

# FLM BK IB M12 DI 8 M12 - Bus coupler



2736301

<https://www.phoenixcontact.com/us/products/2736301>

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The INTERBUS bus coupler opens a local bus for up to 16 devices. Additional functions: easy plug and play installation, 8 digital inputs, channel-specific diagnostics, short-circuit and overload protection, M12 fast connection technology.

## Product description

Fieldline modular bus coupler for INTERBUS with eight digital inputs

## Your advantages

- INTERBUS
- 8 inputs, 24 V DC
- M12 connection technology with SPEEDCON fast locking system

## Commercial data

Item number	2736301
Packing unit	1 pc
Sales key	DR03
Product key	DRI411
GTIN	4017918951061
Weight per piece (including packing)	327.4 g
Weight per piece (excluding packing)	280 g
Customs tariff number	85176200
Country of origin	DE

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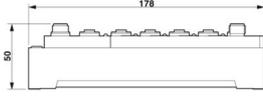


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## Technical data

### Dimensions

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

### Material specifications

Color	anthracite
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### Interfaces

#### INTERBUS

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

#### Fieldbus: Local bus gateway

Designation	Local bus gateway
Connection method	M12 connector, B-coded
Transmission speed	500 kbaud/2 Mbaud, can be selected
Max. length of local bus	20 m
Max. number of local bus devices	16

### System properties

#### System limits

Number of local bus devices that can be connected	max. 16
Number of devices with parameter channel	max. 16

#### Module

ID code (dec.)	190
ID code (hex)	BE
Length code (hex)	81
Process data channel	8 bit
Input address area	1 Byte
Output address area	0 Byte

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Register length	8 bit
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## Input data

Digital:

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	8 (double-occupancy)
Connection method	M12 connector
Connection technology	2-, 3-, 4-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
Filter time	3 ms
Protective circuit	Reverse polarity protection

## Product properties

Product type	I/O component
Product family	Fieldline
Type	modular
No. of channels	8

## 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. 75 mA (At 2 Mbaud)
	max. 100 mA (At 500 kBaud)
	typ. 65 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

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: 24 V supply (bus logics) / FE	500 V AC, 50 Hz, 1 s
Test voltage: 24 V supply (bus logics) / Digital inputs (sensor)	500 V AC, 50 Hz, 1 s

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supply / I/O)	
Test voltage: 24 V supply (bus logics) / Digital outputs (actuator supply)	500 V AC, 50 Hz, 1 s
Test voltage: 24 V supply (bus logics) / Incoming remote bus	500 V AC, 50 Hz, 1 s
Test voltage: 24 V supply (bus logics) / Outgoing remote bus	500 V AC, 50 Hz, 1 s
Test voltage: Digital inputs (sensor supply / I/O) / FE	500 V AC, 50 Hz, 1 s
Test voltage: Digital inputs (sensor supply) / Digital outputs (actuator supply)	500 V AC, 50 Hz, 1 s
Test voltage: Digital inputs (sensor supply / I/O) / Incoming remote bus	500 V AC, 50 Hz, 1 s
Test voltage: Digital inputs (sensor supply / I/O) / Outgoing remote bus	500 V AC, 50 Hz, 1 s

## Connection data

Connection method	M12 connector
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## 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)
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## Mounting

Mounting type	Panel mounting, optionally on mounting panel
	Panel mounting

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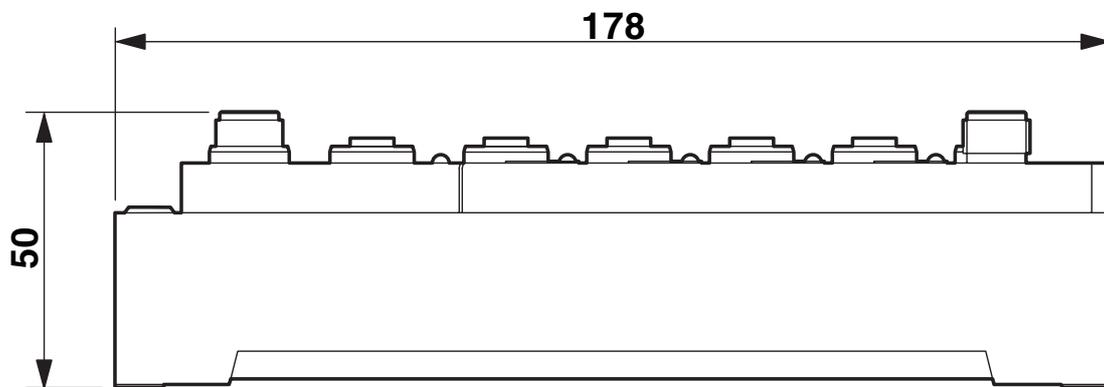


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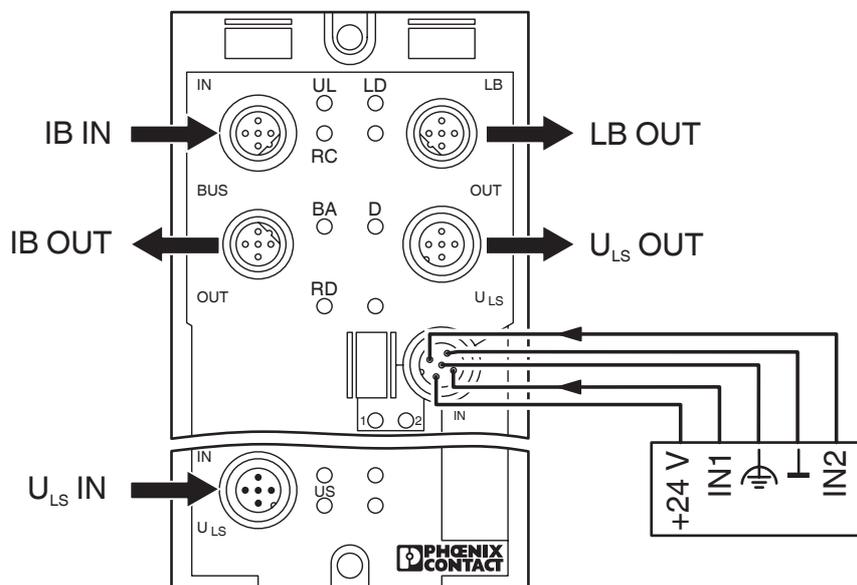
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## Drawings

Dimensional drawing



Connection diagram



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## Classifications

### ETIM

ETIM 8.0	EC001604
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### UNSPSC

UNSPSC 21.0	32151600
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## 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)
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