

ITEM 156312 MBM-PN-S4-MLI-3B-156312

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



Features

- › For connecting MGB2 or MCM modules
- › Connection to PROFINET with PROFI-safe
- › Connection via plug connector M12, D-coded
- › Remote or direct mounting
- › Integrated switch
- › Compatible with all Modular devices

PROFINET interface

Plug connector M12 D-coded (7/8" plug and M12 plug, D-coded) according to IEC 61076-2-101

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 0,85 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 | |
| Acc. to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e | M12 D-coded, screened ^[2] |
| Acc. to IEC 61076-2-101, Profinet I/O cable, at least cat. 5e | M12 D-coded, screened ^[3] |
| | 7/8" Power ^[4] |
| | 7/8" 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.6000 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.)

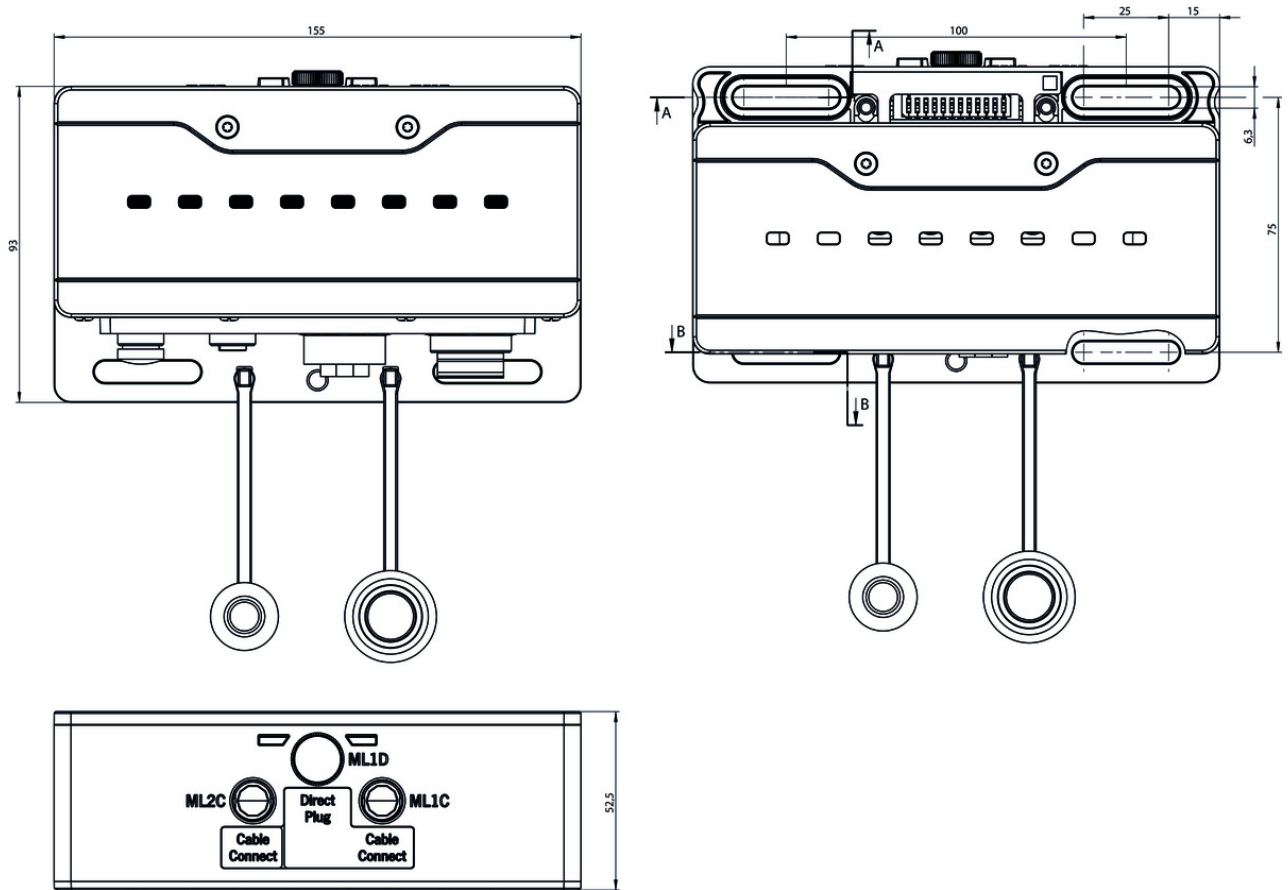
[3] XF2 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

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

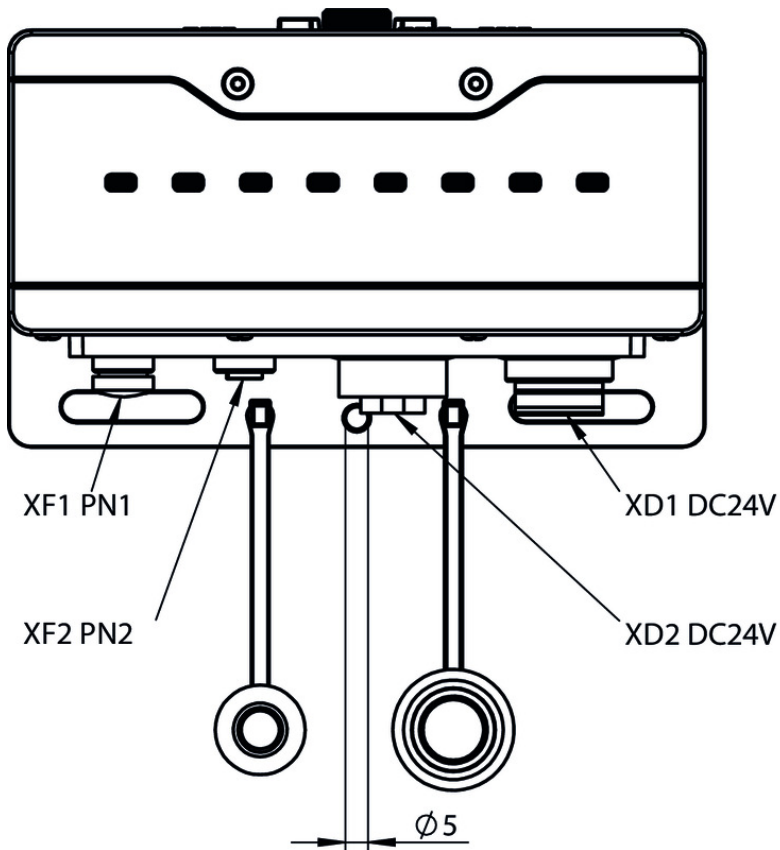
[5] XD2 (The document PROFINET “Cabling and Interconnection Technology” from the PNO aids in the correct selection of cables.)

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

Dimension drawing



Dimension drawing



XD1 / XD2 7/8" Power
 XF1 / XF2 M12 D-coded
 (IEC 61076-2-101)

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

| | 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 |