I/O module - AXL F IOL8 2H - 1027843

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Axioline F, IO-Link master, 8 IO-Link ports, 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
- IOL-CONF supported
- Device rating plate stored

RoHS IO-Link COMPLETE line

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 523552
GTIN	4055626523552
Weight per Piece (excluding packing)	220.000 g
Custom tariff number	85176200

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Country of origin	Germany

Technical data

Dimensions

Width	35 mm
Height	129.9 mm
Depth	54 mm
Note on dimensions	The depth is valid when a TH 35-7,5 DIN rail is used (according to EN 60715).

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
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)
Degree of protection	IP20

Connection data

Designation	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 solid min.	0.2 mm²
Conductor cross section solid max.	1.5 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	1.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

Interfaces

Designation	Axioline F local bus
Number	2
Connection method	Bus base module
Transmission speed	100 Mbps

Digital inputs

Description of the input	IO-Link ports in digital input (DI) mode
Connection method	Push-in connection
Connection technology	3-conductor

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Digital inputs

Number of inputs	max. 8 (EN 61131-2 type 1)
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 µs

IO-Link inputs

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

Digital outputs

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

Axioline potentials

Designation	Axioline F local bus supply (U_{Bus})
Supply voltage	5 V DC (via bus base module)
Current consumption	max. 50 mA
Power consumption	max. 250 mW
Designation	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 consumption	max. 60 mA (without connected peripherals)
	max. 8 A (in total, current consumption of I/O circuit and at C/Q as DO and at L+/L-)
Power consumption	max. 192 W
Protective circuit	Surge protection electronic (35 V, 0.5 s)
	Reverse polarity protection parallel diode; with external 5 A fuse (only for commissioning)
Protection	max. 8 A (polarity reversal protection up to 5 A)

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Supply of the IO-Link ports

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)
Type of protection	Overload protection for L+
	Short-circuit protection for L+

General

Mounting type	DIN rail
Color	traffic grey A RAL 7042
Net weight	215 g
Note on weight specifications	with connectors and bus base module
Degree of pollution	2 (IEC 60664-1, EN 60664-1)
Mounting position	any (no temperature derating)

Electrical isolation

Test section	5 V supply of the local bus (U_{Bus}) / 24 V supply (I/Os) 500 V AC 50 Hz 1 min.
	5 V supply of the local bus (U_{Bus}) / functional ground 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional ground 500 V AC 50 Hz 1 min.

Standards and Regulations

Immunity to ESD	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
Immunity to EF	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to burst	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
Immunity to surge	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, DC supply lines: ±0.5 kV/±0.5 kV (symmetrical/asymmetrical)
Immunity to conducted interference	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Interference emission	Noise emission test according to EN 61000-6-3 Class B
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
Overvoltage category	II (IEC 60664-1, EN 60664-1)

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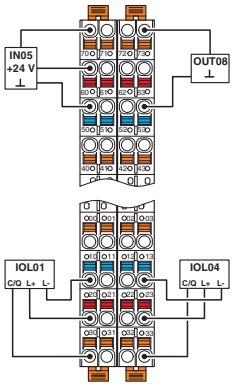
Environmental Product Compliance

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”

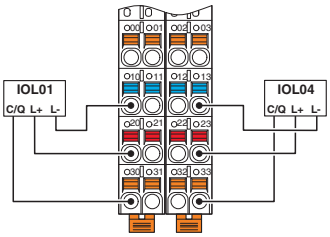
Drawings

Connection diagram



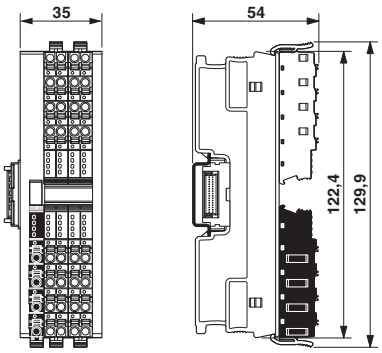
Connection example

Connection diagram



Connection example

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 11.0	27242608

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Classifications

eCl@ss

eCl@ss 6.0	27242600
eCl@ss 7.0	27242608
eCl@ss 9.0	27242608

ETIM

ETIM 6.0	EC001604
ETIM 7.0	EC001604

Approvals

Approvals

Approvals

cULus Listed

Ex Approvals

Approval details

cULus Listed	c UL us LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705

Accessories

Accessories

DIN rail connector

Bus connector - AXL F BS H - 2700992

Axioline F bus base module for housing type H

Network management software

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Accessories

Software - IOL-CONF - 1083065

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

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Terminal marking

Zack marker strip - ZB 20,3 AXL UNPRINTED - 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

Zack Marker strip, flat - ZBF 10/5,8 AXL UNPRINTED - 0829580

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: 10.15 mm, lettering field size: 4 of 10.15 x 5 mm and 1 of 5.8 x 5 mm, Number of individual labels: 50
