

Distributed I/O device - AXL E PB DIO16 M12 6M - 2701506

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Axioline E, Digital I/O device, PROFIBUS DP, M12 fast connection technology, Digital inputs: 16 , 24 V DC, connection method: 4-wire, Digital outputs: , 24 V DC, 500 mA, connection method: 3-wire, Metal housing, degree of protection: IP65/IP67

Product Description

The Axioline E device is designed for use within a PROFIBUS network.

It is used to acquire and output digital signals.

The device is designed for use in systems manufacturing.

It is suitable for use without a control cabinet under harsh industrial conditions.

The Axioline E device can be used on tool platforms, directly on welding robots or in conveying technology, for example.

Your advantages

- Connection to PROFIBUS DP using M12connectors (B-coded)
- Baud rate of up to 12 Mbaud (automatic baud rate detection)
- Connection of digital sensors and actuators using M12connectors (A-coded)
- Diagnostic and status indicators
- Short-circuit and overload protection of the sensor supply
- IP65/IP67 degree of protection



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 763585 |
| GTIN | 4046356763585 |
| Weight per Piece (excluding packing) | 722.100 g |
| Custom tariff number | 85176200 |
| Country of origin | Germany |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

Distributed I/O device - AXL E PB DIO16 M12 6M - 2701506

Technical data

Dimensions

| | |
|--------------------|--|
| Width | 60 mm |
| Height | 185 mm |
| Depth | 38 mm |
| Note on dimensions | The height is 194.5 mm including the mounting plate. With fixing clips pulled out, the height is 212 mm. The depth is 38 mm including the mounting plate (30.5 mm without the mounting plate). |
| Drill hole spacing | 198.5 mm |

Ambient conditions

| | |
|--|---|
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 85 °C |
| Permissible humidity (operation) | 5 % ... 95 % |
| Permissible humidity (storage/transport) | 5 % ... 95 % |
| 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 | IP65/IP67 |

General

| | |
|------------------|---|
| Housing material | Zinc die-cast |
| Mounting type | Wall mounting or DIN rail mounting; both with mounting plate. |
| Net weight | 722.1 g |

Interfaces

| | |
|-------------------------------|--|
| Designation | PROFIBUS DP |
| No. of channels | 2 |
| Connection method | M12 fast connection technology |
| Note on the connection method | B-coded |
| Designation connection point | Copper cable |
| Transmission speed | 9.6 kbps ... 12 Mbps (Automatic baud rate detection) |
| Transmission physics | PROFIBUS-DP-compliant copper cable |
| Address area assignment | 1 ... 126, adjustable |
| Number of positions | 5 |

System limits of the bus coupler

| | |
|---------------------------|--------------------------|
| Designation | PROFIBUS DP |
| Equipment type | PROFIBUS slave |
| System-specific protocols | PROFIBUS protocols DP V1 |

Supply

| | |
|----------------------|--|
| Designation | Actuators (U _A) for additional devices |
| Connection method | M12 connector (T-coded) |
| Number of positions | 4 |
| Supply voltage | 24 V DC |
| Supply voltage range | 18 V DC ... 31.2 V DC (including all tolerances, including ripple) |

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Supply

| | |
|---------------------|-----------------------------------|
| Current consumption | typ. 3 mA \pm 15 % (at 24 V DC) |
|---------------------|-----------------------------------|

Digital inputs

| | |
|-----------------------------------|--|
| Input name | Digital inputs |
| Description of the input | EN 61131-2 types 1 and 3 |
| Connection method | M12 connector, double occupancy |
| Connection technology | 4-wire |
| Number of inputs | 16 |
| Protective circuit | Overload protection, short-circuit protection of sensor supply |
| Nominal input voltage U_{IN} | 24 V DC |
| Nominal input current at U_{IN} | typ. 3 mA |
| Input filter time | < 1000 μ s |
| Cable length | max. 30 m (To the sensor) |
| Input voltage range "0" signal | 0 V ... 5 V DC |
| Input voltage range "1" signal | 11 V DC ... 30 V DC |

Digital outputs

| | |
|--|--|
| Output name | Digital outputs |
| Connection method | M12 connector, double occupancy |
| Connection technology | 3-wire |
| Number of outputs | 16 |
| Protective circuit | Overload protection, short-circuit protection of outputs yes |
| Output voltage | 24 V DC |
| Nominal output voltage | 24 V DC (from voltage U_S) |
| Maximum output current per channel | 500 mA |
| Nominal load, inductive | 12 VA (1.2 H, 48 Ω , with nominal voltage) |
| Nominal load, ohmic | 12 W (48 Ω , with nominal voltage) |
| Switching frequency | max. 5500 per second (with at least 50 mA load current) |
| Output voltage when switched off | max. 1 V |
| Output current when switched off | max. 20 μ A |
| Behavior with overload | Auto restart |
| Reverse voltage resistance to short pulses | Reverse voltage proof |

Electrical isolation

| | |
|--------------|--|
| Test section | 24 V supply (communications power and sensor supply, digital inputs/ outputs)/bus connection 500 V AC 50 Hz 1 min. |
| | 24 V supply (communications power and sensor supply, digital inputs/ outputs)/FE 500 V AC 50 Hz 1 min. |
| | Bus connection / FE 500 V AC 50 Hz 1 min. |
| | 24 V supply (actuator supply)/24 V supply (communications power and sensor supply, digital inputs/outputs) 500 V AC 50 Hz 1 min. |
| | 24 V supply (actuator supply)/bus connection 500 V AC 50 Hz 1 min. |
| | 24 V supply (actuator supply)/FE 500 V AC 50 Hz 1 min. |

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Technical data

Standards and Regulations

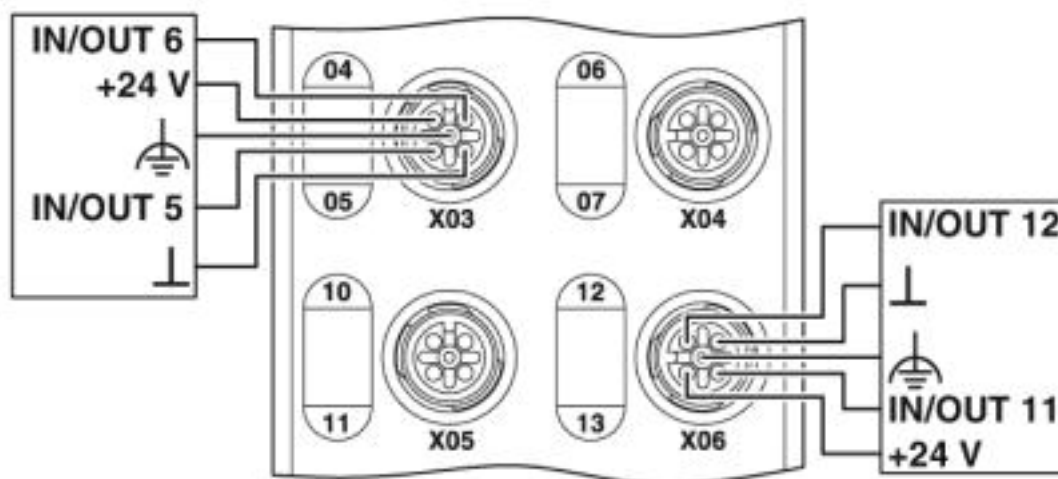
| | |
|------------------|--|
| Mechanical tests | Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g |
| | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g, 11 ms period, half-sine shock pulse |
| | Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g |
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 25; |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

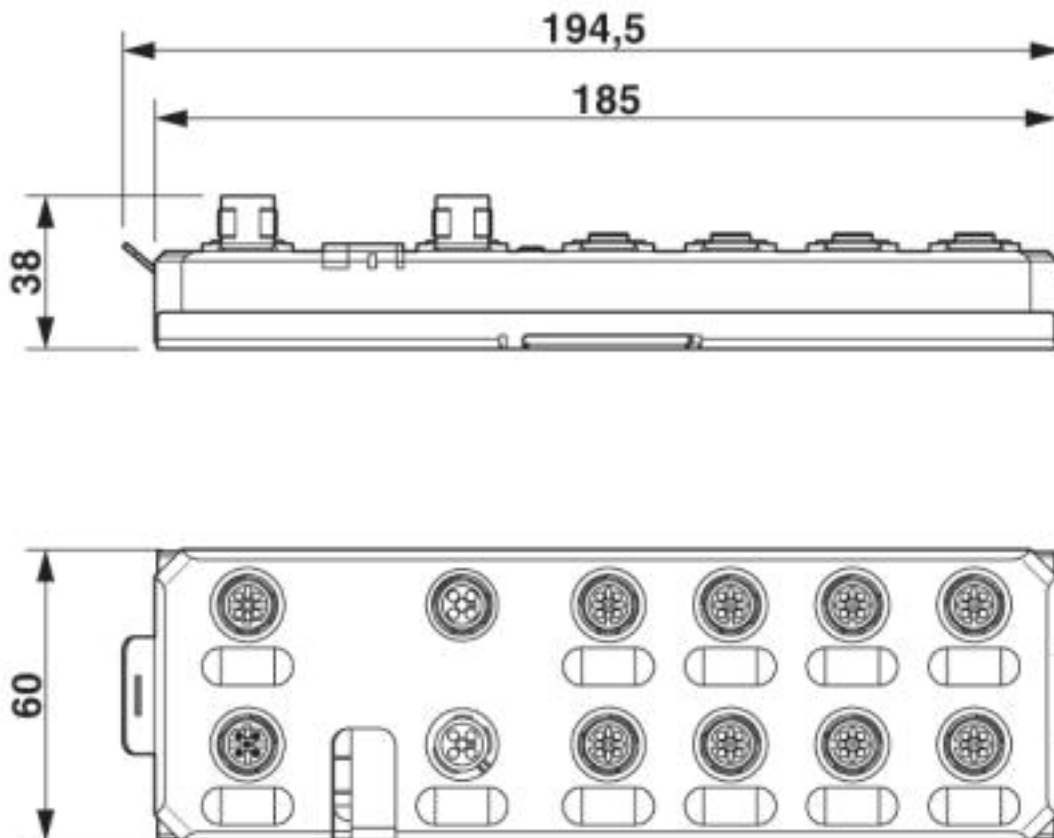
Drawings

Connection diagram



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Dimensional drawing



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27240400 |
| eCl@ss 4.1 | 27240400 |
| eCl@ss 5.0 | 27242200 |
| eCl@ss 5.1 | 27242600 |
| eCl@ss 6.0 | 27242600 |
| eCl@ss 7.0 | 27242604 |
| eCl@ss 8.0 | 27242604 |
| eCl@ss 9.0 | 27242604 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001433 |
| ETIM 3.0 | EC001599 |
| ETIM 4.0 | EC001599 |
| ETIM 5.0 | EC001599 |
| ETIM 6.0 | EC001599 |
| ETIM 7.0 | EC001599 |



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Classifications

UNSPSC

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|---------------|----------|
| UNSPSC 6.01 | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11 | 39121311 |
| UNSPSC 12.01 | 39121311 |
| UNSPSC 13.2 | 32151602 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / PROFIBUS / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
|-----------|--|---|---------------|

| | | | |
|------------|--|---|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
|------------|--|---|---------------|

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| PROFIBUS | Z01810 |
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| cULus Listed | |
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