IO-Link

IO-Link master: connection for intelligent sensors

IO-Link master
StandardLine Coolant

- **4 or 8 IO-Link ports with full V1.1 functionality**
- **Profinet or EtherNet/IP**
- **Master and devices configurable via the LR DEVICE software**
- **Industry 4.0 ready via LR AGENT EMBEDDED**
- **Voltage supply via standard M12 sensor cable, A-coded**

IO-Link

PROFINET

EtherNet/IP

IP 65
IP 67

Robust field bus modules with safe connection

The decentralised IO-Link master modules are used as gateways between intelligent IO-Link sensors and the fieldbus. They are the perfect choice, even in the most difficult environments: The materials and production methods are identical to the ifm jumper cables of the tried-and-tested EVC product series. The ecolink technology guarantees reliable, permanently ingress-resistant M12 connections of the connection cables.

Energy limitation for UL class 2 units

Many sensors require an energy-limited supply with UL class 2 approval. The limitation of energy is usually achieved via a corresponding power supply. With the AL series IO-Link master, sensors can be supplied according to UL class 2 without using an energy-limited power supply approved to UL class 2.

Advantages and customer benefits

- **Sensor configuration with LR DEVICE**

  The intuitive software finds all IO-Link masters in the network and creates an overview of the whole plant. Besides, all sensors connected are indicated with the respective parameters. This means that parameter setting of all sensors in the system is possible from one central point.

- **Easy sensor connection**

  The sensors and actuators are connected via standard M12 connection cables without screening. Depending on the device type, up to 4 or 8 IO-Link sensors can be connected and supplied with up to 3.6 A.
  With the EVC693 accessories, additional auxiliary power for the connection of IO-Link actuators can be supplied. The cable can be up to 20 m long.

- **Reliable digital data**

  The sensor data is transferred digitally. Unlike analogue signals, contact resistance and EMC interference cannot corrupt the signals.

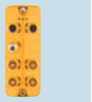
- **Direct connection to the IT**

  The integrated LR AGENT EMBEDDED is capable of transmitting the process values directly to ERP systems, without detour via the PLC.
  This second communication path is available in parallel to the fieldbus via the bus wiring.

Connection technology

Type	Description	Order no.
Ethernet cable (fieldbus)		
	0.5 m	**E12490**
	2 m	**E12090**
	5 m	**E12491**
	10 m	**E12492**
M12 socket 1 mm² (power)		
	2 m	**EVC706**
	5 m	**EVC707**
	10 m	**EVC708**
	20 m	**EVC709**
M12 connection cable 0.34 mm² (sensor)		
	1 m	**EVC042**
	2 m	**EVC043**
	5 m	**EVC044**
	10 m	**EVC493**

Products

Type	Description	Order no.
IO-Link master StandardLine Coolant		
	Profinet 4-port	**AL1100**
	EtherNet/IP 4-port	**AL1120**
	Profinet 8-port	**AL1102**
	EtherNet/IP 8-port	**AL1122**
IO-Link module Coolant		
	Input module 4 x 2DI	**AL2400**
	input module 8 x 2DI	**AL2401**
	Output module 6 x 2DO	**AL2330**

Technical data

IO-Link master StandardLine Coolant		Order no.	
		AL1100 AL1120	**AL1102 AL1122**
Operating voltage	[V DC]	20...30	
Total current consumption	[A]	≤ 3.9	
IO-Link version		1.1	
Number of IO-Link ports		4 A ports	8 A ports
Number of binary inputs (IO-Link in SIO mode)		4 + 4	8 + 8
Number of binary inputs (IO-Link in SIO mode)		4	8
Parameter memory		•	
Current for all ports (device supply)	[A]	≤ 3.6	
Protection		IP 65, IP 67	
Ambient temperature	[°C]	-25...60	
Housing materials		polyamide; socket: nickel-plated brass	

Accessories

Type	Description	Order no.
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	**QA0011**
	Y splitter, for connection of two sensors to a port, M12 connector / 2x M12 socket	**EBC113**
	Protective caps M12 (10 pcs)	**E73004**

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