

# FLM BK EIP M12 DI 8 M12-2TX


Order No.: 2773322

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The EthernetIP bus coupler opens a local bus for up to 16 devices. Additional functions: 10 Mbps and 100 Mbps, auto negotiation, auto crossover, 8 digital inputs, channel-specific diagnostics, short-circuit/overload protection, M12 fast connection technology.



## Commercial data

GTIN (EAN)	 4 046356 166096
sales group	L040
Pack	1 pcs.
Customs tariff	85389091
Catalog page information	Page 369 (AX-2009)

## Product notes

WEEE/RoHS-compliant since:  
12/08/2009



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## Technical data

### General data

Width	70 mm
Height	178 mm
Depth	50 mm

Drill hole spacing	178 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 DC

#### Interface

Fieldbus system	Ethernet/IP
Name	Ethernet / IP
Type of connection	M12 plug connectors, D-coded
Designation connection point	Copper cable
Transmission speed	10/100 Mbps, autonegotiation
	10/100 MBit/s ( mit Autonegation )
Number of positions	4

#### 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	$U_L$
Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC IEC 61131-2 (including ripple)
Supply current	< 100 mA

#### Fieldline potential routing

Voltage supply $U_L$	24 V DC
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Power supply at $U_L$	max. 4 A
Current consumption from $U_L$	max. 118 mA (At 2 Mbaud)
	Typ. 118 mA (At 2 Mbaud)
	max. 60 mA (At 500 kBaud)
	Typ. 60 mA (At 500 kBaud)
Voltage supply $U_S$	24 V DC
Power supply at $U_S$	max. 4 A
Current consumption from $U_S$	Typ. 5 mA (plus power supply for sensors)
	max. 600 mA

### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-20 type 1
Type of connection	M12 male connector
Connection method	2, 3, 4-wire
Number of inputs	8
Protective circuit	Short-circuit protection, overload protection of the sensor supply 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
1657575	VS-M12MSD-RJ45-931/ 1,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 1 m
1657588	VS-M12MSD-RJ45-931/ 2,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 2 m
1657591	VS-M12MSD-RJ45-931/ 5,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 5 m

**General**

1524006	SAC-4P-M12MSD/ 2,0-930	Bus system cable, 4-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, D-coded, on Free conductor end, Cable length: 2 m
1521533	SAC-4P-M12MSD/ 2,0-930/ M12MSD	Bus system cable, 4-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, D-coded, on Plug, straight M12, D-coded, Cable length: 2 m
1524051	SAC-4P-M12MSD/ 5,0-930/ M12MSD	Bus system cable, 4-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, D-coded, on Plug, straight M12, D-coded, Cable length: 5 m
1524022	SAC-4P-M12MSD/10,0-930	Bus system cable, 4-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, D-coded, on Free conductor end, Cable length: 10 m
1524035	SAC-4P-M12MSD/15,0-930	Bus system cable, 4-position, PUR, halogen-free, water blue RAL 5021, shielded, Plug, straight M12, D-coded, on Free conductor end, Cable length: 15 m
1521258	SACC-M12MSD-4CON-PG 7-SH	Bus system plug connector, male, straight, 4-pos., M12, shielded, D-coded, screw connection, metal knurl, cable screw connection Pg7
1521261	SACC-M12MSD-4CON-PG 9-SH	Bus system plug connector, male, straight, 4-pos., M12, shielded, D-coded, screw connection, metal knurl, cable screw connection Pg9
1657562	VS-M12MSD-RJ45-931/ 0,5	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 0.5 m

**Marking**

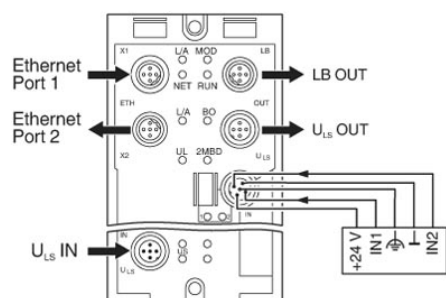
0809735	ZBF 12:UNBEDRUCKT	Zack strip, flat, unprinted, 5-section, divisible, for labeling by the customer
2809128	ZBN 18:UNBEDRUCKT	Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White

**Plug/Adapter**

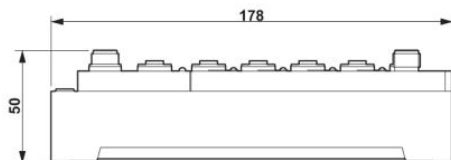
1508200	SACC-M12FS-5SC M	Sensor/actuator connector, female, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm
1508187	SACC-M12MS-5SC M	Sensor/actuator connector, male, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm

**Diagrams/Drawings**

Connection diagram



Dimensioned drawing



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