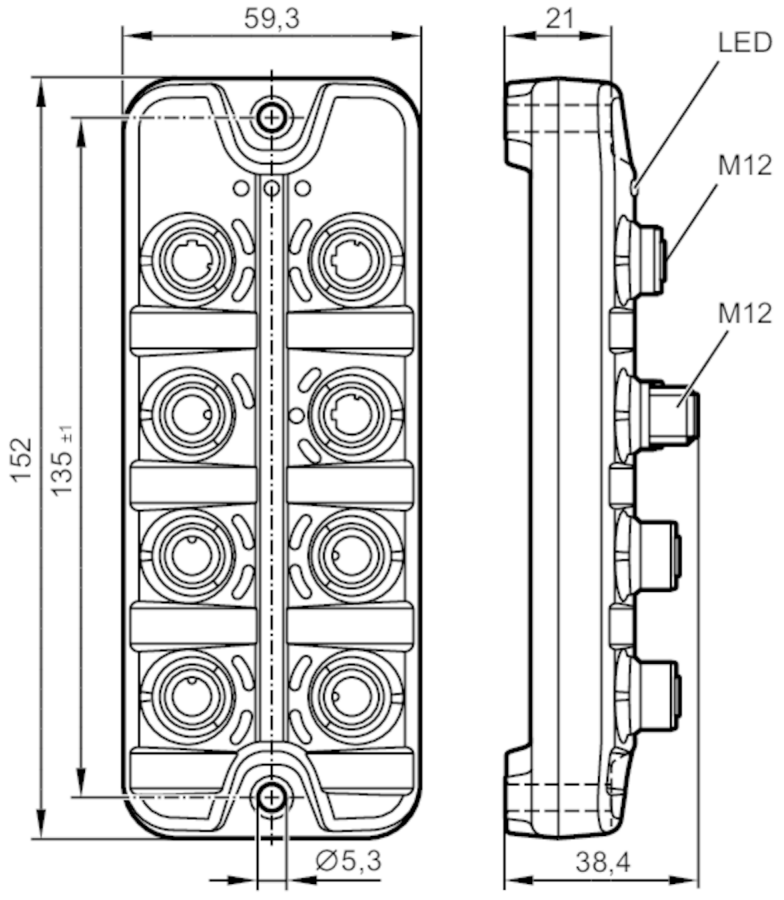
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IO-Link master with EtherCAT interface

IO-Link Master DL EC 4P IP69K



Application		
Application		hygienic systems; I/O modules for field applications
Daisy-chain function		fieldbus interface
Electrical data		
Operating voltage	[V]	20...28 DC; (US ; to SELV/PELV)
Current consumption	[mA]	300...3900; (US)
Protection class		III
Sensor supply US		
Max. current load total	[A]	3.6
Inputs / outputs		
Total number of inputs and outputs		8; (configurable)
Number of inputs and outputs		Number of digital inputs: 8; Number of digital outputs: 4
Inputs		
Number of digital inputs		8; (IO-Link Port Class A: 4 x 2)
Switching level high	[V]	11...28
Switching level low	[V]	0...5

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Digital inputs protected against short circuits		yes	
Outputs			
Number of digital outputs		4; (IO-Link Port Class A: 4 x 1)	
Max. current load per output	[mA]	300	
Short-circuit proof		yes	
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)	
Ethernet - Internet of Things			
Transmission standard		10Base-T; 100Base-TX	
Transmission rate		10 MBit/s; 100 MBit/s	
Protocol		MQTT JSON	
Factory settings		IP address: 169.254.x.x	
		subnet mask: 255.255.0.0	
		gateway IP address: 0.0.0.0	
		MAC address: see type label	
Note on interfaces		Secure protocol: HTTPS	
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 A		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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MTTF	[years]	95
Mechanical data		
Weight	[g]	283
Materials		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		For further information please see the operating instructions.
Pack quantity		1 pcs.

Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: EPDM

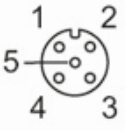


EtherCAT X21, X22	
1	TX +
2	RX +
3	TX -
4	RX -
5	not used

IoT X23	
1	TX +
2	RX +
3	TX -
4	RX -
5	not used

Electrical connection - Process connection

Connector: M12; coding: A; Sealing: EPDM



IO-Link Port Class A X01...X04	
1	Sensor supply (US) L+
2	digital input
3	Sensor supply (US) L-
4	C/Q IO-Link
5	not used

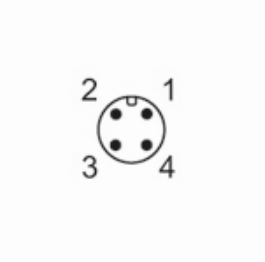
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Electrical connection - power supply

Connector: M12; coding: A



X31	
1	+ 24 V DC (US)
2	not used
3	GND (US)
4	not used