

Distributed I/O device - AXL E ETH DIO16 M12 6M - 2701539

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Axioline E, Digital I/O device, Ethernet, M12 fast connection technology, Digital inputs: 16, 24 V DC, connection method: 4-wire, Digital outputs: 16, 24 V DC, 500 mA, connection method: 3-wire, Metal housing, degree of protection: IP65/67

Product Description

The Axioline E device is designed for use within an Ethernet network (Modbus/TCP). 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 Ethernet network using M12connectors (D-coded)
- ✓ Transmission speed of 10 Mbps and 100 Mbps
- ✓ 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



Modbus/TCP (UDP)

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 763875
GTIN	4046356763875

Technical data

Note

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

Width	60 mm
Height	185 mm
Depth	38 mm

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Technical data

Dimensions

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	727.7 g

Interfaces

Designation	Ethernet
No. of channels	2
Connection method	M12 fast connection technology
Note on the connection method	D-coded
Designation connection point	Copper cable
Transmission speed	10/100 Mbps (with auto negotiation)
Number of positions	4

System limits of the bus coupler

Designation	Modbus/TCP
Equipment type	Modbus slave (server)
System-specific protocols	Modbus protocols Modbus/TCP
Protocols supported	SNMP v1
	HTTP
	TFTP
	FTP
	BootP
	DHCP
Specification	Modbus application protocol V1.1b

Supply

Designation	Actuators (U _A) for additional devices
Connection method	M12 connector (T-coded)
Number of positions	4

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Technical data

Supply

Supply voltage	24 V DC
Nominal supply voltage range	18 V DC ... 31.2 V DC (including all tolerances, including ripple)
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
Type of protection	Overload protection, short-circuit protection of sensor supply
Input filter time	< 1000 μ s
Input voltage range "0" signal	0 V ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Nominal input current at U_{IN}	typ. 3 mA

Digital outputs

Output name	Digital outputs
Connection method	M12 connector, double occupancy
Connection technology	3-wire
Number of outputs	16
Type of protection	Overload protection, short-circuit protection of outputs
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)

Electrical isolation

Test section	24 V supply (communications power/sensor supply, digital inputs/ outputs)/bus connection (Ethernet 1) 500 V AC 50 Hz 1 min.
	24 V supply (communications power/sensor supply, digital inputs/ outputs)/bus connection (Ethernet 2) 500 V AC 50 Hz 1 min.
	24 V supply (communications power/sensor supply, digital inputs/ outputs)/FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 1)/FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 2)/FE 500 V AC 50 Hz 1 min.
	Bus connection (Ethernet 1)/bus connection (Ethernet 2) 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 (Ethernet 1) 500 V AC 50 Hz 1 min.
	24 V supply (actuator supply)/bus connection (Ethernet 2) 500 V AC 50 Hz 1 min.

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Electrical isolation

	24 V supply (actuator supply)/FE 500 V AC 50 Hz 1 min.
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Standards and Regulations

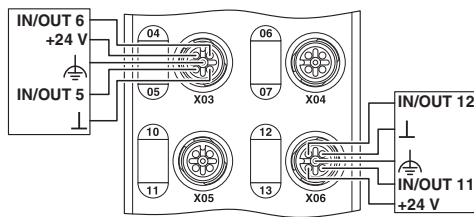
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g, 11 ms period, half-sine shock pulse
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Environmental Product Compliance

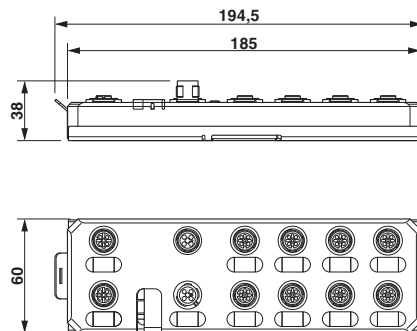
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Connection diagram



Dimensional drawing



Approvals

Approvals

Approvals

UL Listed / cUL Listed / 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
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Approvals

cUL Listed



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

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