

AL1401



IO-Link master with Profinet interface

IO-Link Master PFL PN 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 SELV/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)



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Number of inputs and outputs		Number of digital inputs: 4; Number of digital outputs: 8	
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 - PROFINET			
Transmission standard		100Base-TX	
Transmission rate		100 MBit/s	
Protocol		PROFINET	
Factory settings		IP address: 0.0.0.0	
		subnet mask: 0.0.0.0	
		gateway IP address: 0.0.0.0	
		MAC address: see type label	
Note on interfaces		IO-Link Integration Edition 2	
		CC-C (Conformance Class C) (IRT-Switch)	
		S2 redundancy	
		Netload Class III	
		CiR (Configuration in Run)	
		SNMP (Simple Network Management Protocol)	
		MRP (Media Redundancy Protocol)	
		Supported network topologies: line	
		ring	
		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	
Degree of soiling		2	

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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	
MTTF [years]		60

Mechanical data

Weight [g]	321.9
Material	housing: PA grey; Socket: stainless steel (1.4404 / 316L)
Sealing material	EPDM

Accessories

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

Remarks	Further information is available in the manual.
Pack quantity	1 pcs.

Electrical connection

Electrical connection - Ethernet

Connector: M12; coding: D; sealing: EPDM

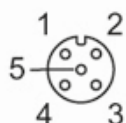


IN / OUT XF1, XF2

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

Electrical connection - Process connection

Connector: M12; coding: A; sealing: EPDM





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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: M12; coding: L



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 - voltage 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