

# 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
GTIN	4055626523552
Weight per piece (including packing)	217 g
Weight per piece (excluding packing)	215 g
Customs tariff number	85176200
Country of origin	DE

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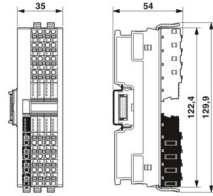


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## Technical data

### 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).

### Notes

Note on application	
Note on application	Only for industrial use

### Interfaces

Axiline 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 (IEC 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

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Sensor current per channel	max. 1 A (from L+/L-)
Input filter time	1 $\mu$ s

## IO-Link

Number of ports	8
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

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (no temperature derating)
Scope of supply	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

Maximum power dissipation for nominal condition	1.7 W
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### 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

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

Supply voltage	24 V DC
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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)
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.

### 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

## 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)

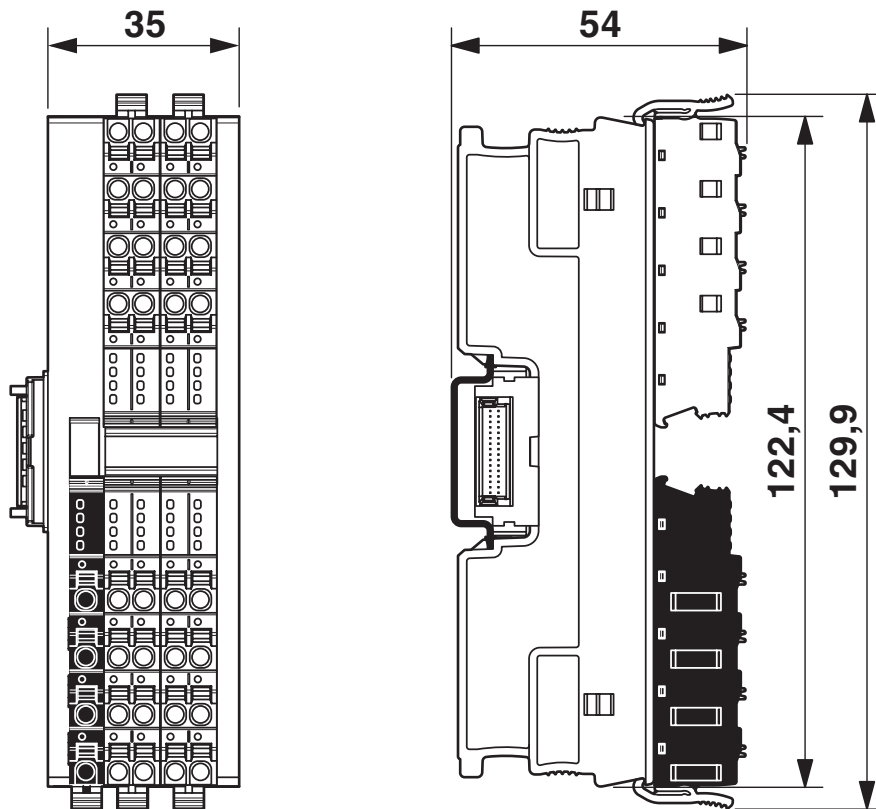
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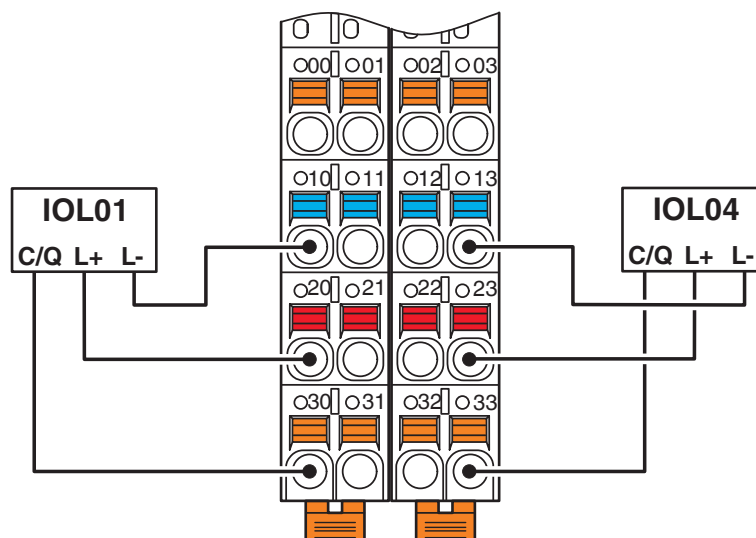
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## Drawings

Dimensional drawing



Connection diagram



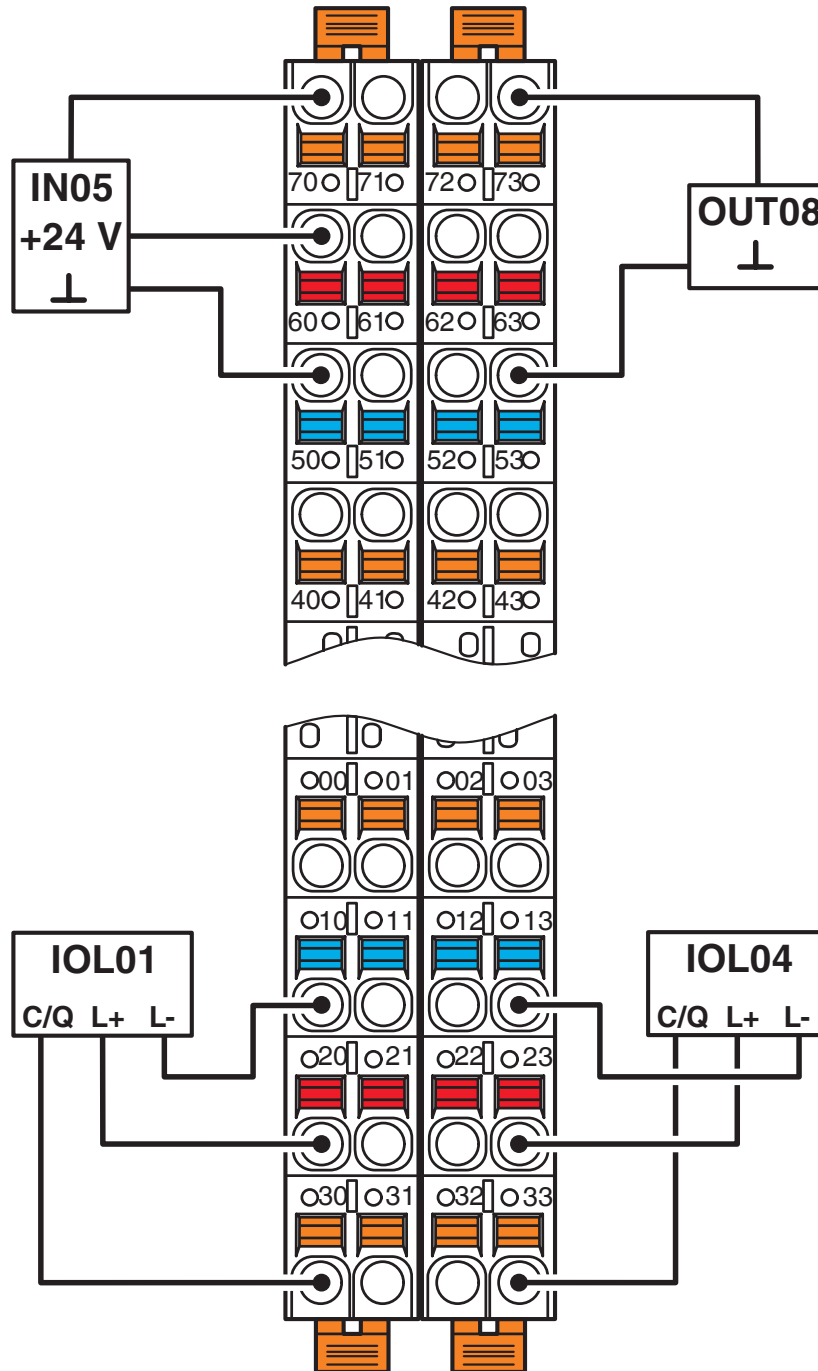
Connection example

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Connection diagram



Connection example

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## Approvals

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**cULus Listed**

Approval ID: E238705

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## Classifications

### ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

### ETIM

ETIM 10.0	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	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)
SCIP	cfa3d82c-783c-487e-ac47-4dfc884df865

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