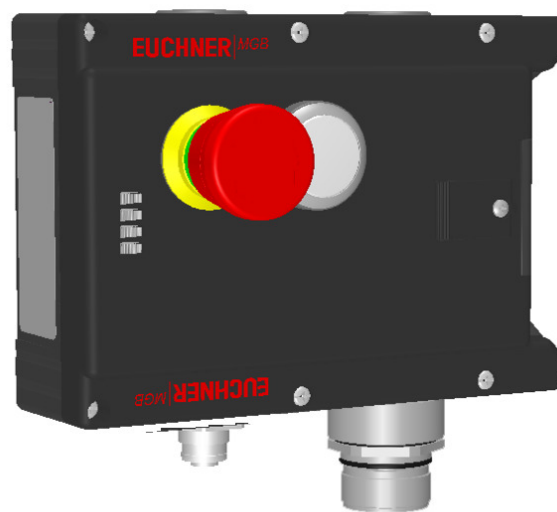


## ITEM 157884 MGB-L1-ARA-AL3A1-S8-R-157884

Description	Technical data	Accessories	Downloads
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### Features

- › Guard locking with guard locking monitoring
- › Emergency stop according to ISO 13850
- › One illuminated pushbutton
- › With plug connector RC26
- › With plug connector M12 for enabling switch
- › 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 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.

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### 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

- S2** One NO contact, illuminated

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### Connection for enabling switch

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

### Approvals



### Mechanical values and environment

Housing material	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	$1 \times 10^6$
In case of use as door stop, and 1 Joule impact energy	$0,1 \times 10^6$
Installation position	Door hinge DIN right
Switching frequency	0,25 Hz
Connection	Plug connector RC26 [1] Plug connector SFF5 [2]
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 <sup>[3]</sup>
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
<b>Power supply <math>U_B</math></b>		
Operating voltage DC	$U_B$	24 V DC -15% ... 10% <sup>[4]</sup>
Current consumption	$I_{UB}$	max.80 mA <sup>[5]</sup>
<b>Power supply <math>U_A</math></b>		
Operating voltage DC	$U_A$	24 V DC -15% ... 10% <sup>[6]</sup>
Current consumption	$I_{UA}$	max.375 mA <sup>[7]</sup>
<b>Safety outputs FO1A, FO1B</b>		
Test pulses		max.1 ms
Test-pulse interval		min.100 ms
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage	$U_{FO1A} / U_{FO1B} \text{ HIGH}$ $U_{FO1A} / U_{FO1B} \text{ LOW}$	$U_B - 2V \dots U_B \text{ V DC}$ <sup>[8]</sup> 0 ... 1 V DC
Output current	Per safety output FO1A / FO1B	1 ... 200 mA
<b>Monitoring outputs OD, OT, OL, OI</b>		
Type of output		Semiconductor outputs, p-switching, short circuit-proof
Output voltage		$U_A - 2V \dots U_A \text{ V DC}$ <sup>[9]</sup>
Output current		max.50 mA
<b>Controls and indicators</b>		
Switching voltage		$U_A \text{ V}$
Switching current		1 ... 10 mA
Breaking capacity		max.0,25 W
Power supply LED		24 V DC
<b>Solenoid control input IMP1, IMP2, IMM</b>		
Test pulses		max.5 ms
Test-pulse interval		min.100 ms

## Controls and indicators

Assignment diagram	L1
Control/indicator	
	<b>Position 1</b>
Version	Emergency stop
Special features	With auxiliary contact
Color	
Switching element	2 pos. driven NC + 1NO
Control/indicator	
	<b>Position 2</b>
Version	Illuminated push buttons
Special features	
Color	
Switching element	1NO

### Miscellaneous

Additional feature	Incl. cover set ID. No. 120344
Product version number	V3.0.3

### 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>	$3.7 \times 10^{-9}$
	<b>Control of the guard locking</b>
Category	4
Performance Level	PL e
PFH <sub>D</sub>	$2.8 \times 10^{-9}$
	<b>Emergency stop</b>
B10 <sub>D</sub>	Emergency stop $0,065 \times 10^6$
<hr/>	
Mission time	20 y

[1] X6

[2] X7

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

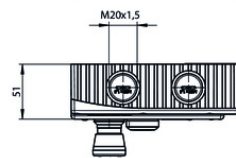
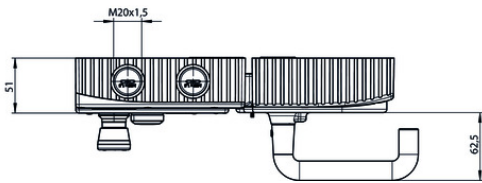
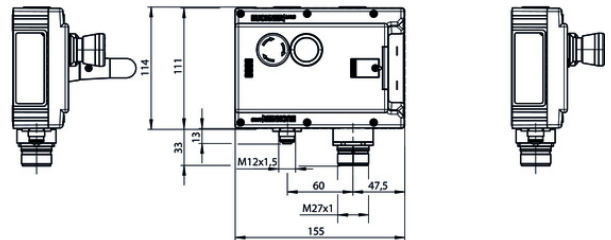
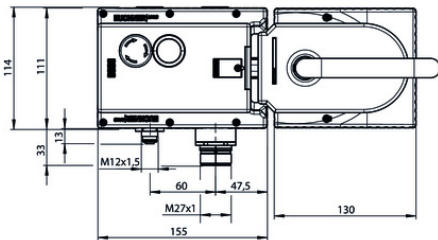
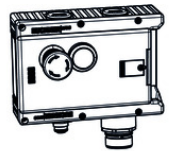
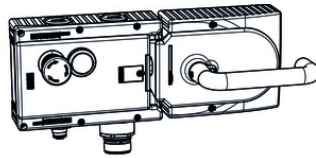
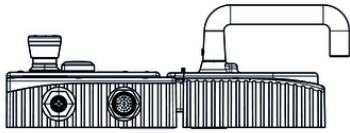
[4, 6] (Reverse polarity protected, regulated, residual ripple <5%, PELV)

[5] (no load on outputs)

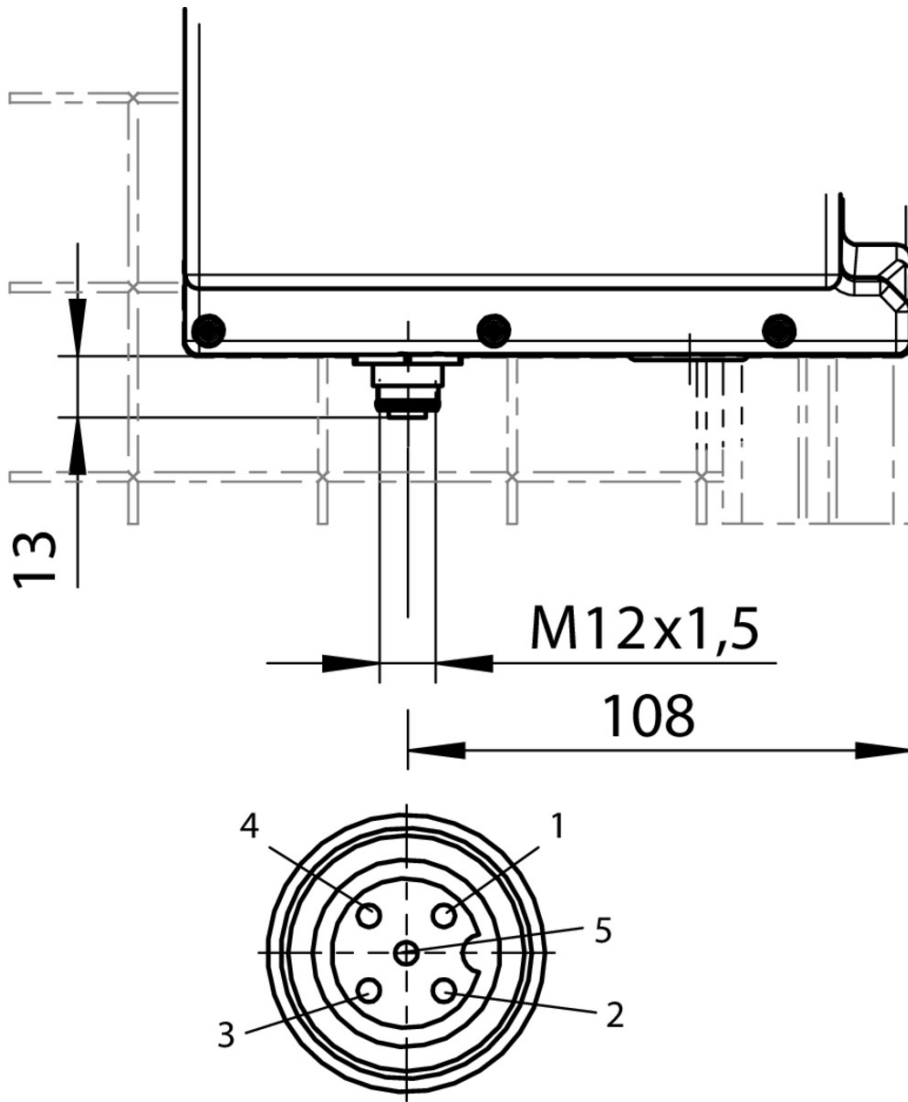
[7] (With energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V)

[8, 9] Value at a switching current of 50mA without taking into account the cable lengths

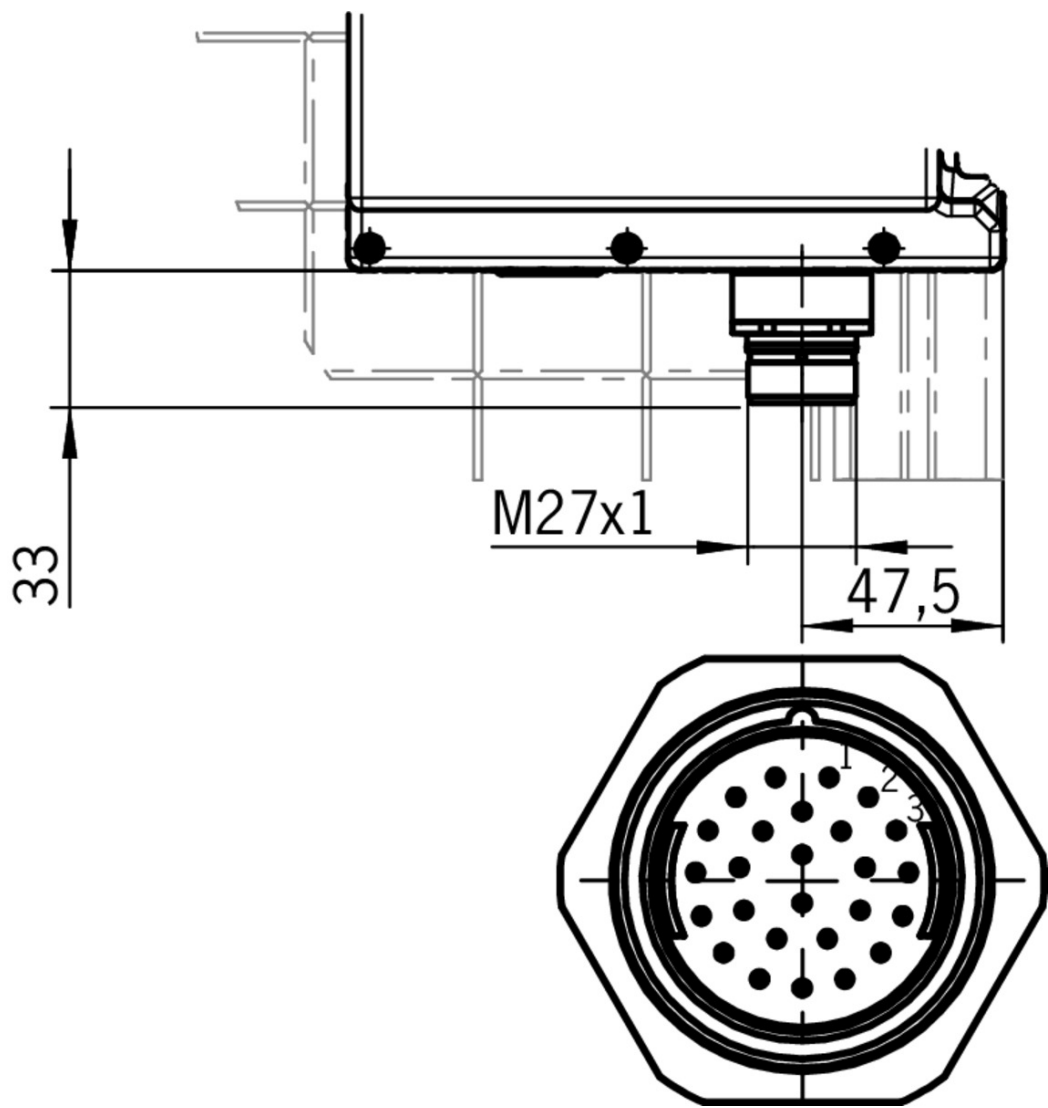
## Dimension drawing



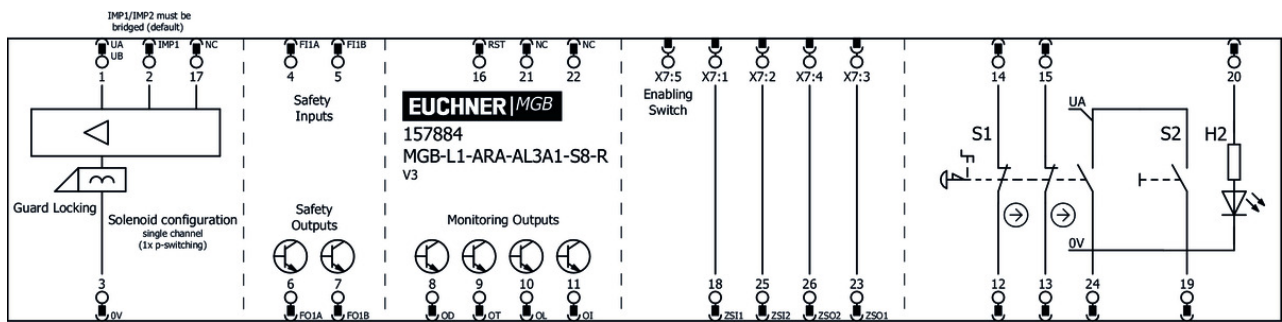
Dimension drawing



### Dimension drawing



### Plug connector RC26



### Miscellaneous accessories

✓ Lens set 5 colors



**120344** AY-SET-LNS-0001-120344

▼ Lens set 6 colors



**120378** AY-SET-LNS-0002-120378

▼ Lens set labeled



**120377** AY-SET-LNS-SY01-120377



**126158** AY-SET-LNS-SY03-126158



**125359** AY-SET-LNS-SY02-125359

▼ Lens set, three colors



**158307** AY-SET-LNS-SY04-158307

## Mounting accessories

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



**109490** MGB-A-MOUNTINGPLATE-L-109490

▼ Features

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

## Function expansion

▼ Emergency unlocking for safety system MGB



**112989** MGB-A-EMERGENCYRELEASE-112989

▼ Features

- › Quick emergency unlocking
- › sealable

▼ Door handle for MGB-H...



**110277** MGB-A-DOORHANDLE-S1-110277

▼ Features

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



### **123926** MGB-A-DOORHANDLE-S2-123926

#### ▼ Features

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

#### ▼ Escape release MGB-E-A...



### **100465** MGB-E-A-100465

#### ▼ Features

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

#### ▼ Door knob for MGB-H...



### **111460** MGB-A-DOORKNOB-S1-111460

#### ▼ Features

- › 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

#### ▼ Features

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

## Connection material

---

#### ▼ 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, 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, 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, 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, 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

## Spare parts

### Handle module MGB-H-...



**111157** MGB-H-AA1A3-R-111157

#### Features

- › Intelligent bolt tongue
- › Fold-out lockout mechanism
- › Second automatically extending lockout mechanism
- › Door handle

## Enabling switch

### ZSA, 3-stage with cable and plug connector M12



**110560** ZSA2B4G10CC2322

#### Features

- › Housing G1
- › 3-stage function
- › Straight connection cable with plug connector, 10 m

## 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			