VM Series Valve Islands Multipole, Fieldbus, Industrial Ethernet and Individually Wired



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Innovation, products and service



Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilise our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world's most demanding engineering challenges.

> Reliability

We deliver and support our high quality products through our global service network.

> High performance products

Calling on a world-class portfolio of fluid and motion control products including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. We can supply these singly, or combined in powerful customised solutions to improve performance and productivity.

> Partnership & Problem Solving

We get closer to our customers to understand their exact challenges.



VM Series Valve Islands

The IMI Norgren VM Series Valve islands are available in both 10 mm and 15 mm valve body widths and provide unsurpassed flow rates of 430 l/min and 1,000 l/min respectively.

You have the option of Individually wired, Multipole, Fieldbus* and Industrial Ethernet* connectivity with all of the market-leading protocols offered. You can also choose from DIN rail, through hole, panel and sub base mounting options. Valve islands can be configured from 2 to 20 stations (Individually Wired option above 16 stations only) with single or double solenoids and with a high number of possibilities for manual overrides and tube fitting sizes. This results in over 15 million possible configurations.

Selection, however, is simple. We provide an online configuration tool which provides you with a part number and price, and your can download your configuration in your native CAD format. We support 60+ native CAD formats including AutoCAD, SolidWorks, Pro/Engineer, NX and Catia.



VM10

A 10 mm valve body width system valve with an unsurpassed flow rate of 430 l/min. Its design ensures it is highly suitable for many applications across a wide range of industry sectors. The high number of options available enables configuration of the valve islands to meet your exact requirements.

VM15

A 15 mm valve body width system valve, again providing unsurpassed flow for size, this time 1,000 l/min. It has some of the options offered with the VM10 plus some additional multi-pressure options often required with higher flow applications. Configuring valve islands to exactly match requirements is easy using our simple software configuration tool available on-line.

* Fieldbus and Industrial Ethernet options only available on VM10



Introducing VM10 Series Valve Islands with Industrial Ethernet

- > Ultimate flexibility in machine design
- > Standardised platform for networking of devices
- > Real-time data transmitted simultaneously over a common medium
- > Large network coverage and almost unlimited number of users
- > Large amounts of data transferable
- > Equal bus access authorisation
- > Available with PROFINET IRT and EtherNet/IP
- > Available in 8, 10, 12 and 16 stations having up to 32 solenoids

Benefits of PROFINET IRT

- > Isochronous Real Time The highest level of PROFINET available
- > The latest and most advanced Industrial Ethernet Protocol
- For use in fast motion control applications that need precise and deterministic data exchange
- Ideal for applications where motion control is critical to production cycles in the most demanding control environments
- > Over 100 times faster than standard Ethernet Ultra short cycle times, independent of the network load





EtherNet/IP

VM Series

- 1 Engineered polymer provides increased strength and weight reduction
- 2 Individually wired and Multipole options provide connection flexibility
- 3 430 l/min from a 10 mm valve body width 1,000 l/min from a 15 mm valve body width provides **maximum flow to size ratio**
- 32 solenoids possible with Multipole, Fieldbus and Industrial Ethernet enabling a reduction in the number of valve islands required
- Integral push in fittings reduce component count, reduce valve island size and eliminate potential leak paths
- Manual override options provide the ability to choose the variant best suited to the application
- Through hole mounting enables valve islands to be **directly mounted without the need for additional brackets**
- In the VM range has CE, UL and ATEX approval (not including Industrial Ethernet) and is approvals and is also LABS free ensuring the product complies with the required international standards
- 9 Laser etched part numbers ensure easy identification of components
- Single screw and hinge locking mechanism for securing each valve to the next facilitates simple valve addition and exchange (no tie rods)
- 11 Rotary switches for simple setting and identification of Fieldbus node addresses
- Balanced spool design enables the valves to be used with **both pressure and vacuum**
- > Proven spool and seal pack design ensures a high life of 100,000,000 cycles

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Options & Accessories



Optional power connection for each VM10 solenoid for **interlocking in safety critical applications**



Clip in manual overrides for VM10 for **operating solenoid overrides without the need for tools**



ISEMs (Intermediate Supply Exhaust Module) enable **multiple pressures to be controlled in one valve island**



Complete range of multipole and fieldbus cables and connectors enable **single sourcing of the complete system**



Robust bracket for **mounting** directly or via DIN rail



Stick on label and hinged label housing provide **flexibility in valve identification**



Pneumapole sub base facilitates fast and simple servicing and exchange without the need to disconnect pipework. Also provides bulkhead mounting capability.

www.imi-precision.com/technical support/configurators

Valve Island Configurator

Introducing the brand new valve island configurator intuitive, flexible and easy to use...

- > Flexible step by step process that is easy navigate for any user regardless of experience
- > Enables quick specification of the valve island to meet your exact requirements
- > Provides price, availability and order now options
- > Unique part number assigned to your valve island
- > Live visualisation of your configuration and downloadable 2D and 3D cad files
- Download your configuration in your native CAD format. We support 60+ native CAD formats including AutoCAD, SolidWorks, Pro/Engineer, NX and Catia
- > Easy to access and download all technical documentation and available in multiple languages
- > Save your configurations for a later date and view your history anytime
- > Online and telephone support available



Introducing VM Series Valve Islands with PROFINET IRT

INTERNET





Benefits of PROFINET IRT

- > Profinet IRT as standard
- > Isochronous Real Time The highest level of PROFINET available
- > The latest and most advanced Industrial Ethernet Protocol
- > For use in fast motion control applications that need precise and deterministic data exchange
- Ideal for applications where motion control is critical to production cycles in the most demanding control environments
- > Over 100 times faster than standard Ethernet Ultra short cycle times, independent of the network load

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z8416BR en/02/17

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