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## FLM BK PB M12 DI 8 M12

Order No.: 2736330

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2736330>

The PROFIBUS bus coupler opens a local bus for up to 16 devices. Additional functions: 8 digital inputs, channel-specific diagnostics, dynamic configuration, short-circuit and overload protection, M12 fast connection technology.



Commercial data	
GTIN (EAN)	 4 017918 960063
sales group	L010
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 367 (AX-2009)

### Product notes

WEEE/RoHS-compliant since:  
09/29/2008



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### Product description

Fieldline modular bus coupler for PROFIBUS with four digital inputs

## Technical data

### General data

Width	70 mm
Height	178 mm
Depth	50 mm
Drill hole spacing	168 mm
Weight	280 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
Mechanical tests	Shock test in acc. with IEC 60068-2-27 Load 30 g, half sine wave, positive and negative per direction
	Vibration resistance in acc. with IEC 60068-2-6 5g in each space direction

### Interface

Fieldbus system	PROFIBUS-DP
Name	PROFIBUS DP
Type of connection	M12 connector, B-coded
Designation connection point	Copper cable
Transmission speed	9.64 kBaud to 12 Mbaud automatic detection
Address area assignment	1 ... 126, adjustable
Number of positions	5

### Local bus gateway

Name	Local bus gateway
Type of connection	M12 connector, B-coded
Transmission speed	500 kBaud/ 2 Mbaud, can be selected
Max. number of local bus devices	16
Max. length of local bus	20 m

**Power supply for module electronics**

Type of connection	M12 male connector
Name	U <sub>L</sub>
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 <sub>L</sub>	24 V DC
Power supply at U <sub>L</sub>	max. 4 A
Current consumption from U <sub>L</sub>	max. 100 mA (At 2 Mbaud) Typ. 75 mA (At 2 Mbaud)
	max. 100 mA (At 500 kBaud) Typ. 75 mA (At 500 kBaud)
Voltage supply U <sub>S</sub>	24 V DC
Power supply at U <sub>S</sub>	max. 4 A
Current consumption from U <sub>S</sub>	Typ. 15 mA (plus power supply for sensors) max. 600 mA

**Digital inputs**

Input name	Digital inputs
Description of the input	Double-occupancy
Type of connection	M12 male connector
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

**Certificates / Approvals**



Certification CUL, UL

Certification Ex: CUL-EX, UL-EX

**Accessories**

Item	Designation	Description
<b>Cable/conductor</b>		
1518368	SAC-5P- 2,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m
1518371	SAC-5P- 5,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m
1518384	SAC-5P-10,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m
1518397	SAC-5P-15,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m
1518407	SAC-5P-MS/ 0,3-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.3 m
1518410	SAC-5P-MS/ 0,5-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.5 m
1518423	SAC-5P-MS/ 1,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 1 m
1518326	SAC-5P-MS/ 2,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 2 m
1518436	SAC-5P-MS/ 2,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m
1518339	SAC-5P-MS/ 5,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 5 m
1518449	SAC-5P-MS/ 5,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m
1518342	SAC-5P-MS/10,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 10 m

1518452	SAC-5P-MS/10,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m
1518355	SAC-5P-MS/15,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 15 m
1518465	SAC-5P-MS/15,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m

**General**

1518067	SAC-2P- 2,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 2 m
1518070	SAC-2P- 5,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 5 m
1518083	SAC-2P-10,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 10 m
1518096	SAC-2P-15,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 15 m
1518106	SAC-2P-MSB/ 0,3-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 0.3 m
1518119	SAC-2P-MSB/ 0,5-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 0.5 m
1518122	SAC-2P-MSB/ 1,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 1 m
1518025	SAC-2P-MSB/ 2,0-910 SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Free conductor end, Cable length: 2 m
1518135	SAC-2P-MSB/ 2,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 2 m
1518038	SAC-2P-MSB/ 5,0-910 SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Free conductor end, Cable length: 5 m
1518148	SAC-2P-MSB/ 5,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 5 m

1518041	SAC-2P-MSB/10,0-910 SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Free conductor end, Cable length: 10 m
1518151	SAC-2P-MSB/10,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 10 m
1518054	SAC-2P-MSB/15,0-910 SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Free conductor end, Cable length: 15 m
1518164	SAC-2P-MSB/15,0-910/FSB SCO	Bus system cable, 2-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 15 m

#### Marking

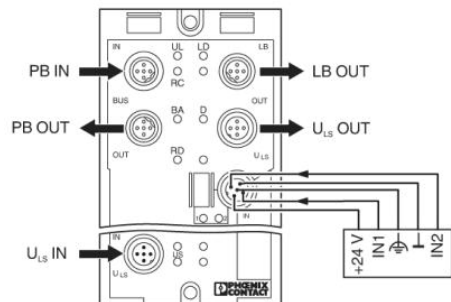
0809735	ZBF 12:UNBEDRUCKT	Zack strip, flat, unprinted, 5-section, divisible, for labeling by the customer
2809128	ZBN 18:UNBEDRUCKT	Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White

#### Plug/Adapter

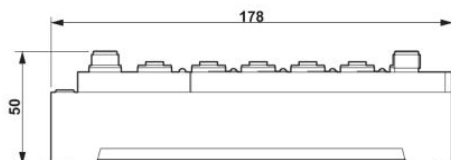
1507803	SAC-5P-M12MS PB TR	Terminating resistor PROFIBUS M12
1513606	SACC-M12FRB-5SC SH	Sensor/actuator connector, female, angled, 5-pos., M12, shielded, B-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
1508200	SACC-M12FS-5SC M	Sensor/actuator connector, female, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
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
1513596	SACC-M12FSB-5SC SH	Sensor/actuator connector, female, straight, 5-pos., M12, shielded, B-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
1513583	SACC-M12MRB-5SC SH	Sensor/actuator connector, male, angled, 5-pos., M12, shielded, B-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
1508187	SACC-M12MS-5SC M	Sensor/actuator connector, male, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
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
1513570	SACC-M12MSB-5SC SH	Sensor/actuator connector, male, straight, 5-pos., M12, shielded, B-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm

## Diagrams/Drawings

### Connection diagram



### Dimensioned drawing





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