

digital input module

CPX-AP-A-16DI-D-M12-5P

Part number: 8129112

FESTO



Data sheet

Feature	Value
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	96 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	30 m inputs
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 Status per channel
Diagnostics per internal communication	Short circuit/overload in sensor supply Communication error

Feature	Value
	Electronics/sensors overvoltage Electronics/sensors undervoltage
Maximum address volume for inputs	2 Byte
Channel parameters	Input debounce time
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 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
Power failure buffering	10 ms
Polarity protected	Yes
Electrical connection, input, function	Digitaleingang
Electrical connection, input, connection type	8x socket
Electrical connection, input, connection technology	M12x1, A-coded in accordance with EN 61076-2-101
Electrical connection, input, number of pins/wires	5
No. of inputs	16
Input characteristics	to IEC 61131-2, type 3
Switching level	Signal 0: ≤ 5 V Signal 1: ≥ 11 V
Input circuit logic	PNP (positive-switching) 2-wire sensors to IEC 61131-2 3-wire sensors to IEC 61131-2
Input debounce time	0,1 ms 3 ms (standard) 10 ms 20 ms
Behaviour after end of overload of the sensor supply	Automatic return
Fuse protection of inputs (short circuit)	Internal electronic fuse per socket
Max. residual current inputs per module	4 A
Electrical isolation of inputs between channels	No
Electrical isolation of inputs between channel - internal communication	Yes