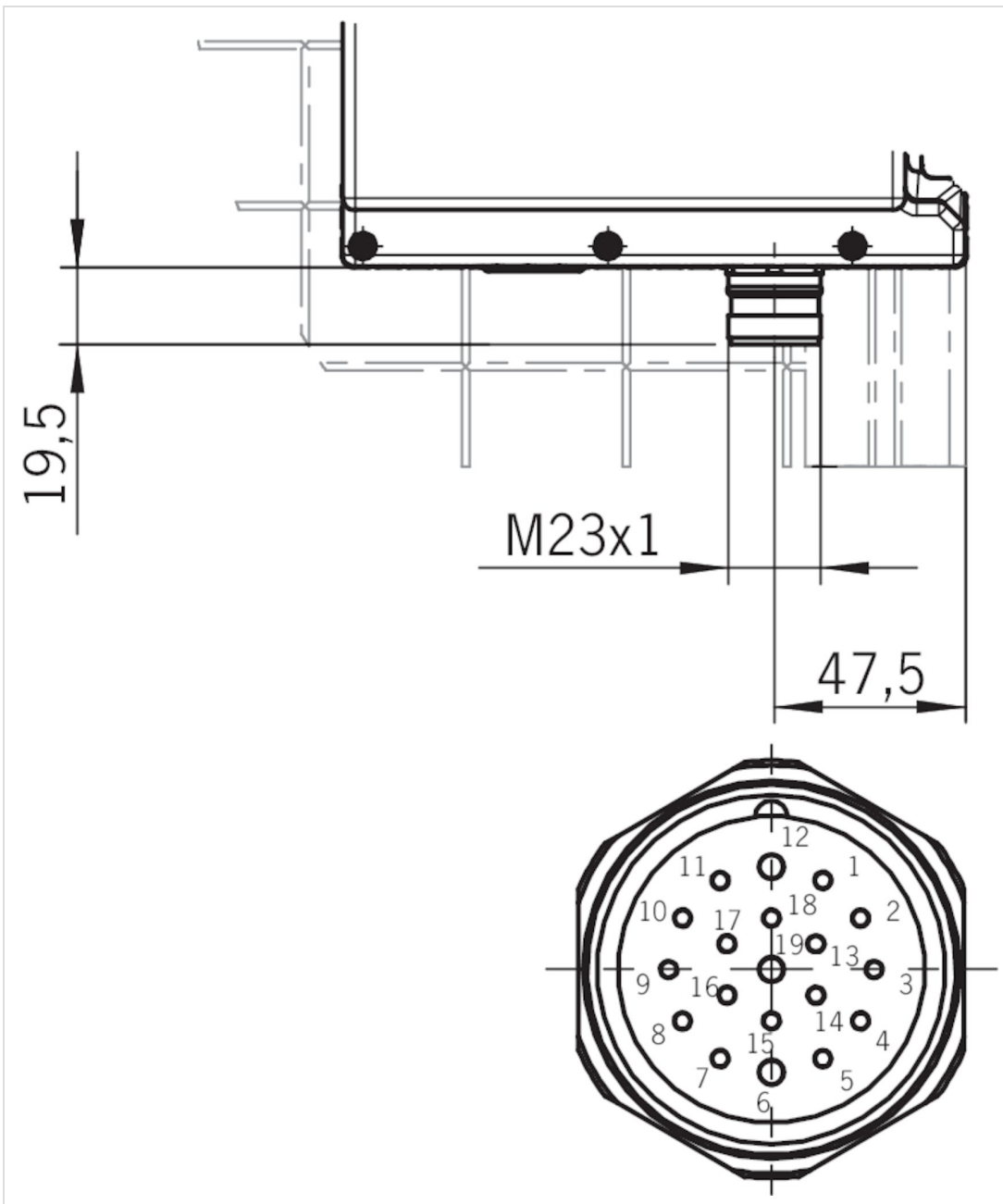
Adhesive labels

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.

Dimension drawing

Dimension drawing

19,5

M23x1

47,5

12
11 1
18
10 17 2
19
9 16 13 3
8 14
15 4
7 5
6

Plug connector RC18

UA
UB
6
IMP1
1
FI1A
2
FI1B
3
RST
7
11
14
16
18

Safety
Inputs

EUCHNER|MGB
121203
MGB-L2-ARA-AM5A1-S1-L
V3

UA

S1   S2 H2   S3 H3

E   E

Guard Locking

Safety
Outputs

Monitoring Outputs

0V

19
0V
12
FE
4
FO1A
5
FO1B
8
OL
9
OI
10
13
15
17
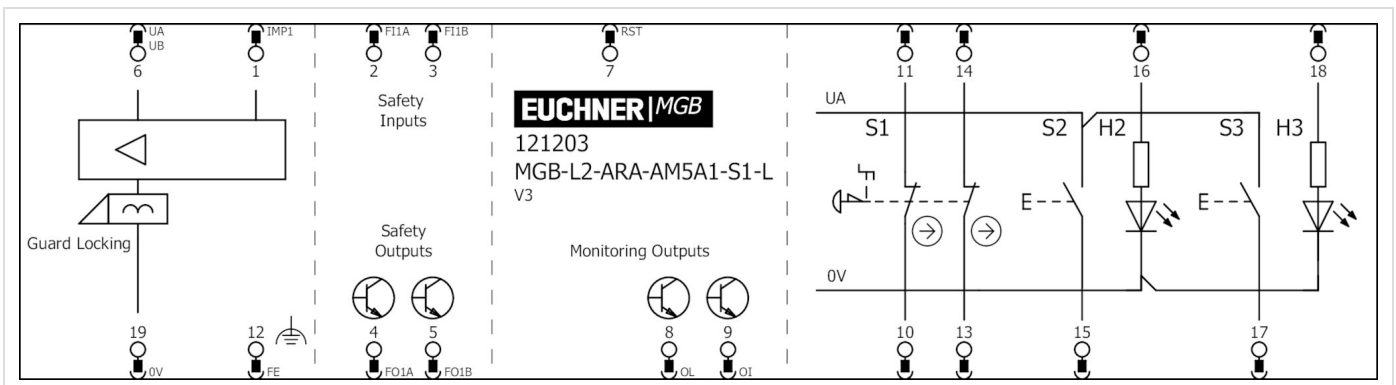
Technical data

Approvals

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	1×10^6
In case of use as door stop, and 1 Joule impact energy	$0,1 \times 10^6$
Installation orientation	Door hinge DIN left
Switching frequency	0,25 Hz
Connection	Plug connector RC18 (X6)
Guard locking principle	Open-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
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
	Solenoid control input IMP1, IMP2, IMM
Test pulses	max.5 ms
Test-pulse interval	min.100 ms
	Emergency stop
Switching voltage	5 … 24 V
Switching current	1 … 100 mA
Breaking capacity	max.0,25 W
Power supply LED	24 V DC
	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
	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
		Safety outputs FO1A, FO1B
Test pulses		max.1 ms
Test-pulse interval		min.100 ms
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage		
	U_{FO1A} /U_{FO1B} HIGH	UB-2V … UB V DC (Value at a switching current of 50mA without taking into account the cable lengths)
	U_{FO1A} /U_{FO1B} LOW	0 … 1 V DC
Output current		
	Per safety output FO1A / FO1B	1 … 200 mA
		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))
		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))

Controls and indicators

Assignment diagram	L1

	Position 1
Version	Emergency stop
Slide-in label	
Special features	
Color	
Switching element	2 pos. driven NC

	Position 2
Version	Illuminated push buttons
Slide-in label	
Special features	
Color	
Switching element	1NO

	Position 3
Version	Illuminated push buttons
Slide-in label	
Special features	
Color	
Switching element	1NO

Other

Additional feature	Incl. cover set ID. No. 120344
Product version number	V4.0.0
Slide-in label	2 pcs. without marking

Reliability values according to EN ISO 13849-1

	Emergency stop
$B10_D$	
Emergency stop	$0{,}13 \times 10^6$
	Monitoring of guard locking and the safety guard position
Category	4
Performance Level	PL e
PFH_D	3.7×10^{-9}
Mission time	20 y

Accessories

Connection material

Connection cable with plug connector M23 with option C1825, 1.5m, straight

092761
C-M23F19-19XDIFPU01,5-MA-092761

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 1.5 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 3m, straight

092816
C-M23F19-19XDIFPU03,0-MA-092816

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 3 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 6m, straight

077014
C-M23F19-19XDIFPU06,0-MA-077014

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 6 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 8m, straight

077015
C-M23F19-19XDIFPU08,0-MA-077015

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 8 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 10m, straight

092898
C-M23F19-19XDIFPU10,0-MA-092898

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 10 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 15m, straight

077016
C-M23F19-19XDIFPU15,0-MA-077016

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 15 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 20m, straight

092726
C-M23F19-19XDIFPU20,0-MA-092726

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 20 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 25m, straight

092727
C-M23F19-19XDIFPU25,0-MA-092727

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 25 m
- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 30m, straight

095993
C-M23F19-19XDIFPU30,0-MA-095993

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector

C-M23F19-19XDIFPU30,0-MA-095993

- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 30 m
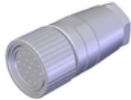- ▸ With flying lead
- ▸ Cores color-coded

Connection cable with plug connector M23 with option C1825, 40m, straight

102490
C-M23F19-19XDIFPU40,0-MA-102490

- ▸ M23 plug connector, 18-pin + PE
- ▸ Straight plug connector
- ▸ PUR cable
- ▸ Cable length 40 m
- ▸ With flying lead
- ▸ Cores color-coded

Female plug RC18 straight with option C1825

077025
RC18EF-C1825

- ▸ Plug connector M23, straight
- ▸ Number of pins: 19-pin with shield spring

Replacement crimp contacts for female connector RC18 with option C1825

094310
CRIMPKONTAKT BUCHSE RCF-C1825

- ▸ 19 crimp sockets
- ▸ Conductor cross-section 16 x 0.25 - 0.5 mm² and 3 x 0.75 - 1 mm²
- ▸ For plug connector RC18..C1825

Function expansion

Emergency unlocking for safety system MGB

112989
MGB-A-EMERGENCYRELEASE-112989

- ▸ Quick emergency release
- ▸ sealable

Miscellaneous accessories

Adhesive labels

114529
MGB-A-PLATESET-NN01-114529

- ▸ Adhesive labels suitable for MGB evaluation modules, bus modules and control modules
- ▸ silver, blank
- ▸ Packaging unit = 10 pcs.

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 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

Contacts

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