

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



2736738

<https://www.phoenixcontact.com/us/products/2736738>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

Commercial data

Item number	2736738
Packing unit	1 pc
Sales key	DR03
Product key	DRI434
GTIN	4046356042642
Weight per piece (including packing)	458.4 g
Weight per piece (excluding packing)	400 g
Customs tariff number	85389099
Country of origin	DE

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

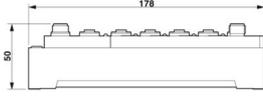


2736738

<https://www.phoenixcontact.com/us/products/2736738>

Technical data

Dimensions

Dimensional drawing	
Width	70 mm
Height	178 mm
Depth	50 mm
Drill hole spacing	168 mm

Interfaces

Fieldline local bus

Connection method	M12 connector, B-coded
Designation connection point	Copper cable
Number of positions	5
Transmission speed	500 kbps / 2 Mbps

System properties

Module

ID code (dec.)	223
ID code (hex)	DF
Length code (hex)	01
Process data channel	16 bit
Input address area	2 Byte
Output address area	2 Byte
Register length	32 bit
Required parameter data	18 Byte
Required configuration data	5 Byte

Input data

Digital:

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	16
Connection method	M12 connector, 8-pos.
Connection technology	2-, 3-conductor
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
Nominal input voltage U_{IN}	24 V DC
Total sensor current	max. 500 mA (Maximum current per socket)
Filter time	3 ms
Delay at signal change from 0 to 1	3 ms
Delay at signal change from 1 to 0	3 ms
Protective circuit	Short-circuit protection, overload protection of the sensor supply; Reverse polarity protection

Output data

Digital:

Output name	Digital outputs
Connection method	M12 connector, 8-pos.
Connection technology	2-conductor
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

Product properties

Product type	I/O component
Product family	Fieldline
Type	modular
No. of channels	16

Electrical properties

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

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



2736738

<https://www.phoenixcontact.com/us/products/2736738>

Power supply at U_{A12}	max. 4 A
Current consumption at U_{A12}	typ. 15 mA
	max. 4 A

Supply: 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)

Electrical isolation/isolation of the voltage ranges

Test voltage: To I/O	500 V DC, 1 min
----------------------	-----------------

Connection data

Connection method	M12 connector
-------------------	---------------

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP65/IP67
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)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (storage/transport)	95 %

Standards and regulations

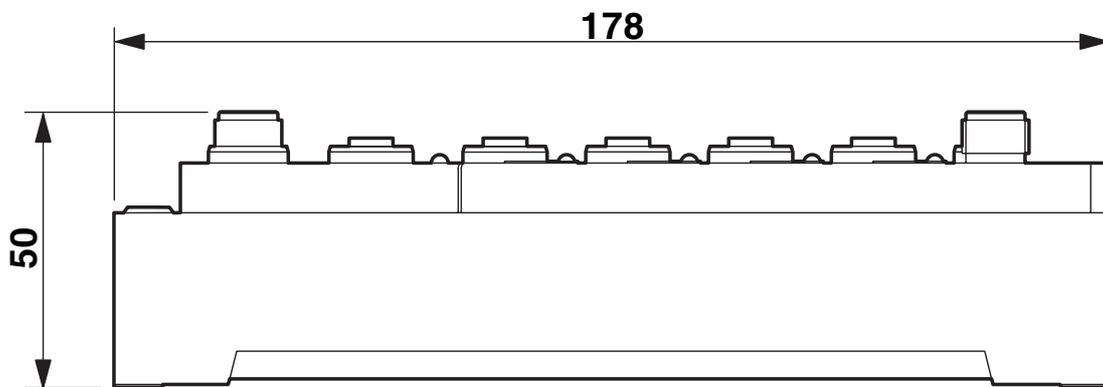
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
------------------	---------------------------------------

Mounting

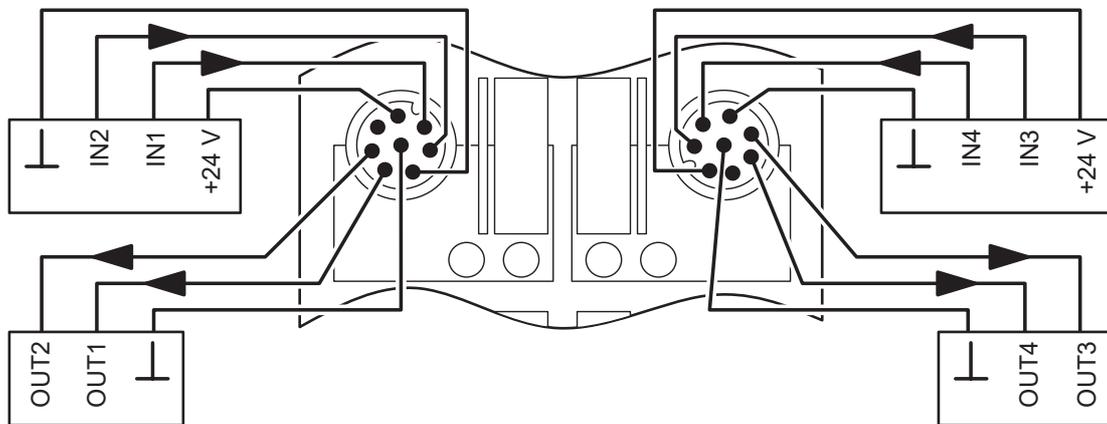
Mounting type	Panel mounting
---------------	----------------

Drawings

Dimensional drawing



Connection diagram



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



2736738

<https://www.phoenixcontact.com/us/products/2736738>

Classifications

ETIM

ETIM 8.0	EC001599
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

2736738

<https://www.phoenixcontact.com/us/products/2736738>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
-------------------------------------	----------------------

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com