

ITEM 156310 MBM-PN-S3-MLI-3B-156310

Description	Technical data	Accessories	Downloads
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Features

- › For connecting MGB2 or MCM modules
- › Interface to PROFINET/PROFIsafe
- › Connection via plug connector RJ45, AIDA compliant
- › Remote or direct mounting
- › Integrated switch
- › Compatible with all Modular devices

PROFINET interface

Plug connector RJ45 AIDA-compliant (push-pull plug according to IEC 61076-3-117, variant 14)

PROFINET switch

Linear topology network structure due to integrated switch (supports MRP).

MLI connections (module plug connector)

An MGB2 Modular or an MCM Modular can be connected directly to a bus module (direct plug). Alternatively, the modules can be connected using

commercially available connecting cables M12, 5-core (cable connect).

Approvals



Mechanical values and environment

Housing material	Fiber glass reinforced plastic, die-cast zinc, nickel plated
Weight	Net 0,8 kg
Ambient temperature	At $U_B = 24V$ DC -25 ... 55 °C
Degree of protection	IP65 [1]
Resilience to vibration	In acc. with EN 60947-5-3
Installation position	Any
Connection	
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 [2]
According to IEC 61076-3-117 variant 14, screened, Profinet I/O cable, at least cat. 5e	Push-pull RJ45 [3]
	Push-pull power [4]
	Push-pull power [5]
	ML1C / ML2C
Type specification	M12 EN 61076-2-101 / A-coded
Insertion cycles	100
Connection	Screw terminal
Connection type	Plug
Number of pins	5
	ML1D
Insertion cycles	100
Connection	Connector (unlocked)
Connection type	Plug
Number of pins	5

Electrical connection ratings

Current consumption	max.150 mA
Rated insulation voltage U_i	75 V
Rated impulse withstand voltage U_{imp}	1,5 kV

Maximum feed-in current in the connection block		
	XD1, XD2	max.16000 mA
EMC protection requirements		EMC directive 2014/30/EU
Degree of contamination (external, according to EN 60947-1)		3
Connecting cable		
	MLI	5-pin, M12x1
Safety class		III

Interface, bus

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

Reliability values acc. to EN ISO 13849-1

Performance Level	PL e
PFH _D	1.14×10^8 [6]
Safety Integrity Level	SIL 3 (EN 62061:2005)
Mission time	20

[1] Only in closed state with correctly mounted caps and the connecting cables or the connected modules

[2] XF1 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

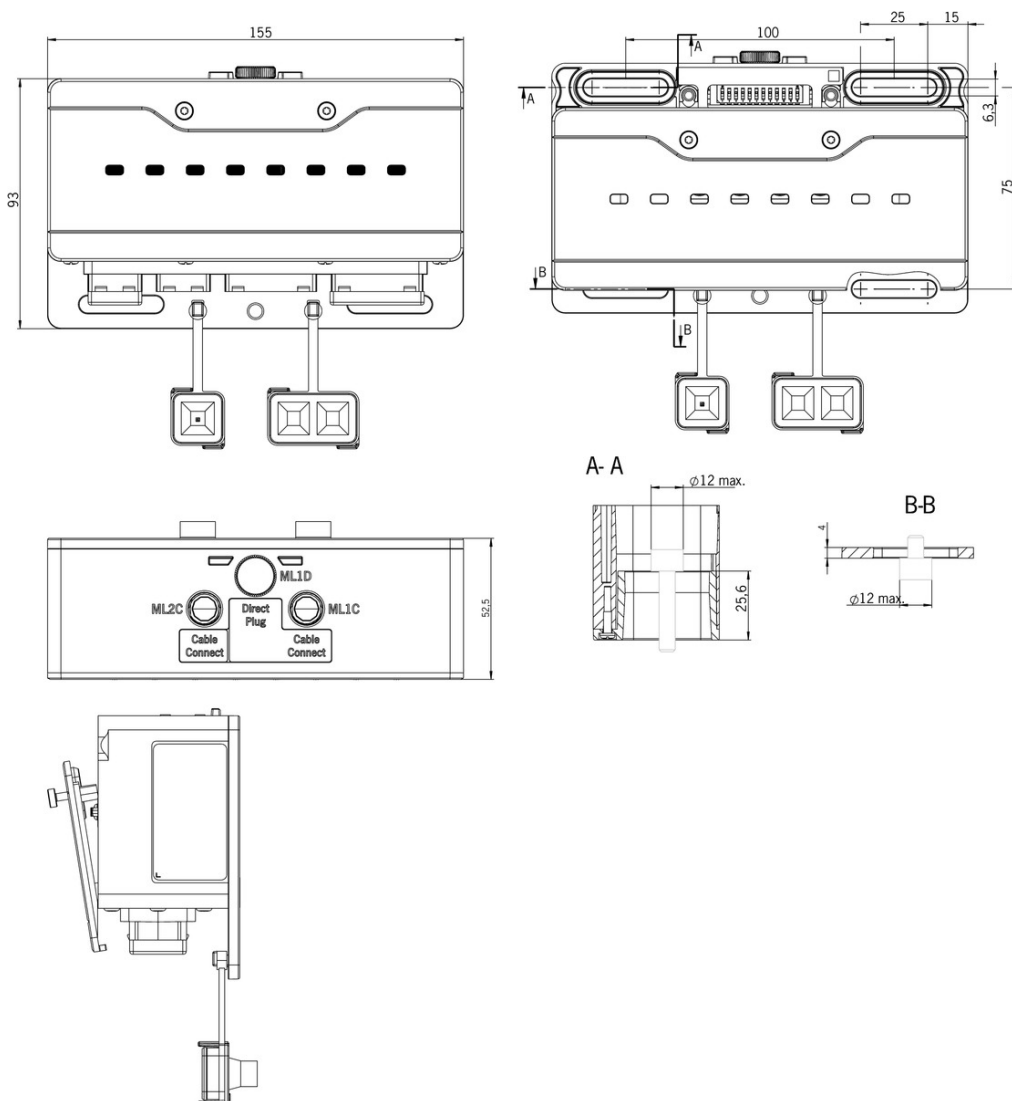
[3] XF2 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

[4] XD1 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

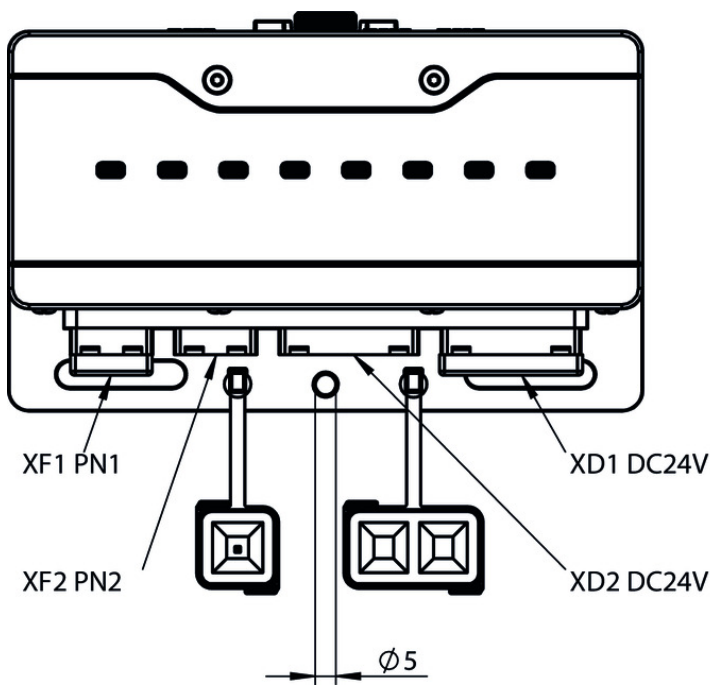
[5] XD2 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

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

Dimension drawing



Dimension drawing



XD1 / XD2 PushPull Power
 XF1 / XF2 PushPull RJ45
 (IEC 61076-3-117, variant 14)

Connection material

- Connection cable with 2 plug connectors M12, 5-pin, 20m



119971 C-M12F05-05X034PU20,0-M12M05-119971

- Features

- > M12 female plug to M12 plug connector, 5-pin
- > Straight female plug and plug connector
- > PUR cable
- > Cable length 20 m

- Connection cable with 2 plug connectors M12, 5-pin, 10m



119947 C-M12F05-05X034PU10,0-M12M05-119947

- Features

- > M12 female plug to M12 plug connector, 5-pin
- > Straight female plug and plug connector
- > PUR cable
- > Cable length 10 m

- Connection cable with 2 plug connectors M12, 5-pin, 5m



119932 C-M12F05-05X034PU05,0-M12M05-119932

- Features

- > M12 female plug to M12 plug connector, 5-pin
- > Straight female plug and plug connector
- > PUR cable
- > Cable length 5 m









Instructions

- Betriebsanleitung Busmodul MBM-PN-...-MLI-... (PROFINET) und ab V1.0.0


	Doc. no.	Version	Language	Download
Betriebsanleitung Busmodul MBM-PN-...-MLI-... (PROFINET) und ab V1.0.0	2500235	02-09/18		5.4 MB
Mode d'emploi Module de bus MBM-PN-...-MLI-... (PROFINET) et À partir de V1.0.0	2500235	02-09/18		5.4 MB
Manual de instrucciones Módulo de bus MBM-PN-...-MLI-... (PROFINET) y V1.0.0 o superior	2500235	02-09/18		5.4 MB
Operating Instructions Bus Module MBM-PN-...-MLI-... (PROFINET) from V1.0.0	2500235	02-09/18		5.4 MB



Catalogs

- Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular Multifunctional Gate Box MGB2 Modular

	Doc. no.	Version	Language	Download
Multifunctional Gate Box MGB2 Modular	159037	02-09/18		 14.3 MB
Multifunctional Gate Box MGB2 Modular	159050	02-09/18		 14.4 MB
Multifunctional Gate Box MGB2 Modular	159051	02-09/18		 14.4 MB
Multifunctional Gate Box MGB2 Modular	159039	02-09/18		 14.4 MB

Application example

 Einbindung MGB2 in das TIA Portal V13/V14/V15

	Doc. no.	Version	Language	Download
Einbindung MGB2 in das TIA Portal V13/V14/V15	AP000232	01-06/18		 1.6 MB