

Bulk high pressure gaseous hydrogen modules

A new innovation—designed, engineered, and proven



H2 2-bay trailer exchange and fill point modules, regulator module and vent stack module



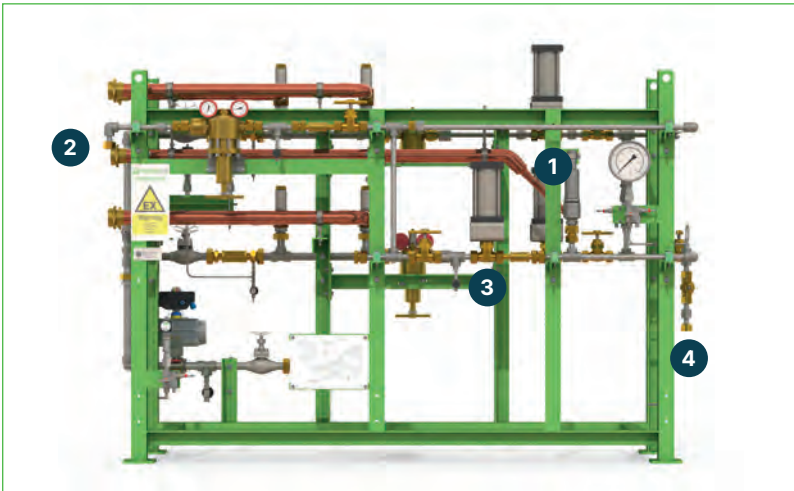
Customer regulator setting (Barg)	PSV setting (Barg)	Outlet ESOV
3 to 10	<14	Standard
3 to 10 (standard supply)	14	Standard
3 to 16	19	Standard
10 to 20	23.5	Standard
10 to 25	30	Standard
10 to 30	40	Standard
10 to 35	45	Standard
Higher pressures available	Max 100	Special

**Typical flow range 0-500 Sm³/hr.
Higher available on request.**

H2 2-bay trailer exchange and fill point modules, H2 regulator module and H2 vent stack module

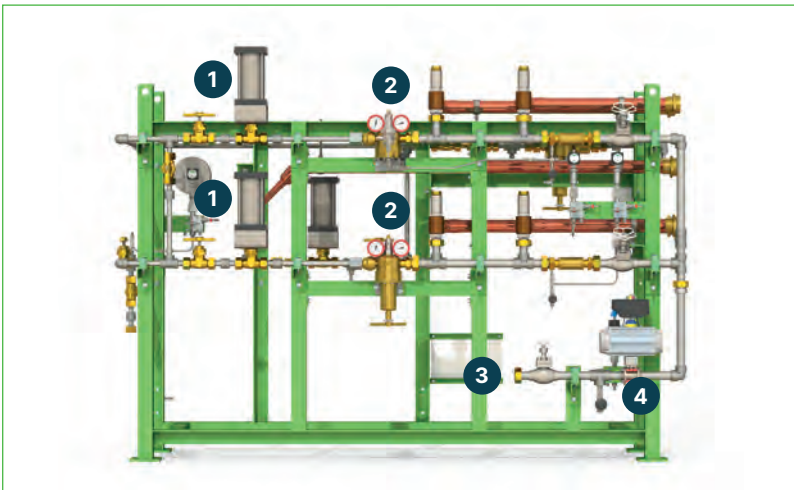


H2 regulator module layout (front)



- | | |
|----------------------|--------------------------|
| 1 Buffer storage PSV | 3 HP ESOV (optional) |
| 2 HP inlet | 4 To/from buffer storage |

H2 regulator module layout (rear)



- | | | |
|-----------------------|----------------------------|--------|
| 1 HP ESOVS (optional) | Height | 1.8 m |
| 2 LP regulators | Width | 2.4 m |
| 3 LP outlet | Depth | 1 m |
| 4 LP ESOV | H2 regulator module weight | 375 kg |

H2 trailer fill module



- | |
|-----------------------------|
| 1 Hose from trailer |
| 2 To regulator module inlet |

Height	1 m
Width	0.8 m
Depth	0.3 m
H2 trailer fill module weight	25 kg

Follow our 3-step plan to discover more about our safety-first modules:

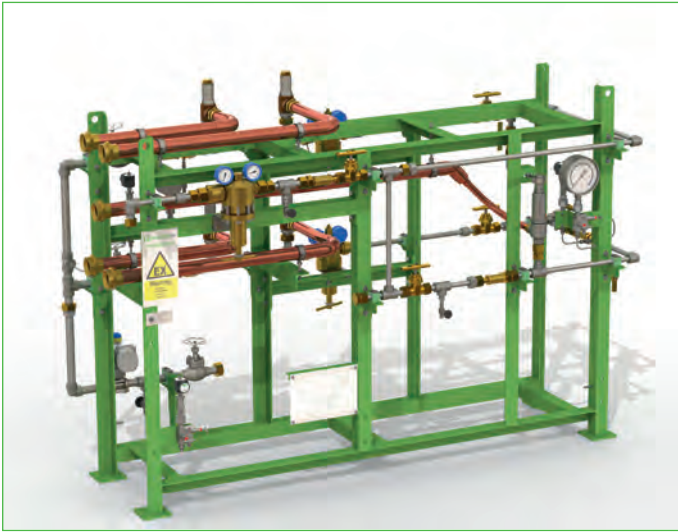


- 1 Schedule a call with our team
- 2 Discuss your requirements
- 3 Receive tailored solutions

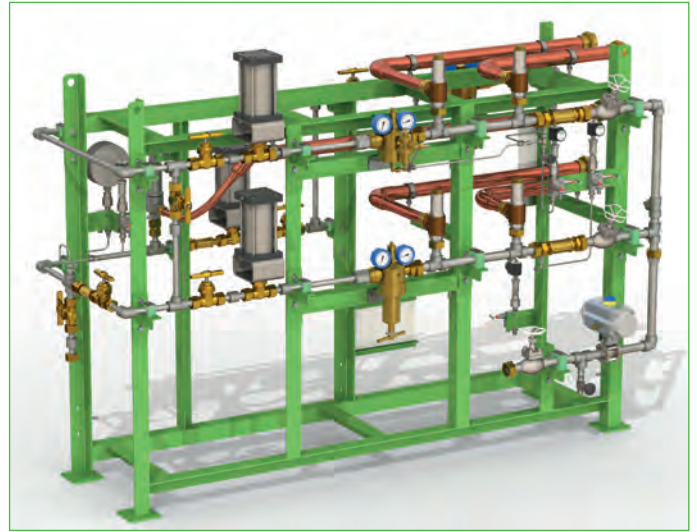
Our safety-first modules are used by major gas companies worldwide, delivering exceptional benefits.

To find out more, visit: herose.co.uk/modules

Standard H2 module



H2 module with HP ESOVs



Product capabilities

- Module supports decant and trailer exchange customer sites, with or without buffer storage
- Module rated for 300 Barg trailer settled pressure @ +15°C designed for +60°C
- Module supports future 350 to 500 Barg trailer delivery pressures if required
- Module provided with stand-alone trailer fill connection module(s) where required
- Module provides flexibility on the number of trailer connection points
- Module provides flexibility on trailer hose inlet connection to suit gas supplier connector
- Module supports different design pressure buffer storage solutions/types (40-200 Barg); higher on request
- Module supports different customer outlet pressure ranges and PSV settings
- Module provided with two stages of pressure control – 1st stage spring, 2nd stage spring or dome loaded regulators
- Module provided with customer supply outlet Emergency Shut Off Valve (ESOV) as standard
- Module provided with pre-piped vent stack and pipework (copper or stainless-steel options) for efficient installation
- Vent stack provides individual vents; vertical venting of hydrogen PSVs for safety & rain/snow ingress protection
- Module supports simple installation and future maintenance activities also considered with flat-face fittings
- Options for prefabricated interconnecting spools between trailer connection(s) and valving
- Option for nitrogen purge available for commissioning and maintenance
- Options for instruments and additional high pressure ESOVs improving operational safety based on site risk analysis
- Options for electrical control panel, with integration of supplier telemetry (panel must be mounted in safe area)
- Standard module flow range 0-500 Sm³/hr – higher available on request
- Standard module outlet pressure range up to 40 Barg – higher available on request
- Typical customer supply pressure 3-10 Barg outlet with 14 Barg PSV – different settings available on request

- **Module reduces install times by more than 50%, real cash savings**
- **Module provides a standardised solution for all your installations**
- **Reduce the number of your suppliers & stock**
- **One part number = one fully assembled and tested module for delivery**
- **Digital portal solution for complete module documentation and certification control**
- **Engineered and available today**

H2 vent stack and H2 regulator modules in situ



All H2 modules, vent stacks & fill systems are designed, engineered, and proven, in-use and available today.

H2 vent stack dimensions

Height	6 m
Width	1.3 m
Depth	0.65 m
H2 vent stack module weight	395 kg

H2 regulator module dimensions

Height	1.8 m
Width	2.4 m
Depth	1 m
H2 regulator module weight	375 kg

Driving innovation in industrial gas applications

If safety and performance are your top priority, you'll need product experts and engineering consultants who provide state-of-the-art valve technology and advanced engineering solutions that drive innovation in global industrial gas applications.



Clean Power



Modules



**Cryogenic
Quarter-Turn Valves**



**Cryogenic & Gas
Delivery Valves**



**Liquid Cylinder
+ Micro-bulk**



Insulation



Industrial Valves



Gauges



Generant Valves

To place your order or to find out more, contact us on: