

AXL E IOL DI8 M12 3M - Digital module



1480996

<https://www.phoenixcontact.com/us/products/1480996>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Axioline E, Digital input device, IO-Link ports Class A: 1, connection method: M12 connector, A-coded, connection technology: 3-conductor, Digital inputs: 8, 24 V DC, connection technology: 4-conductor, IO-Link, degree of protection: IP65/IP67/IP69

Product description

You can connect this Axioline E device to an IO-Link master via an IO-Link A port. You can use this device to acquire digital signals via IO-Link. Use within different networks is possible via the IO-Link master.

Your advantages

- Connection to an IO-Link master with M12 connector (A-coded, 4-pos.)
- Type A port
- IO-Link specification V1.1.3
- Connection of up to 8 inputs with M12 connectors (A-coded, 5-pos.)
- Diagnostic and status indicators
- Single-channel diagnostics
- Short-circuit and overload protection of the sensor supply
- Device rating plate stored
- IP65/IP67/IP69 degree of protection

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1480996 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DR04 |
| Product key | DRI7MF |
| GTIN | 4063151900403 |
| Weight per piece (including packing) | 293.7 g |
| Weight per piece (excluding packing) | 279 g |
| Customs tariff number | 85176200 |
| Country of origin | DE |

AXL E IOL DI8 M12 3M - Digital module



1480996

<https://www.phoenixcontact.com/us/products/1480996>

Technical data

Dimensions

| | |
|---------------------|---------|
| Dimensional drawing | |
| Width | 30 mm |
| Height | 184 mm |
| Depth | 30.3 mm |

Notes

Note on application

| | |
|---------------------|-------------------------|
| Note on application | Only for industrial use |
|---------------------|-------------------------|

Material specifications

| | |
|------------------|---------------|
| Housing material | Die-cast zinc |
|------------------|---------------|

Input data

Digital:

| | |
|-----------------------------------|---|
| Input name | Digital inputs |
| Description of the input | IEC 61131-2 types 1 and 3 |
| Number of inputs | 8 |
| Cable length | max. 30 m (to the sensor) |
| Connection method | M12 connector, A-coded |
| Note on the connection method | Push-pull fast connection according to IEC 61076-2-010 or screw connection according to IEC 61076-2-101 |
| Connection technology | 4-conductor |
| Input voltage range "0" signal | -3 V ... 5 V DC |
| Input voltage range "1" signal | 11 V DC ... 30 V DC |
| Nominal input voltage U_{IN} | 24 V DC |
| Nominal input current at U_{IN} | typ. 2.5 mA |
| Input filter time | 1 ms |
| Protective circuit | Reverse polarity protection; yes Short-circuit protection; yes Overload protection; yes |

IO-Link

| | |
|-------------------------------|---|
| Number of ports | 1 |
| Connection method | M12 connector, A-coded |
| Note on the connection method | Push-pull fast connection according to IEC 61076-2-010 or screw connection according to IEC 61076-2-101 |

AXL E IOL DI8 M12 3M - Digital module



1480996

<https://www.phoenixcontact.com/us/products/1480996>

| | |
|-----------------------------|---|
| Connection technology | 3-conductor |
| Port type | Class A |
| Specification | V1.1.3 |
| Reverse polarity protection | yes |
| Transmission speed | 230.4 kbps (COM3) |
| Cycle Time | 1 ms |
| Amount of process data | 2 Byte (Input data) 0 Byte (Output data) |

Product properties

| | |
|--------------------|---------------|
| Product type | I/O component |
| Product family | Axioline E |
| Type | Stand-alone |
| Special properties | IO-Link |

Insulation characteristics

| | |
|------------------|-----------------------------|
| Pollution degree | 2 (IEC 60664-1, EN 60664-1) |
|------------------|-----------------------------|

Electrical properties

Supply: IO-Link

| | |
|--------------------------------|---|
| Designation | IO-Link port supply (L+) |
| Nominal voltage for I/O supply | 24 V DC (Provided via the IO-Link interface of the IO-Link master.) |
| Supply voltage range | 18 V DC ... 30 V DC (including all tolerances, including ripple) |
| Nominal current per device | typ. 30 mA |
| Current consumption | max. 800 mA (device dependent; observe the current of the IO-Link master that is made available via L+) |
| Protective circuit | Reverse polarity protection; yes |

Supply: Sensors

| | |
|---------------------|---|
| Designation | Supply of the sensors (from L+) |
| Current consumption | max. 800 mA (per port) max. 800 mA (device dependent; observe the current of the IO-Link master that is made available via L+) |

Electrical isolation/isolation of the voltage ranges

| | |
|--|------------------------|
| Test voltage: 24 V supply L+ (IO-Link)/functional ground | 500 V AC, 50 Hz, 1 min |
|--|------------------------|

Connection data

| | |
|-------------------|---------------|
| Connection method | M12 connector |
| Tightening torque | 0.4 Nm |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|------------------|
| Ambient temperature (operation) | -25 °C ... 70 °C |
| Degree of protection | IP65/IP67/IP69 |

1480996

<https://www.phoenixcontact.com/us/products/1480996>

| | |
|--|---|
| | IK08 (Impact resistance level) |
| 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) | -25 °C ... 85 °C |
| Permissible humidity (operation) | 5 % ... 95 % |
| Permissible humidity (storage/transport) | 5 % ... 95 % |

Test (noxious gas)

| | |
|--|------------------------------|
| Test standard | IEC 60068-2-60:2015 Method 4 |
| Temperature | 25 °C ±1 K |
| Humidity (relative) | 75 % ±3 % |
| Test duration | 14 Days |
| Volume concentration H ₂ S (Hydrogen sulfide) | 10 ppb ±5 ppb |
| Volume concentration NO ₂ (Nitrogen dioxide) | 200 ppb ±20 ppb |
| Volume concentration Cl ₂ (Chlorine) | 10 ppb ±5 ppb |
| Volume concentration SO ₂ (Sulfur dioxide) | 200 ppb ±20 ppb |

Test (Salt spray)

| | |
|-----------------------|---|
| Test standard | DIN EN 60068-2-52 |
| Number of cycles | 4 |
| Test steps per cycle | 2 |
| Test duration (Total) | 168 h |
| Test step (Salt mist) | 2 h with 5 % ±0.5 % NaCl, pH value 6.5...7.2 for 35 °C ±2 K |
| Test step (Humidity) | 166 h with 93 % ±3 % Humidity for 40 °C ±2 K |

Standards and regulations

| | |
|------------------|---------------------------------------|
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |
|------------------|---------------------------------------|

Mounting

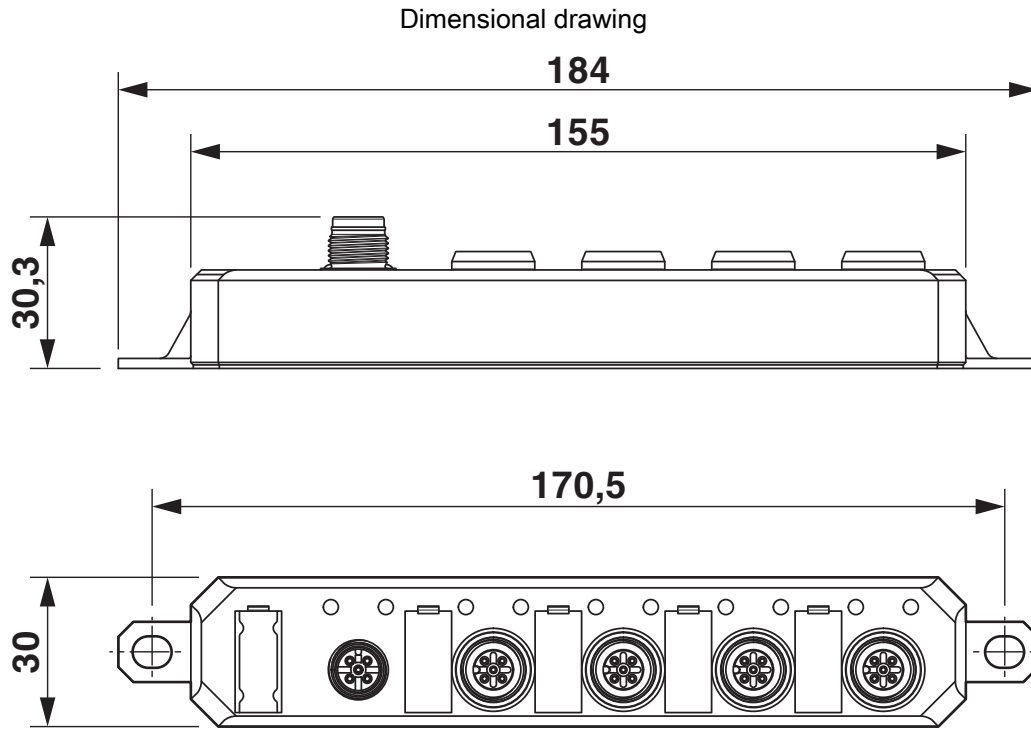
| | |
|---------------|----------------|
| Mounting type | Screw mounting |
|---------------|----------------|

AXL E IOL DI8 M12 3M - Digital module

1480996

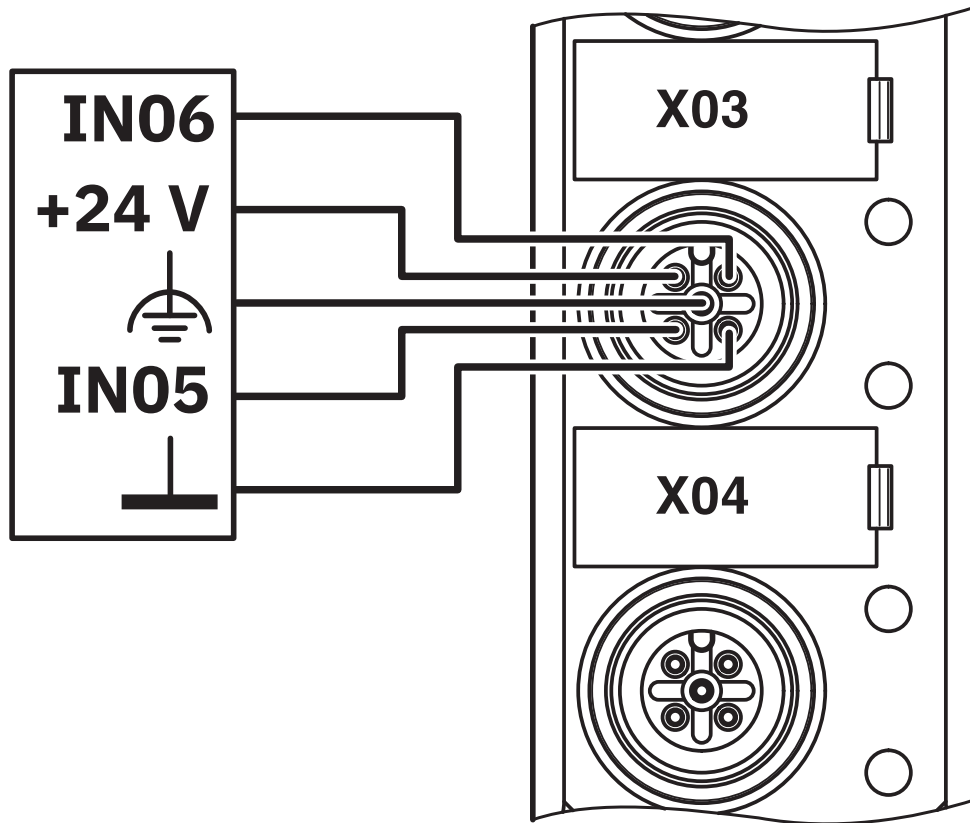
<https://www.phoenixcontact.com/us/products/1480996>

Drawings



Dimensions (in mm)

Connection diagram



Connection example

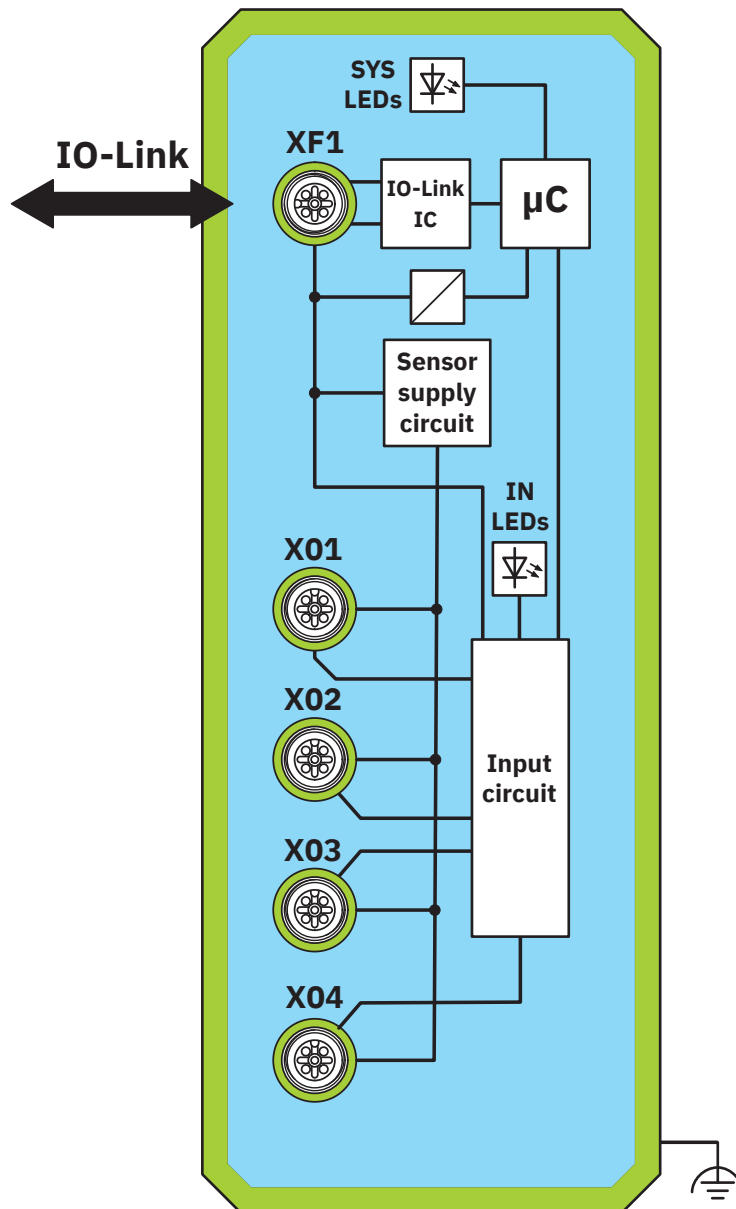
AXL E IOL DI8 M12 3M - Digital module

1480996

<https://www.phoenixcontact.com/us/products/1480996>



Block diagram



Basic circuit diagram

AXL E IOL DI8 M12 3M - Digital module



1480996

<https://www.phoenixcontact.com/us/products/1480996>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27242604 |
| ECLASS-15.0 | 27242604 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001599 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 32151600 |
|-------------|----------|

AXL E IOL DI8 M12 3M - Digital module



1480996

<https://www.phoenixcontact.com/us/products/1480996>

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-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|----------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
|-------------------------------------|----------------------|

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com