

# FLS PB M12 DO 8 M12-2A

Order No.: 2736110




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2736110>

The stand-alone device for PROFIBUS has 8 digital outputs each with a load capacity of 2 A. The M12 connection is established using fast connection technology. The 24 V DC supply is protected against short circuit and overload.



## Commercial data

|                          |  |
|--------------------------|--|
| GTIN (EAN)               | <br>4 017918 899578 |
| sales group              | L011   |
| Pack                     | 1 pcs.   |
| Customs tariff           | 85176200   |
| Catalog page information | Page 353 (AX-2009)   |

## Product notes

WEEE/RoHS-compliant since:  
09/05/2007



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## Technical data

### General data

|        |         |
|--------|---------|
| Width  | 60 mm   |
| Height | 178 mm  |
| Depth  | 49.3 mm |

|  |   |
|--|---|
| Drill hole spacing                       | 168 mm  |
| Weight                                   | 350 g   |
| Mounting type                            | Wall mounting   |
| Ambient temperature (operation)          | -25 °C ... 60 °C  |
| Ambient temperature (storage/transport)  | -25 °C ... 85 °C  |
| Permissible humidity (storage/transport) | 95 %  |
| Air pressure (operation)                 | 80 kPa ... 106 kPa (up to 2000 m above sea level)                                 |
| Air pressure (storage/transport)         | 70 kPa ... 106 kPa (up to 3000 m above sea level)                                 |
| Degree of protection                     | IP65/67   |
| Protection class                         | III, IEC 61140, EN 61140, VDE 0140-1  |
| Test section                             | 24 V supply (bus logics) / Bus connection   |
|  | 24 V supply (bus logics) / FE 500 V AC 50 Hz 1 min                                |
|  | 24 V supply (bus logics) / Digital outputs (actuator supply) 500 V AC 50 Hz 1 min |
|  | Bus connection / FE 500 V AC 50 Hz 1 min  |
|  | Bus connection / Digital outputs (actuator supply) 500 V AC 50 Hz 1 min           |
|  | FE / Digital outputs (actuator supply) 500 V AC 50 Hz 1 min                       |

#### Interface

|                              |  |
|------------------------------|--|
| Fieldbus system              | PROFIBUS-DP                                |
| Name                         | PROFIBUS DP                                |
| Type of connection           | 2 M12 plug connectors, B-coded             |
| Designation connection point | Copper cable                               |
| Transmission speed           | 9.64 kBaud to 12 Mbaud automatic detection |
|                              | 12 MBit/s (Automatic baud rate detection)  |
| Transmission physics         | PROFIBUS-DP-compliant copper cable         |
| Address area assignment      | 1 ... 99, can be set                       |
| Number of positions          | 5  |

#### Power supply for module electronics

|                      |  |
|----------------------|--|
| Type of connection   | M12 plug connectors, (A-coded)                     |
| Name                 | $U_L$  |
| Supply voltage       | 24 V DC  |
| Supply voltage range | 18 V DC ... 30 V DC IEC 61131-2 (including ripple) |

#### Fieldline potential routing

|                      |         |
|----------------------|---------|
| Voltage supply $U_L$ | 24 V DC |
|----------------------|---------|

|                                  |  |
|----------------------------------|--|
| Power supply at $U_L$            | 4 A  |
| Current consumption from $U_L$   | Typ. 40 mA<br>max. 100 mA                      |
| Voltage supply $U_S$             | 24 V DC  |
| Power supply at $U_S$            | max. 4 A                                       |
| Current consumption from $U_S$   | Typ. 3 mA<br>max. 700 mA                       |
| Voltage supply $U_{A11}$         | 24 V DC  |
| Power supply at $U_{A11}$        | max. 4 A                                       |
| Current consumption at $U_{A11}$ | Typ. 12 mA (plus actuator current)<br>max. 4 A |
| Voltage supply $U_{A12}$         | 24 V DC  |
| Power supply at $U_{A12}$        | max. 4 A                                       |
| Current consumption at $U_{A12}$ | Typ. 12 mA (plus actuator current)<br>max. 4 A |
| Voltage supply $U_{A21}$         | 24 V DC  |
| Power supply at $U_{A21}$        | max. 4 A                                       |
| Current consumption at $U_{A21}$ | Typ. 12 mA (plus actuator current)<br>max. 4 A |
| Voltage supply $U_{A22}$         | 24 V DC  |
| Power supply at $U_{A22}$        | max. 4 A                                       |
| Current consumption at $U_{A22}$ | Typ. 12 mA (plus actuator current)<br>max. 4 A |

#### Digital outputs

|                                    |                          |
|------------------------------------|--------------------------|
| Output name                        | Digital outputs          |
| Type of connection                 | M12 male connector       |
| Connection method                  | 2, 3-wire                |
| Number of outputs                  | 8                        |
| Protective circuit                 | Short-circuit protection |
| Output voltage                     | 24 V DC                  |
| Maximum output current per channel | 2 A                      |

**Certificates / Approvals**



Certification CUL, GOST, TUEV-RH, UL

Certification Ex: CUL-EX, UL-EX

**Accessories**

| Item                   | Designation                    | Description   |
|------------------------|--------------------------------|---|
| <b>Cable/conductor</b> |                                |   |
| 1507298                | SAC-2P- 2,0-910/M12FSB         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12, B-coded, Cable length: 2 m            |
| 1507308                | SAC-2P- 5,0-910/M12FSB         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12, B-coded, Cable length: 5 m            |
| 1507311                | SAC-2P-10,0-910/M12FSB         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12, B-coded, Cable length: 10 m           |
| 1507324                | SAC-2P-15,0-910/M12FSB         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12, B-coded, Cable length: 15 m           |
| 1507340                | SAC-2P-M12MSB/ 0,3-910/ M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 0.3 m |
| 1507353                | SAC-2P-M12MSB/ 0,5-910/ M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 0.5 m |
| 1507366                | SAC-2P-M12MSB/ 1,0-910/ M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 1 m   |
| 1507243                | SAC-2P-M12MSB/ 2,0-910         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 2 m              |
| 1507379                | SAC-2P-M12MSB/ 2,0-910/ M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 2 m   |
| 1507256                | SAC-2P-M12MSB/ 5,0-910         | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 5 m              |

|         |                                   |  |
|---------|-----------------------------------|--|
| 1507382 | SAC-2P-M12MSB/ 5,0-910/<br>M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 5 m  |
| 1507269 | SAC-2P-M12MSB/10,0-910            | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 10 m            |
| 1507395 | SAC-2P-M12MSB/10,0-910/<br>M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 10 m |
| 1507272 | SAC-2P-M12MSB/15,0-910            | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 15 m            |
| 1507405 | SAC-2P-M12MSB/15,0-910/<br>M12FSB | Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 15 m |
| 1509487 | SAC-4P- 2,0-186/M12FS             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12, A-coded, Cable length: 2 m                           |
| 1509490 | SAC-4P- 5,0-186/M12FS             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12, A-coded, Cable length: 5 m                           |
| 1509500 | SAC-4P-10,0-186/M12FS             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12, A-coded, Cable length: 10 m                          |
| 1509513 | SAC-4P-15,0-186/M12FS             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12, A-coded, Cable length: 15 m                          |
| 1509526 | SAC-4P-M12MS/ 0,3-186/<br>M12FS   | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 0.3 m                |
| 1509539 | SAC-4P-M12MS/ 0,5-186/<br>M12FS   | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 0.5 m                |
| 1509542 | SAC-4P-M12MS/ 1,0-186/<br>M12FS   | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 1 m                  |
| 1509445 | SAC-4P-M12MS/ 2,0-186             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Free conductor end, Cable length: 2 m                             |
| 1509555 | SAC-4P-M12MS/ 2,0-186/<br>M12FS   | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 2 m                  |
| 1509458 | SAC-4P-M12MS/ 5,0-186             | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Free conductor end, Cable length: 5 m                             |
| 1509568 | SAC-4P-M12MS/ 5,0-186/<br>M12FS   | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 5 m                  |

|         |                             |  |
|---------|-----------------------------|--|
| 1509461 | SAC-4P-M12MS/10,0-186       | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Free conductor end, Cable length: 10 m            |
| 1509571 | SAC-4P-M12MS/10,0-186/M12FS | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 10 m |
| 1509474 | SAC-4P-M12MS/15,0-186       | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Free conductor end, Cable length: 15 m            |
| 1509584 | SAC-4P-M12MS/15,0-186/M12FS | Sensor/Actuator cable, 4-position, PUR, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 15 m |

### Marking

|         |                   |   |
|---------|-------------------|---|
| 0809735 | ZBF 12:UNBEDRUCKT | Zack strip, flat, unprinted, 5-section, divisible, for labeling by the customer |
|---------|-------------------|---|

### Plug/Adapter

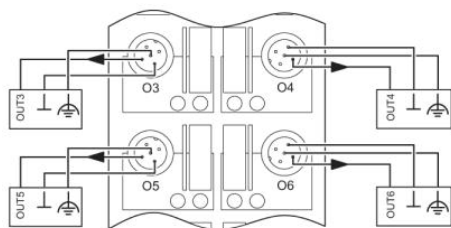
|         |                                |   |
|---------|--------------------------------|---|
| 1510722 | SAC-4P-M12Y/2X0,3-PUR/M12FS VP | Sensor/Actuator cable, 4-position, PUR, halogen-free, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded and Socket, straight M12, A-coded, Cable length: 0.3 m |
| 1507803 | SAC-5P-M12MS PB TR             | Terminating resistor PROFIBUS M12   |
| 1507780 | SAC-M12T/2XM12 PB DP           | Bus system T-connector, 5-pos., PROFIBUS, M12 plug, B-coded, to M12 plug, B-coded, and M12 socket, B-coded  |
| 1507777 | SACC-M12FSB-5CON-PG9 SH AU     | Bus system plug connector, female, straight, 5-pos., M12, shielded, gold-plated contacts, B-coded, screw connection, metal knurl, cable screw connection Pg9                                    |
| 1507764 | SACC-M12MSB-5CON-PG9 SH AU     | Bus system plug connector, male straight, 5-pos., M12, shielded, gold-plated contacts, B-coded, screw connection, metal knurl, cable screw connection Pg9                                       |

### Protection and sealing elements

|         |          |   |
|---------|----------|---|
| 1680539 | PROT-M12 | An M12 screw plug for the unoccupied M12 sockets of the sensor/ actuator cable, boxes and flush-type connectors |
|---------|----------|---|

### Diagrams/Drawings

#### Connection diagram



Dimensioned drawing

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