

https://www.phoenixcontact.com/us/products/2702782



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Axioline F, Bus coupler, EtherNet/IP™, RJ45 jack, extended function, 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 an EtherNet/IP™ network. It is the link to the Axioline F I/O system. Up to 63 Axioline F devices can be connected to the bus coupler. A corresponding EDS file is available for integrating the Axioline F station into the programming system. This file can be downloaded at: www.phoenixcontact.com/product/2702782

## Your advantages

- · 2 Ethernet ports (with integrated switch)
- Transmission speed of 10 Mbps and 100 Mbps
- · Rotary coding switches for setting the IP address assignment and other functions
- · Firmware can be updated
- Runtime in bus coupler is negligible (almost 0 μs)
- Typical cycle time of the Axioline F local bus is around 10  $\mu s$
- · Web-based management
- · Supports the operation of Axioline Smart Elements
- · Supports passive Smart Elements (firmware version 1.30 or later)
- Supports IOL-CONF (firmware version 1.30 and later)
- · Supports Diag+

#### Commercial data

Item number	2702782
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI21D
Catalog page	Page 70 (C-6-2019)
GTIN	4055626320533
Weight per piece (including packing)	222.7 g
Weight per piece (excluding packing)	222.7 g
Customs tariff number	85176200
Country of origin	DE

2702782

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## Technical data

#### **Dimensions**

Dimensional drawing	74 FZZI
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

### EtherNet/IP™

Number of interfaces	2
Connection method	RJ45 jack
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps (Half or full duplex mode (automatic detection, can be adjusted manually))
Transmission physics	Ethernet in RJ45 twisted pair

### Axioline F local bus

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

#### Service

Number of interfaces	1
Connection method	USB type C (from HW 01)
	Micro USB type B (HW 00)

### 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

Туре	block modular
Product type	I/O component
Product family	Axioline F



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Mounting position	any (observe temperature derating)
Scope of delivery	including bus base module and Axioline F connector
Special properties	extended function
Insulation characteristics	
Insulation characteristics  Overvoltage category	II (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. 583 mA (2.0 A at $U_{Bus}$ , $U_{L}$ = 24 V, HW 00)
	max. 670 mA (2.5 A at U <sub>Bus</sub> , U <sub>L</sub> = 24 V, HW 01 or later)
Power consumption	max. 14 W (2.0 A at U <sub>Bus</sub> , U <sub>L</sub> = 24 V, HW 00)
	max. 16 W (2.5 A at U <sub>Bus</sub> , U <sub>L</sub> = 24 V, HW 01 or later)
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	max. 2 A (HW 00)
	max. 2.5 A (from HW 01)

#### Electrical isolation/isolation of the voltage ranges

3 3	
Test voltage: Ethernet interface 1 / Ethernet interface 2	1500 V AC, 50 Hz, 1 min.
Test voltage: Ethernet interface 1 / 24 V communications voltage $(\mathrm{U_L})$ feed-in	1500 V AC, 50 Hz, 1 min.
Test voltage: Ethernet interface 2 / 24 V communications voltage $(\mathrm{U_L})$ feed-in	1500 V AC, 50 Hz, 1 min.
Test voltage: Ethernet interface 1 / functional ground	1500 V AC, 50 Hz, 1 min.
Test voltage: Ethernet interface 2 / functional ground	1500 V AC, 50 Hz, 1 min.
Test voltage: 24 V communications voltage ( $\mathrm{U_L}$ ) feed-in / functional ground	500 V AC, 50 Hz, 1 min.

#### Connection data

### Connection technology

Conductor cross section flexible

Conductor cross section AWG

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 mm² 1.5 mm²

0.2 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>

24 ... 16



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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 mm² 1.5 mm²			
Conductor cross section, flexible	0.2 mm² 1.5 mm²			
Conductor cross section AWG	24 16			
Stripping length	8 mm			

### 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)



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-11.0	27242608	
	ECLASS-12.0	27242608	
	ECLASS-13.0	27242608	
ETIM			
	ETIM 9.0	EC001604	
UNSPSC			

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## Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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