

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

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, Digital I/O device, PROFIBUS DP, M12 fast connection technology, Digital inputs: 8, 24 V DC, connection method: 4-wire, Digital outputs: 4, 24 V DC, 2 A, connection method: 3-conductor, Plastic housing, degree of protection: IP65/67

Why buy this product

- ✓ 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 STK
GTIN	 4 046356 763547
GTIN	4046356763547
Weight per Piece (excluding packing)	540.000 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
-------	-------

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Technical data

Dimensions

Height	185 mm
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

Housing material	Pocan®
Mounting type	Wall mounting
Net weight	480 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	Module electronics and sensors (U _S)
Connection method	M12 connector (T-coded)
Number of positions	4
Supply voltage	24 V DC

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Technical data

Supply

Nominal supply voltage range	18 V DC ... 31.2 V DC (including all tolerances, including ripple)
Current consumption	max. 12 A
Typical current consumption	110 mA \pm 15 % (at 24 V DC)
Designation	Actuators (U_A)
Connection method	M12 connector (T-coded)
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 \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	8
Type of protection	Overload protection, short-circuit protection of sensor supply
Input filter time	< 1000 μ s
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

Digital outputs

Output name	Digital outputs
Connection method	M12 connector, (A-coded)
Connection technology	3-conductor
Number of outputs	4
Type of protection	Overload protection, short-circuit protection of outputs
Output voltage	24 V
Nominal output voltage	24 V DC (from voltage U_A)
Maximum output current per channel	2 A
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 and sensor supply, digital inputs)/bus connection 500 V AC 50 Hz 1 min.
--------------	---

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Technical data

Electrical isolation

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

Standards and Regulations

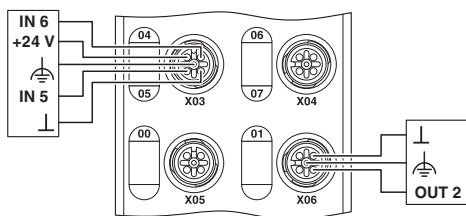
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g, 11 ms period, half-sine shock pulse
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Environmental Product Compliance

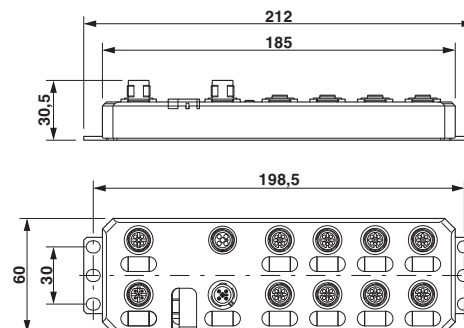
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Connection diagram



Dimensional drawing



Classifications

eCl@ss

eCl@ss 4.0	27240404
eCl@ss 4.1	27240404
eCl@ss 5.0	27242204
eCl@ss 5.1	27242604

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Classifications

eCl@ss

eCl@ss 6.0	27242604
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

UNSPSC

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

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Approvals

cUL Listed



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

FILE E 140324

PROFIBUS

<http://www.profibus.com>

Z01812

cULus Listed



Accessories

Accessories

Circular connector (cable-side)

Connector - SACC-M12FSB-5SC SH - 1513596



Connector, 5-position, shielded, Socket straight M12, B-coded, Spring-cage connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12FSB-5CON-PG9 SH AU - 1507777



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, B-coded, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

Bus system connector - SACC-M12MSB-5CON-PG9 SH AU - 1507764



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug straight M12, B-coded, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

Data cable preassembled

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Bus system cable - SAC-2P-MSB SCO/910/... - 1538050



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12 SPEEDCON, B-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Bus system cable - SAC-2P-FSB SCO/910/... - 1538076



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, free cable end, on Socket straight M12 SPEEDCON, B-coded, cable length: Free input (0.2 ... 40.0 m)

Bus system cable - SAC-2P-MSB-FSB SCO/910/... - 1538092



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12 SPEEDCON, B-coded, on Socket straight M12 SPEEDCON, B-coded, cable length: Free input (0.2 ... 40.0 m)

Bus system cable - SAC-2P-MSB-FRB SCO/910/... - 1433252



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M12 SPEEDCON, B-coded, on Socket angled M12 SPEEDCON, B-coded, cable length: Free input (0.2 ... 40.0 m)

Device marking

Snap-in markers - UCT-EM (7X10) - 0830765



Snap-in markers, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snapped into marker carrier, lettering field size: 7 x 10 mm

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Power cable

Power cable - SAC-4P-FRT/ 1,5-PUR SH SCO - 1424116



Power cable, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket angled M12 SPEEDCON, T-coded, cable length: 1.5 m

Power cable - SAC-4P-MST/ 1,5-PUR SH SCO - 1424120



Power cable, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M12 SPEEDCON, T-coded, on free cable end, cable length: 1.5 m

Power cable - SAC-4P-MST/ 1,0-PUR SCO - 1408812



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on free cable end, cable length: 1 m

Power cable - SAC-4P-MST/ 2,0-PUR SCO - 1408813



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on free cable end, cable length: 2 m

Power cable - SAC-4P-MST/ 5,0-PUR SCO - 1408814



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on free cable end, cable length: 5 m

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Power cable - SAC-4P-MST/10,0-PUR SCO - 1408815



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on free cable end, cable length: 10 m

Power cable - SAC-4P-MRT/ 1,0-PUR SCO - 1408816



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, T-coded, on free cable end, cable length: 1 m

Power cable - SAC-4P-MRT/ 2,0-PUR SCO - 1408819



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, T-coded, on free cable end, cable length: 2 m

Power cable - SAC-4P-MRT/ 5,0-PUR SCO - 1408820



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, T-coded, on free cable end, cable length: 5 m

Power cable - SAC-4P-MRT/10,0-PUR SCO - 1408822



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug angled M12 SPEEDCON, T-coded, on free cable end, cable length: 10 m

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Power cable - SAC-4P- 1,0-PUR/FST SCO - 1408823



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, T-coded, cable length: 1 m

Power cable - SAC-4P- 2,0-PUR/FST SCO - 1408824



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, T-coded, cable length: 2 m

Power cable - SAC-4P- 5,0-PUR/FST SCO - 1408825



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, T-coded, cable length: 5 m

Power cable - SAC-4P-10,0-PUR/FST SCO - 1408826



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12 SPEEDCON, T-coded, cable length: 10 m

Power cable - SAC-4P- 1,0-PUR/FRT SCO - 1408827



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12 SPEEDCON, T-coded, cable length: 1 m

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Power cable - SAC-4P- 2,0-PUR/FRT SCO - 1408828



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12 SPEEDCON, T-coded, cable length: 2 m

Power cable - SAC-4P- 5,0-PUR/FRT SCO - 1408829



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12 SPEEDCON, T-coded, cable length: 5 m

Power cable - SAC-4P-10,0-PUR/FRT SCO - 1408830



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12 SPEEDCON, T-coded, cable length: 10 m

Power cable - SAC-4P-MST/ 0,3-PUR/FST SCO - 1408806



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 0.3 m, for direct current up to 12 A/60 V

Power cable - SAC-4P-MST/ 0,6-PUR/FST SCO - 1408807



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 0.6 m, for direct current up to 12 A/60 V

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Power cable - SAC-4P-MST/ 1,0-PUR/FST SCO - 1408808



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 1 m

Power cable - SAC-4P-MST/ 2,0-PUR/FST SCO - 1408809



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 2 m

Power cable - SAC-4P-MST/ 5,0-PUR/FST SCO - 1408810



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 5 m

Power cable - SAC-4P-MST/10,0-PUR/FST SCO - 1408811



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, cable length: 10 m

Protective cap

Screw plug - PROT-M12 - 1680539



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Sensor/actuator cable

Sensor/actuator cable - SAC-3P-MS SCO/.../... - 1523515



Sensor/actuator cable, 3-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-3P-MR SCO/.../... - 1523531



Sensor/actuator cable, 3-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-3P-MS-FS SCO/.../... - 1523544



Sensor/actuator cable, 3-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-3P-MR-FS SCO/.../... - 1523557



Sensor/actuator cable, 3-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-3P-MR-FR SCO/.../... - 1542020



Sensor/actuator cable, 3-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Sensor/actuator cable - SAC-4P-MS SCO/.../... - 1523560



Sensor/actuator cable, 4-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-4P-MR SCO/.../... - 1523573



Sensor/actuator cable, 4-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-4P-MS-FS SCO/.../... - 1523586



Sensor/actuator cable, 4-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-4P-MR-FS SCO/.../... - 1523599



Sensor/actuator cable, 4-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-4P-MR-FR SCO/.../... - 1537828



Sensor/actuator cable, 4-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Sensor/actuator cable - SAC-5P-MS SCO/.../... - 1523609



Sensor/actuator cable, 5-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-5P-MR SCO/.../... - 1523612



Sensor/actuator cable, 5-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-5P-MS-FS SCO/.../... - 1523625



Sensor/actuator cable, 5-position, Variable cable type, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-5P-MR-FS SCO/.../... - 1523638



Sensor/actuator cable, 5-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

Sensor/actuator cable - SAC-5P-MR-FR SCO/.../... - 1542389



Sensor/actuator cable, 5-position, Variable cable type, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, cable length: Free input (0.2 ... 40.0 m)

T-distributor

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Bus system T-connector - SAC-M12T/2XM12 PB DP - 1507780



Bus system T-plug, PROFIBUS, M12 B-coded male plug to M12 B-coded male plug and M12 B-coded female plug, shielded

Terminal resistor

Termination resistor - SAC-5P-M12MS PB TR - 1507803



Terminating resistor PROFIBUS M12

Y-distributor

Y distributor - SAC-3P-Y/2XM 8FS SCO - 1523984



Y distributor, 4-position, Plug straight M12 SPEEDCON, A-coded, on Socket straight M8, A-coded and Socket straight M8, A-coded

Y distributor - SAC-3P-Y/2XFS PE SCO - 1523971



Y distributor, 4-position, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded and Socket straight M12 SPEEDCON, A-coded

Y distributor - SAC-3P-Y/2XFS B PE SCO - 1523968



Y distributor, 4-position, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, PIN 2+4 bridged and Socket straight M12 SPEEDCON, A-coded, PIN 2+4 bridged, Thread M12 socket not rotatable

Distributed I/O device - AXL E PB DI8 DO4 2A M12 6P - 2701502

Accessories

Y distributor - SAC-5P-Y/2XFS VP SCO - 1546068



Y distributor, 5-position, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded and Socket straight M12 SPEEDCON, A-coded, Parallel distributor, Thread M12 socket not rotatable