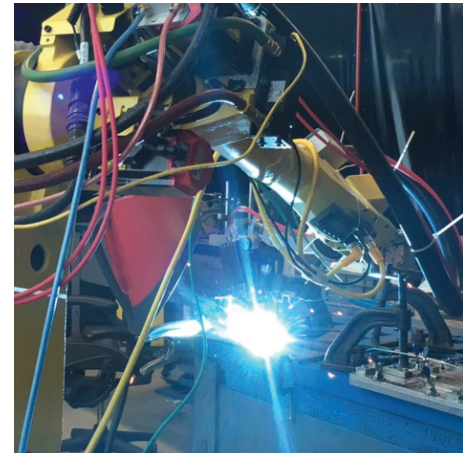


P2M IO-Link Node

Smart Control of Pneumatic Valve Manifolds



IO-Link communication is quickly expanding within the Factory Automation market space as a low cost method of connecting I/O “on the network”. The **P2M IO-Link** node brings this exciting technology to Parker’s key valve manifold ranges. Process data is easily accessible and can be monitored by the PLC to help reduce or even prevent downtime.

Superior Value

This product reduces overall machine cost via a low cost connection to a network while also providing diagnostic information. The **P2M IO-Link** communicates diagnostic information through the PLC, and also has local LED status lights to help diagnose a problem.

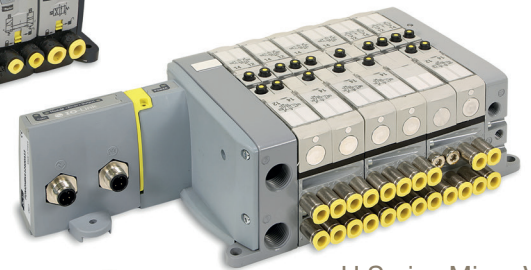
- **IO-Link com status**
- **Module error**
- **Output error**
- **Auxiliary power**



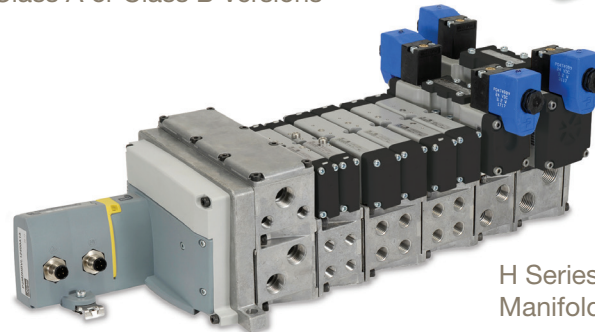
P2M IO-Link Module
Diagnostic LEDs



Moduflex Valve Manifold



H Series Micro Valve Manifold



H Series ISO Universal Valve Manifold



Class A or Class B Versions

Product Features:

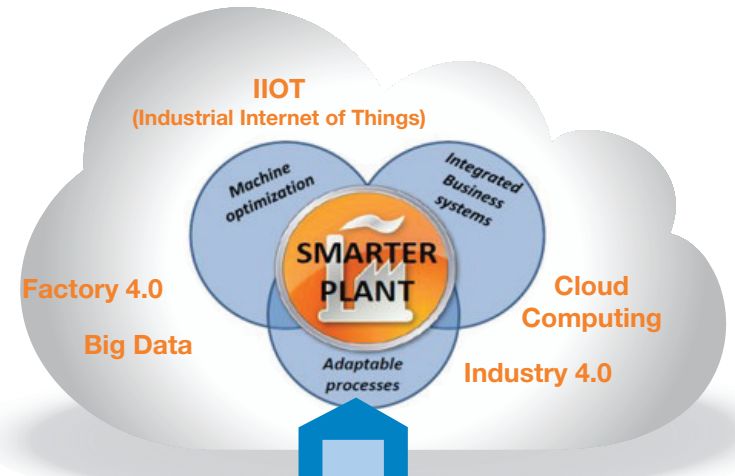
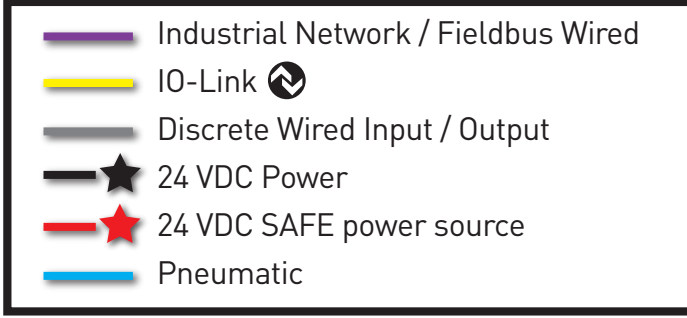
- **Certified according to latest IO-Link standard: V1.1.2**
- **Industry standard pin-out configurations for easy connection.**
- **Connection to valve manifolds with Cv from .18 to 6.0**
- **Class B module offers one M12 connector for both communications and auxiliary power for easy connection to Class B IO-Link Masters.**
- **Class A module offers one M12 for connection to Class A IO-Link Master and one M12 for easy connection to auxiliary power for solenoids.**
- **Easy access to Prognostic & Diagnostic data.**
- **Easy connection to SAFE power source. P2M standard version suitable for PP/PM Safe output and P2M -SPC version suitable for OSSD / test pulsed Safe Output.**

IO-Link

IO-Link masters communicate point to point with all connected IO-Link devices and sends the combined data to the PLC.

IO-Link uses standard 4 or 5 pin M12 cables

Parker's IO-Link module is compatible with a SAFE power source for valve control.



Network to Remote IO-Link Master
 Reduce cabinet size by using a De-centralized "on-machine" IO-Link Master
 * Control all local I/O with IO-Link Masters
 • Discrete I/O
 • "Smart" I/O
 • P2M IO-Link Class B & CPS pictured see www.parker.com/pdn/CPS

Node Expansion Using IO-Link
 Reduce node count by adding IO-Link Master module onto BL67 manifold
 * 20m max length for I/O-Link cables
 * Control all "smart I/O" on 1 node
 * Reduce cost of secondary valve manifold
 • P2H IO-Link Class A pictured see www.parker.com/pdn/P2H_IOL

Non-Network I/O Control Using IO-Link
 Use PLC with integrated IO-Link Master for machines with smaller I/O counts
 * 20m max length for I/O-Link cables
 * Control all local I/O with IO Link
 • Discrete I/O
 • "Smart" I/O
 • P2M IO-Link Class A pictured

IO-Link is another step towards the Smarter Plant by lowering the cost for gathering component level prognostics and diagnostics.

Out of Tolerance Warnings
 * Voltage
 * Temperature

Error Descriptors
 * Solenoid Short Circuit
 * IO-Link Communication Error Cycle Count for each valve

THIS IS EASIER

Faster Install than Discrete Wire
 Standard IP67 M12 Cable

THIS IS SAVINGS

Fewer Network Nodes
 Easy Expandability

THIS IS VALUE

Easy Access Diagnostics
 Prognostics to Prevent Downtime

P2M IO-Link Node

Connection Types and Power:

Connection to Class A Master:

Use a P2M Class A Module with (2) M12 connectors for IO-Link and auxiliary power up to 4A for valve power (max 2A for -SPC version).



Connection to Class B Master:

Use a P2M Class B Module with (1) M12 connector for IO-Link and valve power up to limit of Class B Master output.

Use Class A module with auxiliary power if the Class B Master cannot provide enough power.

M12 Pins	Class B	Class A	Class A		
	5 pins P2M...B	3 pins P2M...A	3 Pins P2M...A13	P2M...A43	5 Pins P2m...A42
1	L+	L+	Aux +	Not used	Not used
2	Aux +	-	-	-	Aux -
3	L-	L-	Aux -	Aux -	Not used
4	C/Q	C/Q	Not used	Aux +	Aux +
5	Aux -	-	-	-	Not used

Class A and B units are compatible with SAFE power source for valve control. Consult website for additional information at www.parker.com/pdn/P2M_IOL

	IO-Link Class	IO-Link	Aux Power	Aux. Power Pinout	Order Code	
					Standard	Safe Power Capable *
	Class A	3 Pins	3 Pins	1 & 3	P2M2HBVL12400A13	P2M2HBVL12400A13-SPC
		3 Pins	3 Pins	4 & 3	P2M2HBVL12400A43	P2M2HBVL12400A43-SPC
		3 Pins	5 Pins	4 & 2	P2M2HBVL12400A42	P2M2HBVL12400A42-SPC
	Class B	5 Pins		2 & 5	P2M2HBVL12400B25	P2M2HBVL12400B25-SPC

* Safe Power Capable (-SPC) version is suitable for connection to an OSSD (test pulsed) SAFE output source. Further details: www.parker.com/pdn/P2M_IOL
See offer of sale: www.parker.com/offerofsale

Valve Series

Check the total maximum solenoid current consumption against the limit of the power supply and P2M module (standard version 4A, SPC version 2A).

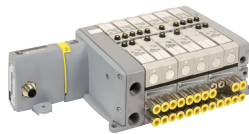


Moduflex Valve

Cv: .18 - 0.80

19 Solenoids

42mA per Sol.

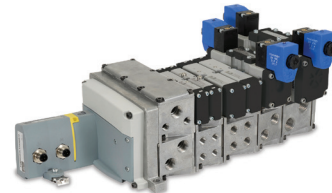


H Micro

Cv: 0.35

24 Solenoids

42mA per Sol.



H ISO 15407-2 & 5599-2

Cv: 0.55 - 6.0

24 Solenoids

42mA (15407) / 133mA (5599) per Sol.

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