

# AXL F BK PB - Bus coupler



2688530

<https://www.phoenixcontact.com/us/products/2688530>

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.



Axioline F, Bus coupler, PROFIBUS DP, D-SUB-9 female connector, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connector

## Product description

The bus coupler is intended for use within a PROFIBUS network and represents the link to the Axioline F I/O system. Up to 63 Axioline F devices can be connected to the bus coupler. A corresponding GSD file is available for integrating the Axioline F station into the programming system. It can be downloaded at: [phoenixcontact.net/product/2688530](https://phoenixcontact.net/product/2688530)

## Your advantages

- PROFIBUS connection via 9-pos. D-SUB socket
- Electrical isolation between PROFIBUS interface and logic
- Rotary coding switches for setting the PROFIBUS address
- DP/V1 for class 1 and class 2 masters
- PROFIBUS data transmission speed of 9.6 kbps to 12 Mbps
- Dynamic configuration is supported
- I&M functions
- Firmware can be updated
- Typical cycle time of the Axioline F local bus is around 10  $\mu$ s
- Supports the operation of Axioline Smart Elements
- Supports passive Smart Elements (firmware version 2.20 or later)

## Commercial data

Item number	2688530
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI212
Catalog page	Page 72 (C-6-2019)
GTIN	4046356712903
Weight per piece (including packing)	221.9 g
Weight per piece (excluding packing)	175 g
Customs tariff number	85176200
Country of origin	DE

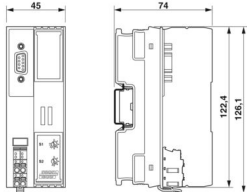
# AXL F BK PB - Bus coupler

2688530

<https://www.phoenixcontact.com/us/products/2688530>

## Technical data

### Dimensions

Dimensional drawing	
Width	45 mm
Height	126.1 mm
Depth	74 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

### Interfaces

#### PROFIBUS DP

Number of interfaces	1
Connection method	D-SUB-9 female connector
Transmission speed	9.6 kbps ... 12 Mbps

#### Axioline F local bus

Number of interfaces	1
Connection method	Bus base module
Transmission speed	100 Mbps

#### Service

Number of interfaces	1
Connection method	Micro USB type B

#### Fieldbus: Local bus gateway

Max. number of local bus devices	63 (Consider the logic current consumed by the devices)
----------------------------------	---

### System properties

#### System limits

Number of supported devices	max. 63 (per station)
Number of local bus devices that can be connected	max. 63

### Product properties

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (observe temperature derating)

# AXL F BK PB - Bus coupler



2688530

<https://www.phoenixcontact.com/us/products/2688530>

Scope of delivery	including bus base module and Axioline F connector
Insulation characteristics	
Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

## Electrical properties

Potentials: Communications power  $U_L$  feed-in (the supply of the Axioline F local bus  $U_{BUS}$  is generated from  $U_L$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 567 mA (with 2 A at $U_{BUS}$ for the I/Os and $U_L = 24$ V)
Power consumption	max. 13.7 W (2.0 A on $U_{BUS}$ , $U_L = 24$ V)
Protective circuit	Surge protection; electronic Reverse polarity protection; electronic

Potentials: Axioline F local bus supply ( $U_{BUS}$ )

Supply voltage	5 V DC (via bus base module)
Power supply unit	2 A

Electrical isolation/isolation of the voltage ranges

Test voltage: PROFIBUS interface / 24 V communications voltage ( $U_L$ ) feed-in	500 V AC, 50 Hz, 1 min.
Test voltage: PROFIBUS interface / functional ground	500 V AC, 50 Hz, 1 min.
Test voltage: 24 V communications voltage ( $U_L$ ) feed-in / functional ground	500 V AC, 50 Hz, 1 min.

## Connection data

Connection technology

Connection name	Axioline F connector
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.

Conductor connection

Connection method	Push-in connection
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Axioline F connector

Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.
Conductor cross section, rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

# AXL F BK PB - Bus coupler



2688530

<https://www.phoenixcontact.com/us/products/2688530>

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (Mounting position: wall mounting on horizontal DIN rail)
	-25 °C ... 55 °C (Mounting position: any)
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

## Standards and regulations

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

## Mounting

Mounting type	DIN rail mounting
Mounting position	any (observe temperature derating)

Phoenix Contact 2024 © - 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](mailto:info@phoenixcon.com)