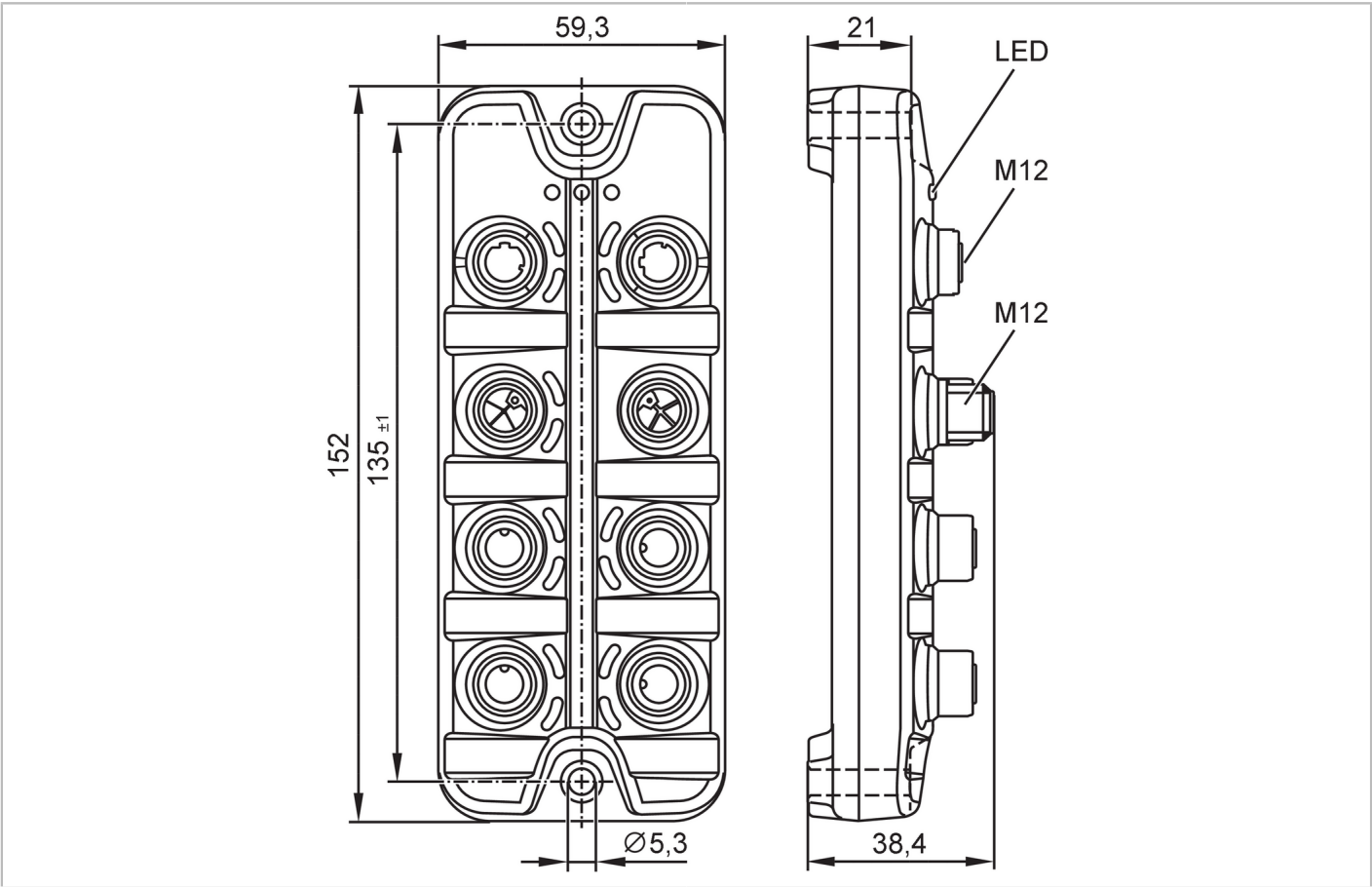


AL1431



IO-Link master with EtherCAT interface

IO-Link Master PFL EC 4P IP69K



Application		
Application		hygienic systems; I/O modules for field applications
Daisy-chain function		voltage supply; fieldbus interface
Electrical data		
Operating voltage	[V]	20...28 DC; (US ; to PELV)
Current consumption	[mA]	300...3900; (US)
Protection class		III
Additional voltage supply	[V]	20...30 DC; (UA)
Actuator supply UA		
Max. current load total	[A]	8
Current rating per port	[A]	2; (adjustable: 0...2; Factory setting: 2)
Sensor supply US		
Max. current load total	[A]	3.6
Current rating per port	[A]	2; (adjustable: 0...2; Factory setting: 0,45)
Inputs / outputs		
Total number of inputs and outputs		12; (configurable)
Number of inputs and outputs		Number of digital inputs: 4; Number of digital outputs: 8



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Inputs		
Number of digital inputs		4; (IO-Link Port Class B: 4 x 1)
Switching level high	[V]	11...30
Switching level low	[V]	0...5
Digital inputs protected against short circuits		yes
Outputs		
Number of digital outputs		8; (IO-Link Port Class B: 4 x 2)
Short-circuit proof		yes
Actuator supply UA		
Max. current load per output	[mA]	2000
Sensor supply US		
Max. current load per output	[mA]	2000
Interfaces		
Communication interface		Ethernet; IO-Link
Ethernet - EtherCAT		
Transmission standard		100Base-TX
Transmission rate		100 MBit/s
Protocol		EtherCAT
Factory settings		MAC address: see type label
Note on interfaces		AoE (ADS over EtherCAT)
		CoE (CANopen over EtherCAT)
		EoE (Ethernet over EtherCAT)
		FoE (File Access over EtherCAT)
IO-Link Master		
Transmission type		COM1 (4,8 kBaud); COM2 (38,4 kBaud); COM3 (230,4 kBaud)
IO-Link revision		1.1
Number of ports class B		4
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	



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Mechanical data	
Weight [g]	322.4
Housing	rectangular
Type of mounting	Backplane mounting
Dimensions [mm]	152 x 59.3 x 38.4
Material	housing: PA grey; Socket: stainless steel (1.4404 / 316L)
Sealing material	EPDM
Accessories	
Items supplied	Protective cap: 1 x M12, stainless steel, E12542
Remarks	
Remarks	Further information is available in the manual.
Pack quantity	1 pcs.
Electrical connection - Ethernet	
Connector: 2 x M12; coding: D; Contacts: 4; sealing: EPDM	
	
IN / OUT XF1, XF2	
1	TX +
2	RX +
3	TX -
4	RX -
5	not used
Electrical connection - IO-Link	
Connector: 4 x M12; coding: A; Contacts: 5; sealing: EPDM	
	
IO-Link Port Class B X1...X4	
1	Sensor supply (US) L +
2	Actuator supply / Digital output (UA) L+
3	Sensor supply (US) L-
4	C/Q IO-Link
5	Actuator supply (UA) L-
Electrical connection - voltage supply IN	
Connector: 1 x M12; coding: L; Contacts: 5	
	
XD1	
1	+ 24 V DC (US) brown
2	GND (UA) white
3	GND (US) blue
4	+ 24 V DC (UA) black
5	FE grey

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IO-Link master with EtherCAT interface

IO-Link Master PFL EC 4P IP69K

Electrical connection - voltage supply OUT

Connector: 1 x M12; coding: L; Contacts: 5; 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