

ITEM 114744 MGB-CB-PN-114744

Description	Technical data	Accessories	Downloads
-------------	----------------	-------------	-----------



Features

- › Control panel
- › Emergency stop according to ISO 13850
- › 6 pushbuttons illuminated
- › 6 selector switches, 3-stage, illuminated
- › Including adhesive labels
- › Push-pull plug
- › Including terminal plug for Stacklight (M12, 8-pin)
- › Including terminal plug for enabling switch (RC12, 12-pin)
- › Pre-assembled on mounting plates
- › Integrated Profinet RT switch

Profinet connection

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

Profinet RT switch

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

Approvals



Mechanical values and environment

Housing material	Reinforced plastic, die-cast zinc nickel-plated, stainless steel
Weight	Net 2,7 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
Installation position	Any
Reaction time	
Emergency stop / machine stop	Switch-off timemax.250 ms ^[1]
Enabling switch	Switch-off timemax.250 ms ^[2]
Switching frequency	0,25 Hz
Connection	
	Push-pull power ^[3]
	Push-pull power ^[4]
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 ^[5]
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 ^[6]
	Plug connector RC12 ^[7]
	Plug connector M12 ^[8]

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, X2	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
	Power supply X1
Operating voltage DC	

	L1	24 V DC -15% ... 10% [9]
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% [10]
Fusing		
	external	Slow blowmin.1 A
		Power supply X2
Operating voltage DC		
	L1	24 V DC -15% ... 10% [11]
Auxiliary voltage DC		
	L2	24 V DC -15% ... +10% [12]

Interface, bus

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

Controls and indicators

Assignment diagram	C1
Assignment diagram	B1
Control/indicator	
	Position 10
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 11
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 12
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	

Control/indicator	
	Position 13
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Control/indicator	
	Position 14
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Control/indicator	
	Position 15
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Slide-in label	
Control/indicator	
	Position 16
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Control/indicator	
	Position 17
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Slide-in label	
Control/indicator	
	Position 90
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	
Control/indicator	
	Position 91
Version	Illuminated push buttons
Special features	
Color	white
Switching element	1NO
Slide-in label	

Control/indicator	
	Position 93
Version	Emergency stop
Special features	
Color	
Switching element	2 pos. driven NC
Slide-in label	
Control/indicator	
	Position 94
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Slide-in label	
Control/indicator	
	Position 95
Version	Selector switch, illuminated
Special features	
Color	
Switching element	2S
Slide-in label	

Miscellaneous

Product version number	V3.30.10
Slide-in label	
	12 pcs. without marking
	Acknowledge symbol 1
	Acknowledge symbol 2

Reliability values acc. to EN ISO 13849-1

	Emergency stop
B10 _D	
Emergency stop	0.1 x 10 ⁶
	Emergency-stop evaluation
Category	4
Performance Level	PL e
PFH _D	4.1 x 10 ⁻⁸
	Enabling switch
B10 _D	
Enabling switch	According to manufacturer's specifications
	Enabling switch evaluation
Category	4
Performance Level	PL e
PFH _D	4.1 x 10 ⁻⁸

Performance Level	PL e
Category	4
Safety Integrity Level	SIL 3 (EN 62061:2005)
Diagnostic Coverage (DC)	99
Mission time	20

[1, 2] 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.

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

[4] X2 (The document PROFINET "Cabling and Interconnection Technology" from the PNO aids in the correct selection of wiring.)

[5] X3 (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

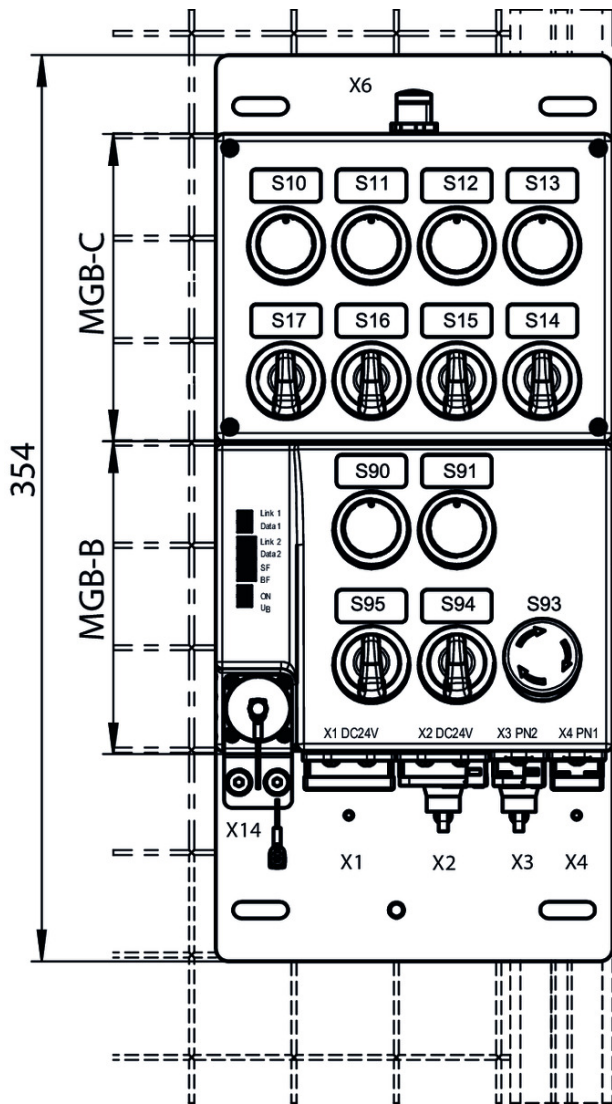
[8] X6

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

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

[11, 12] For looping through for connected devices

Dimension drawing



Miscellaneous accessories

- ✓ Lens set 5 colors



120344 AY-SET-LNS-0001-120344

- ✓ Lens set 6 colors



120378 AY-SET-LNS-0002-120378

- ✓ Lens set labeled



120377 AY-SET-LNS-SY01-120377

- ✓ Adhesive labels

114529 MGB-A-PLATESET-NN01-114529

Features

- › Adhesive labels suitable for MGB evaluation modules, bus modules and control modules
- › silver, blank
- › Packaging unit = 10 pcs.

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







Catalogs

Multifunctional Gate Box MGB Multifunctional Gate Box MGB Multifunctional Gate Box MGB Multifunctional Gate Box MGB Multifunctional Gate Box MGB 多功能系统安全控制系统 MGB

	Doc. no.	Version	Language	Download
Multifunctional Gate Box MGB	106108	10-02/18		8.2 MB
Multifunctional Gate Box MGB	109155	10-02/18		8.2 MB
Multifunctional Gate Box MGB	114433	10-02/18		8.3 MB
Multifunctional Gate Box MGB	121652	10-02/18		8.0 MB
Multifunctional Gate Box MGB	106109	10-02/18		8.2 MB
多功能系统安全控制系统 MGB	155883	10-02/18		8.3 MB

Declaration of conformity

 EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung	2123624	06-01/17		 0.3 MB
Declaración UE de conformidad				
Déclaration UE de conformité				
Dichiarazione di conformità				
EU declaration of conformity				

CAD data

CAD data for this item on TraceParts