

# MGB-L1B-EIA-L-128326 (Order no. 128326)

# Locking module MGB-L1...-EI (guard locking by spring force) with 3 pushbuttons, emergency stop

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850, illuminated
- ▶ 3 illuminated pushbuttons
- ▶ including adhesive labels
- ▶ Connection via M12 plug
- ▶ Pre-assembled on mounting plates
- ▶ Unicode





## **Technical data**

#### **Approvals**







#### Workspace

Rated operating distances  $S_n$  20 mm

(Only applies for use on sliding doors with deactivated guard lock

monitoring)

#### Operating and display elements

Occupancy diagram

L1

B1

Item	Color	Extras	Version	Switching element	Note slide-in label	Slide-in label	Number	Designation1	LED
1		with adhesive ring	Emergency stop illuminated	2 PD					
90			Illuminated pushbutton	1NO					
91			Illuminated pushbutton	1NO					
92			Illuminated pushbutton	1NO					

#### **Electrical connection values**

Connecting cable

Ethernet Ethernet/IP cable, at least cat. 5e

Rated insulation voltage U<sub>i</sub> 75 V

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Rated impulse with stand voltage  $U_{imp}$  0.5 kV

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
Safety class	III
Current consumption	max. 500 mA
Transponder coding	Unicode
Degree of contamination (external, according to EN 60947-1)	3
	Power supply X1
Fuse	
external	min. 1 A slow blow
Operating voltage DC	
L1	24 V DC −15% +10%
	((reverse polarity protected, regulated, residual ripple<5%, PELV))
Auxiliary voltage DC	((reverse polarity protected, regulated, residual ripple<5%, PELV))
Auxiliary voltage DC	((reverse polarity protected, regulated, residual ripple<5%, PELV))  24 V DC -15% +10%
, ,	
, ,	24 V DC -15% +10%
, ,	24 V DC −15% +10%  (The auxiliary voltage is not required for the MGB system)
L2	24 V DC −15% +10%  (The auxiliary voltage is not required for the MGB system)
L2 Operating voltage DC	24 V DC -15% +10% (The auxiliary voltage is not required for the MGB system)  Power supply X2
L2 Operating voltage DC	24 V DC -15% +10% (The auxiliary voltage is not required for the MGB system)  Power supply X2  24 V DC -15% +10%

# Mechanical values and environment

Connection type	
Ethernet/IP cable, at least cat. 5e	M12, D-coded, screened (X4)
	M12 Power, A-coded (X1)
Ethernet/IP cable, at least cat. 5e	M12, D-coded, screened (X3)
	M12 Power, A-coded (X2)

(For looping through for connected devices)



Installation orientation	Door hinge DIN left		
Switching frequency	0.25 Hz		
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>		
Response time			
Bolt position	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.)		
Guard locking	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.)		
Emergency stop / machine stop	max. 100 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. 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.)		
Shock and vibration resistance	Acc. to EN IEC 60947-5-3		
Degree of protection	IP54		
Ambient temperature			
with $U_B = 24 \text{ V DC}$	−20 +55 °C		
Material			
Housing	Fiber glass reinforced plastic, nickel-plated die-cast zinc, stainless steel		
Locking force F <sub>Zh</sub>	2000 N		
Guard locking principle	Closed-circuit current principle		

# Characteristic values according to EN ISO 13849-1 and EN IEC 62061

Mission time	20 y
Safety Integrity Level	SIL 3 (EN 62061:2005)
	Control of guard locking
	control of guara footing



Performance Level		PL e		
PFH <sub>D</sub>		$4.91 \times 10^{-9}$ (Fixed failure rate without consideration of faults in wearing parts.)		
		Emergency stop		
B <sub>10D</sub>				
	Emergency stop	0.13 x 10 <sup>6</sup>		
		Emergency-stop evaluation		
Category		4		
Performance Level		PL e		
PFH <sub>D</sub>		$3.05 \times 10^{-9}$		
		(Fixed failure rate without consideration of faults in wearing parts.)		
		Monitoring of guard locking and the guard position		
Diagnostic Coverage	(DC)	99 %		
Category		4		
Performance Level		PL e		
PFH <sub>D</sub>		$3.37 \times 10^{-9}$ (Fixed failure rate without consideration of faults in wearing parts.)		

# Miscellaneous

Product version number	V1.5
Additional feature	
	incl. lens set, ID no. 120377
	incl. lens set, ID no. 120344

## Interface

Bus data protocol	Ethernet/IP	
Safety data protocol	CIP Safety	
Date interface		
	Ethernet	