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 both ends of a segment

The PBMX with the protective system IP 67 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 according to an internal DC/DC transformer.

The diagnostic tools are connected according to 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-codiert, socket) - "outgoing"

• PG / Diagnosis: M12 - Connection B (B-coded, socket)

Electrical parameters

Baud rate: 9,6 kbps to 12 Mbps

• Rated voltage: 24 VDC

Pin 2 / 4 • Rated current: 0,25 A

Pin 1 / 3 / 5 2,00 A

• Input voltage: 24 VDC (18 to 30 VDC, pole-proof)

5 VDC (100 mA) Pin 1/3 • Output voltage:

(5 V tapping at sockets B and C)

Ambient conditions

-20°C to +80°C • Temperature range:

 Industrial protection: IP67 • Degree of pollution: 3

Design

• Casing: nickel-plated zinc die cast • Input / Output: EMC electromechanical screw-joint • Outlet: M12 plug-and-socket connector

• Number of contacts: 5 gilt copper • Weight: approx. 210 g

M5 x 1 bolt (thread at the back) • Fastening:

Ordering details Art. No. PBMX-Set 110080005

The PBMX-Set includes (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

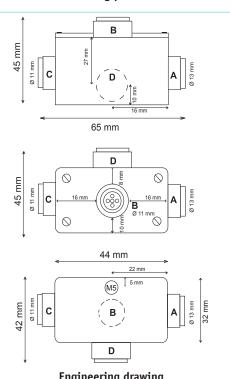
1 x M12 bus temination (male)

1 x M12 blind closure

PBMX-Single	110080004
Mounting panel for direct fixing for PBMX	110090017



Active measuring point PBMX IP67



Engineering drawing

Α	Bus "coming"	(5 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	1: not used 2: A-Line (green) 3: not used 4: B-Line (red) 5: shield
В	diagnostic and programmer interface		1: 5 V 2: A-Line (green) 3: 0 V
С	Bus "going"		4: B-Line (red) 5: shield
D	Power (24 V DC)	(4 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1: 24 V (brown) 2: not used 3: 0 V (bue) 4: not used 5: not used

Pin assignment