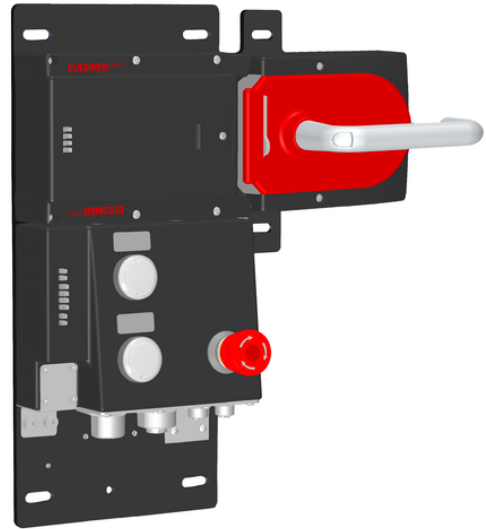


MGB-L1HB-PNA-R-121858 (Order no. 121858)

Locking set MGB-L1...-PN... (guard locking by spring force) with 3 control elements, 7/8" and M12 plugs

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850, illuminated
- ▶ 2 illuminated pushbuttons
- ▶ including adhesive labels
- ▶ Connection via 7/8" and M12 plugs
- ▶ Pre-assembled on mounting plates
- ▶ Integrated Profinet RT switch
- ▶ Unicode



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.

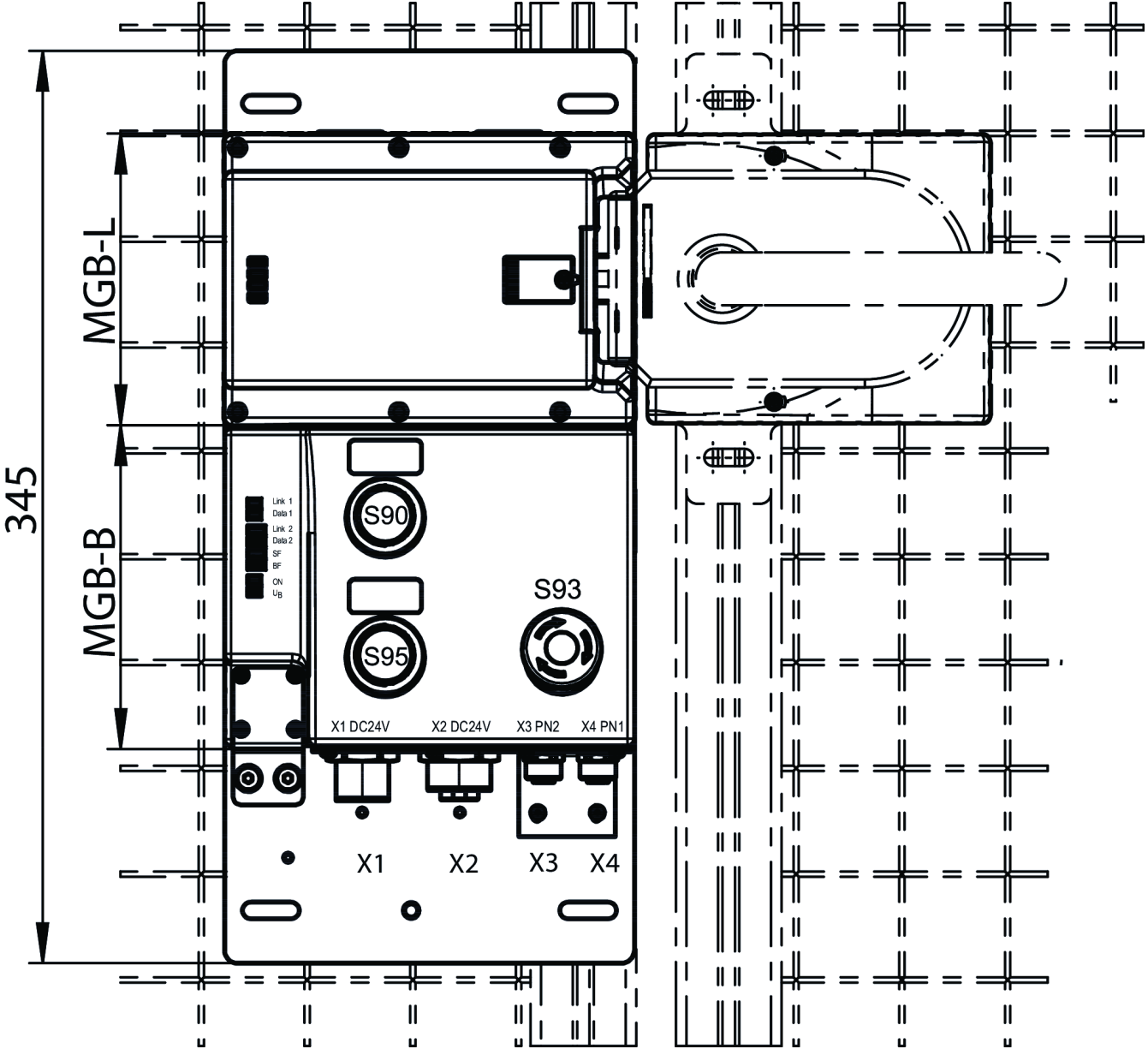
Flexible use as interlocking or guard locking

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.

Dimensional drawings



Components



106049

MGB-H-AA1A2-R-106049

Handle module MGB-H-...

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



121857

MGB-L1B-PNA-R-121857

Evaluation module and bus module MGB-L1...-PN... (guard locking by spring force) with 3 control elements, 7/8" and M12 plugs

- ▶ Guard locking with guard lock monitoring
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Technical data

Approvals



Handle modules MGB-H-AA1A2-R-106049 (Order no. 106049)

Mechanical values and environment

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

Miscellaneous

Product version number	V3.0.0
Additional feature	with mounting plate



Locking modules MGB-L1B-PNA-R-121857 (Order no. 121857)

Workspace

Secured switch-off distance s_{ar}	
Door position	max. 65 mm

Operating and display elements

Occupancy diagram

L0

B1

Item	Color	Extras	Switching element	Slide-in label	Note slide-in label	Version	Number	Designation1	LED
90			1NO			Illuminated pushbutton			
93			2 PD			Emergency stop illuminated			
95			1NO			Illuminated pushbutton			

Electrical connection values

Connecting cable

Ethernet Profinet I/O cable, at least cat. 5e

Rated insulation voltage U_i 75 V

Rated impulse withstand 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

L2	24 V DC -15% ... +10%
	(The auxiliary voltage is not required for the MGB system)

Power supply X2

Operating voltage DC

L1	24 V DC -15% ... +10%
	(For looping through for connected devices)

Auxiliary voltage DC

L2	24 V DC -15% ... +10%
	(For looping through for connected devices)

Mechanical values and environment

Connection type

according to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e	M12, D-coded, screened (X3 (The PROFINET 'Cabling and Interconnection Technology' document from the PNO helps with the correct selection of cables).)
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7/8" Power

(X1 (The PROFINET 'Cabling and Interconnection Technology' document from the PNO helps with the correct selection of cables).)

according to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e	M12, D-coded, screened (X4 (The PROFINET 'Cabling and Interconnection Technology' document from the PNO helps with the correct selection of cables).)
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7/8" Power

(X2 (The PROFINET 'Cabling and Interconnection Technology' document from the PNO helps with the correct selection of cables).)

Installation orientation

Door hinge DIN right

Switching frequency

0.25 Hz

Mechanical life

1 x 10⁶

in case of use as door stop, and 1 Joule impact energy	0.1 x 10 ⁶
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Response time	
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.)
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.)
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.)
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.)
Shock and vibration resistance	Acc. to EN IEC 60947-5-3
Degree of protection	IP54
Ambient temperature	
	with $U_B = 24 \text{ V DC}$ $-20 \dots +55 \text{ }^\circ\text{C}$
Material	
Housing	Fiber glass reinforced plastic, nickel-plated die-cast zinc, stainless steel
Locking force F_{Zh}	2000 N
Guard locking principle	Closed-circuit current principle
Miscellaneous	
Slide-in label	
Number Labeling Note	
2	without marking
Product version number	V3.30.10
Additional feature	incl. lens set, ID no. 120344
Interface	
Bus data protocol	Profinet (IEC 61158 type 10)
Safety data protocol	Profisafe (IEC 61784-3-3)
Data interface	
	Ethernet

Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/121858/?#downloads-tab>

Ordering data

Ordernumber	121858
Item designation	MGB-L1HB-PNA-R-121858
Gross weight	5,791kg
Customs tariff number	85371098
ECLASS	27-27-24-05 Safety-related transponder switch with guardlocking

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
- ▶ Signal red door handle
- ▶ Designed for door profiles up to 40 mm
- ▶ Extended actuation axis for thicker doors (available optionally)

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



120377
AY-SET-LNS-SY01-120377



126158
AY-SET-LNS-SY03-126158



125359
AY-SET-LNS-SY02-125359



158307
AY-SET-LNS-SY04-158307



160049
AY-SET-LNS-SY05-160049

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-L1...-PN... (guard locking by spring force) with 3 control elements, 7/8" and M12 plugs



121857

MGB-L1B-PNA-R-121857

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Handle module MGB-H-...



106049

MGB-H-AA1A2-R-106049

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