DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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

Product Description

The Axioline E device is designed for use within an EtherCAT® network.
It enables the operation of up to eight IO-Link sensors/actuators and is also used to acquire digital signals.

Your advantages

- Connection to EtherCAT® network using M12connectors (D-coded)
- Transmission speed of 100 Mbps
- 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.)
- IO-Link specification V1.1.2
- Diagnostic and status indicators
- Short-circuit and overload protection of the sensor supply
- IP65/IP67 degree of protection

RoHS EtherCAT. IO-Link

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 763790
GTIN	4046356763790
Weight per Piece (excluding packing)	726.900 g
Custom tariff number	85176200
Country of origin	Germany

Technical data

Dimensions

Width	60 mm
Height	185 mm

DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

Technical data

Dimensions

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	726.9 g

Interfaces

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

System limits of the bus coupler

Designation	EtherCAT®
Equipment type	EtherCAT® slave
System-specific protocols	Mailbox protocols CANopen® over EtherCAT®
	Mailbox protocols File access over EtherCAT®
Type of addressing	Auto-increment addressing
	Fixed position addressing
	Logical addressing
Specification	ETG.1000 V1.02

Supply

Designation	Module electronics and sensors (U_S)
Connection method	M12 connector (T-coded)
Number of positions	4

DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

Technical data

Supply

Supply voltage	24 V DC
Supply voltage range	19.5 V DC ... 31.2 V DC (including all tolerances, including ripple)
Current consumption	typ. 180 mA ±15 % (at 24 V DC)
Designation	Actuators (U_A)
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)
Current consumption	typ. 28 mA ±15 % (at 24 V DC)

Digital inputs

Input name	Digital inputs at pin 2 for type A ports
Description of the input	IEC 61131-2 type 1
Connection method	M12 connector, X01 ... X04 have double occupancy
Connection technology	3-wire
Number of inputs	4
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 µs
Input voltage range "0" signal	-0.3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Input frequency	0.5 kHz
Description of the input	IO-Link ports in digital input (DI) mode
Connection method	M12 connector, X01 ... X04 have double occupancy
Connection technology	3-wire
Number of inputs	max. 8 (EN 61131-2 type 1)
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	15 V DC ... 30 V DC
Nominal input current	typ. 3 mA
Sensor current per channel	max. 200 mA (from L+/L-)
Total sensor current	max. 1.6 A (from L+/L-)
Input filter time	< 1000 µs
Input frequency	0.5 kHz
Type of protection	Overload protection
	Short-circuit protection for the sensor supply

Digital outputs

Output description	IO-Link ports in digital output (DO) mode
Connection method	M12 connector, X01 ... X04 have double occupancy

DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

Technical data

Digital outputs

Connection technology	3-wire
Number of outputs	max. 8
Nominal output voltage	24 V DC
Maximum output current per channel	150 mA
Maximum output current per device	1.2 A
Nominal load, ohmic	3.6 W (160 Ω, at nominal load)
Nominal load, inductive	3.6 VA (0.8 H, 160 Ω, at nominal load)
Signal delay	max. 150 µs (when switched on)
	max. 200 µs (when switched off)
Switching rate	1 per second, maximum (at nominal inductive load)
Limitation of the voltage induced on circuit interruption	-15 V DC
Output voltage when switched off	max. 1 V
Output current when switched off	max. 300 µA
Type of protection	Overload protection
	Short-circuit protection
Behavior with overload	Shutdown with automatic restart

Electrical isolation

Test section	24 V supply (communications power and sensor supply, IO-Link ports)/ bus connection (Ethernet 1) 500 V AC 50 Hz 1 min.
	24 V supply (communications power and sensor supply, IO-Link ports)/ bus connection (Ethernet 2) 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 (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, IO-Link ports) 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.
	24 V supply (actuator supply)/FE 500 V AC 50 Hz 1 min.

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;

DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

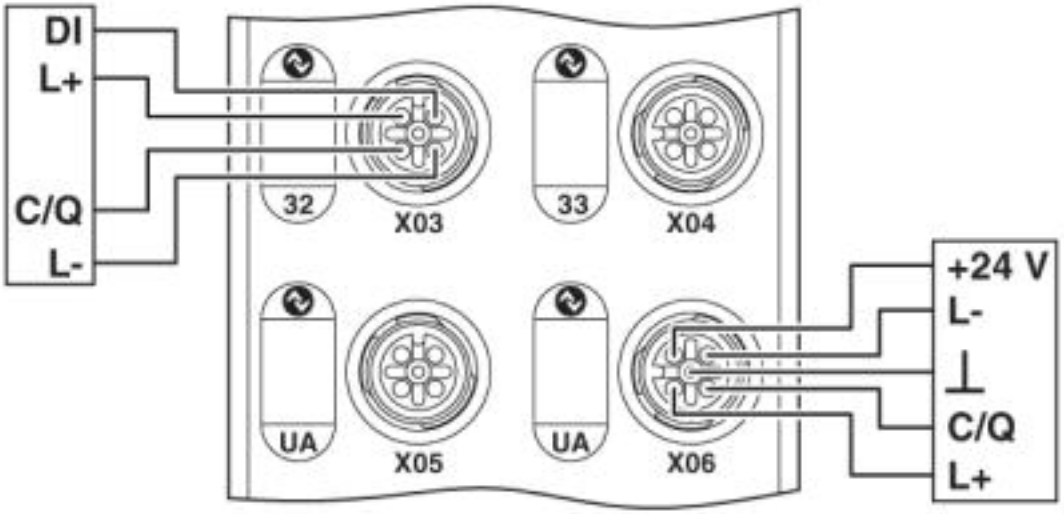
Technical data

Environmental Product Compliance

	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Connection diagram

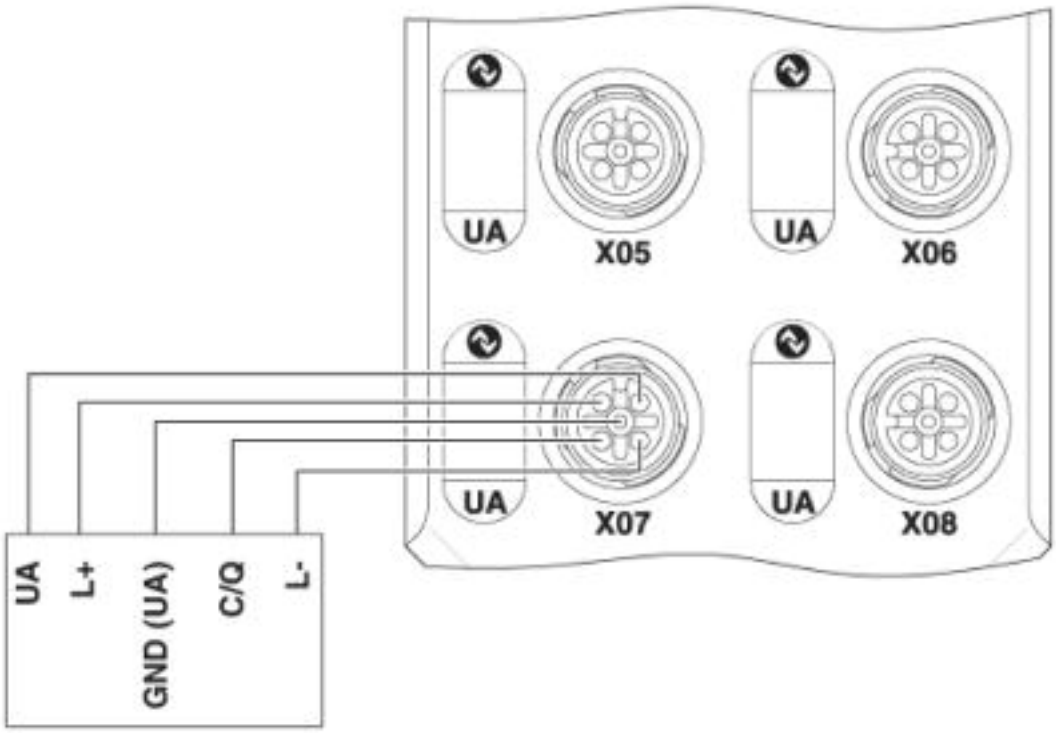


DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

Connection diagram

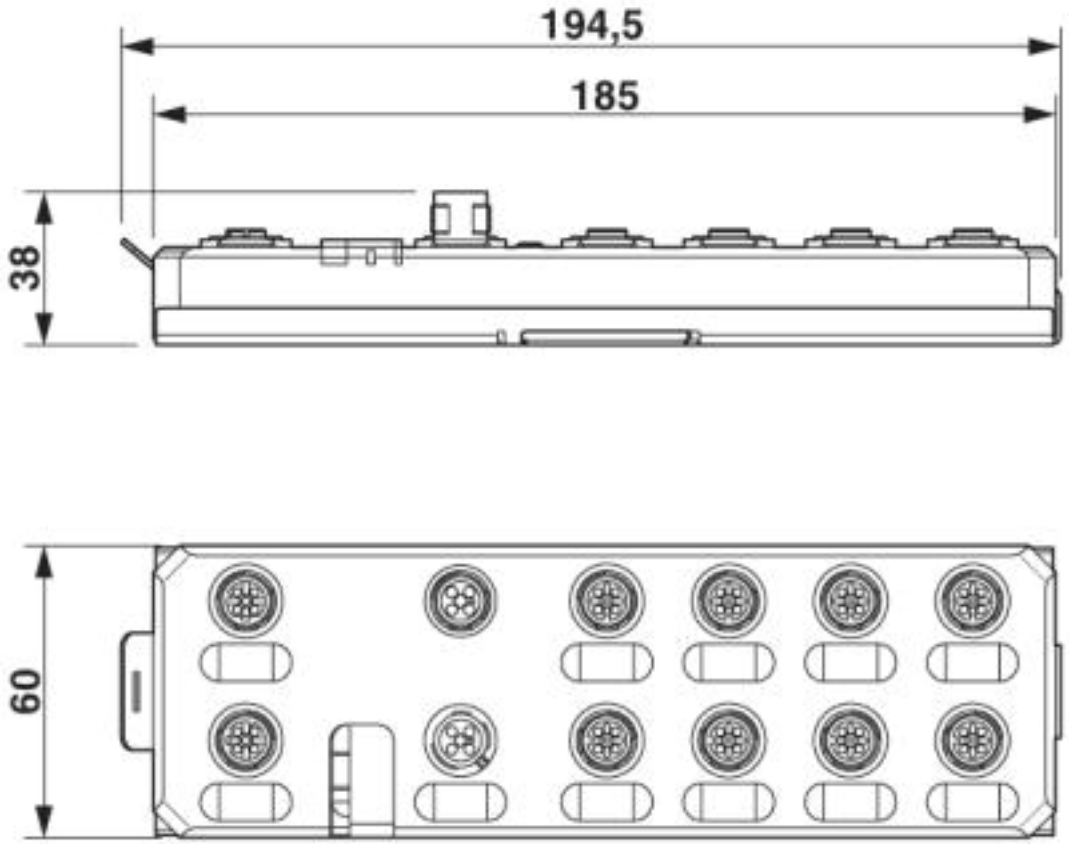


DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

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

DOWNLOADED FROM WWW.SCATTS.CO.UK

DOWNLOADED FROM WWW.SCATTS.CO.UK

Distributed I/O device - AXL E EC IOL8 DI4 M12 6M - 2701531

Classifications

UNSPSC

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

Phoenix Contact 2019 © - all rights reserved
http://www.phoenixcontact.com

DOWNLOADED FROM WWW.SCATTS.CO.UK

SCATTERGOOD & JOHNSON LTD
ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS
Est.1899

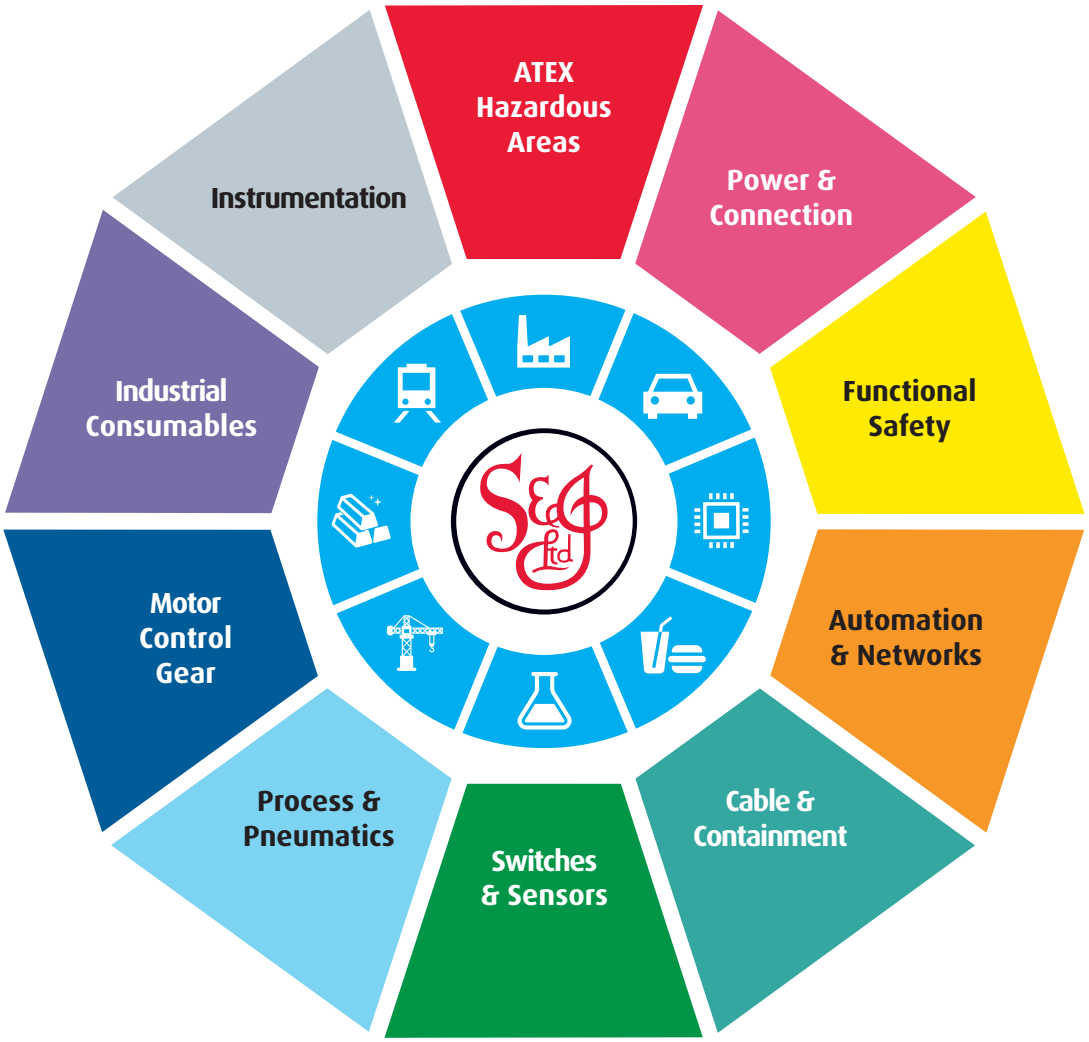
At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk