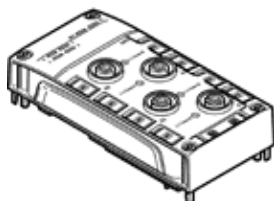


# IO-Link Master CPX-AP-A-4IOL-M12

Part number: 8129114

FESTO



## Data sheet

Feature	Value
Protocol	IO-Link
Dimensions W x L x H	(including interlinking block) 50,1 mm x 107,3 mm x 57,5 mm
Grid dimension	50.1 mm
Mounting type	Tightened
Product weight	90 g
Assembly position	Any
Ambient temperature	-20 ... 50 °C
Note on ambient temperature	Note ambient temperature derating according to IEC 61131-2:2017
Storage temperature	-20 ... 70 °C
Relative air humidity	5 - 95 % non-condensing
Nominal altitude of use	≤ 2000 m ASL (> 79,5 kPa)
Max. installation height	3,500 m
Note on max. installation height	> 2000 m ASL (< 79,5 kPa) Note ambient temperature derating according to IEC 61131-2:2017
Corrosion resistance classification CRC	1 - Low corrosion stress
Vibration resistance	Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6
Note on vibration resistance	SG1 on H-rail SG2 on direct mounting Transport application test at severity level 1 in accordance with FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27
Note on shock resistance	30 g/11 ms to EN 60068-2-27 SG1 on H-rail SG2 on direct mounting Shock test with severity level 1 in accordance with FN 942017-5 and EN 60068-2-27
Safety class	III
Degree of contamination	2
Overvoltage category	II
Max. line length	20 m with IO-Link operation
PWIS conformity	VDMA24364-B2-L
Material fire test	UL94 V-0 (housing)
Materials note	Conforms to RoHS Halogen-free Free of phosphoric acid ester
Material housing	PC
Material cover	PBT-reinforced
Material screws	Steel, nickel-plated
Material o-ring	FPM
Diagnostics via LED	Diagnostics per channel Diagnostics per module Power supply load

Feature	Value
	Status per channel Status per module
Diagnostics per internal communication	IO-Link® event Short circuit/overload in sensor supply Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Maximum address volume for inputs	33 Byte
Maximum address volume for outputs	33 Byte
Module parameters	Configuration of voltage monitoring load supply PL
Channel parameters	Activation diagnostics for IO-Link® device lost Port mode Target deviceID Target vendorID Target cycle time
Internal cycle time	< 1 ms
Configuration support	IODD file
Communication interface, protocol	AP
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Note on nominal operating voltage DC	Prot.Ext.Low-Volt. IEC 60204-1
Nominal operating voltage, DC outputs	24 V
Permissible voltage fluctuations, load	± 25 %
Nominal operating voltage DC for electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25 %
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typ. 40 mA
Intrinsic current consumption at nominal operating voltage load	typ. 4 mA
Power failure buffering	10 ms
Potential separation between the supply voltages electronics/sensors and load/valves	Yes
Polarity protected	Yes
Fuse protection of inputs (short circuit)	Internal electronic fuse protection per module
Max. residual current inputs per module	2 A
Behaviour after end of overload of the outputs	No automatic return
Max. residual current outputs per module	4 A
Electrical isolation of outputs between channel - internal communication	Yes
Max. power supply per channel	2.1 A (50 W lamp load), per channel pair
Electrical connection for IO-Link®, connection type	4x socket
Electrical connection for IO-Link®, connection technology	M12x1, A-coded in accordance with EN 61076-2-101
Electrical connection for IO-Link®, number of pins/wires	5
IO-Link, communication	C/Q green LED
IO-Link, number of ports	4
IO-Link, port type	B
IO-Link, protocol	Master V 1.1
IO-Link, SIO mode support	Yes
IO-Link, communication mode	Configurable via software SIO, COM1 (4.8 kBaud), COM2 (38.4 kBaud), COM3 (230.4 kBaud)
IO-Link, process data width OUT	Can be parameterised 8 - 128 bytes
IO-Link, process data width IN	Can be parameterised 12 - 132 bytes
IO-Link, minimum cycle time	Dependent on minimum supported cycle time of the connected IO-Link® device