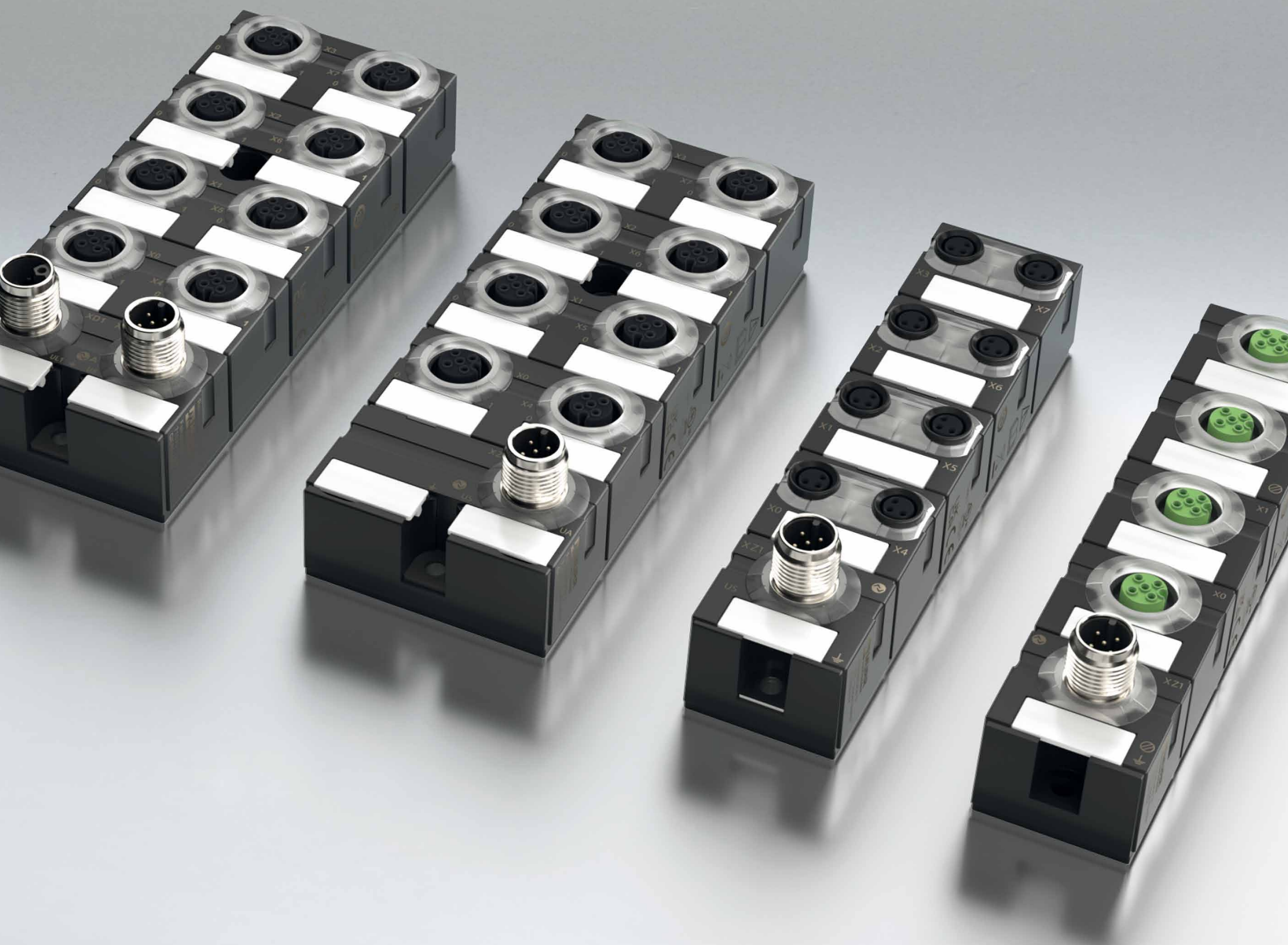




IO-Link I/O Modules

Analog & Digital

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ELEKTRONIK
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IO-LINK I/O MODULES

Experience the future of industrial automation with our multifunctional IO-Link I/O modules. Choose between different digital models: with M8 or M12 connections, PNP or NPN, with up to 16 digital channels, or AI models with four analog channels.

Simply connect multiple sensors and actuators to a single IO-Link master port using a standard sensor cable.



COM3 & IOL



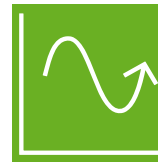
Plug & Play Versions



DIOs with auto-configuration



Digital signals



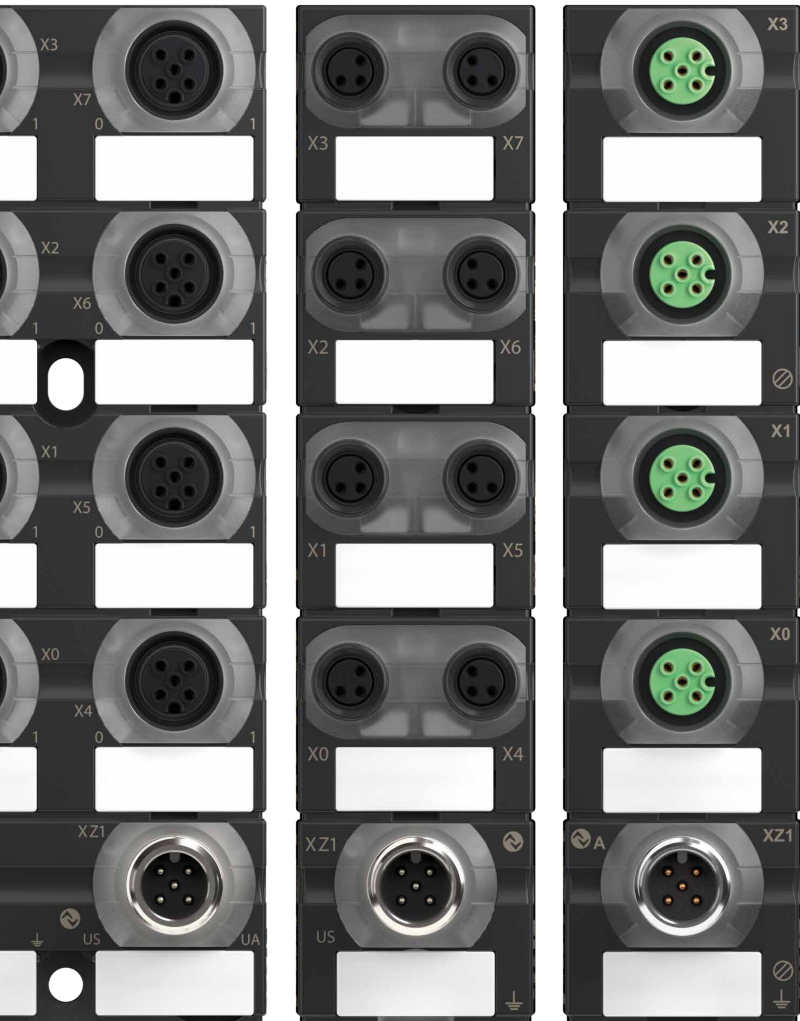
Analog signals



Passive Safety (K3)



Live Data Monitoring



- DIO functionality with auto-configuration**
The modules function simultaneously as input and output modules and configure themselves automatically depending on the control signal. This offers maximum flexibility and eliminates the need for hardware configuration, which simplifies both the installation process and the replacement of modules.
- IO-Link I/O modules for analog signals**
Available for current, voltage and temperature sensors.
- Plug & Play models (B0)**
With preset configurations
- Extended models (E0)**
Extended configuration and diagnostic options for maximum flexibility, module identification via process data.
- Extended channel diagnostics**
More in-depth diagnostic information when connected to Murrelektronik PROFINET master.

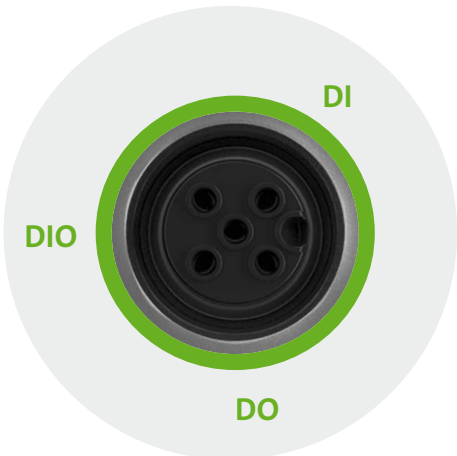
PLUG & PLAY (B0) VS. EXTENDED (E0) MODELS

	B0 – Plug & Play	E0 – Extended
DIO auto-configuration: Channels operate in DI or DO mode based on PLC logic	✓	✓
IO-Link standard configuration, events, BLOB transfer, common profile I&D	✓	✓
I/O process data (2 byte)	✓	✓
Diagnostic process data bits (1 byte): Detected errors are mapped into the process data	✗	✓
Module identification process data bits (1 byte): Helpful for tool change applications	✗	✓
Diagnostic parameters: Status/value of power supply, temperature, short circuit detection, identification, user-defined serial number	✗	✓
Options for parameter setting: channel configuration, inversion inputs, signal extension, input filter time, recovery behavior, fail-safe behavior	✗	✓
Various bitmapping layouts: Adaptable to other master provider formats	✗	✓
Manual channel configuration: If the channel is to be used as a fixed DI or DO	✗	✓

DIO auto-configuration

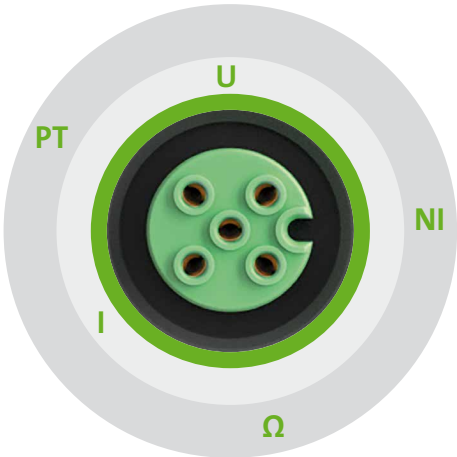
When designing a system, it's often hard to know exactly how many digital inputs (DI) or outputs (DO) you'll need at each location. That uncertainty can make it challenging to choose the right IO-Link I/O modules upfront.

Our IO-Link modules with auto-configurable DIO take the guesswork out of the process. Each digital channel automatically functions as an input or output based on your PLC logic – no manual setup required. Just use the process data: read for DI, write for DO. It's that simple.



Functional configuration for analog models

Functional configuration allows the configuration of analog IO-Link I/O modules in the simplest possible way via process data – even during operation.



IO-Link features

- Developed according to IO-Link V1.1.3
- Common Profile Identification and Diagnosis (I & D) supports manufacturer-independent, standardized identification and diagnostics
- Firmware updates via standardized IO-Link BLOB transfer
- IO-Link event support

DIO ports

- DI and DIO modules available as M8 and M12, PNP and NPN variants
- Up to 16 DIO channels with outputs rated at 0.5 A (class A), 2 A (class B) or even 4 A (EXT PWR M12L)
- True DIO functionality (autoconfiguration) for universal use
- Common GND modules for maximum flexibility (DI over US, DO over UA – independent of the used channel/port)

Power connector

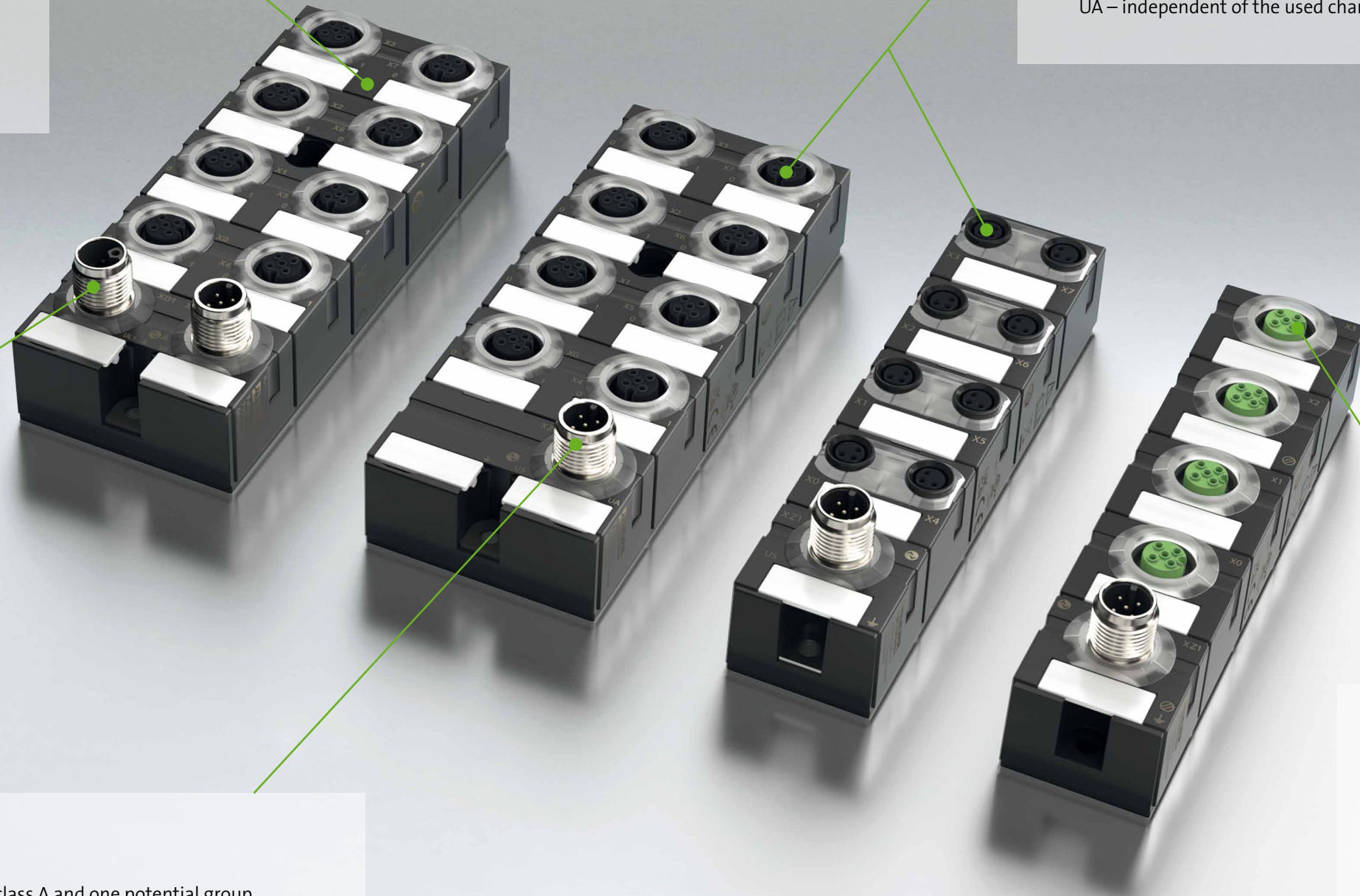
- IO-Link class A I/O modules with separate power supply via M12-L
- Passively safe up to PI d thanks to two galvanically isolated voltage groups

IO-Link connection

- IO-Link I/O modules with class A and one potential group
- IO-Link I/O modules with class B and two galvanically isolated potential groups
- IO-Link I/O module class A/B with common ground potential
- COM3 – 1 ms cycle time
- Status LED

AI ports

- AI Multi modules for voltage and current signals
- RTD modules for measuring temperature (PT, Ni and resistance)



ORDERING DATA

Digital M8 IO-Link I/O modules, class A und class B, PNP
Plug & Play variants B0 and extended variants E0

					
Description		MVP8-P3 DIO8 8xM8-3 IOLA12 B0	MVP8-P3 DIO8 8xM8-3 IOLA12 E0	MVP8-P3 DIO4 DIO4 8xM8-3 IOLB12 B0	MVP8-P3 DIO4 DIO4 8xM8-3 IOLB12 E0
Article number		59507	59607	59504	59604
Protection class		IP68		IP68	
IO-Link device		Class A		Class B	
IO-Link connection		1 x M12, 5-pole A-coded			
IO-Link and functions		COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer			
I/O functions	X0...X7:	DIO8 (US)		–	
	X0...X3:	–		X0...X3: DIO4 (P24/UA)	
	X4...X7:	–		X4...X7: DIO4 (L+/US)	
DIO auto. conf.		Pin 4: DIO – usable/configurable as DIO, DI, DO			
Firmware		preconfigured, fixed parameters (Plug & Play)	EO = extended parameters	preconfigured, fixed parameters (Plug & Play)	EO = extended parameters
Feed		From L+ (US)		From L+ (US) and P24 (UA)	
I/O connections		8x M8, 3-pole, A-coded			
Galvanic isolation		–		Yes	
Temperatur range		-25 °C to 70 °C			
Housing		Plastic			
Dimensions		126 x 30 x 34,5 mm			

Digital M12 IO-Link I/O modules, class A, PNP
Plug & Play variants B0

					
Description		MVP12-P6 DI16 8xM12A IOLA12 B0	MVP12-P6 DIO16 8xM12A IOLA12 B0	MVP12-P6 DIO8 DIO8 8xM12A IOLA12 PL4 B0	MVP12-P6 P6 DIO8 DIO8 8xM12A IOLA12 PL5 B0
Article number		59710	59719	59728	59738
Protection class		IP68			
IO-Link device		Class A			
IO-Link connection		1 x M12, 5-pole A-coded			
IO-Link and functions		COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer			
I/O functions	X0...X3:	DI8 (US)	DIO8 (US)	DIO8 (UL1)	
	X4...X7:	DI8 (US)	DIO8 (US)	DIO8 (UL2)	
DIO auto. conf.		–	Pin 2: DIO – usable/configurable as DIO, DI, DO Pin 4: DIO – usable/configurable as DIO, DI, DO		
Firmware		preconfigured, fixed parameters (Plug & Play)			
Feed		From L+ (US)		From M12L 4-pole (UL1/UL2)	From M12L 5-pole (UL1/UL2)
Galvanic isolation		–		Yes, IOL to UL1 to UL2	
Temperatur range		-25 °C to 70 °C			
Housing		Plastic			
Dimensions		126 x 50 x 34,5 mm			

Digital M12 IO-Link I/O modules, class A, PNP
Extended variants E0

							
Description	MVP12-P6 DI16 8xM12A IOLA12 E0			MVP12-P6 DIO16 8xM12A IOLA12 E0		MVP12-P6 DIO8 DIO8 8xM12A IOLA12 PL4 E0	MVP12-P6 P6 DIO8 DIO8 8xM12A IOLA12 PL5 E0
Article number	59810			59819		59828	59838
Protection class	IP68						
IO-Link device	Class A						
IO-Link connection	1 x M12, 5-pole A-coded						
IO-Link and functions	COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer						
I/O functions	X0...X3:	DI8 (US)		DIO8 (US)		DIO8 (UL1)	
	X4...X7:	DI8 (US)		DIO8 (US)		DIO8 (UL2)	
DIO auto. conf.	–			Pin 2: DIO – usable/configurable as DIO, DI, DO Pin 4: DIO – usable/configurable as DIO, DI, DO			
Firmware	EO = extended parameters						
Feed	From L+ (US)				From M12L 4-pole (UL1/UL2)		From M12L 5-pole (UL1/UL2)
Galvanic isolation	–				Yes, IOL to UL1 to UL2		
Temperatur range	-25 °C to 70 °C						
Housing	Plastic						
Dimensions	126 x 50 x 34,5 mm						

Digital M12 IO-Link I/O modules, class A, PNP

			
Description		MVP12-M DI16 IOL	
Article number		55519	
Protection class		IP67	
IO-Link device		Class A	
IO-Link connection		1 x M12, 5-pole A-coded	
IO-Link and functions		COM2, V1.1.2	
I/O functions	X0...X3:	DI8 (US)	
	X4...X7:	DI8 (US)	
Feed		From L+ (US)	
Galvanic isolation		–	
Temperatur range		-25 °C to 70 °C	
Housing		Metal	
Dimensions		145 x 55 x 32 mm	

ORDERING DATA

Digital M12 IO-Link I/O modules, class A/B and class B, PNP
Plug & Play variants B0 and extended variants E0

				
Description	MVP12-P6 DIO16CGND 8xM12A IOL_12 BO	MVP12-P6 DIO16CGND 8xM12A IOL_12 EO	MVP12-P6 DIO8 DIO8 8xM12A IOLB12 BO	MVP12-P6 DIO8 DIO8 8xM12A IOLB12 EO
Article number	59712	59812	59718	59818
Protection class	IP68			
IO-Link device	Class A/B		Class B	
IO-Link connection	1 x M12, 5-pole A-coded			
IO-Link and functions	COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer			
I/O functions	X0...X3:	DIO8 (DI: US / DO: UA)		DIO8 (P24/UA)
	X4...X7:	DIO8 (DI: US / DO: UA)		DIO8 (L+/US)
DIO auto. conf.	Pin 2: DIO – usable/configurable as DIO, DI, DO Pin 4: DIO – usable/configurable as DIO, DI, DO			
Firmware	preconfigured, fixed parameters (Plug & Play)	EO = extended parameters	preconfigured, fixed parameters (Plug & Play)	EO = extended parameters
Feed	From L+ (US) and P24 (UA)			
Galvanic isolation	–		Yes, US to UA	
Temperatur range	-25 °C to 70 °C			
Housing	Plastic			
Dimensions	126 x 50 x 34,5 mm			

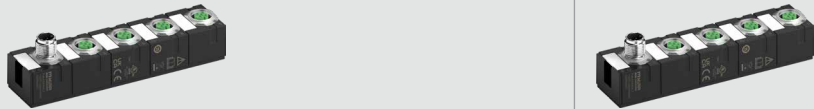
Digital M8 and M12 IO-Link I/O modules, class A, NPN
Plug & Play variants B0

				
Description	MVP8N-P3 DI8 8xM8-3 IOLA12 B0	MVP8N-P3 DIO8 8xM8-3 IOLA12 B0	MVP12N-P6 DI16 8xM12A IOLA12 B0	MVP12N-P6 DIO16A 8xM12 IOLA12 B0
Article number	59003	59007	59210	59219
Protection class	IP68			
IO-Link device	Class A			
IO-Link connection	1 x M12, 5-pole A-coded			
IO-Link and functions	COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer			
I/O functions	DI8 (US)	DIO8 (US)	DI16 (US)	DIO16 (US)
DIO auto. conf.	–	Pin 4: DIO – usable/configurable as DIO, DI, DO	–	Pin 2: DIO – usable/configurable as DIO, DI, DO Pin 4: DIO – usable/configurable as DIO, DI, DO
Firmware	preconfigured, fixed parameters (Plug & Play)			
Feed	From L+ (US)			
I/O connections	8x M8, 3-pole, A-coded		8x M12, 5-pole, A-coded	
Temperatur range	-25 °C to 70 °C			
Housing	Plastic			
Dimensions	126 x 30 x 34,5 mm		126 x 50 x 34,5 mm	

Digital M12 IO-Link I/O modules, class B, PNP

	
Description	MVP12-M DI8 DO8 IOL K3
Article number	55518
Protection class	IP67
IO-Link device	Class B
IO-Link connection	1 x M12, 5-pole A-coded
IO-Link and functions	COM2, V1.1.2
I/O functions	X0...X3: DO8 (P24/UA)
	X4...X7: DI8 (L+/US)
DIO auto. conf.	–
Feed	From L+ (US) and P24 (UA)
Galvanic isolation	Yes, US to UA
Temperatur range	-25 °C to 70 °C
Housing	Metal
Dimensions	145 x 55 x 32 mm

Analog M12 IO-Link I/O modules, class A
Extended variants E0

		
Description	MVP12-P3 AI-MULT4 4xM12A IOLA12 EO	MVP12-P3 AI-RTD4 4xM12A IOLA12 EO
Article number	59840	59841
Protection class	IP68	
IO-Link device	Class A	
IO-Link connection	1 x M12, 5-pole A-coded	
IO-Link and functions	COM3, developed according to IO-Link V.1.1.3, Common Profile Identification & diagnostic (I&D), firmware update via BLOB transfer	
I/O functions	AI4 MULTI (U/I)	AI4 RTD
Firmware	EO = extended parameters	
Feed	From L+ (US)	
I/O connections	4x M12, 3-pole, A-coded	4x M12, 4-pole, A-coded
Temperatur range	-25 °C to 70 °C	
Housing	Plastic	
Dimensions	126 x 30 x 34,5 mm	

NOTES

Handwriting practice area consisting of a grid of dots for tracing and writing practice.



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