Non-stop transmission of digital sensor signals via fieldbus

Ethernet modules for PROFINET and EtherNet/IP

Digital input modules for PROFINET and EtherNet/IP

Direct connection of sensors simplifies network structure

Integrated counter function to easily implement high-frequency counter applications

Robust housing suited for use in environments with wash-down cleaning requirements

Ethernet modules for field applications

The decentralised DI modules serve as a gateway between binary sensors and the fieldbus. This means that binary switching signals in the field can be transmitted directly via the fieldbus. No further transmission systems are needed in the fieldbus topology.

Robust and permanently tight

The ifm modules 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 and EVF product series.
The ecolink technology guarantees reliable, permanently ingress-resistant M12 connections of the connection cables.

Products

Type	Description	Order no.	
		Coolant	**Food**
Ethernet modules 2 x 8 digital inputs			
	StandardLine PROFINET	**AL4002**	**AL4003**
	StandardLine EtherNet/IP	**AL4022**	**AL4023**
	PerformanceLine PROFINET	**AL4102**	**AL4103**
	PerformanceLine EtherNet/IP	**AL4122**	**AL4123**

Advantages and customer benefits

- **Expansion of the IO-Link master family with digital input modules**

  The Ethernet modules are the perfect addition to ifm's IO-Link master family. They feature the same design, port configuration and standardised M12 connections.

- **Integrated counter function for high-frequency counter applications**

  The high-frequency counter function can be activated via the PLC. The pulses transmitted by the sensor are counted within the module and are cyclically transmitted to the PLC as a counter packet. This ensures accurate counting that is not affected by the cycle time of the PLC.

- **Powerful voltage supply**

  The Ethernet modules offer different connection options for the voltage supply: an A-coded M12 connector with 1 x 4 A and an L-coded M12 connector with 2 x 16 A. The latter can be daisy-chained to other modules of the product family.

Connection technology

Type	Description	Order no.	
		Coolant	**Food**
Ethernet cables (fieldbus)		**RJ45 - M12**	
	0.5 m	**EVC924**	**EVF549**
	2 m	**EVC926**	**EVF551**
	5 m	**EVC927**	**EVF552**
	10 m	**EVC928**	**EVF553**
Connection cables, A-coded (power)		**M12 - open**	
	2 m; 1 mm²	**EVC706**	**EVF480**
	5 m; 1 mm²	**EVC707**	**EVF481**
	10 m; 1 mm²	**EVC708**	**EVF482**
Connection cables, L-coded (power)		**M12 - open**	
	2 m; 2,5 mm²	**E12641**	**EVF611**
	5 m; 2,5 mm²	**E12642**	**EVF612**
	10 m; 2,5 mm²	**E12643**	**EVF613**
Jumper cables (sensor)		**M12 - M12**	
	1 m; 0.34 mm²	**EVC012**	**EVF492**
	2 m; 0.34 mm²	**EVC013**	**EVF493**
	5 m; 0.34 mm²	**EVC014**	**EVF494**
	10 m; 0.34 mm²	**EVC108**	**EVF495**

Accessories

Type	Description	Order no.	
		Coolant	**Food**
Protective caps			
	Protective caps stainless steel, 4 pieces	–	**E12542**
	Protective caps PA, 10 pieces	**E73004**	–

Further technical data

Ethernet modules (DI)		AL4002 AL4022	AL4003 AL4023	AL4102 AL4122	AL4103 AL4123
		StandardLine		**PerformanceLine**	
Operating voltage	[V DC]	20...30			
Current consumption	[mA]	200...3900			
Sensor supply (US) Total current rating	[A]	3.6			
Number of digital inputs		2 x 8; (type 2 to IEC 61131-2)			
Ambient temperature	[°C]	-25...60			
Daisy chain voltage supply		no		yes	
Voltage supply connection		M12 A-coded		M12 L-coded	
Protection rating		IP 65, IP 66, IP 67	IP 65, IP 66, IP 67, IP 69K	IP 65, IP 66, IP 67	IP 65, IP 66, IP 67, IP 69K
Housing material		polyamide; socket: nickel-plated brass	polyamide; socket: stainless steel	polyamide; socket: nickel-plated brass	polyamide; socket: stainless steel

ifm – close to you!

For further technical details, please visit: ifm.com