

## Active measuring point PBMX IP67

### Function

For the purpose of physical determination of the signal-to-noise ratio of the PROFIBUS communication feedback-free measuring points are required in every segment of a master system. To get optimal information on the physical transfer quality, the measuring points have to be provided at the two ends of a segment

As PBMX type with the protective system IP 67 it can be used without protective casing in a rough production environment. The PBMX meets not only the requirements of a feedback-free measuring point but also fulfils the requirements and the function respectively of an active bus termination.

The 24V connection ensures the 5 V voltage supply for the terminating resistor via an internal DC/DC transformer.

The diagnostic tools are connected via the free M 12 measuring socket.

### Bus connection

- Power: M12 - Connection D (A-coded, dowel)
- Bus: M12 - Connection A (B-coded, dowel) - „incoming“  
M12 - Connection C (B-coded, socket) - „outgoing“
- PG / Diagnosis: M12 - Connection B (B-coded, socket)

### Electrical parameters

- Baud rate: 9,6 kbps to 12 Mbps
- Rated voltage: 24 VDC
- Rated current: Pin 2 / 4 0,25 A  
Pin 1 / 3 / 5 2,00 A
- Input voltage: 24 VDC (18 to 30 VDC, pole-proof)
- Output voltage: 5 VDC (100 mA) Pin 1/3  
(5 V tapping at sockets B and C)

### Ambient conditions

- Temperature range: -20 °C to +80 °C
- Industrial protection: IP67
- Degree of pollution: 3

### Design

- Casing: nickel-plated zinc die cast
- Input / Output: EMV electromechanical screw-joint
- Outlet: M12 plug-and-socket connector
- Number of contacts: 5 gilt copper
- Weight: approx. 210 g
- Fastening: M5 x 1 bolt (thread at the back)

### Ordering details

#### PBMX set

**Art. No.**

**110080005**

The PBMX-Set comprises (ready-to-install items):

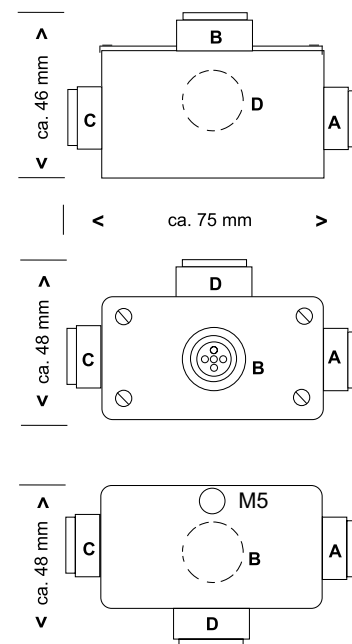
- 1 x active measuring adapter PBMX (bus termination)
- 1 x power cable M12 (female), standard length 3 m
- 1 x unilaterally converted PROFIBUS cable (female) 2 m
- 1 x M12 bus termination (male)
- 1 x M12 blind closure

#### PBMX single

**110080004**



**PBMX**



**Engineering drawing**

Label	Description	Pin Assignment Diagram	Pin Details
<b>A</b>	Bus "coming"		1: not used 2: A-Line (green) 3: not used 4: B-Line (red) 5: shield
<b>B</b>	diagnostic and programmer interface		1: 5 V 2: A-Line (green) 3: 0 V 4: B-Line (red) 5: shield
<b>C</b>	Bus "going"		1: 5 V 2: A-Line (green) 3: 0 V 4: B-Line (red) 5: shield
<b>D</b>	Power (24 V DC)		1: 24 V (brown) 2: not used 3: 0 V (blue) 4: not used 5: not used

**Pin assignment**