

## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

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The local bus device has digital inputs and outputs. Functions: 4 digital inputs, 3 ms filter time, 4 digital outputs of 2 A each, 500 kbaud/2 Mbaud selection, channel-specific diagnostics, short-circuit and overload protection, M12 fast connection technology.

### Why buy this product

- Flexible power supply concept
- Short-circuit and overload protection
- Diagnostic and status indicators
- SPEEDCON fast locking system
- Consistent connection via M12 connectors

RoHS

### Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 951078
GTIN	4017918951078
Weight per Piece (excluding packing)	377.000 g
Custom tariff number	85176200
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	70 mm
Height	178 mm

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## Technical data

### Dimensions

Depth	50 mm
Drill hole spacing	168 mm

### Ambient conditions

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/IP67

### General

Mounting type	Wall mounting
Net weight	315 g

### Interfaces

Designation	Fieldline local bus
Connection method	M12 connector, B-coded
Designation connection point	Copper cable
Transmission speed	500 kbps / 2 Mbps (can be switched)
Number of positions	5

### Power supply for module electronics

Connection method	M12 connector
Designation	$U_L$
Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC (including ripple)

### Fieldline potentials

Voltage supply $U_L$	24 V DC
Power supply at $U_L$	max. 4 A
Current consumption from $U_L$	max. 50 mA (At 2 Mbaud)
	typ. 45 mA (At 2 Mbaud)
	max. 50 mA (At 500 kBaud)
	typ. 40 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
Voltage supply $U_{A11}$	24 V DC

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### Technical data

#### Fieldline potentials

Power supply at $U_{A11}$	max. 4 A
Current consumption at $U_{A11}$	typ. 3 mA
	max. 4 A
Voltage supply $U_{A12}$	24 V DC
Power supply at $U_{A12}$	max. 4 A
Current consumption at $U_{A12}$	typ. 3 mA
	max. 4 A

#### Digital inputs

Input name	Digital inputs
Connection method	M12 connector
Connection technology	2, 3, 4-wire
Number of inputs	4
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
Connection method	M12 connector
Connection technology	2, 3-wire
Number of outputs	4
Type of protection	Short-circuit protection
Output voltage	24 V DC
Maximum output current per channel	2 A

#### Electrical isolation

Test section	To I/O 500 V AC
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#### Standards and Regulations

Connection in acc. with standard	CUL
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

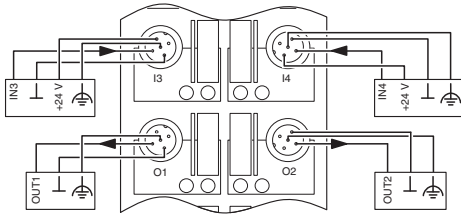
#### Environmental Product Compliance

REACH SVHC	DEHP 117-81-7
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

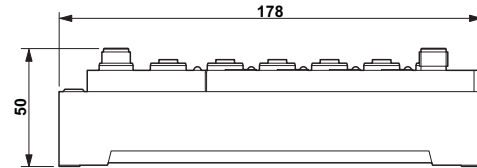
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## Drawings

Connection diagram



Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 4.0	27250302
eCl@ss 4.1	27250302
eCl@ss 5.0	27250302
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

### ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599
ETIM 6.0	EC001599

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602

## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Approvals

#### Approvals

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#### Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

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#### Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

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### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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EAC			RU *- DE.A*30.B.01735
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	
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### Accessories

#### Accessories

#### Circular connector (cable-side)

Bus system connector - SACC-M12MSB-5CON-PG9 SH AU - 1507764



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug straight M12, B-coded, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

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### Accessories

Bus system connector - SACC-M12FSB-5CON-PG9 SH AU - 1507777



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, B-coded, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

Connector - SACC-M12MSB-5SC SH - 1513570



Connector, 5-position, shielded, Plug straight M12, B-coded, Spring-cage connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

Connector - SACC-M12FSB-5SC SH - 1513596



Connector, 5-position, shielded, Socket straight M12, B-coded, Spring-cage connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

Connector - SACC-M12MRB-5SC SH - 1513583



Connector, 5-position, shielded, Plug angled M12, B-coded, Spring-cage connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

Connector - SACC-M12FRB-5SC SH - 1513606



Connector, 5-position, shielded, Socket angled M12, B-coded, Spring-cage connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

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### Accessories

Connector - SACC-M12MS-5SC M - 1508187



Connector, 5-position, Plug straight M12, A-coded, Spring-cage connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

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Connector - SACC-M12FS-5SC M - 1508200



Connector, 5-position, Socket straight M12, A-coded, Spring-cage connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

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### Data cable preassembled

Bus system cable - SAC-5P-M12MSB/ 2,0-900 - 1507065



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on free cable end, cable length: 2 m

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Bus system cable - SAC-5P-M12MSB/ 5,0-900 - 1507078



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on free cable end, cable length: 5 m

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Bus system cable - SAC-5P-M12MSB/10,0-900 - 1507081



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on free cable end, cable length: 10 m

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## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Accessories

Bus system cable - SAC-5P-M12MSB/15,0-900 - 1507094



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on free cable end, cable length: 15 m

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Bus system cable - SAC-5P- 2,0-900/M12FSB - 1507117



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, free cable end, on Socket straight M12, B-coded, cable length: 2 m

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Bus system cable - SAC-5P- 5,0-900/M12FSB - 1507120



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, free cable end, on Socket straight M12, B-coded, cable length: 5 m

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Bus system cable - SAC-5P-10,0-900/M12FSB - 1507133



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, free cable end, on Socket straight M12, B-coded, cable length: 10 m

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Bus system cable - SAC-5P-15,0-900/M12FSB - 1507146



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, free cable end, on Socket straight M12, B-coded, cable length: 15 m

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## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Accessories

Bus system cable - SAC-5P-M12MSB/ 0,3-900/M12FSB - 1507162



Bus system cable, INTERBUS (16 Mbps), 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

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Bus system cable - SAC-5P-M12MSB/ 0,5-900/M12FSB - 1507175



Bus system cable, INTERBUS (16 Mbps), 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

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Bus system cable - SAC-5P-M12MSB/ 1,0-900/M12FSB - 1507188



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 1 m

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Bus system cable - SAC-5P-M12MSB/ 2,0-900/M12FSB - 1507191



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 2 m

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Bus system cable - SAC-5P-M12MSB/ 5,0-900/M12FSB - 1507201



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 5 m

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## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Accessories

Bus system cable - SAC-5P-M12MSB/10,0-900/M12FSB - 1507214



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 10 m

Bus system cable - SAC-5P-M12MSB/15,0-900/M12FSB - 1507227



Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, cable length: 15 m

### Sensor/actuator cable

Sensor/actuator cable - SAC-5P-MS/ 2,0-186 SCO - 1518326



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: 2 m

Sensor/actuator cable - SAC-5P-MS/ 5,0-186 SCO - 1518339



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: 5 m

Sensor/actuator cable - SAC-5P-MS/10,0-186 SCO - 1518342



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: 10 m

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### Accessories

Sensor/actuator cable - SAC-5P-MS/15,0-186 SCO - 1518355



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: 15 m

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Sensor/actuator cable - SAC-5P- 2,0-186/FS SCO - 1518368



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, A-coded, cable length: 2 m

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Sensor/actuator cable - SAC-5P- 5,0-186/FS SCO - 1518371



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, A-coded, cable length: 5 m

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Sensor/actuator cable - SAC-5P-10,0-186/FS SCO - 1518384



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, A-coded, cable length: 10 m

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Sensor/actuator cable - SAC-5P-15,0-186/FS SCO - 1518397



Sensor/actuator cable, 5-position, PUR, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, A-coded, cable length: 15 m

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## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Accessories

Sensor/actuator cable - SAC-5P-MS/ 0,3-186/FS SCO - 1518407



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

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Sensor/actuator cable - SAC-5P-MS/ 0,5-186/FS SCO - 1518410



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

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Sensor/actuator cable - SAC-5P-MS/ 1,0-186/FS SCO - 1518423



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

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Sensor/actuator cable - SAC-5P-MS/ 2,0-186/FS SCO - 1518436



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

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Sensor/actuator cable - SAC-5P-MS/ 5,0-186/FS SCO - 1518449



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

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## Distributed I/O device - FLM DIO 4/4 M12-2A - 2736369

### Accessories

Sensor/actuator cable - SAC-5P-MS/10,0-186/FS SCO - 1518452



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

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Sensor/actuator cable - SAC-5P-MS/15,0-186/FS SCO - 1518465



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

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Sensor/actuator cable - SAC-5P-MS/ 0,13-186/FS SCO - 1518481



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

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Sensor/actuator cable - SAC-5P-MSB/0,13-PUR/FSB SCO SH - 1518478



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

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### Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm

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