

FLM DI 16 M12

Order No.: 2736835

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2736835>FLM DI16 M12-2 A Fieldline Modular local bus device, 16 digital
inputs, 24 V DC, M12

Commercial data

GTIN (EAN)	4046356135542
sales group	L081
Pack	1 pcs.
Customs tariff	85176200
Weight/Piece	0.3487 KG
Catalog page information	Page 372 (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
Bore hole spacing	168 mm
Weight	310 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
Class of protection	Class 3 as per VDE 0106, IEC 61440
Test section	To I/O 500 V AC

Interface

Name	Local bus
Type of connection	M12 plug connectors, B-coded
Designation connection point	Copper cable
Transmission speed	500 kBaud/ 2 MBaud, switchable
Number of positions	5

Power supply for module electronics

Type of connection	M12 plug connector
Name	U_L
Supply voltage	24 V DC
Range of supply voltages	18 V DC ... 30 V DC IEC 61131-2 (including ripple)

Fieldline potential routing

Voltage supply U_L	24 V DC
Power supply for U_L	max. 4 A
Current consumption from U_L	max. 50 mA (At 2 Mbaud)
	Typ. 40 mA (At 2 Mbaud)
	max. 50 mA (At 500 kBaud)
	Typ. 35 mA (At 500 kBaud)
Voltage supply U_s	24 V DC
Power supply for U_s	max. 4 A
Current consumption from U_s	Typ. 5 mA (plus power supply for sensors)
	max. 1.2 A

Digital inputs

Input name	Digital inputs
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Type of connection	M12 plug connector
Connection method	2, 3, 4-wire
Number of inputs	16
Protective circuitry	Polarity protection
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
Delay at signal change from 0 to 1	3.1 ms
Delay at signal change from 1 to 0	4.1 ms

Certificates / Approvals



Certification	CUL, UL
Certification Ex:	CUL-EX, UL-EX

Accessories

Item	Designation	Description
Cable/conductor		
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
1507117	SAC-5P- 2,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Free conductor end, on Socket, straight M12, B-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
1507120	SAC-5P- 5,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Free conductor end, on Socket, straight M12, B-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

1507133	SAC-5P-10,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Free conductor end, on Socket, straight M12, B-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
1507146	SAC-5P-15,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Free conductor end, on Socket, straight M12, B-coded, Cable length: 15 m
1507162	SAC-5P-M12MSB/ 0,3-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 0.3 m
1507175	SAC-5P-M12MSB/ 0,5-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 0.5 m
1507188	SAC-5P-M12MSB/ 1,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 1 m
1507065	SAC-5P-M12MSB/ 2,0-900	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 2 m
1507191	SAC-5P-M12MSB/ 2,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 2 m
1507078	SAC-5P-M12MSB/ 5,0-900	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 5 m
1507201	SAC-5P-M12MSB/ 5,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 5 m
1507081	SAC-5P-M12MSB/10,0-900	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 10 m
1507214	SAC-5P-M12MSB/10,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-coded, Cable length: 10 m
1507094	SAC-5P-M12MSB/15,0-900	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Free conductor end, Cable length: 15 m
1507227	SAC-5P-M12MSB/15,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR, halogen-free, Green RAL 6017, shielded, Plug, straight M12, B-coded, on Socket, straight M12, B-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

1518481	SAC-5P-MS/ 0,13-186/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: 0.13 m
1518478	SAC-5P-MSB/0,13-PUR/FSB SCO SH	Sensor/Actuator cable, 5-position, PUR, halogen-free, Black-gray RAL 7021, shielded, Plug, straight M12-SPEEDCON, B-coded, on Socket, straight M12-SPEEDCON, B-coded, Cable length: 0.13 m

Marking

0810038	ZBF 12:SO/CMS	Zack marker strip, flat, in 12 mm pitch, printed according to customer requirements, 5-section, divisible, color: white
0809735	ZBF 12:UNBEDRUCKT	Zack strip, flat, unprinted, 5-section, divisible, for labeling by the customer

Plug/Adapter

1683455	SAC-3P-M12Y/2XM12FS PE	Y-distributor, 3-pos. +PE, straight connector M12 on 2 x straight socket M12
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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

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