



IO-Link



IO-Link master: connection for intelligent sensors



IO-Link masters
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



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