

## Distributed I/O device - FLM DIO 8/4 M8-2MBD - 2773568

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The space-saving local bus device is particularly suitable for use in close proximity to the process. Functions: 2 Mbaud, 4 digital inputs, 4 digital I/Os of 500 mA, maximum, channel-specific diagnostics, short-circuit/overload protection, M8 connection method.


### Product Description

The device is designed for use in the Fieldline Modular M8 local bus, which is opened by a Fieldline or Inline bus coupler. It is used to acquire and output digital signals.

### Your advantages

- ✓ Can also be connected to an Inline station
- ✓ Optimized for 30 mm mounting profile
- ✓ Short-circuit and overload protection
- ✓ Diagnostic and status indicators
- ✓ Consistent connection via M8 connectors

### Key Commercial Data

|                      |   |
|----------------------|---|
| Packing unit         | 1   |
| GTIN                 | <br>4 046356 301626 |
| GTIN                 | 4046356301626   |
| Custom tariff number | 85389099  |

### Technical data

#### Note

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

#### Dimensions

|                    |                                   |
|--------------------|-----------------------------------|
| Caption            | Side view (dimensions in mm)      |
| Width              | 29.8 mm                           |
| Height             | 143 mm                            |
| Depth              | 26.5 mm                           |
| Note on dimensions | Length details incl. fixing clips |

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## Technical data

### Dimensions

|                    |        |
|--------------------|--------|
| Drill hole spacing | 133 mm |
|--------------------|--------|

### Ambient conditions

|  |   |
|--|---|
| Ambient temperature (operation)          | -25 °C ... 60 °C                                  |
| Ambient temperature (storage/transport)  | -25 °C ... 85 °C                                  |
| Permissible humidity (operation)         | 5 % ... 95 %                                      |
| Permissible humidity (storage/transport) | 10 % ... 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 |
| Color         | black         |
| Net weight    | 161.54 g      |

### Interfaces

|                              |                     |
|------------------------------|---------------------|
| Designation                  | Fieldline local bus |
| Connection method            | M8 connector        |
| Designation connection point | Copper cable        |
| Transmission speed           | 2 Mbps              |
| Number of positions          | 4                   |

### Power supply for module electronics

|                      |  |
|----------------------|--|
| Connection method    | M8 connector                           |
| Designation          | U <sub>L</sub>                         |
| Number of positions  | 4                                      |
| Supply voltage       | 24 V DC                                |
| Supply voltage range | 18 V DC ... 30 V DC (including ripple) |
| Supply current       | 3 A                                    |

### Fieldline potentials

|                               |         |
|-------------------------------|---------|
| Voltage supply U <sub>L</sub> | 24 V DC |
|-------------------------------|---------|

### Digital inputs

|                          |                                  |
|--------------------------|----------------------------------|
| Input name               | Digital inputs                   |
| Description of the input | IEC 61131-2 type 1               |
| Connection method        | M8 connector                     |
| Connection technology    | 2, 3-wire                        |
| Number of inputs         | 8 (4 fixed, 4 freely selectable) |
| Protective circuit       | Reverse polarity protection      |

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### Technical data

#### Digital inputs

|                                |                     |
|--------------------------------|---------------------|
| Nominal input voltage $U_{IN}$ | 24 V DC             |
| Filter time                    | 3 ms                |
| 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                  | M8 connector                     |
| Connection technology              | 2, 3-wire                        |
| Number of outputs                  | 4 (Can also be used as an input) |
| Protective circuit                 | Short-circuit protection         |
| Output voltage                     | 24 V DC                          |
| Maximum output current per channel | 500 mA                           |

#### Standards and Regulations

|                  |                                       |
|------------------|---------------------------------------|
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |
|------------------|---------------------------------------|

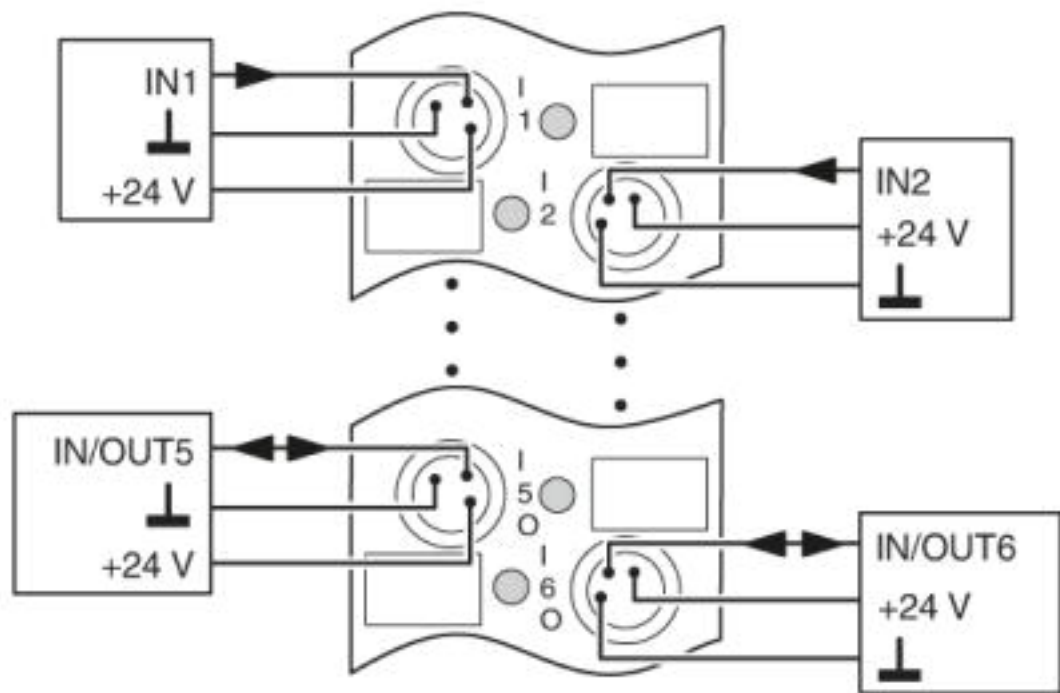
#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

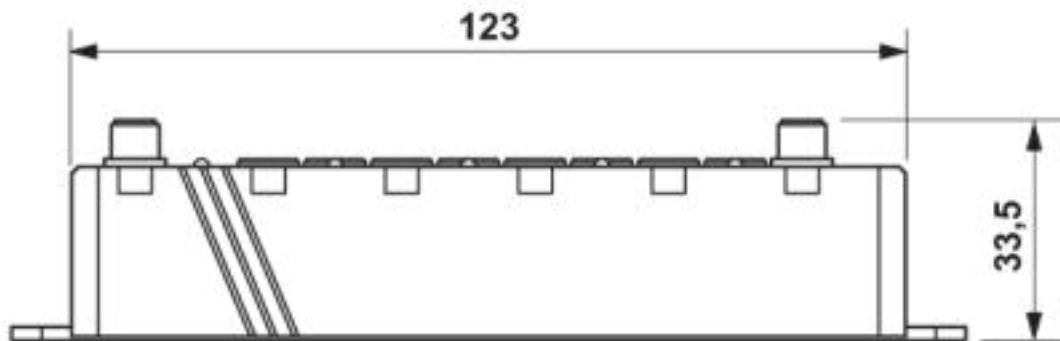
### Drawings

Distributed I/O device - FLM DIO 8/4 M8-2MBD - 2773568

Connection diagram



Dimensional drawing



Side view (dimensions in mm)

Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27250302 |
| eCl@ss 4.1 | 27250302 |
| eCl@ss 5.0 | 27250302 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11     | 43172015 |
| UNSPSC 12.01  | 43201404 |
| UNSPSC 13.2   | 43201404 |

### Accessories

#### Accessories

##### Adapter

Adapter - FLM ADAP M12/M8 - 2736961



Adapter for connecting Fieldline Modular M8 devices to a Fieldline Modular M12 local bus

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#### Circular connector (cable-side)

Connector - SACC-M 8MS-4CON-M-0,34-SH - 1542897



Connector, Universal, 4-position, shielded, Plug straight M8, Coding: A, Screw connection, knurl material: Nickel-plated brass, external cable diameter 3.5 mm ... 5.5 mm

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### Accessories

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Connector - SACC-M 8FS-4CON-M-0,34-SH - 1542910



Connector, Universal, 4-position, shielded, Socket straight M8, Coding: A, Screw connection, knurl material: Nickel-plated brass, external cable diameter 3.5 mm ... 5.5 mm

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Connector - SACC-M 8FS-4PCON - 1506781



Connector, Universal, 4-position, Socket straight M8, Coding: A, Piercecon<sup>®</sup> fast connection, knurl material: Nickel-plated brass, external cable diameter 3 mm ... 5 mm

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### Data cable by the meter

Bus system cable - SAC-4P-950/... - 1543401



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m)

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### Data cable preassembled

Bus system cable - SAC-4P-M 8MS/ 2,0-950 - 1543249



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 2 m

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### Accessories

Bus system cable - SAC-4P-M 8MS/ 5,0-950 - 1543252



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 5 m

Bus system cable - SAC-4P-M 8MS/10,0-950 - 1543265



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 10 m

Bus system cable - SAC-4P-M 8MS/15,0-950 - 1543278



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 15 m

Bus system cable - SAC-4P-M 8MS/20,0-950 - 1543281



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 20 m

Bus system cable - SAC-4P- 2,0-950/M 8FS - 1543294



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M8, cable length: 2 m

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### Accessories

Bus system cable - SAC-4P- 5,0-950/M 8FS - 1543304



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M8, cable length: 5 m

Bus system cable - SAC-4P-10,0-950/M 8FS - 1543317



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M8, cable length: 10 m

Bus system cable - SAC-4P-15,0-950/M 8FS - 1543320



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M8, cable length: 15 m

Bus system cable - SAC-4P-20,0-950/M 8FS - 1543333



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M8, cable length: 20 m

Bus system cable - SAC-4P-M 8MS/ 0,13-950/M 8FS - 1543346



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 0.13 m



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### Accessories

Bus system cable - SAC-4P-M 8MS/ 0,3-950/M 8FS - 1543511



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 0.3 m

Bus system cable - SAC-4P-M 8MS/ 0,5-950/M 8FS - 1543524



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 0.5 m

Bus system cable - SAC-4P-M 8MS/ 1,0-950/M 8FS - 1543537



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 1 m

Bus system cable - SAC-4P-M 8MS/ 2,0-950/M 8FS - 1543359



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 2 m

Bus system cable - SAC-4P-M 8MS/ 5,0-950/M 8FS - 1543362



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 5 m

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### Accessories

Bus system cable - SAC-4P-M 8MS/10,0-950/M 8FS - 1543375



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 10 m

Bus system cable - SAC-4P-M 8MS/15,0-950/M 8FS - 1543388



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 15 m

Bus system cable - SAC-4P-M 8MS/20,0-950/M 8FS - 1543391



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on Socket straight M8, cable length: 20 m

### I/O component

Inline function terminal - IB IL 24 FLM-PAC - 2736903



Inline, Branch terminal, for extending the Inline local bus to Inline or Fieldline Modular, transmission speed in the local bus: 500 kbps / 2 Mbps, degree of protection: IP20, including Inline connector and labeling field

### Plug for cable screw gland

Screw plug - PROT-M8 - 1682540



An M8 screw plug for the unoccupied M8 sockets of the sensor/actuator cable, boxes and flush-type connectors

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### Accessories

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#### Sensor/actuator cable

Sensor/actuator cable - SAC-4P- 2,0-PUR/M 8FS 0,34 - 1543582



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, cable length: 2 m

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Sensor/actuator cable - SAC-4P- 5,0-PUR/M 8FS 0,34 - 1534818



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, cable length: 5 m

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Sensor/actuator cable - SAC-4P-10,0-PUR/M 8FS 0,34 - 1543595



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, cable length: 10 m

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Sensor/actuator cable - SAC-4P-15,0-PUR/M 8FS 0,34 - 1543605



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, cable length: 15 m

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Sensor/actuator cable - SAC-4P-20,0-PUR/M 8FS 0,34 - 1543618



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, cable length: 20 m

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### Accessories

Sensor/actuator cable - SAC-4P-M 8FS/.../... - 1697771



Sensor/actuator cable, 4-position, Variable cable type, free cable end, on Socket straight M8, cable length: Free input (0.2 ... 40.0 m)

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### Terminal marking

Zack Marker strip, flat - ZBF 8:UNBEDRUCKT - 0808781



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 8 mm, lettering field size: 5.15 x 8.15 mm, Number of individual labels: 10