

https://www.phoenixcontact.com/gb/products/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 | DRI253 |
| Product Key | DRI253 |
| Catalog Page | Page 89 (C-6-2019) |
| GTIN | 4055626523552 |
| Weight per Piece (including packing) | 215 g |
| Weight per Piece (excluding packing) | 215 g |
| Customs tariff number | 85176200 |
| Country of origin | DE |



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Technical Data

Dimensions

| Dimensional drawing | 35 54 54 54 55 54 55 55 55 55 55 55 55 55 |
|---------------------|--|
| 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). |

Material specifications

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 μs |



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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

| Туре | block modular |
|----------------------------|---|
| Product type | I/O component |
| 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) |
| | |

Electrical properties

Supply: IO-Link

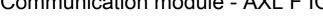
| Nominal voltage for I/O supply | 24 V DC |
|--|--|
| Nominal current for every IO-Link port | 1 A (at L+/L-) |
| | 200 mA (at C/Q) |
| Protective circuit | Overload protection for L+; electronically limited to 1.2 A |
| | Short-circuit protection for L+; by switching off after 5 ms |

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) |



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| 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) |

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

| Conductor Connection | |
|----------------------------------|--------------------|
| Connection method | Push-in connection |
| Conductor cross section solid | 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 |

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) |
|------------------|---------------------------------------|
| FTOLECTION Class | III (IEC 01140, EN 01140, VDE 0140-1) |

Mounting

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



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Classifications

ECLASS

| EC | LASS-9.0 | 27242608 |
|-------|-------------|----------|
| EC | LASS-10.0.1 | 27242608 |
| EC | LASS-11.0 | 27242608 |
| ETIM | ETIM | |
| ETI | IM 8.0 | EC001604 |
| UNSPS | UNSPSC | |
| UN | SPSC 21.0 | 32151600 |

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