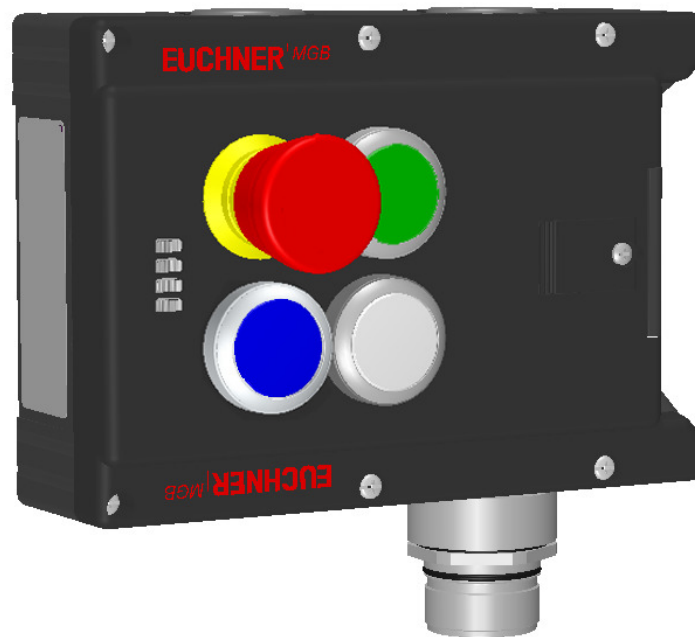


## ITEM 119923 MGB-L1-ARA-AI2A1-S6-R-119923

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)
- › Emergency stop according to ISO 13850
- › 3 pushbuttons (illuminated, gn, wh, bu)
- › 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.

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### 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

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### Emergency stop device

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

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### Pushbutton

- S2** 1 NO contact, green, illuminated
- S3** 1 NO contact, white, illuminated
- S4** 1 NO contact, blue, illuminated

### 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
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>[1]</sup>
Rated insulation voltage U <sub>i</sub>		30 V
Rated impulse withstand voltage U <sub>imp</sub>		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 U<sub>B</sub></b>
Operating voltage DC		
	U <sub>B</sub>	24 V DC -15% ... 10% <sup>[2]</sup>
Current consumption		
	I <sub>UB</sub>	max.80 mA <sup>[3]</sup>
		<b>Power supply U<sub>A</sub></b>
Operating voltage DC		
	U <sub>A</sub>	24 V DC -15% ... 10% <sup>[4]</sup>
Current consumption		
	I <sub>UA</sub>	max.375 mA <sup>[5]</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 <sub>FO1A</sub> /U <sub>FO1B</sub> HIGH	U <sub>B</sub> -2V ... U <sub>B</sub> V DC <sup>[6]</sup>
	U <sub>FO1A</sub> /U <sub>FO1B</sub> LOW	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 <sub>A</sub> -2V ... U <sub>A</sub> V DC <sup>[7]</sup>
Output current		max.50 mA
		<b>Controls and indicators</b>
Switching voltage		U <sub>A</sub> V
Switching current		1 ... 10 mA
Breaking capacity		max.0,25 W
Power supply LED		24 V DC
		<b>Emergency stop</b>
Switching voltage		5 ... 24 V
Switching current		1 ... 100 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	
Color	
Switching element	2 pos. driven NC
Control/indicator	
	<b>Position 2</b>
Version	Illuminated push buttons
Special features	
Color	Green
Switching element	1NO
Control/indicator	
	<b>Position 3</b>
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Control/indicator	
	<b>Position 4</b>
Version	Illuminated push buttons
Special features	
Color	Blue
Switching element	1NO

## Miscellaneous

Product version number	V3.0.3
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## 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>	

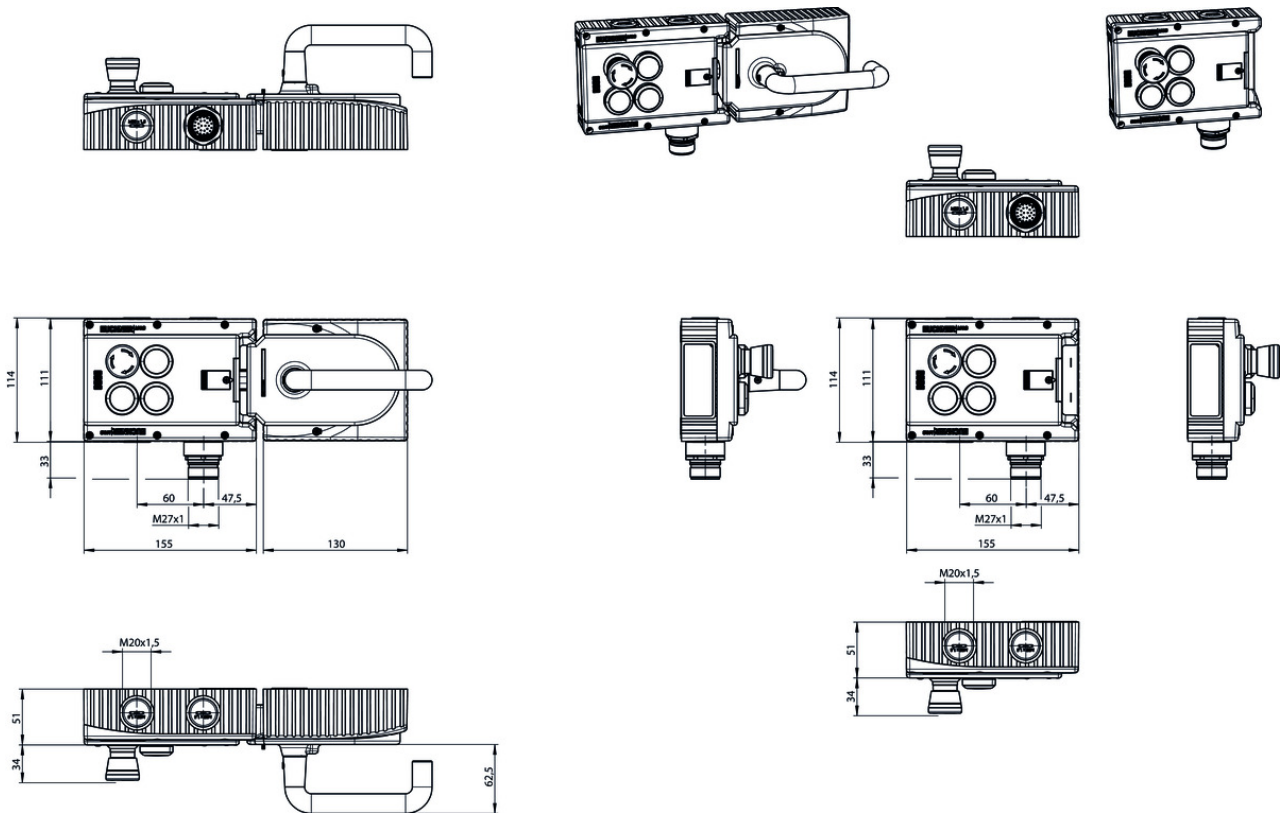
Emergency stop  $0,065 \times 10^6$

Mission time

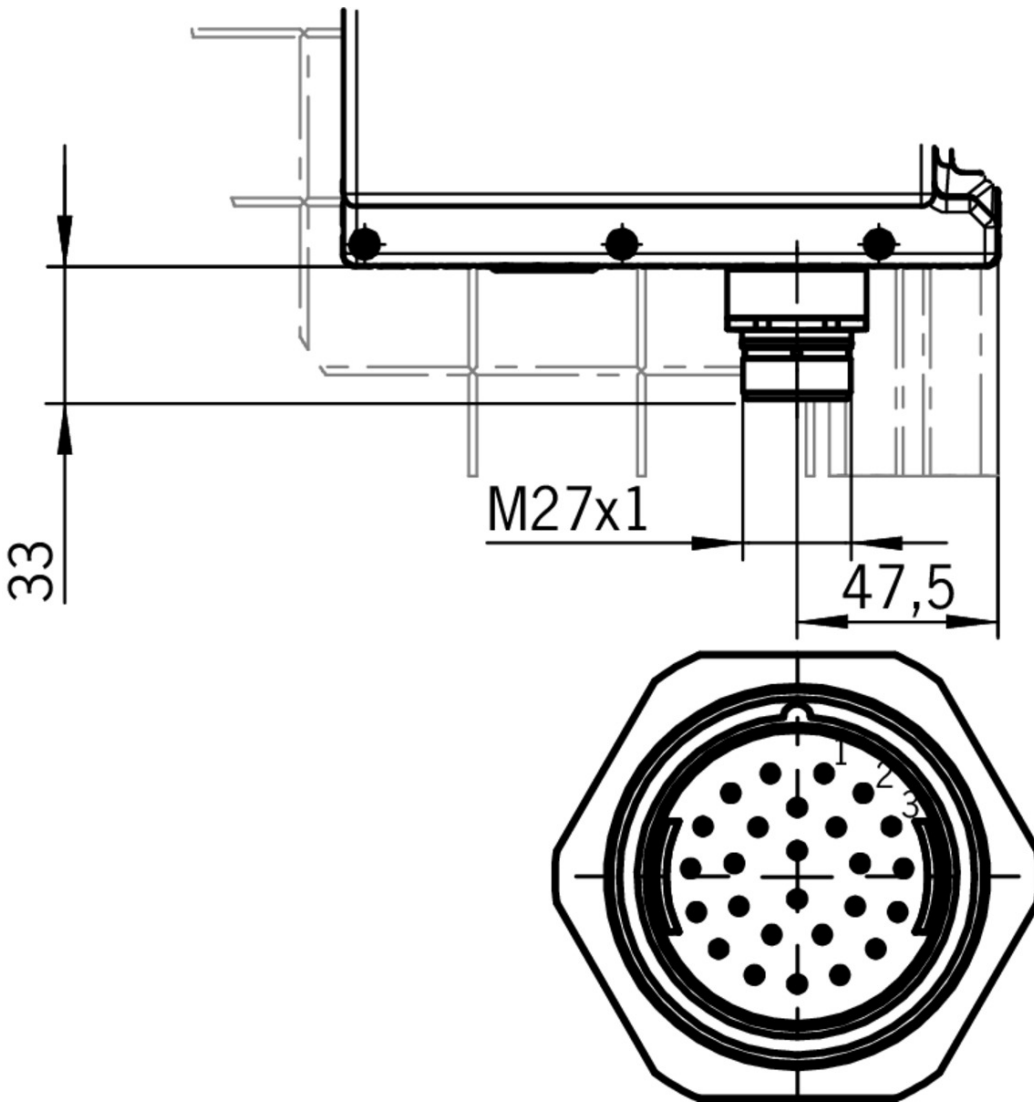
20 y

- [1] Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.
- [2, 4] (Reverse polarity protected, regulated, residual ripple <5%, PELV)
- [3] (no load on outputs)
- [5] (With energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V)
- [6, 7] Value at a switching current of 50mA without taking into account the cable lengths

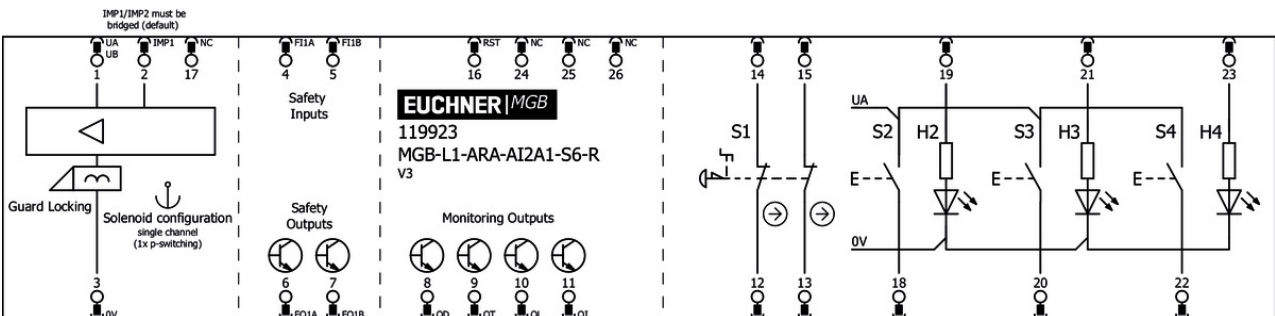
### Dimension drawing



## Dimension drawing



## Plug connector RC26



## Mounting accessories

- ✓ Mounting plate for evaluation 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
- 

## Miscellaneous accessories

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### ▼ Lens set 5 colors



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

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### ▼ Lens set labeled



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

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

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

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### ▼ Lens set 6 colors



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

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### ▼ Lens set, three colors



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

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## Connection material

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### ▼ 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

### Informação de segurança (Parte do manual de instruções Sistema de segurança MGB-AR/MGB-AP) a partir de V3.0.0







	Doc. no.	Version	Language	Download
Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-AR/MGB-AP) ab 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 Safety Information (Part of the Operating Instructions Safety System MGB-AR/MGB-AP) from V3.0.0	123151	01-02/15	     	0.6 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

Veiligheidsinformatie (Deel van de handleiding Beveiligingssysteem MGB-AR/MGB-AP) vanaf 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
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
Bezpečnostná informácia (časť návodu na prevádzku Bezpečnostný systém MGB-AR/MGB-AP) od V3.0.0	123151	01-02/15		 0.2 MB
安全情報 MGB-AR/MGB-AP	123151	01-02/15		 0.6 MB
 <b>Návod k použití - bezpečnostní systémy MGB-L1...AR-... / MGB-L2...AR-... a MGB-L1...AP-... / MGB-L2...AP-... od V3.0.0</b>				
	<b>Doc. no.</b>	<b>Version</b>	<b>Language</b>	<b>Download</b>
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

## Declaration of conformity

### EU-Konformitätserklärung

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