

ITEM 156859 MGB-L1C-ARA-L-156859

Description	Technical data	Accessories	Downloads
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Features

- › Guard locking with guard lock monitoring
- › Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- › With control module MGB-C
- › Emergency stop according to ISO 13850
- › 5 pushbuttons (illuminated)
- › Incl. adhesive labels
- › With plug connector RC26
- › Unicode

Guard locking type

MGB- The locking arm is held in the locked position by spring force and is
L1... unlocked by solenoid force (closed-circuit current principle, mechanically locked).

Door hinge

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 in the evaluation module
 - OL** Guard locking solenoid in locked position
 - OI** Diagnostics; there is a fault
-

Emergency stop device

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

Pushbutton

- S10** 1 NO contact, illuminated
 - S11** 1 NO contact, illuminated
 - S12** 1 NO contact, illuminated
 - S14** 1 NO contact, illuminated
 - S15** 1 NO contact, illuminated
-

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.

Approvals



Mechanical values and environment

Housing material	Reinforced plastic; die-cast zinc nickel-plated, stainless steel
Weight	Net 1,4 kg
Ambient temperature	
At $U_B = 24V DC$	-20 ... 55 °C
Degree of protection	IP65
Mechanical life	
In case of use as door stop, and 1 Joule impact energy	1×10^6 $0,1 \times 10^6$
Installation position	Door hinge DIN left
Switching frequency	0,25 Hz

Connection	Plug connector RC26 [1]
Guard locking principle	Closed-circuit current principle
Locking force F_{Zh}	2000 N

Electrical connection ratings

Utilization category according to EN 60947-5-2	DC-13	24V 200mA [2]
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
Power supply U_B		
Operating voltage DC	U_B	24 V DC -15% ... 10% [3]
Current consumption	I_{UB}	max.80 mA [4]
Power supply U_A		
Operating voltage DC	U_A	24 V DC -15% ... 10% [5]
Current consumption	I_{UA}	max.375 mA [6]
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	$U_{FO1A} / U_{FO1B} \text{ HIGH}$	$U_B - 2V \dots U_B \text{ V DC}$ [7]
	$U_{FO1A} / U_{FO1B} \text{ LOW}$	0 ... 1 V DC
Output current	Per safety output FO1A / FO1B	1 ... 200 mA
Monitoring outputs OD, OT, OL, OI		
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage		$U_A - 2V \dots U_A \text{ V DC}$ [8]
Output current		max.50 mA
Controls and indicators		
Switching voltage		$U_A \text{ V}$
Switching current		1 ... 10 mA
Breaking capacity		max.0,25 W
Power supply LED		24 V DC

	Emergency stop
Switching voltage	5 ... 24 V
Switching current	1 ... 100 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

Controls and indicators

Assignment diagram	C2
Assignment diagram	L0
Control/indicator	
	Position 10
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 11
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 12
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 13
Version	Emergency stop
Special features	
Color	
Switching element	2 pos. driven NC
Slide-in label	Adhesive label D40mm
Control/indicator	
	Position 14
Version	Illuminated push buttons

Special features	
Color	
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 15
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO
Slide-in label	

Miscellaneous

Additional feature	Incl. cover set ID. No. 120344
Product version number	V3.0.3
Slide-in label	5 pc. without marking

Reliability values acc. 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}
	Emergency stop
B10 _D	
Emergency stop	$0,065 \times 10^6$
<hr/>	
Mission time	20 y

[1] X6

[2] Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.

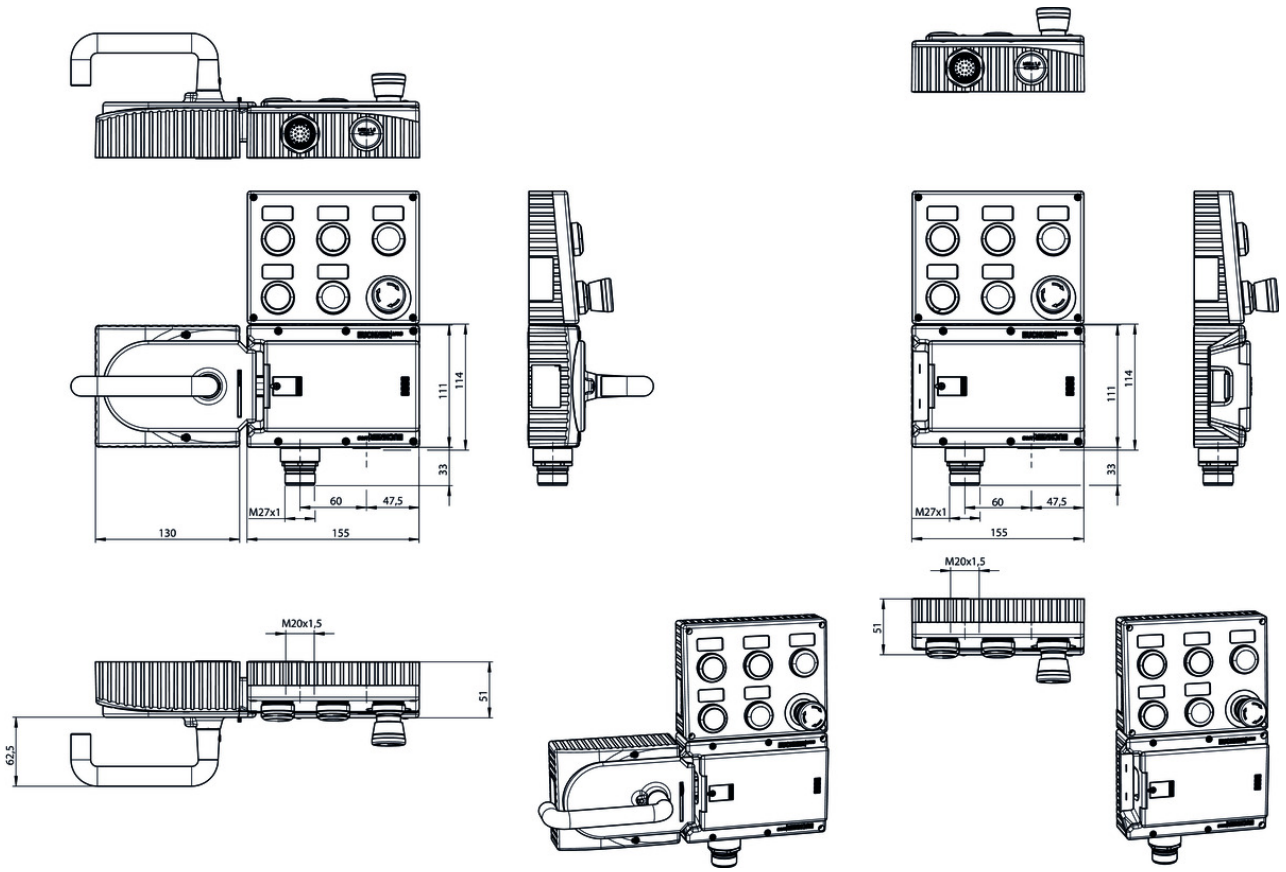
[3, 5] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

[4] (no load on outputs)

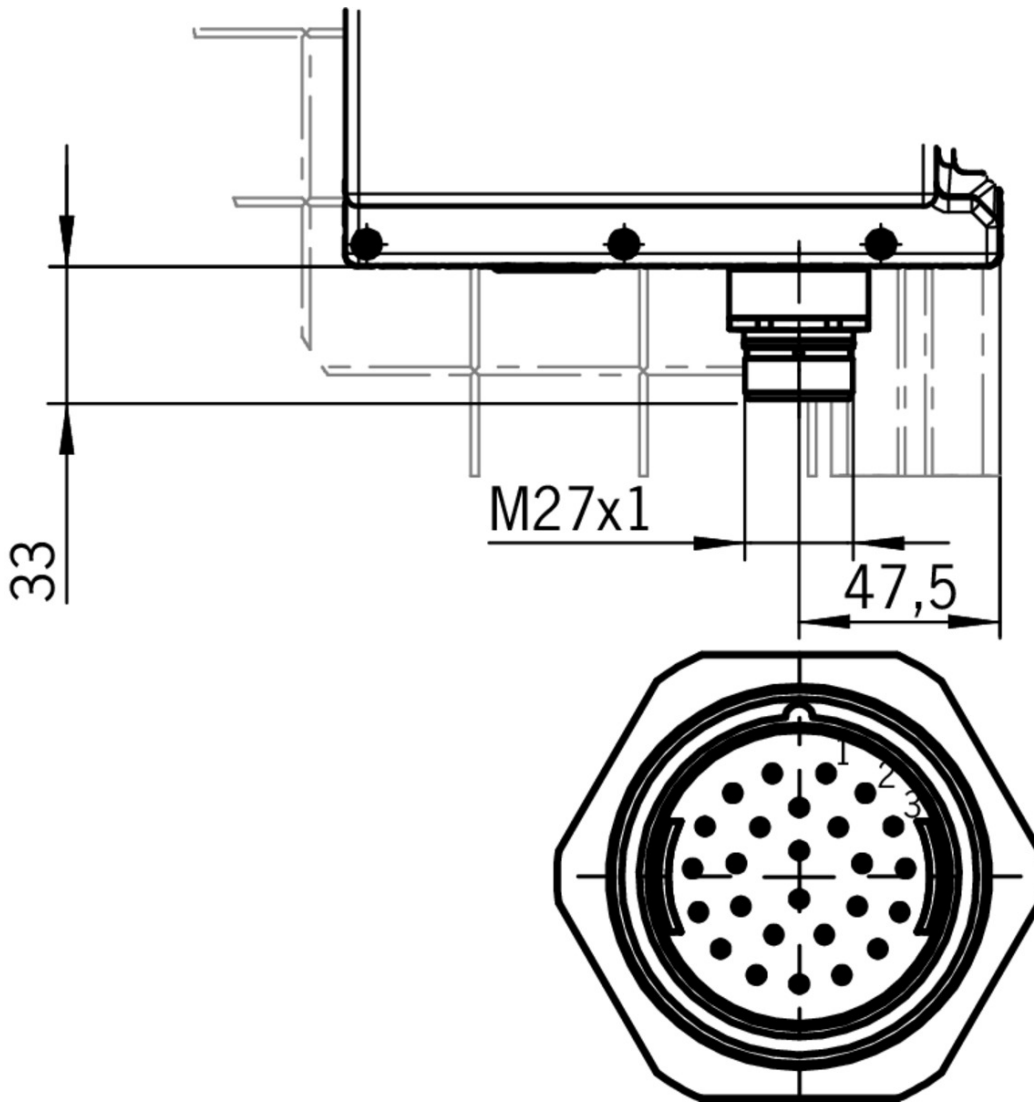
[6] (With energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V)

[7, 8] Value at a switching current of 50mA without taking into account the cable lengths

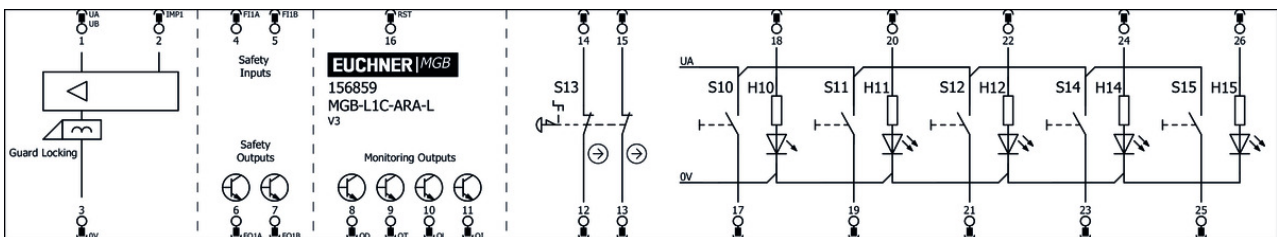
Dimension drawing



Dimension drawing



Plug connector RC26



Mounting accessories

- ✓ Mounting plate for evaluation module-control module combination



110072 MGB-A-MOUNTINGPLATE-LC-110072

✓ Features

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

Miscellaneous accessories

▼ Lens set 5 colors



120344 AY-SET-LNS-0001-120344

▼ Lens set labeled



120377 AY-SET-LNS-SY01-120377



126158 AY-SET-LNS-SY03-126158



125359 AY-SET-LNS-SY02-125359

▼ Lens set 6 colors



120378 AY-SET-LNS-0002-120378

▼ Adhesive labels

114529 MGB-A-PLATESET-NN01-114529

▼ Features

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

▼ Lens set, three colors



158307 AY-SET-LNS-SY04-158307

Connection material

▼ Connection cable with plug connector RC26, 26-pin, 1.1m



114976 C-M27F26-PU01,1-MA-114976

▼ Features

- › M27 female plug (RC26), 26-pin
- › Straight plug connector
- › TPE-U cable
- › Cable length 1.1 m
- › With flying lead

- › Cores numbered, black
-

- ▼ Connection cable with plug connector RC26, 26-pin, 2m



111997 C-M27F26-PU02,0-MA-111997

▼ Features

- › M27 female plug (RC26), 26-pin
 - › Straight plug connector
 - › TPE-U cable
 - › Cable length 2 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector RC26, 26-pin, 5m



111998 C-M27F26-PU05,0-MA-111998

▼ Features

- › M27 female plug (RC26), 26-pin
 - › Straight plug connector
 - › TPE-U cable
 - › Cable length 5 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector RC26, 26-pin, 10m



111999 C-M27F26-PU10,0-MA-111999

▼ Features

- › M27 female plug (RC26), 26-pin
 - › Straight plug connector
 - › TPE-U cable
 - › Cable length 10 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector RC26, 26-pin, 20m



112912 C-M27F26-PU20,0-MA-112912

▼ Features

- › M27 female plug (RC26), 26-pin
 - › Straight plug connector
 - › TPE-U cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector RC26, 26-pin, 35m



123829 C-M27F26-PU35,0-MA-123829

▼ Features

- › M27 female plug (RC26), 26-pin
- › Straight plug connector

- › TPE-U cable
- › Cable length 35 m
- › With flying lead
- › Cores numbered, black

☑ Connection cable with plug connector RC26, 26-pin, 50m



123877 C-M27F26-PU50,0-MA-123877

☑ Features

- › M27 female plug (RC26), 26-pin
- › Straight plug connector
- › TPE-U cable
- › Cable length 50 m
- › With flying lead
- › Cores numbered, black

Function expansion

☑ Emergency unlocking for safety system MGB



112989 MGB-A-EMERGENCYRELEASE-112989

☑ Features

- › Quick emergency unlocking
- › sealable

Instructions

















☑ Návod k použití - bezpečnostní systémy MGB-L1...AR.-... / MGB-L2...AR.-... a MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0

	Doc. no.	Version	Language	Download
Betriebsanleitung MGB-L1...AR.-... / MGB-L2...AR.-... und MGB-L1...AP.-... / MGB-L2...AP.-... ab V3.0.0	2119167	04-05/18		3.7 MB
Mode d'emploi MGB-L1...AR.-... / MGB-L2...AR.-... et MGB-L1...AP.-... / MGB-L2...AP.-... à partir de V3.0.0	2119167	04-05/18		3.7 MB
Manual de instrucciones MGB-L1...AR.-... / MGB-L2...AR.-... y MGB-L1...AP.-... / MGB-L2...AP.-... V3.0.0 o superior	2119167	04-05/18		3.7 MB
Návod k použití - bezpečnostní systémy MGB-L1...AR.-... / MGB-L2...AR.-... a MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0	2119167	04-05/18		4.0 MB
Operating Instructions MGB-L1...AR.-... / MGB-L2...AR.-... and MGB-L1...AP.-... / MGB-L2...AP.-... from V3.0.0	2119167	04-05/18		3.7 MB

Istruzioni di impiego MGB-L1...AR.-... / MGB-L2...AR.-... und MGB-L1...AP.-... / MGB-L2...AP.-... da V3.0.0	2119167	04-05/18		3.7 MB
Handleiding MGB-L1...AR.-... / MGB-L2...AR.-... en MGB-L1...AP.-... / MGB-L2...AP.-... vanaf V3.0.0	2119167	04-05/18		3.7 MB
Instrukcja obsługi MGB-L1...AR.-... / MGB-L2...AR.-... i MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0	2119167	04-05/18		4.0 MB
Manual de instruções MGB-L1...AR.-... / MGB-L2...AR.-... e MGB-L1...AP.-... / MGB-L2...AP.-... a partir de V3.0.0	2119167	04-05/18		3.7 MB
Инструкция по эксплуатации MGB-L1...AR.-... / MGB-L2...AR.-... и MGB-L1...AP.-... / MGB-L2...AP.-... с V3.0.0	2119167	04-05/18		4.2 MB
Návod na prevádzku Bezpečnostné systémy MGB-L1...AR.-... / MGB-L2...AR.-... a MGB-L1...AP.-... / MGB-L2...AP.-... od V3.0.0	2119167	04-05/18		4.0 MB
Instruktionsbok MGB-L1...AR.-... / MGB-L2...AR.-... och MGB-L1...AP.-... / MGB-L2...AP.-... fr. V3.0.0	2119167	04-05/18		3.7 MB
İşletim kılavuzu MGB-L1...AR.-... / MGB-L2...AR.-... ve MGB-L1...AP.-... / MGB-L2...AP.-... itibaren V3.0.0	2119167	04-05/18		4.1 MB
操作指示書 安全システム MGB-L1...AR.-... / MGB-L2...AR.-... および MGB-L1...AP.-... / MGB-L2...AP.-... V3.0.0以降	2119167	04-05/18		4.1 MB
使用说明书 安全系统 MGB-L1...AR.-... / MGB-L2...AR.-... 和 MGB-L1...AP.-... / MGB-L2...AP.-... V3.0.0 以上	2119167	04-05/18		4.1 MB






Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab V3.0.0

	Doc. no.	Version	Language	Download
Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab V3.0.0 Safety Information (Part of the Operating Instructions Safety System MGB-AR/MGB-AP) from V3.0.0 Información de seguridad (parte del manual de instrucciones Sistema de seguridad MGB-AR/MGB-AP) V3.0.0 o superior Information de sécurité (partie du mode d'emploi Système de sécurité MGB-AR/MGB-AP) à partir de V3.0.0 Informazioni sulla sicurezza (Parte delle istruzioni di impiego Sistema di sicurezza MGB-AR/MGB-AP) da V3.0.0 Säkerhetsinformation (Del av instruktionsboken Säkerhetssystem MGB-AR/MGB-AP) från V3.0.0	123151	01-02/15	 	0.6 MB
Veiligheidsinformatie (Deel van de handleiding Beveiligingssysteem MGB-AR/MGB-AP) vanaf V3.0.0	123151	01-02/15		0.2 MB

Informação de segurança (Parte do manual de instruções Sistema de segurança MGB-AR/MGB-AP) a partir de V3.0.0	123151	01-02/15		 0.2 MB
Bezpečnostní informace (součást návodu k použití „Bezpečnostní systém MGB-AR/MGB-AP“) od V3.0.0	123151	01-02/15		 0.2 MB
Informacje o bezpieczeństwie (Część instrukcji obsługi System bezpieczeństwa MGB-AR/MGB-AP) od V3.0.0	123151	01-02/15		 0.2 MB
Информация о безопасности (часть инструкции по эксплуатации Предохранительная система MGB-AR/MGB-AP) с V3.0.0	123151	01-02/15		 0.3 MB
Bezpečnostná informácia (časť návodu na prevádzku Bezpečnostný systém MGB-AR/MGB-AP) od V3.0.0	123151	01-02/15		 0.2 MB
Güvenlik bilgisi (İşletim kılavuzunun parçası emniyet sistemi MGB-AR/MGB-AP) V3.0.0 ve üstü	123151	01-02/15		 0.3 MB
安全信息 (安全系统 MGB-AR/MGB-AP使用说明书的组成部分) V3.0.0以上	123151	01-02/15		 0.3 MB
安全情報 MGB-AR/MGB-AP	123151	01-02/15		 0.6 MB

Declaration of conformity

EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung	2123150	08-01/17		 0.3 MB
EU declaration of conformity				
Declaración UE de conformidad				
Déclaration UE de conformité				
Dichiarazione di conformità			