

Distributed I/O device - FLM DIO 16/16 M12/8-DIAG - 2736738

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The local bus device has digital inputs and outputs. Functions: 16 digital inputs, 3 ms filter time, 16 digital outputs of 500 mA each, 500 kbaud/2 Mbaud selection, diagnostics strategy, short-circuit/overload protection, 8-pos. M12 fast connection technology.

Your advantages

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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 042642
GTIN	4046356042642

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
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 %

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Technical data

Ambient conditions

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	400 g

Interfaces

Designation	Fieldline local bus
Connection method	M12 connector, B-coded
Designation connection point	Copper cable
Transmission speed	500 kbps / 2 Mbps
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. 100 mA (At 2 Mbaud)
	typ. 80 mA (At 2 Mbaud)
	max. 75 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. 20 mA (plus power supply for sensors)
	max. 1.2 A
	max. 1.2 A
Voltage supply U_{A11}	24 V DC
Power supply at U_{A11}	max. 4 A
Current consumption at U_{A11}	typ. 15 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. 15 mA
	max. 4 A

Digital inputs

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Technical data

Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Connection method	M12 connector, 8-pos.
Connection technology	2, 3-wire
Number of inputs	16
Protective circuit	Short-circuit protection, overload protection of the sensor supply Reverse polarity protection
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
Delay at signal change from 0 to 1	3 ms
Delay at signal change from 1 to 0	3 ms

Digital outputs

Output name	Digital outputs
Connection method	M12 connector, 8-pos.
Connection technology	2-wire
Number of outputs	16
Protective circuit	Short-circuit protection, overload protection of the sensor supply Polarity protection diode
Maximum output current per channel	500 mA

Electrical isolation

Test section	To I/O 500 V DC 1 min.
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Standards and Regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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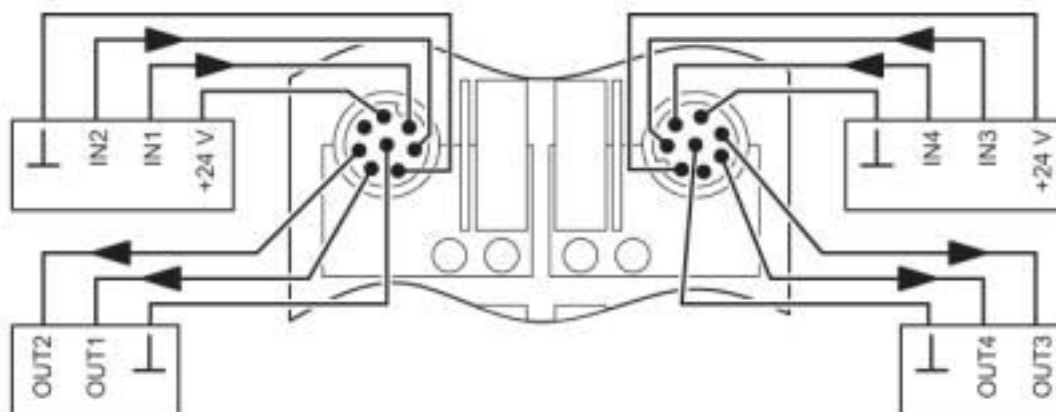
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

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Connection diagram



Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27242604
eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
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

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Classifications

ETIM

ETIM 6.0	EC001599
ETIM 7.0	EC001599

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

Accessories

Accessories

Assembly element

Mounting plate - FLM MP 5 - 2736660



Fieldline Modular mounting plate for 5 Fieldline Modular devices

Mounting plate - FLM MP 7 - 2736673



Fieldline Modular mounting plate for 7 Fieldline Modular devices

Circular connector (cable-side)

Connector - SACC-M12MS-8CON-PG9-M - 1513334



Connector, Universal, 8-position, Plug straight M12, Coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

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Accessories

Connector - SACC-M12MS-8CON-PG 9-SH - 1511857



Connector, Universal, 8-position, shielded, Plug straight M12, Coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

Sensor/actuator cable

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 0.13 m

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, coding: B, on Socket straight M12 SPEEDCON, coding: B, cable length: 0.13 m

Sensor/actuator cable - SAC-8P-FS SCO/.../... - 1523667



Sensor/actuator cable, 8-position, Variable cable type, free cable end, on Socket straight M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-8P-MS SCO/.../... - 1523641



Sensor/actuator cable, 8-position, Variable cable type, Plug straight M12 SPEEDCON, coding: A, on free cable end, cable length: Free input (0.2 ... 40.0 m)

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Accessories

Sensor/actuator cable - SAC-8P-MR SCO/.../... - 1523654



Sensor/actuator cable, 8-position, Variable cable type, Plug angled M12 SPEEDCON, coding: A, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-8P-MS-FS SCO/.../... - 1523683



Sensor/actuator cable, 8-position, Variable cable type, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-8P-MR-FS SCO/.../... - 1552191



Sensor/actuator cable, 8-position, Variable cable type, Plug angled M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-8P-MS-FR SCO/.../... - 1523696



Sensor/actuator cable, 8-position, Variable cable type, Plug straight M12 SPEEDCON, coding: A, on Socket angled M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-8P-MR-FR SCO/.../... - 1552201



Sensor/actuator cable, 8-position, Variable cable type, Plug angled M12 SPEEDCON, coding: A, on Socket angled M12 SPEEDCON, coding: A, cable length: Free input (0.2 ... 40.0 m)

Terminal marking

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Accessories

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



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: 12 mm, lettering field size: 5.15 x 12.15 mm, Number of individual labels: 5

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