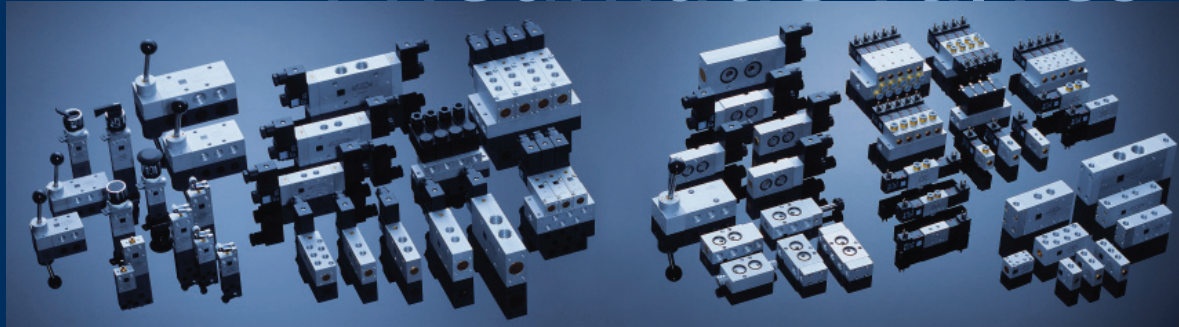


Pneumatic Valves



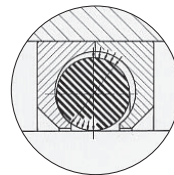
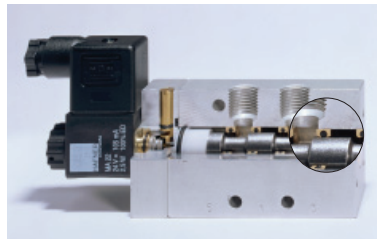
Product Overview

Excellence in Pneumatics

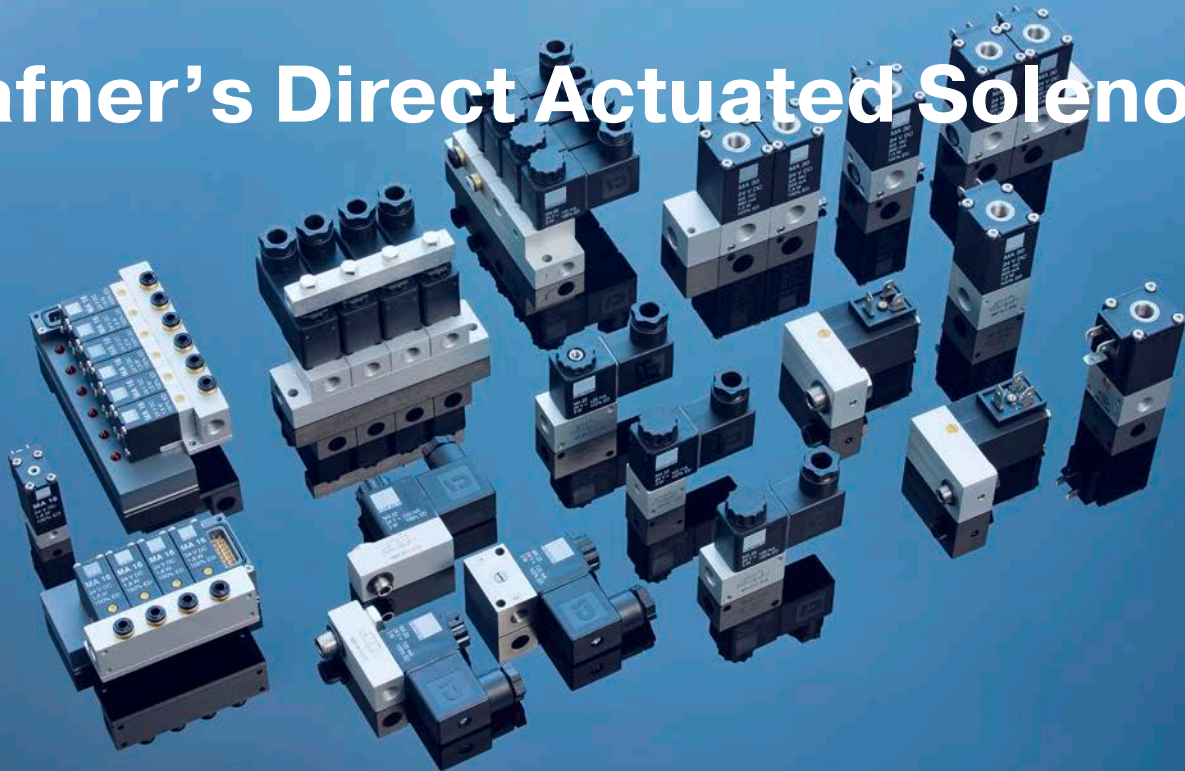
Hafner-Pneumatik is the manufacturer of a complete range of high-quality valves for industrial automation purposes. Our products are not only used in the general automation or the machine-building industries, but also in applications throughout the car, truck, railway and process industries. Our customers enjoy the use of the valves because of their outstanding reliability offered at an extraordinary price/value ratio. Thanks to the sealing system of the „Swimming O-ring“ the valves are regularly tested to up-to 50.000.000 maintenance-free switches.

Hafner-Pneumatik stands for over 40 years of knowledge and venture in the development of pneumatics. Manufacturing excellence, flexibility and customer responsiveness are the dominating elements of our corporate strategy.

Hafner-Pneumatik is your partner: enjoy the advantages!



Hafner's Direct Actuated Solenoids



HAFNER



Three sizes of direct actuated solenoid valves

- 1** 16 mm wide orifice 1,0 mm up to 10 bar ported M5 or with 4 mm push-in fitting.
In-line and on manifold plate as well as on terminals.
- 2** 22 mm wide orifice 1,25 mm up to 10 bar M5 and G 1/8".
In-line, with banjo and on manifold plate 3/2-way as well as 2/2-way, n.c. and n.o..
Body material aluminum as well as stainless steel or for low temperature applications.
Also available:
ATEX- and SIL-rated valves,
GOST-R certification.
- 3** 30 mm wide orifice 3,0 mm up to 7 bar G 1/8" and G 1/4".
In-line, with banjo and as modular manifold system.
3/2-way as well as 2/2-way, n.c. and n.o.



The Hafner G-Series with Modular Manifolds

HAFNER



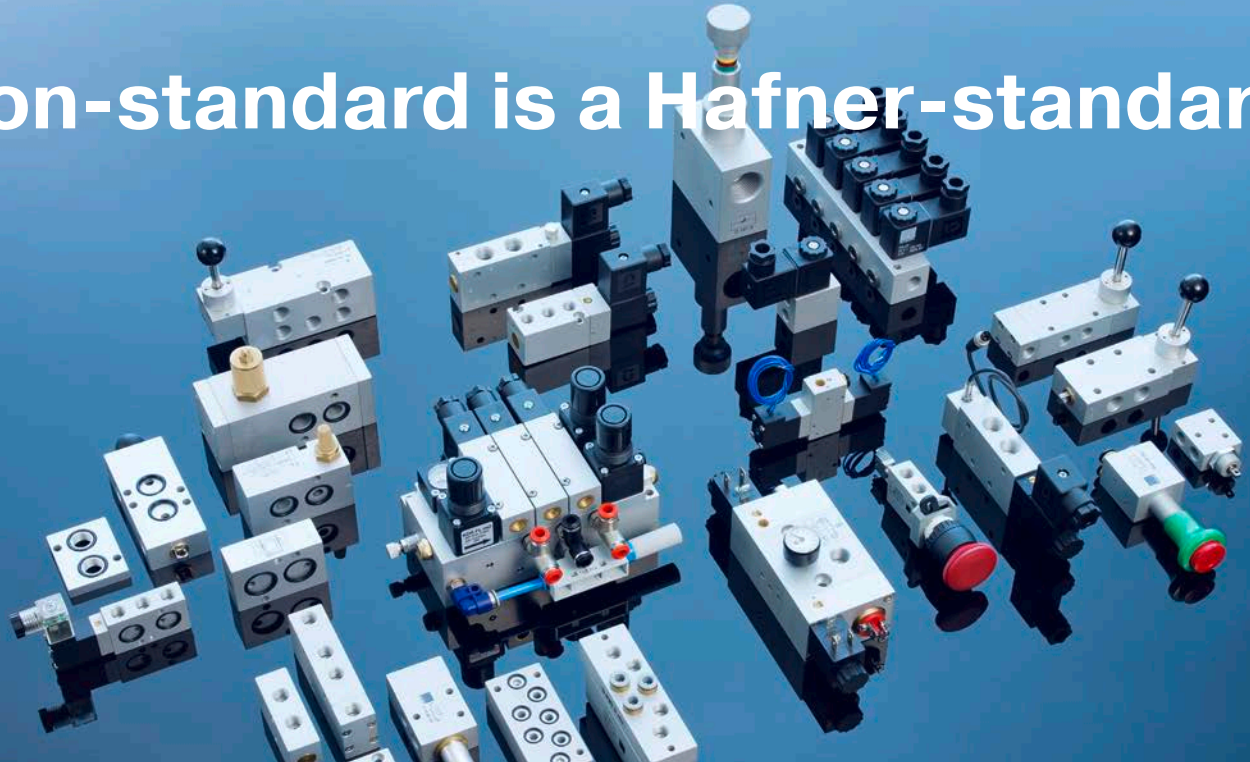
Valves of the G-range can be used in-line as well as on manifold plates. Most of the manifolds are designed as modular systems allowing the distribution-partner as well as the customer to make last-minute changes. Available for pneumatically and solenoid actuated valves size G 1/8", G 1/4", G 3/8" and G 1/2". Selected sizes also available NPT ported as well as for low temperature. Products can be delivered in ATEX-certified versions for explosion hazardous environment, SIL-rated or with GOST-R certification.

Specific advantages of the modular manifolds:

- The number of positions on the manifold is totally flexible.
- Two different pressures can be attached to one manifold by just adding a plug at any position.
- 5-way and 3-way valves can be mixed by just using different modules for the manifold.
- Plates that allow the isolation of an individual valve are available.



Non-standard is a Hafner-standard





Based on an extremely experienced and motivated group of engineers Hafner prides itself to fulfill requests where many other companies tell the customer impossible to do. We realize components as well as systems. The modular design of the Hafner valves helps to manufacture non-standard-items in an economic manor.

Examples:

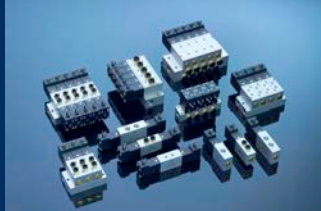
- PTO-valves with different functions in-line and as modular manifold system.
- Bleed-valves for the bus-door-industry.
- Numerous accessories to enhance use and safety of automated ball- and butterfly-valves such as quick-exhaust and purge-valves, lockable block-and-vent or block-and-block valves, pneumatic-manual overrides for armatures with positioners.
- Entire systems for the paper industry.
- Solenoid and manual valves with electric feedback.
- Manual valves with locking function (padlock) enhancing security for maintenance personnel.

Hafner Solenoids

HAFNER
MA 22 125 mA
24 V = 100% ED
3 W

HAFNER

HAFNER



A large variety of 3/2-, 3/3-, 5/2- and 5/3-way solenoid valves, in-line, for manifold- or terminal-use.

Product range consists of 2 groups:

the Slim Line **MD-range**, 16 mm wide ported M5 and G 1/8", also available with easy-to-use push-in fittings and

the **MH-range**, 22 mm plus wide, ported M5, G 1/8", G 1/4", G 3/8", G 1/2" and G 3/4".

Selected models are available in ATEX-certified version for explosion hazardous environment, SIL-rated and/or GOST-R certified.

Selected sizes are available NPT ported, in stainless steel (for details please refer to „Hafner Heavy Metal“) or for low temperature environment (for details please refer to „Hafner on the Rocks“). UL-rated coils are available for the MH-range.



Manually and Pneumatically Actuated Valves





Mechanically and manually actuated valves

Extensive range of 3/2-way, 5/2-way and 5/3-way valves with mechanical or manual actuators, impressive through their compact design and low actuation force.

Lever valves from G 1/8" up to G 3/4" with a flow of 6.000 NI.

Selected models also available NPT ported as well as for low temperature.

Pneumatically actuated valves Logical elements

Different sizes and designs of air pilot actuated valves, designed to best serve our customers needs for pure pneumatic automation.

Many products can be delivered in an ATEX-certified version for explosion hazardous environment as well as with GOST-R-certification.

Program is enriched by a range of base-mounted logical elements.





MA 16
HAFNER
24 V DC
1.8 W
100% ED

Valve-Terminals made by Hafner

HAFNER



Compact design combined with high-flow and true IP 65 due to O-ring-seals on any electrical connection are the most significant competitive advantages of the Hafner terminals.

The range consists of 16 mm wide or 22 mm wide valves that can be put onto terminals with up to 14 stations. Port 2 and 4 is located either in the valves or in the terminal.

BUS-integration with different protocols available on request, please contact manufacturer or distribution partner.

The image features a collection of hydraulic components, including solenoid valves and manual levers, scattered across a surface of jagged, light-colored rocks. The components are primarily white and black. A semi-transparent blue banner with white text is overlaid across the middle of the image. The overall scene is lit with a cool, blue-toned light, creating a rugged and industrial atmosphere.

Hafner on the Rocks

HAFNER

Hafner on the Rocks

- Temperature range: - 50° C to + 50° C.
- G 1/8" (500 series) and G 1/4" (700 series).
- Solenoid-, Lever- and Pneumatic-valves.
- Namur-valves, Flow-regulators and Accessories.
- Valves on Manifold-plates.

For detailed information please request the valve-catalogue edition 2010.

Hafner-Pneumatik Krämer KG Stammheimer Straße 10 D-70806 Kornwestheim Phone +49 - 71 54 - 17 85 890 Fax +49 - 71 54 - 17 85 89 28 www.hafner-pneumatik.de

Hafner Pneumatika Kft. Püski út 3. H-9228 Halászi Phone +36 - 96 - 57 30 12 Fax +36 - 96 - 21 06 15 www.hafner-pneumatika.com

HAFNER

A close-up photograph of two stainless steel valve components. The component on the left is a rectangular block with a threaded port on top and several circular ports on its side. The component on the right is a similar block with two large circular ports on its face. The background is a soft, out-of-focus blue.

Hafner Heavy Metal

Stainless Steel Valves

The logo consists of a solid blue square above the word "HAFNER" in white, uppercase, sans-serif font.

HAFNER



Hafner Stainless Steel Valves

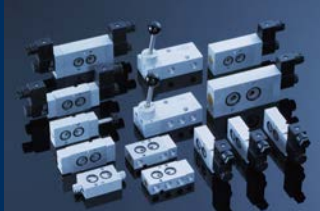
Selected models of the Hafner valve range are offered in stainless steel. The material used is 316 L = 1.4404. The customer has the choice between a full stainless steel product and valves where body and other metal parts are made from stainless steel, the head of the valve is made from polyamide.

- 22 mm wide G1/4"-valves as well as direct actuated 3/2-way valve G1/8"
- 3-way and 5-way in-line valves.
- Hafner Namur Flex: 5-way valve to be converted into 3-way. Flow-regulator plates with Namur interface.
- VES-version = full stainless steel with Viton seals to the outside.
- KES-version = PA-head with NBR seals to the outside.
- Low-temperature products (- 50° C).
- Atex-approved valves for explosion hazardous environment.
- Pneumatically actuated valves on request.

The Hafner NAMUR-Range



HAFNER



Our range of valves for actuator control – interface according to G 1/4” and G 1/2” Namur standard – offer maximum flow at compact design. Valves are available with solenoid, pneumatic or lever actuation. Flow-regulators as intermediate plates and other accessories enrich the range.

- G 1/4” valves with 1.250 NI, G 1/2” with 3.000 NI flow.
- Special coil-design for superior protection in wet environment, standard IP 65, IP 67 on request.
- Patented sealing system for low friction and extended life-time.
- Atex-approved valves for explosion hazardous environment.
- Customer-specific labelling.
- Fail-safe function in products with mechanical spring.
- Products free of brass-parts on request.
- Low temperature products (- 50° C) available.
- Valves with only 1.8 Watt power-consumption on request.

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Certified Excellence: a wide variety of solenoid, pneumatically, manually and mechanically actuated valves are ATEX-certified and can be used in explosion hazardous environment.

Evaluated Performance: for many of our solenoid valves we can provide B10d-values, lots of the Hafner-valves can be used in areas where SIL II is required. The necessary documents can be provided by the manufacturer.

Over 90 % of our product-range is **GOST-R** certified, therefore no limits if our customers want „to go East“.





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