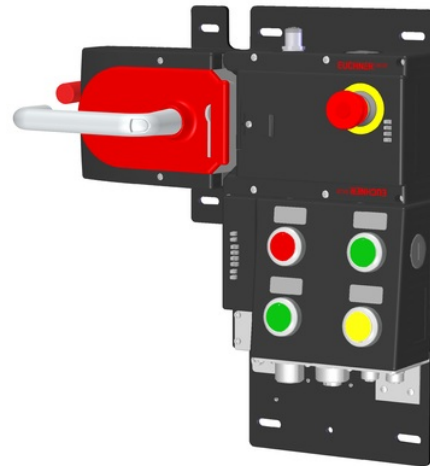


## MGB-L2HEB-PNA-L-161484 (ORDER NO. 161484)

Locking set MGB-L2...-PN (guard locking by spring force) with 5 control elements, 7/8" and M12 plugs

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850, illuminated
- ▶ 4 illuminated pushbuttons
- ▶ including adhesive labels
- ▶ Connection via 7/8" and M12 plugs
- ▶ including terminal plug for stack light (M12, 5-pin)
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch
- ▶ With escape release
- ▶ Unicode



### Description

#### Profinet connection

7/8" plugs according to ANSI/B93.55M-1981 and M12 plugs (d-coded) according to IEC 61076-2-101

#### Profinet RT switch

Point-to-point topology network structure due to integrated RT switch.

#### Flexible use as interlocking or guard locking

By means of the corresponding evaluation of the safe device data by the control system, use can be as either interlocking or guard locking (with or without monitoring).

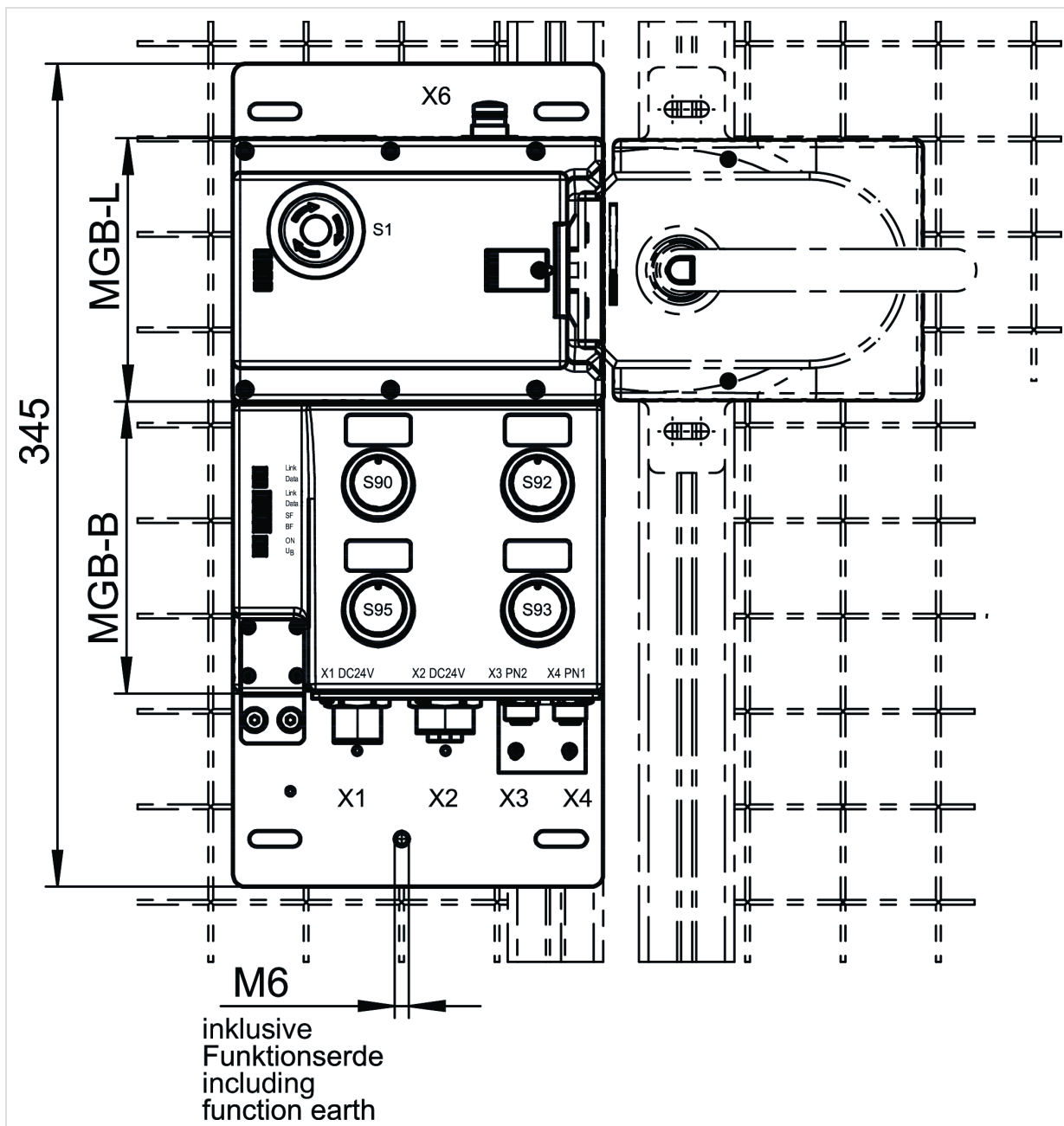
#### Illuminated emergency stop

Emergency stop with illumination that can be controlled as required.

#### Escape release

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

### Dimension drawings

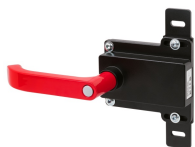


## Technical data

### Approvals



Escape release MGB-E-A2-106051 (Order No. 106051)



### Mechanical values and environment

Ambient temperature -20 ... +55 °C

Installation orientation any

Material

Housing Die-cast zinc/stainless steel, powder-coated

Mechanical life 1 x 10<sup>6</sup>

## Miscellaneous

Additional feature	with mounting plate
Product version number	V2.0.0

## Handle modules MGB-H-AA1A2-L-106221 (Order No. 106221)



### Mechanical values and environment

Ambient temperature	-20 ... +55 °C
Degree of protection	IP65
Installation orientation	Door hinge DIN left
Material	
Housing	Fiber glass reinforced plastic, nickel-plated die-cast zinc, stainless steel

## Miscellaneous

Additional feature	with mounting plate
Product version number	V3.0.0

## Locking modules MGB-L2B-PNA-L-161482 (Order No. 161482)

### Work area



Assured release distance  $s_{ar}$

Door position max. 65 mm

### Controls and indicators

Assignment diagram

B1

L1

Item	Extras	Color	Designation1	Number	LED	Version	Einlegeschild Anmerkung	Slide-in label	Switching element
1						Emergency stop illuminated			2 PD
90		red				Illuminated pushbutton			1NO
92		green				Illuminated pushbutton			1NO
93		yellow				Illuminated pushbutton			1NO
95		green				Pushbutton			1NO

### Electrical connection ratings

## Connecting cable

	Ethernet	Profinet I/O cable, at least cat. 5e
Current consumption		max. 500 mA
Degree of contamination (external, according to EN 60947-1)		3
EMC protection requirements		In accordance with EN 61000-4 and EN 61326-3-1
maximum feed-in current in the connection block		
	X1, X2	max. 4000 mA
Rated impulse withstand voltage $U_{imp}$		0.5 kV
Rated insulation voltage $U_i$		75 V
Safety class		III
Transponder coding		Unicode
		<b>Power supply X1</b>
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% (The auxiliary voltage is not required for the MGB system)
Fusing		
	extern	min. 1 A träge
Operating voltage DC		
	L1	24 V DC -15% ... +10% ((verpolsicher, geregelt, Restwelligkeit <5%, PELV))
		<b>Power supply X2</b>
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% (For looping through for connected devices)
Operating voltage DC		
	L1	24 V DC -15% ... +10% (Zum Weiterschleifen für nachfolgende Geräte)

## Mechanical values and environment

## Ambient temperature

at UB = 24V DC -20 ... +55 °C

## Connection

acc. to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e	M12, D-coded, screened (X3 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of cables.))
	7/8" Power (X1 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of cables.))
acc. to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e	M12, D-coded, screened (X4 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of cables.))
	7/8" Power (X2 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of cables.))
	Plug connector M12 (X6)
Degree of protection	IP54
Guard locking principle	Open-circuit current principle
Installation orientation	Door hinge DIN left
Locking force $F_{Zh}$	2000 N
Material	
	Housing Fiber glass reinforced plastic, nickel-plated die-cast zinc, stainless steel
Mechanical life	
	1 x 10 <sup>6</sup>
in case of use as door stop, and 1 Joule impact energy	0.1 x 10 <sup>6</sup>
Reaction time	
Guard locking	max. 550 ms Turn-off time (The reaction time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.)
Door position	max. 550 ms Turn-off time (The reaction time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.)
Emergency stop / machine stop	max. 250 ms Turn-off time (The reaction time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.)
Bolt position	max. 550 ms Turn-off time (The reaction time is the max. time between the change in the input status and the deletion of the corresponding bit in the bus protocol.)
Shock and vibration resistance	according to EN 60947-5-3
Switching frequency	0.25 Hz

## Reliability values according to EN ISO 13849-1

Mission time	20 y
Safety Integrity Level	SIL 3 (EN 62061:2005)
<b>Control of guard locking</b>	
Category	4
Performance Level	PL e
PFHd	3.91 x 10 <sup>-8</sup>
<b>Emergency stop</b>	
B10d	Emergency stop 0.13 x 10 <sup>6</sup>
<b>Emergency-stop evaluation</b>	
Category	4
Performance Level	PL e
PFHd	4.1 x 10 <sup>-8</sup>
<b>Monitoring of guard locking and the guard position</b>	
Category	4
Diagnostic Coverage (DC)	99 %
Performance Level	PL e
PFHd	4.07 x 10 <sup>-8</sup> (Fixed failure rate without consideration of faults in wearing parts.)

## Miscellaneous

Product version number	V3.30.10	
Slide-in label		
<b>Anzahl</b>	<b>Beschriftung</b>	<b>Anmerkung</b>
		ohne Aufschrift

## Interface, bus

Bus data protocol	Profinet (IEC 61158 type 10)
Data interface	Ethernet
Safety data protocol	Profisafe (IEC 61784-3-3)

## Components



**161482**  
MGB-L2B-PNA-L-161482  
Evaluation module and bus module  
MGB-L2...-PN... (guard locking by  
solenoid force) with 5 control elements,  
7/8" and M12 plugs

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850, illuminated
- ▶ 4 illuminated pushbuttons
- ▶ including adhesive labels
- ▶ Connection via 7/8" and M12 plugs
- ▶ including terminal plug for stack light (M12, 5-pin)
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch
- ▶ Unicode
- ▶ Intelligent bolt tongue
- ▶ Lockout bar
- ▶ Door handle
- ▶ Mounting plate



**106221**  
MGB-H-AA1A2-L-106221  
Handle module MGB-H-...



**106051**  
MGB-E-A2-106051  
Escape release module MGB-E... pre-assembled on mounting plate

- ▶ Escape release from the danger zone
- ▶ Mounted on mounting plate
- ▶ With red handle
- ▶ 115 mm long

## Accessories

### Function expansion

#### Emergency release for safety system MGB



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

- ▶ Quick emergency release
- ▶ sealable

#### Escape release module MGB-E... pre-assembled on mounting plate



**106051**  
MGB-E-A2-106051

- ▶ Escape release from the danger zone
- ▶ Mounted on mounting plate
- ▶ With red handle
- ▶ 115 mm long

## Miscellaneous

### 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 labeled



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



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



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



**160049**  
AY-SET-LNS-SY05-160049



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

---

### 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

---

### Spare parts

Evaluation module and bus module MGB-L2...-PN... (guard locking by solenoid force) with 5 control elements, 7/8" and M12 plugs



**161482**  
MGB-L2B-PNA-L-161482

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850, illuminated
- ▶ 4 illuminated pushbuttons
- ▶ including adhesive labels
- ▶ Connection via 7/8" and M12 plugs
- ▶ including terminal plug for stack light (M12, 5-pin)
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch
- ▶ Unicode

---

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





**106221**  
MGB-H-AA1A2-L-106221


- ▶ Intelligent bolt tongue
- ▶ Lockout bar
- ▶ Door handle
- ▶ Mounting plate




## Contacts

 EUCHNER GmbH + Co. KG  
Kohlhammerstraße 16  
70771 Leinfelden-Echterdingen

 +49 711 7597-0

 +49 711 753316

 [info\(at\)euchner.de](mailto:info(at)euchner.de)