PHŒNIX CONTACT

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

The PROFINET bus coupler opens a local bus for up to 16 devices. Additional functions: 100 Mbps, auto negotiation, auto crossover, SNMP, TFTP, LLDP, 8 digital inputs, channel-specific diagnostics, short-circuit/ overload protection, M12 fast connection technology.

Your advantages

☑ PROFINET

☑ 8 inputs, 24 V DC

☑ M12 connection technology with SPEEDCON fast locking system

RoHS **PROFINET®**

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 042659
GTIN	4046356042659

Technical data

Note

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

Dimensions

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

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °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)

PHŒNIX CONTACT

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Technical data

Ambient conditions

Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP65/IP67
Note	Seal unused slots/connections to ensure the degree of protection.

General

Mounting type	Wall mounting
Color	anthracite
Net weight	335.2 g
Mounting type	Wall mounting, optionally on mounting plate
Note	Seal unused slots/connections to ensure the degree of protection.

Interfaces

Designation	PROFINET
Connection method	M12 connectors, D-coded
Designation connection point	Copper cable
Transmission speed	100 Mbps (auto negotiation)
Number of positions	4
Designation	PROFINET
Transmission speed	100 Mbps

Local bus gateway

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

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)
Supply current	< 100 mA

Fieldline potentials

Voltage supply U_L	24 V DC
Power supply at U_L	max. 4 A
Current consumption from U_L	max. 118 mA (At 2 Mbaud)
	typ. 118 mA (At 2 Mbaud)
	max. 60 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

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Technical data

Fieldline potentials

Current consumption from U_S	typ. 5 mA (plus power supply for sensors)
	max. 600 mA

Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Connection method	M12 connector
Connection technology	2, 3, 4-wire
Number of inputs	8 (EN 61131-2 type 1)
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

Electrical isolation

Test section	To I/O 500 V DC

Standards and Regulations

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

Environmental Product Compliance

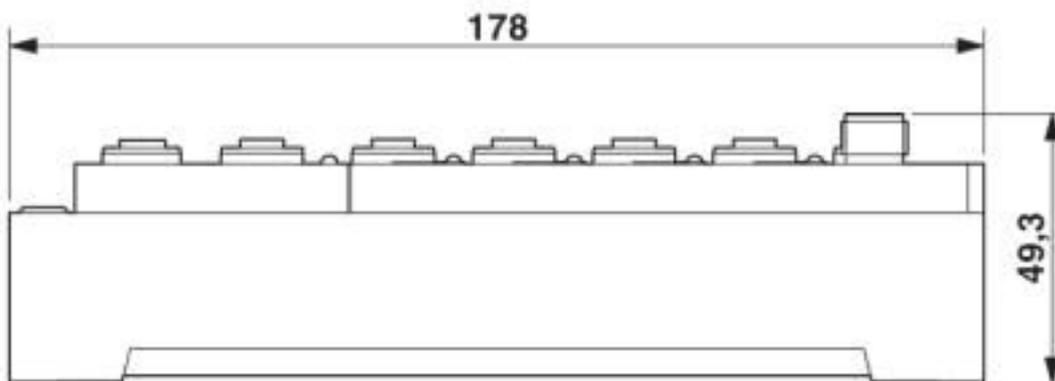|	
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Connection diagram
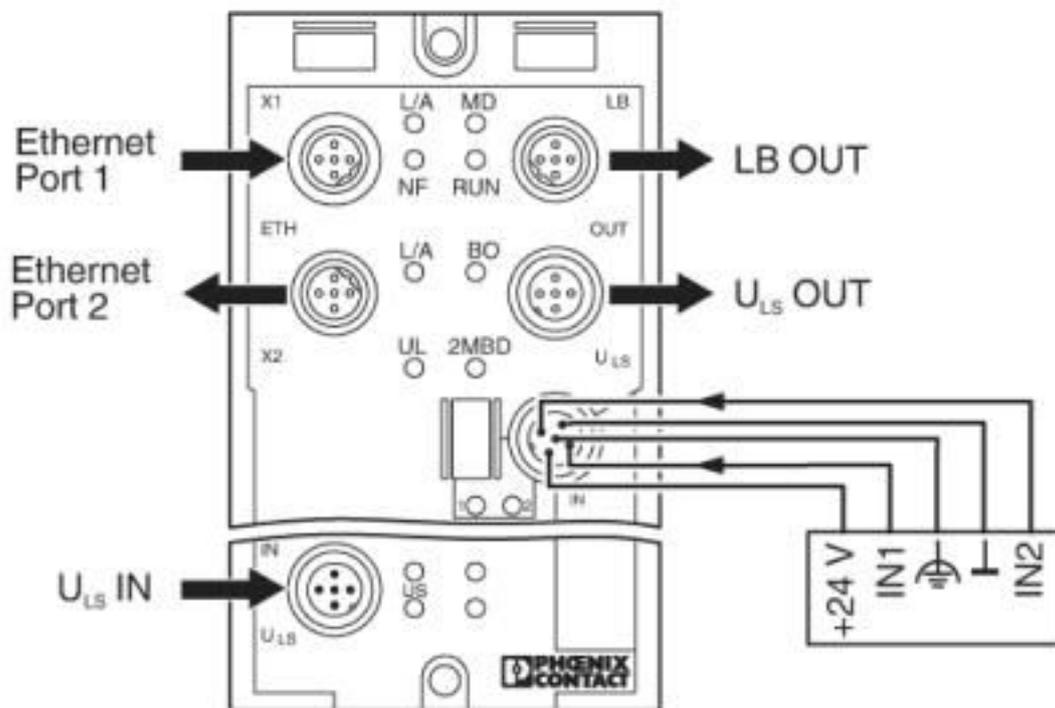
Dimensional drawing

Classifications

eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 11.0	27242608
eCl@ss 4.0	27250200
eCl@ss 4.1	27250200
eCl@ss 5.0	27250200
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Classifications

eCl@ss

eCl@ss 7.0	27242604
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608

ETIM

ETIM 2.0	EC001434
ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604

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

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / PROFINET / EAC / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324

PROFINET	Z10580

EAC		EAC-Zulassung

cULus Recognized	

Accessories

Accessories

Circular connector (cable-side)

Data connector - SACC-M12MSD-4CON-PG 7-SH - 1521258

Data connector, Ethernet/PROFINET CAT5 (100 Mbps), 4-position, shielded, Plug straight M12, Coding: D, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg7, external cable diameter 4 mm ... 6 mm

Data connector - SACC-M12MSD-4CON-PG 9-SH - 1521261

Data connector, Ethernet/PROFINET CAT5 (100 Mbps), 4-position, shielded, Plug straight M12, Coding: D, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

Data cable preassembled

Network cable - NBC-MSD/ 2,0-93B SCO - 1407496

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT$^®$ CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on free cable end, cable length: 2 m

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Accessories

Network cable - NBC-MSD/ 5,0-93B SCO - 1407497

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on free cable end, cable length: 5 m

Network cable - NBC-MSD/10,0-93B SCO - 1407498

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on free cable end, cable length: 10 m

Network cable - NBC-MSD/ 1,0-93B/R4AC SCO - 1407499

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on Plug straight RJ45 / IP20, cable length: 1 m

Network cable - NBC-MSD/ 2,0-93B/R4AC SCO - 1407500

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on Plug straight RJ45 / IP20, cable length: 2 m

Network cable - NBC-MSD/ 5,0-93B/R4AC SCO - 1407501

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on Plug straight RJ45 / IP20, cable length: 5 m

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

Accessories

Network cable - NBC-MSD/10,0-93B/R4AC SCO - 1407502

Network cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded, Plug straight M12 SPEEDCON / IP67, coding: D, on Plug straight RJ45 / IP20, cable length: 10 m

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128

Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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, coding: A, 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, coding: A, 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, coding: A, on free cable end, cable length: 10 m

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

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, coding: A, on free cable end, cable length: 15 m

---

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, coding: A, cable length: 2 m

---

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, coding: A, cable length: 5 m

---

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, coding: A, cable length: 10 m

---

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, coding: A, cable length: 15 m

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 0.3 m

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 0.5 m

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 1 m

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 2 m

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 5 m

PHŒNIX CONTACT

Bus coupler - FLM BK PN M12 DI 8 M12-2TX - 2736741

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 10 m

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, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 15 m

Terminal marking

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