

AXL F IOL8 2H - Communication module



1027843

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Axioline F, IO-Link master, IO-Link ports Class A: 8, connection method: Push-in connection, connection technology: 3-conductor, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connectors

Product description

The module is designed for use within an Axioline F station. The IO-Link master enables the operation of up to eight IO-Link devices. Alternatively, you can connect a standard digital sensor or actuator to each port. When used in combination with the Axioline F bus coupler, the IO-Link master is the connecting element that integrates IO-Link devices into a higher-level bus system.

Your advantages

- Connection of eight IO-Link devices
- Alternatively: connection of one digital sensor or actuator per port
- Connection of IO-Link devices in 3-conductor technology
- Connection of sensors in 3-conductor technology
- Connection of actuators in 2- and 3-conductor technology
- Parameter data storage on the master
- IO-Link specification V1.1.2
- Substitute value behavior of inputs and outputs can be parameterized for each port
- Supports IOL-CONF (firmware version 1.02 or later)
- Device rating plate stored

Commercial data

Item number	1027843
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI253
Catalog page	Page 89 (C-6-2019)
GTIN	4055626523552
Weight per piece (including packing)	225 g
Weight per piece (excluding packing)	215 g
Customs tariff number	85176200
Country of origin	DE

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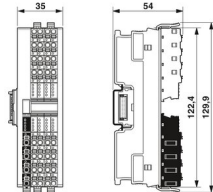


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Technical data

Dimensions

Dimensional drawing	
Width	35 mm
Height	129.9 mm
Depth	54 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

Interfaces

Axioline F local bus

Number of interfaces	2
Connection method	Bus base module
Transmission speed	100 Mbps

System properties

Module

Process data channel	512 bit
Input address area	64 Byte
Output address area	64 Byte

Input data

Digital

Description of the input	IO-Link ports in digital input (DI) mode
Number of inputs	max. 8 (EN 61131-2 type 1)
Connection method	Push-in connection
Connection technology	3-conductor
Nominal input voltage U_{IN}	24 V DC
Input voltage range "0" signal	-0.3 V DC ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Nominal input current	typ. 2.5 mA
Sensor current per channel	max. 1 A (from L+/L-)
Input filter time	1 μ s

IO-Link

Number of ports	8
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Connection method	Push-in connection
Connection technology	3-conductor
Port type	Class A

Output data

Digital

Output description	IO-Link ports in digital output (DO) mode
Connection method	Push-in connection
Connection technology	2-, 3-conductor
Number of outputs	max. 8
Nominal output voltage	24 V DC
Nominal current per channel	200 mA

Product properties

Type	block modular
Product type	I/O component
Product family	Axioline F
Mounting position	any (no temperature derating)
Scope of delivery	including bus base module and Axioline F connectors

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Supply: IO-Link

Nominal voltage for I/O supply	24 V DC
Supply voltage range	18 V DC ... 30 V DC (including all tolerances, including ripple)
Nominal current for every IO-Link port	1 A (at L+/L-) 200 mA (at C/Q)
Protective circuit	Overload protection for L+; electronically limited to 1.2 A Short-circuit protection for L+; by switching off after 5 ms

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

Supply voltage	5 V DC (via bus base module)
Current draw	max. 50 mA
Power consumption	max. 250 mW

Potentials: Feed-in of the supply voltage for the I/O devices (U_O), including IO-Link port supply

Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 8 A (in total, current consumption of I/O circuit and at C/Q as DO and at L+/L-) max. 60 mA (without connected peripherals)
Power consumption	max. 192 W

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Protective circuit	Surge protection; electronic (35 V, 0.5 s)
	Reverse polarity protection; parallel diode; with external 5 A fuse (only for commissioning)
Electrical isolation/isolation of the voltage ranges	
Test voltage: 5 V supply of the local bus (U_{BUS}) / 24 V supply (I/Os)	500 V AC, 50 Hz, 1 min.
Test voltage: 5 V supply of the local bus (U_{BUS}) / functional ground	500 V AC, 50 Hz, 1 min.
Test voltage: 24 V supply (I/O) / 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 ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
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 ² ... 1.5 mm ²
Conductor cross section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
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)
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Mounting

Mounting type	DIN rail mounting
Mounting position	any (no temperature derating)

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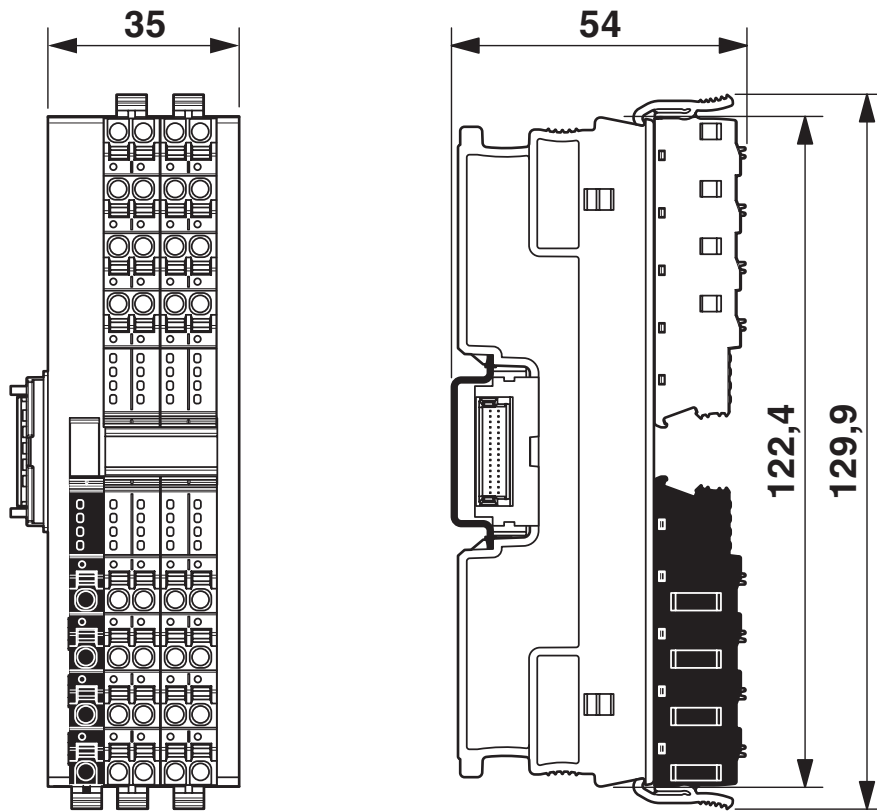
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Drawings

Dimensional drawing

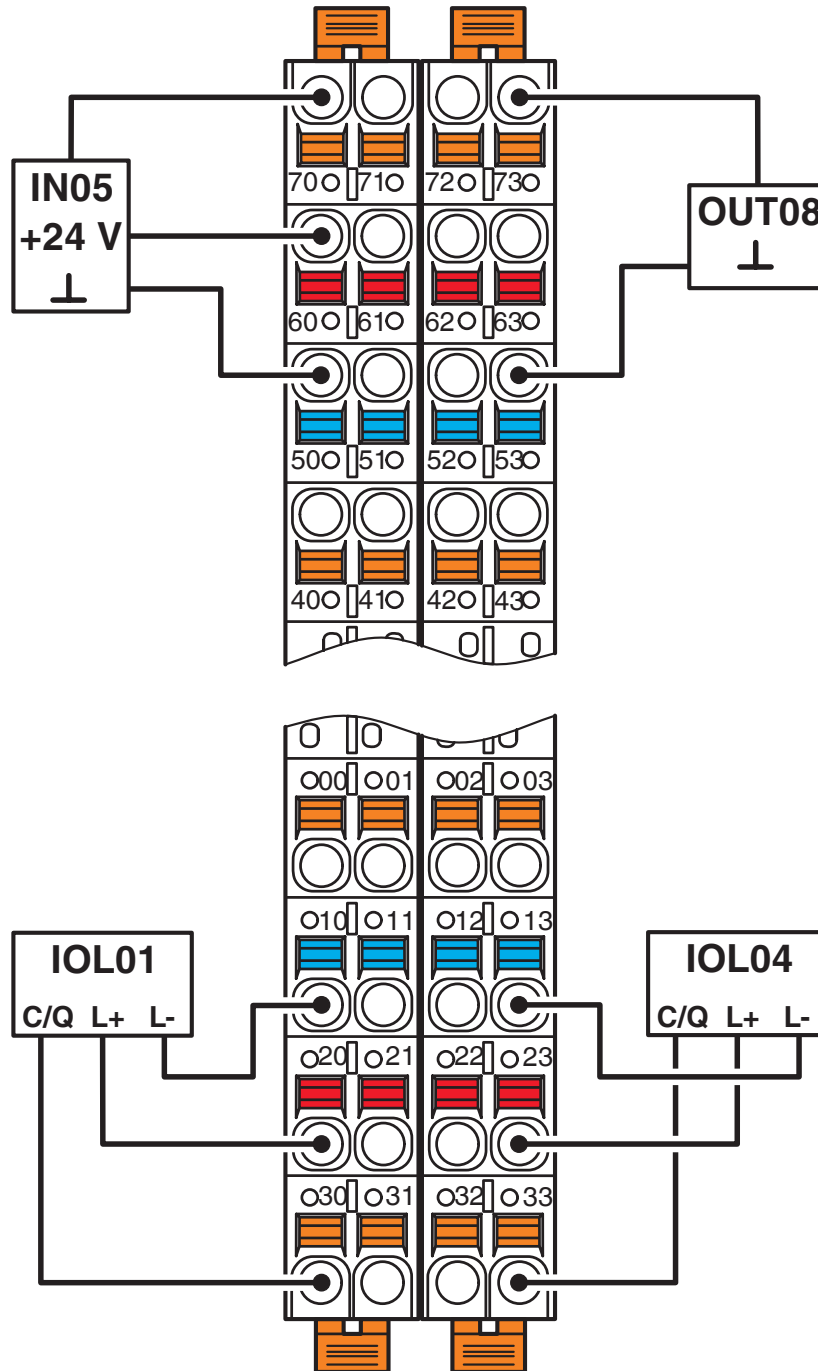


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Connection diagram



Connection example

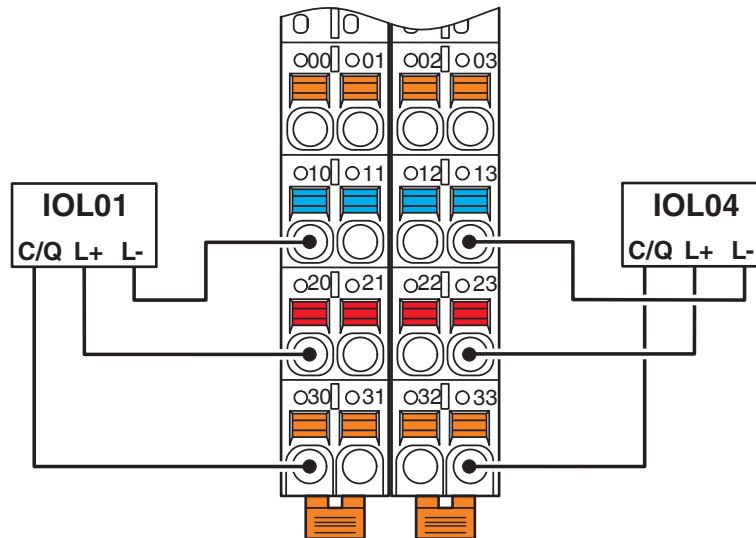
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Connection diagram



Connection example

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Approvals

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cULus Listed

Approval ID: E238705

UAE-RoHS

Approval ID: 23-02-63242

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Classifications

ECLASS

ECLASS-11.0	27242608
ECLASS-12.0	27242608
ECLASS-13.0	27242608

ETIM

ETIM 9.0	EC001604
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UNSPSC

UNSPSC 21.0	32151600
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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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Accessories

AXL F BS H - Bus connector

2700992

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Axioline F bus base module for housing type H



ZB 20,3 AXL UNPRINTED - Zack marker strip

0829579

<https://www.phoenixcontact.com/us/products/0829579>



Zack marker strip for Axioline F (device labeling), in 2 x 20.3 mm pitch, unprinted, 25-section, for individual labeling with B-STIFT 0.8, X-PEN, or CMS-P1-PLOTTER

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ZBF 10/5,8 AXL UNPRINTED - Zack Marker strip, flat

0829580

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Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.15 mm, lettering field size: 4 x 10, 15 x 5 mm, 1 x 5.8 x 5 mm, Number of individual labels: 50

IOL-CONF - Network management software

1083065

<https://www.phoenixcontact.com/us/products/1083065>



IOL-CONF is a browser-based configuration software tool for the easy startup of IO-Link masters and IO-Link devices

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