

# FLS PB M12 DIO 8/8 M12

Order No.: 2736372




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The stand-alone device for PROFIBUS has 8 digital inputs and 8 digital outputs each with a load capacity of 500 mA. 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)	 4 017918 939199
sales group	L011
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 353 (AX-2009)

## Product notes

WEEE/RoHS-compliant since:  
08/21/2008



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## Technical data

### General data

Width	60 mm
Height	178 mm
Depth	49.3 mm

Drill hole spacing	168 mm
Weight	340 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	To I/O 500 V AC

#### 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 $U_L$	max. 4 A
Current consumption from $U_L$	Typ. 40 mA max. 100 mA
Voltage supply $U_S$	24 V DC
Power supply at $U_S$	max. 4 A

Current consumption from $U_s$	Typ. 10 mA (plus sensor current) max. 500 mA
Voltage supply $U_{A11}$	24 V DC
Power supply at $U_{A11}$	max. 4 A
Current consumption at $U_{A11}$	Typ. 6 mA (plus actuator current) max. 4 A
Voltage supply $U_{A12}$	24 V DC
Power supply at $U_{A12}$	max. 4 A
Current consumption at $U_{A12}$	Typ. 6 mA (plus actuator current) max. 4 A

#### Digital inputs

Input name	Digital inputs
Type of connection	M12 plug connectors, double occupancy
Connection method	2, 3, 4-wire
Number of inputs	8
Protective circuit	Protection against polarity reversal
Filter time	3 ms
Input characteristic curve	IEC 61131-2 type 1
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC

#### Digital outputs

Output name	Digital outputs
Type of connection	M12 plug connectors, double occupancy
Connection method	2, 3-wire
Number of outputs	8
Protective circuit	Short-circuit protection
Output voltage	24 V DC
Maximum output current per channel	500 mA

#### Certificates / Approvals



Certification CUL, 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/ 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/ 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/ 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/ 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/ 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/ 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/ 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/ 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
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**Plug/Adapter**

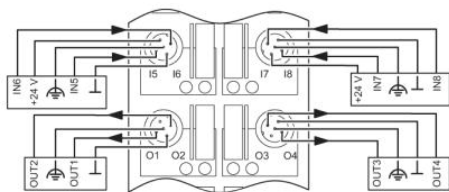
1510722	SAC-4P-M12Y/2X0,3-PUR/M12FS VP	Sensor/Actuator cable, 4-position, PUR, halogen-free, Black-gray RAL 7021, Plug, straight M12, A-coded, on Socket, straight M12, A-coded and Socket, straight M12, A-coded, Cable length: 0.3 m
1507803	SAC-5P-M12MS PB TR	Terminating resistor PROFIBUS M12
1507780	SAC-M12T/2XM12 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**

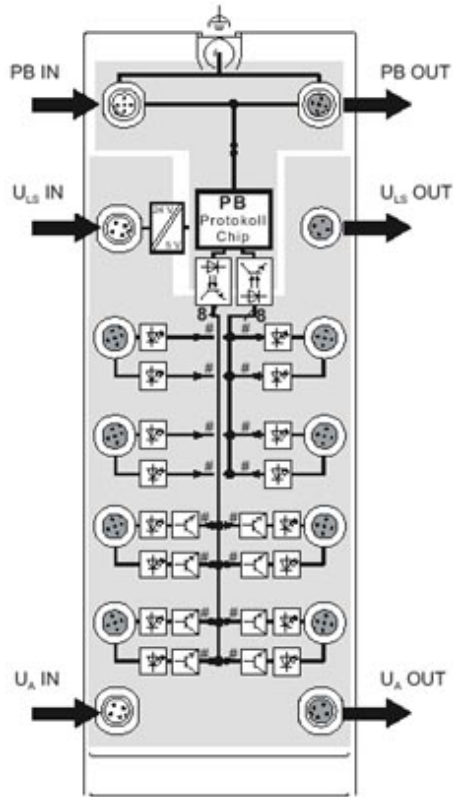
1680539	PROT-M12	An M12 screw plug for the unoccupied M12 sockets of the sensor/ actuator cable, boxes and flush-type connectors
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**Diagrams/Drawings**

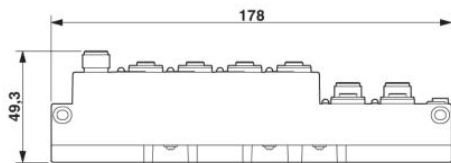
Connection diagram



Block diagram



Dimensioned drawing



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