

ITEM 116521 MGB-L2B-PNC-R-116521

Description	Technical data	Accessories	Downloads
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Features

- › Guard locking with guard lock monitoring
- › 3 pushbuttons illuminated with symbol
- › Push-pull plug
- › Including terminal plug for enabling switch (RC12, 12-pin)
- › Pre-assembled on mounting plates
- › Multicode

Profinet connection

Connection via push-pull plugs according to IEC 61076-3-117

Flexible usage as interlocking or guard locking

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

Approvals



Mechanical values and environment

Housing material	Reinforced plastic, die-cast zinc nickel-plated, stainless steel
Weight	Net 3,1 kg
Ambient temperature	
At $U_B = 24V DC$	-20 ... 55 °C
Degree of protection	IP54
Resilience to vibration	In accordance with EN 60947-5-3
Mechanical life	
In case of use as door stop, and 1 Joule impact energy	1×10^6 $0,1 \times 10^6$
Installation position	Door hinge DIN right
Reaction time	
Enabling switch	Switch-off timemax.250 ms [1]
Door position	Switch-off timemax.550 ms [2]
Bolt position	Switch-off timemax.550 ms [3]
Guard locking	Switch-off timemax.550 ms [4]
Switching frequency	0,25 Hz
Connection	
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull power [5] Push-pull RJ45 [6]
	Plug connector RC12 [7]
Guard locking principle	Open-circuit current principle
Locking force F_{Zh}	2000 N

Electrical connection ratings

Current consumption	max.500 mA
Rated insulation voltage U_i	75 V
Rated impulse withstand voltage U_{imp}	0,5 kV
Maximum feed-in current in the connection block	
	X1 max.4000 mA
EMC protection requirements	In accordance with EN 61000-4 and EN 61326-3-1
Degree of contamination (external, according to EN 60947-1)	3
Connecting cable	
Ethernet	Profinet I/O cable, at least cat. 5e
Safety class	III

Transponder coding	Multicode
	Power supply X1
Operating voltage DC	L1 24 V DC -15% ... 10% ^[8]
Auxiliary voltage DC	L2 24 V DC -15% ... +10% ^[9]
Fusing	external Slow blow min.1 A

Interface, bus

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

Operating distance

Assured switch-off distance S_{ar}	Door position max.65 mm
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Controls and indicators

Assignment diagram	B1
Assignment diagram	L0
Control/indicator	
	Position 90
Version	Illuminated push buttons
Special features	Printed
Color	white
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 91
Version	Illuminated push buttons
Special features	Printed
Color	Yellow
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 92
Version	Illuminated push buttons
Special features	Printed
Color	Blue

Switching element	1NO
Slide-in label	

Miscellaneous

Product version number	V3.30.11
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Reliability values acc. to EN ISO 13849-1

Monitoring of guard locking and the safety guard position	
Category	4
Performance Level	PL e
PFH _D	4.07×10^{-8} [10]
Diagnostic Coverage (DC)	99
Enabling switch	
B10 _D	
Enabling switch	According to manufacturer's specifications
Enabling switch evaluation	
Category	4
Performance Level	PL e
PFH _D	4.1×10^{-8}

Safety Integrity Level	SIL 3 (EN 62061:2005)
Mission time	20

[1, 2, 3, 4] 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.

[5] X1 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[6] X4 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

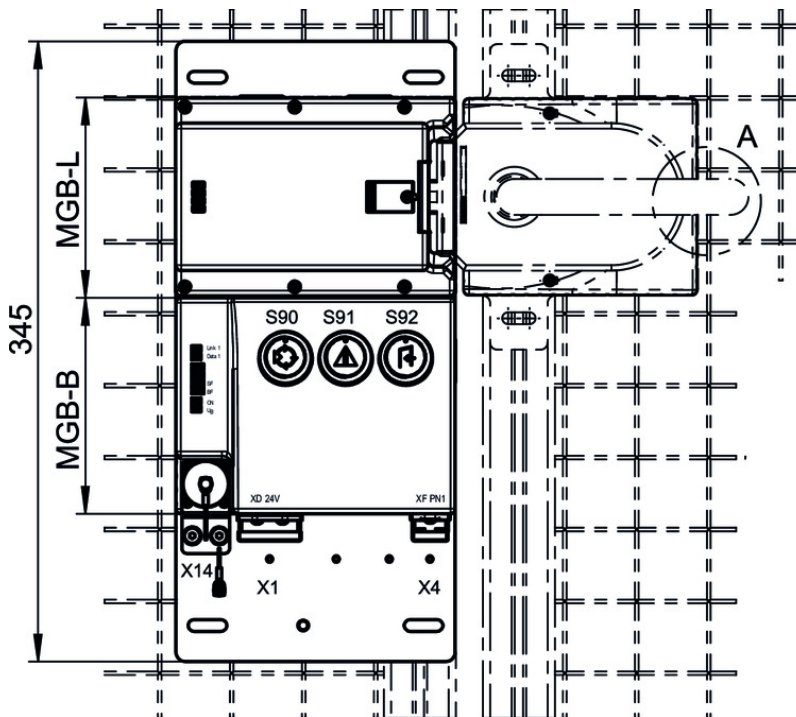
[7] X14

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

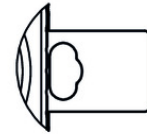
[9] The auxiliary voltage is not required for the MGB system

[10] Fixed failure rate without consideration of faults in wearing parts.

Dimension drawing



Detail A
Sperrverriegelung im
ausgefahrenen Zustand



Miscellaneous accessories

▼ Lens set 5 colors



120344 AY-SET-LNS-0001-120344

▼ Lens set labeled



120377 AY-SET-LNS-SY01-120377



125359 AY-SET-LNS-SY02-125359



126158 AY-SET-LNS-SY03-126158

▼ Lens set 6 colors



120378 AY-SET-LNS-0002-120378





▼ Lens set, three colors






158307 AY-SET-LNS-SY04-158307

Instructions

- ▼ Betriebsanleitung Sicherheitssysteme MGB-L..B-PN.-... (PROFINET) mit Datenstruktur Typ B ab V3.30.0





	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitssysteme MGB-L..B-PN.-... (PROFINET) mit Datenstruktur Typ B ab V3.30.0	115174	07-02/15		 3.2 MB
Operating Instructions Safety Systems MGB-L..B-PN.-... (PROFINET) with Data Structure Type B from V3.30.0	115174	07-02/15		 3.2 MB

- ▼ Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-L.B-PN.-... (PROFINET)) ab V3.30.0





	Doc. no.	Version	Language	Download
Sicherheitsinformation (Teil der Betriebsanleitung Sicherheitssystem MGB-L.B-PN.-... (PROFINET)) ab V3.30.0 Safety Information (Part of the Operating Instructions Safety System MGB-L.B-PN.-... (PROFINET)) from V3.30.0	123621	02-03/15	 	 0.2 MB

Application example

- ▼ Anschluss MGB-L1B-PN... an Siemens S7 315F (TIA Portal V13)







	Doc. no.	Version	Language	Download
Anschluss MGB-L1B-PN... an Siemens S7 315F (TIA Portal V13)	AP000226	01-02/17		 1.5 MB
Connecting MGB-L1B-PN... to Siemens S7 315F (TIA Portal V13)	AP000226	01-02/17		 1.7 MB

- ▼ Anschluss MGB-L2B-PN... an Siemens S7 315F

	Doc. no.	Version	Language	Download
Anschluss MGB-L2B-PN... an Siemens S7 315F	AP000222	02-09/16		 2.0 MB
Connection of MGB-L2B-PN... to Siemens S7 315F	AP000222	02-09/16		 1.6 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	2123624	06-01/17	    	 0.3 MB