Distributed I/O device - AXL E PB IOL8 DI4 M12 6P - 2701503

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Axioline E PROFIBUS device in a plastic housing with 8 IO-Link ports and 4 digital inputs, 24 V DC, M12 fast connection technology

Product Description

The device enables the operation of up to eight IO-Link sensors/actuators and is also used to acquire digital signals.

Product Features

- Connection to PROFIBUS DP using M12connectors (B-coded)
- Baud rate of up to 12 Mbaud (automatic baud rate detection)
- Connection of four IO-Link devices with additional digital input
- Connection of four IO-Link actuators with additional power supply
- Connection of IO-Link ports using M12connectors (A-coded, 5-pos.)
- 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
Weight per Piece (excluding packing)	560.0 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

Width	60 mm
Height	185 mm

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Dimensions

Depth	30.5 mm
Note on dimensions	The height is 212 mm including fixing clips.
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

Net weight	552 g
Mounting type	Wall mounting

Interfaces

Fieldbus system	PROFIBUS DP
Designation	PROFIBUS DP
Connection method	2x M12 connectors, B-coded
Designation connection point	Copper cable
Transmission speed	9,6 kBit/s ... 12 MBit/s (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

Power supply for module electronics

Module electronics and sensors	M12 connector (T-coded) Module electronics and sensors (U_S) 4
Connection method	M12 connector (T-coded)
Designation	Module electronics and sensors (U_S)
Number of positions	4
Supply voltage	24 V DC
Nominal supply voltage range	18 V DC ... 31.2 V DC (including all tolerances, including ripple)
Current consumption	max. 12 A

Distributed I/O device - AXL E PB IOL8 DI4 M12 6P - 2701503

Technical data

Power supply for module electronics

Typical current consumption	170 mA ±15 % (at 24 V DC)
Actuators	M12 connector (T-coded) Actuators (U_A) 4
Connection method	M12 connector (T-coded)
Designation	Actuators (U_A)
Number of positions	4
Supply voltage	24 V DC
Nominal supply voltage range	18 V DC ... 31.2 V DC (including all tolerances, including ripple)
Current consumption	max. 12 A
Typical current consumption	30 mA ±15 % (at 24 V DC)

Digital inputs

Input name	Digital inputs
Connection method	M12 connector, double occupancy
	2, 3, 4-wire
Number of inputs	4 (EN 61131-2 types 1 and 3)
Protective circuit	Protection against polarity reversal
Input filter time	< 1000 µs
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Nominal input current at U_{IN}	typ. 3 mA

Standards and Regulations

Conformity with EMC directives	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
	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
	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
	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)
	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
	Noise emission test as per EN 61000-6-4 Radio interference properties EN 55022 Class A
Test section	24 V supply (communications power and sensor supply, IO-Link ports)/bus connection 500 V AC 50 Hz 1 min.
	24 V supply (communications power and sensor supply, IO-Link ports)/FE 500 V AC 50 Hz 1 min.
	Bus connection / FE 500 V AC 50 Hz 1 min.

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Standards and Regulations

	24 V supply (actuator supply)/24 V supply (communications power and sensor supply, IO-Link ports) 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.
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

Classifications

eCl@ss

eCl@ss 4.0	27240404
eCl@ss 4.1	27240404
eCl@ss 5.0	27242204
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604

ETIM

ETIM 2.0	EC001433
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	39121311
UNSPSC 12.01	39121311
UNSPSC 13.2	39121311

Approvals

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Approvals

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UL Listed / cUL Listed / PROFIBUS / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

UL Listed

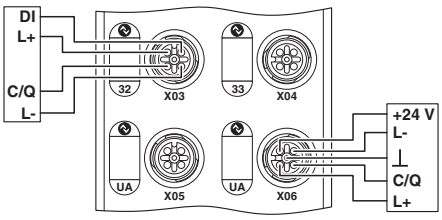
cUL Listed

PROFIBUS

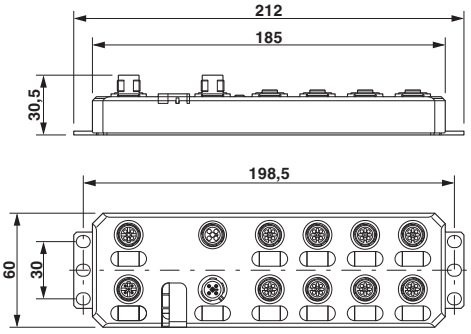
cULus Listed

Drawings

Connection diagram



Dimensional drawing



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