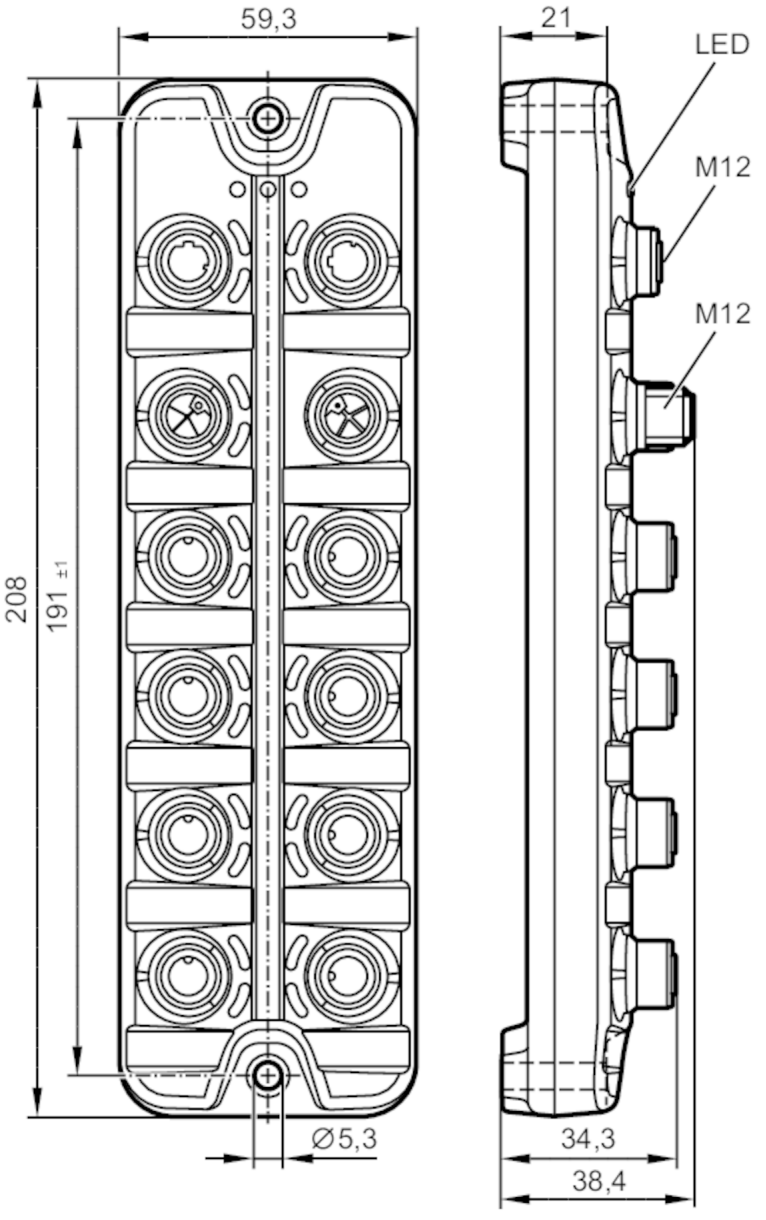
AL4143

Ethernet module with Modbus TCP interface

ETH Module PFL MB 16DI IP69K



Depending on the version some LEDs are inactive

Application		
Application		hygienic systems; I/O modules for field applications
Daisy-chain function		power supply; fieldbus interface
Electrical data		
Operating voltage	[V]	20...30 DC; (US ; to SELV/PELV)
Current consumption	[mA]	200...3900; (US)
Protection class		III
Sensor supply US		
Max. current load total	[A]	3.6

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Inputs / outputs			
Number of inputs and outputs		Number of digital inputs: 16	
Inputs			
Number of digital inputs		16; (type 2 according to IEC 61131-2)	
Switching level high	[V]	11...30	
Switching level low	[V]	0...5	
Digital inputs protected against short circuits		yes	
Software / programming			
Parameter setting options		counter function	
Functions and parameters		function	CTU (Up Counter), CTD (Down Counter), CTUD (Up-Down Counter), CTDIR (Direction Counter)
		number	8 (1 counter for each port)
		count frequency	4500 Hz
		main counter	32 Bit (0…4.294.967.295)
		batch counter	16 Bit (0…65.535)
Interfaces			
Communication interface		Ethernet	
Ethernet - Modbus TCP			
Transmission standard		10Base-T; 100Base-TX	
Transmission rate		10 MBit/s; 100 MBit/s	
Protocol		Modbus TCP	
Factory settings		IP address: 192.168.1.250	
		subnet mask: 255.255.255.0	
		gateway IP address: 0.0.0.0	
		MAC address: see type label	
Operating conditions			
Ambient temperature	[°C]	-25...60	
Storage temperature	[°C]	-25...85	
Max. relative air humidity	[%]	90	
Protection		IP 65; IP 66; IP 67; IP 69K; (operation with stainless steel protective caps: IP 69K)	
Protection rating (NEMA 250)		6P	
Pollution degree		2	
Chemical media		ISO 16750-5	HLP, CC, DB, DC, DD, CA
		NEMA 250 5.13.1	AA
Tests / approvals			
EMC		EN 61000-6-2	
		EN 61000-6-4	
Shock resistance		DIN EN 60068-2-27	
Vibration resistance		DIN EN 60068-2-64 2009-04	
		DIN EN 60068-2-6 2008-10	
Mechanical data			
Weight	[g]	438.1	
Materials		housing: PA grey; socket: stainless steel (316L/1.4404)	
Sealing material		EPDM	

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Accessories	
Items supplied	Protective cap: 1 x M12, stainless steel, E12542

Remarks	
Remarks	For further information please see the operating instructions.
Pack quantity	1 pcs.

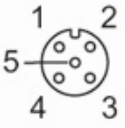
Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: EPDM

IN / OUT XF1, XF2	
1	TX +
2	RX +
3	TX -
4	RX -
5	not used

Electrical connection - Process connection

Connector: M12; coding: A; Sealing: EPDM



Digital Input X1...X8	
1	Sensor supply (US) L +
2	digital input 2
3	Sensor supply (US) L-
4	digital input 1
5	functional earth

Electrical connection - power supply IN

Connector: M12; coding: L

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XD1	
1	+ 24 V DC (US) brown
2	GND (UA) white
3	GND (US) blue
4	+ 24 V DC (UA) black
5	FE grey

Electrical connection - power supply OUT

Connector: M12; coding: L; Sealing: EPDM

XD2	
1	+ 24 V DC (US) brown
2	GND (UA) white
3	GND (US) blue
4	+ 24 V DC (UA) black
5	FE grey