

Fluid Control

Our product brands:

IMI Buschjost

IMI FAS

IMI Herion

Manifolds for Hydrogen Refuelling Stations
Create your own manifold or use
our solutions



Breakthrough
engineering for
a better world

Contents

Hydrogen Refuelling Station	3
Custom Manifold Solutions for Hydrogen	4
Manifolds from your solenoid	6
Ready solutions for storage and dispensing	8
Contact	10

Breakthrough engineering for a better world

We create breakthrough solutions which accelerate the safety, reliability and performance of everyday processes. Our valves and complete system solutions control liquids and gases, enabling machine builders to improve design functionality and keep safety and sustainability at the forefront of innovation.

For over 80 years, we have helped our customers improve the reliability and efficiency of their machines for diverse end markets. Working in close customer partnership, we continuously push the boundaries of technology, offering a wide selection of components and tailored solutions. Meeting equipment manufacturers' needs includes everything from helping provide traceability for consumers, to reducing waste in critical resources and delivering a premium cup of coffee.

Through flexible, scalable and agile innovation, we help our customers solve their current challenges and create competitive advantage for the future.

Breakthrough engineering you can count on.

Hydrogen Refuelling Stations

IMI offers an extensive range of high quality components and complete system solutions to tackle the biggest challenges currently facing hydrogen infrastructure development.

- Helping to reduce complexity
- Simplified assembly by reduction of parts and modular solutions
- Improving the safety, reliability and performance of fluid and process control sub-systems
- Reduction of fittings and therefore potential leakage points

IMI has extensive expertise in hydrogen and high pressure products and solutions. The IMI Hydrogen Portfolio includes a complete range of fluid and process control components specifically designed with hydrogen in mind. Suitable for storage, compression and dispensing applications, our products are designed to provide leading performance and maximum safety for pressures up to 1.050 bar.

Our market leading products combine to create an extensive range of proven valve and pressure control solutions including:

- Pressure Regulators (Spring, Dome, Proportional Pressure Reducers, Back Pressure Valves)
- Solenoid Operated Valves
- Manual Stop Valves
- Filters - In-line and Tee-Type
- Check Valves
- Safety and Relief Valves

→ FIND OUT MORE:
imiplc.com

●● Offering a complete range of components and manifolds for applications in the whole Hydrogen value chain up to pressures of 1050 bar! ●●





Custom Manifold Solutions for Hydrogen

High complexity in a simple package!

Why Manifolds?

- Fewer leak points
- Simple mounting
- Smaller footprint
- Reduced piping

Customers value our unique expertise in optimising their system layout.

Manifolds make large-scale production more efficient – they enable the trend away from the “prototype setups” towards “established series”.

Find out more
www.imiplc.com



8383/8384
Solenoid Valves

Check Valves

Manual Valves

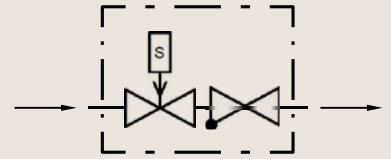
Filters

Manifolds from solenoid valves



High pressure solenoid valve

- Material: 316L, min 12% Ni
- Maximum pressure: 1,050 bar (8 mm) / 550 bar (13 mm)
- Seat diameter: 8 mm / 13 mm (high flow)
- Inlet: MP Cone Thread for 3/8", 9/16", 3/4", 1" tubing
- Ambient temp: -40°C – +55°C (+60°C)
- Hydrogen temp: -50°C – +80°C (+85°C)
- Kv: 1.0 m³/h (DN8) / 2.2 m³/h (DN13)
- Flow (900 bar): 8 mm, 60 g/s, 0.6 bar pressure drop
- Flow (900 bar): 8 mm, 120 g/s, 2.5 bar pressure drop

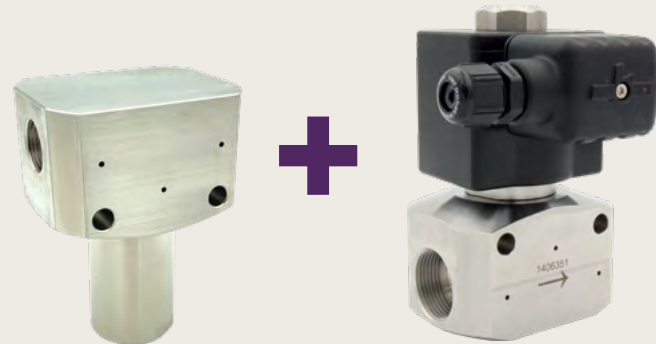


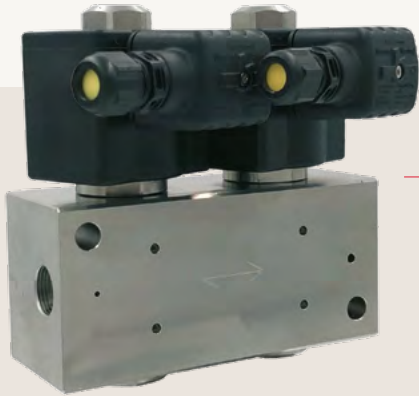
Solenoid Valve With Integrated Check Valve

- Series: Series: 83830, 83834, 83810
- Material: 316L, min. 12% Ni
- Max. Pressure: 1,050 bar (8 mm) / 550 bar (13 mm)
- Seat Diameter: 8 mm / 13 mm (high flow)
- Inlet: MP Cone Thread for 3/8", 9/16", 3/4", 1" tubing
- Ambient temp: -40°C – +55°C (+60°C)
- Hydrogen temp: -50°C – +80°C (+85°C)

Create your own manifold

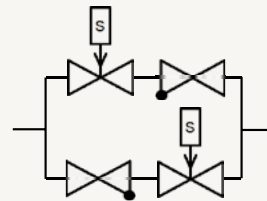
Based on your P&ID we can create a one manifold solutions, that will meet all the functionality, will save a space and assembly line, and even will reduce a potential leak points.



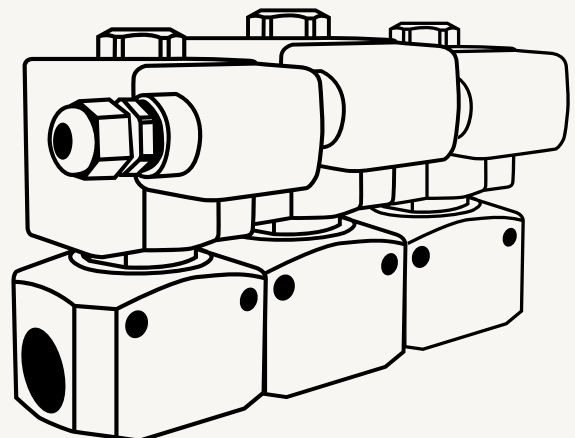
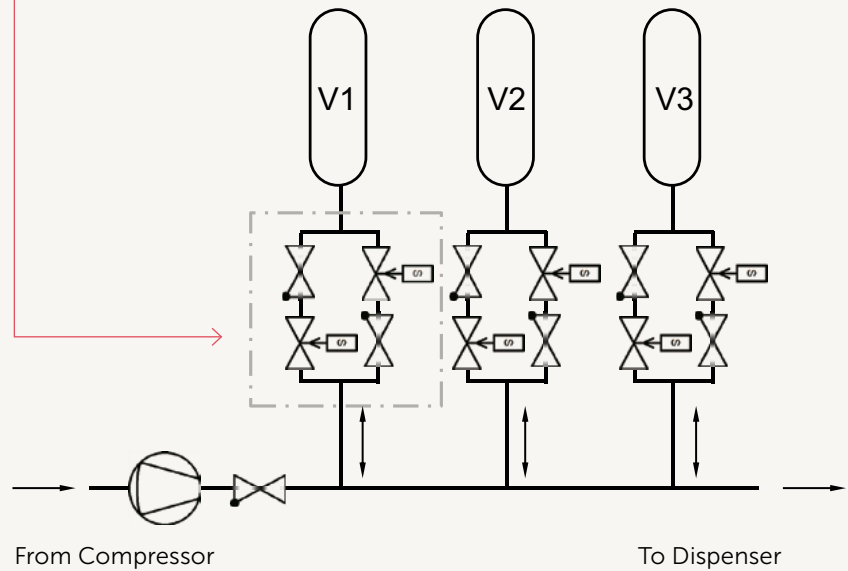


Bi-Directional Flow Manifold

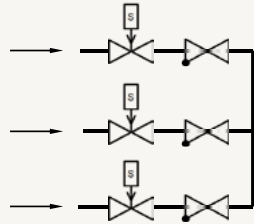
- Type: 8592321.6236.02400
- Components: 2 x Solenoid Valve
2 x Chekvalve
- Material: 316L, min. 12% Ni
- Max. Pressure: 1,050 bar
- Seat Diameter: 8 mm
- Connections *: HP Cone Thread for 9/16
- Ambient temp: -40°C – +55°C (+60°C)
- Hydrogen temp: -50°C – +80°C (+85°C)
- *custom requirements possible)



Manifold Solutions Examples In HRS



Ready solutions for storage and dispensing

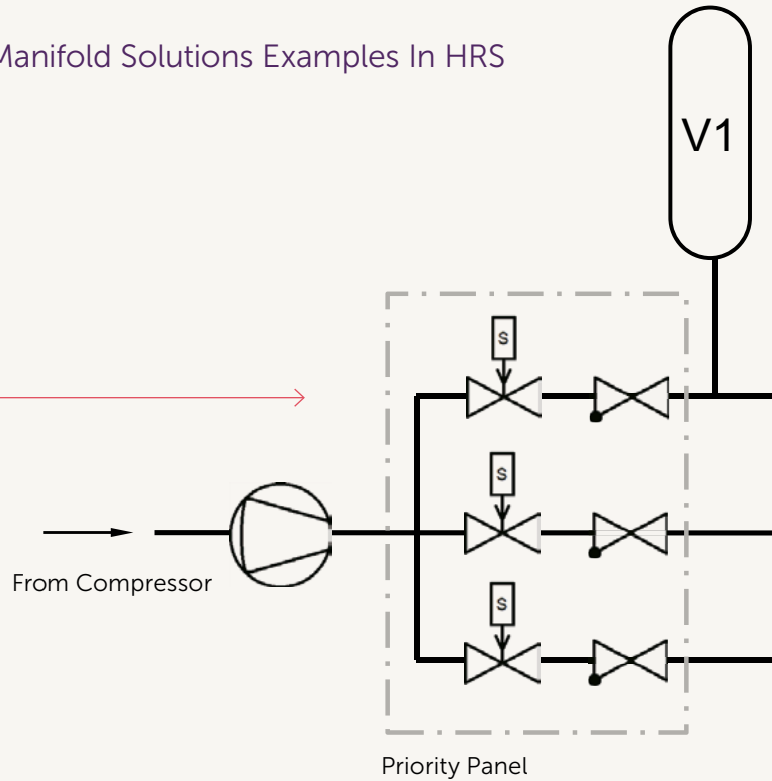


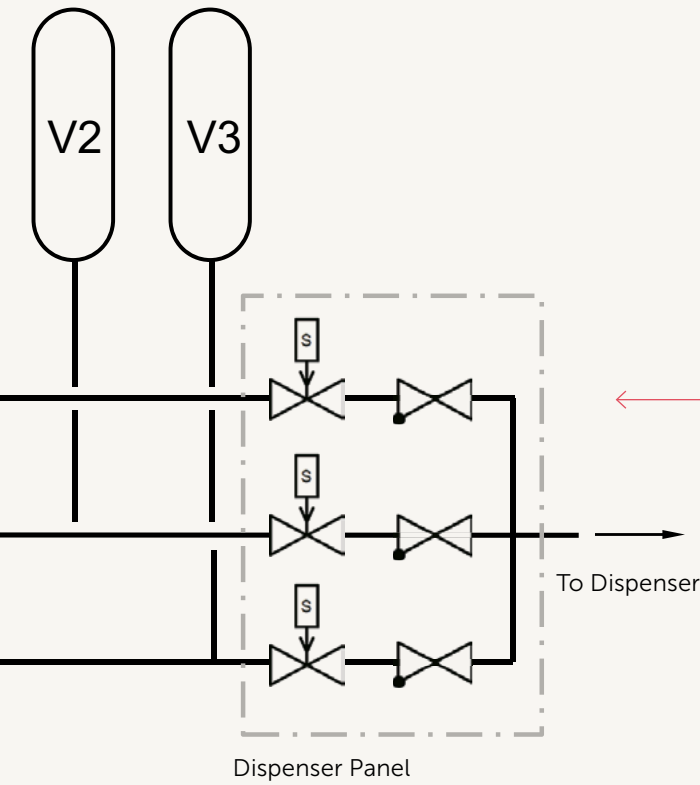
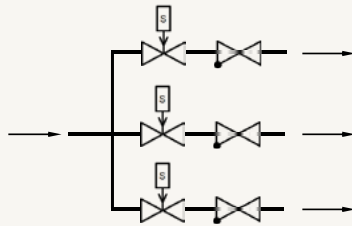
Dispenser Panel Manifold

- Type: 8592297.6236.02400
- Components: 3 x Solenoid Valve
3 x Check Valve
- Material: 316 L, min. 12% Ni
- Max. Pressure: 1,050 bar
- Seat Diameter: 8 mm
- Inlet*: 3 x MP Cone Thread for 9/16 tubing
- Outlet*: 1 x MP Cone Thread for 9/16 tubing
- Ambient temp: -40°C – +55°C (+60°C)
- Hydrogen temp: -50°C – +80°C (+85°C)

*custom requirements possible

Manifold Solutions Examples In HRS





Priority Panel Manifold

- Type: 8592297.6236.02400
- Components: 3 x Solenoid Valve
3 x Check Valve
- Material: 316 L, min. 12% Ni
- Max. Pressure: 1,050 bar
- Seat Diameter: 8 mm
- Inlet *: 1 x MP Cone Thread for 9/16 tubing
- Outlet *: 3 x MP Cone Thread for 9/16 tubing
- Ambient temp: -40°C – +55°C (+60°C)
- Hydrogen temp: -50°C – +80°C (+85°C)

*custom requirements possible

●● Ready to start the next level in your HRS design? ●●

Interested?

If you're intrigued by our advanced hydrogen manifold solutions and how they fit into your requirements, or if you have questions, ideas or just want to explore the possibilities, please contact us. Our team is ready to help and looks forward to getting in touch.

✉ hydrogen@imiplt.com

●● Book a call with the IMI Hydrogen experts today: ●●





Trusted by hydrogen system
OEMs around the world

Our solutions are battle proof and
have seen millions of hours in operation.



120

Green Hydrogen Projects

7.000+

Solutions Shipped

35

Years of Expertise

IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, Switzerland, the UK and the USA.

Supported by distributors worldwide.

For further information, scan this QR code or visit

www.imiplc.com



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Due to our policy of continuous development, IMI reserves the right to change specifications without prior notice.

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