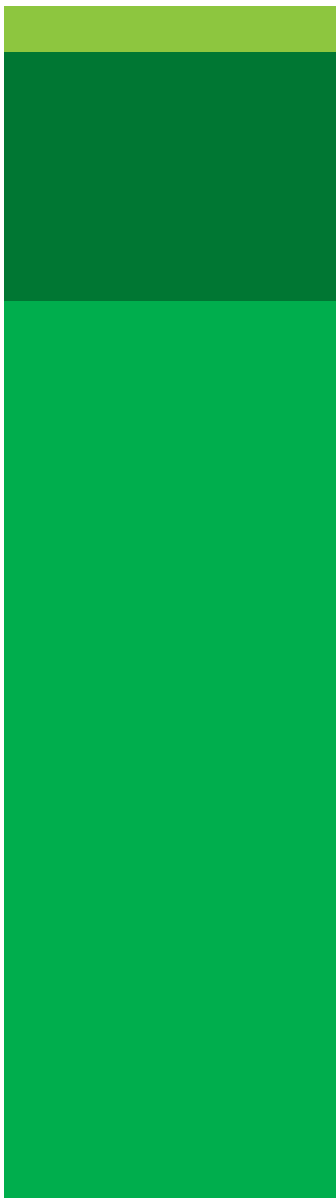




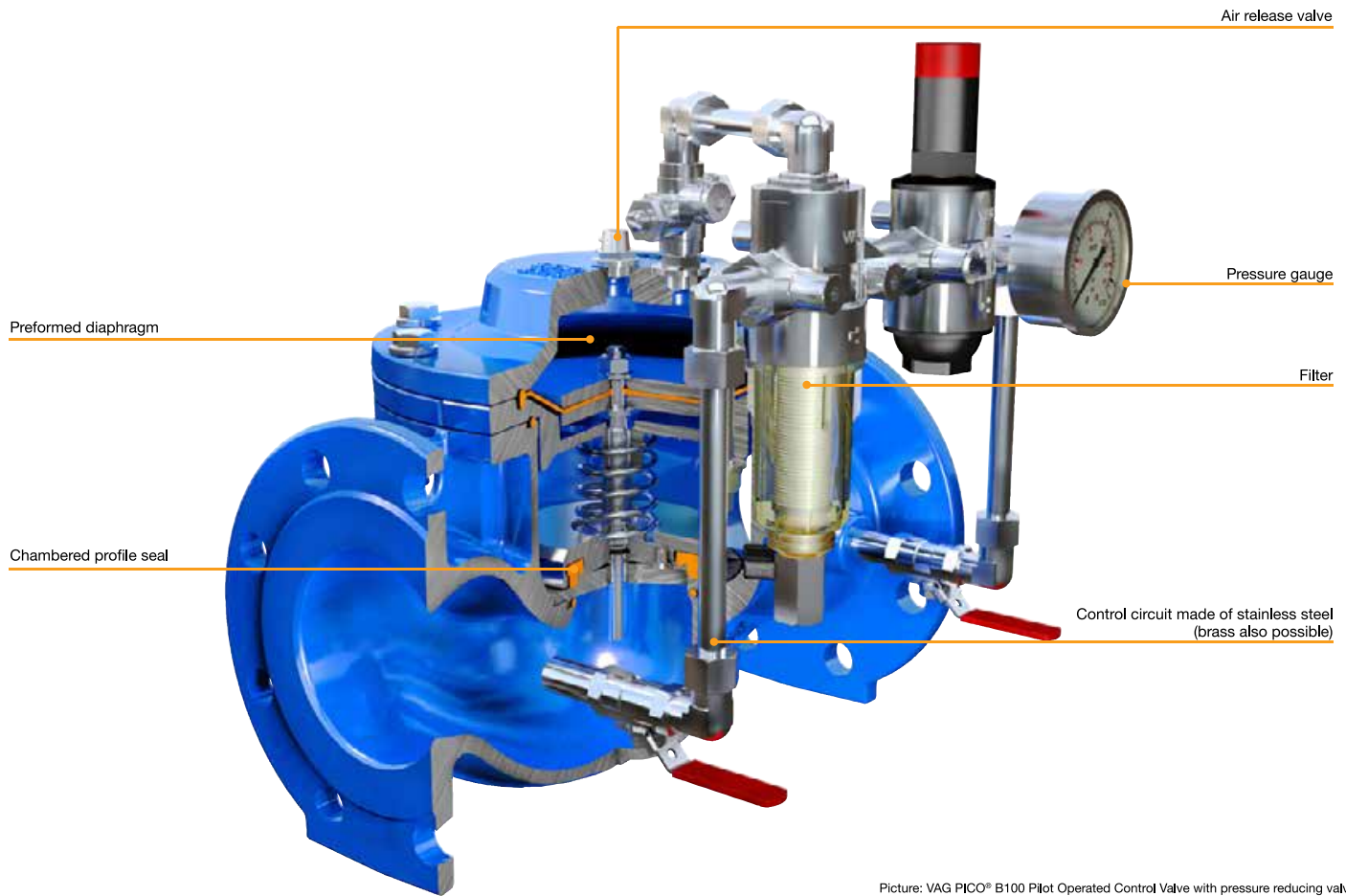
VAG PICO[®] Pilot Operated Control Valves Platform





VAG PICO® Pilot Operated Control Valve – B-Series

Basic version



Picture: VAG PICO® B100 Pilot Operated Control Valve with pressure reducing valve

VAG PICO® Pilot Operated Control Valves are suitable for diverse tasks, such as pressure reduction, sustaining, relief and level control, and are available as series for various requirements in different qualities and versions.

Technical details

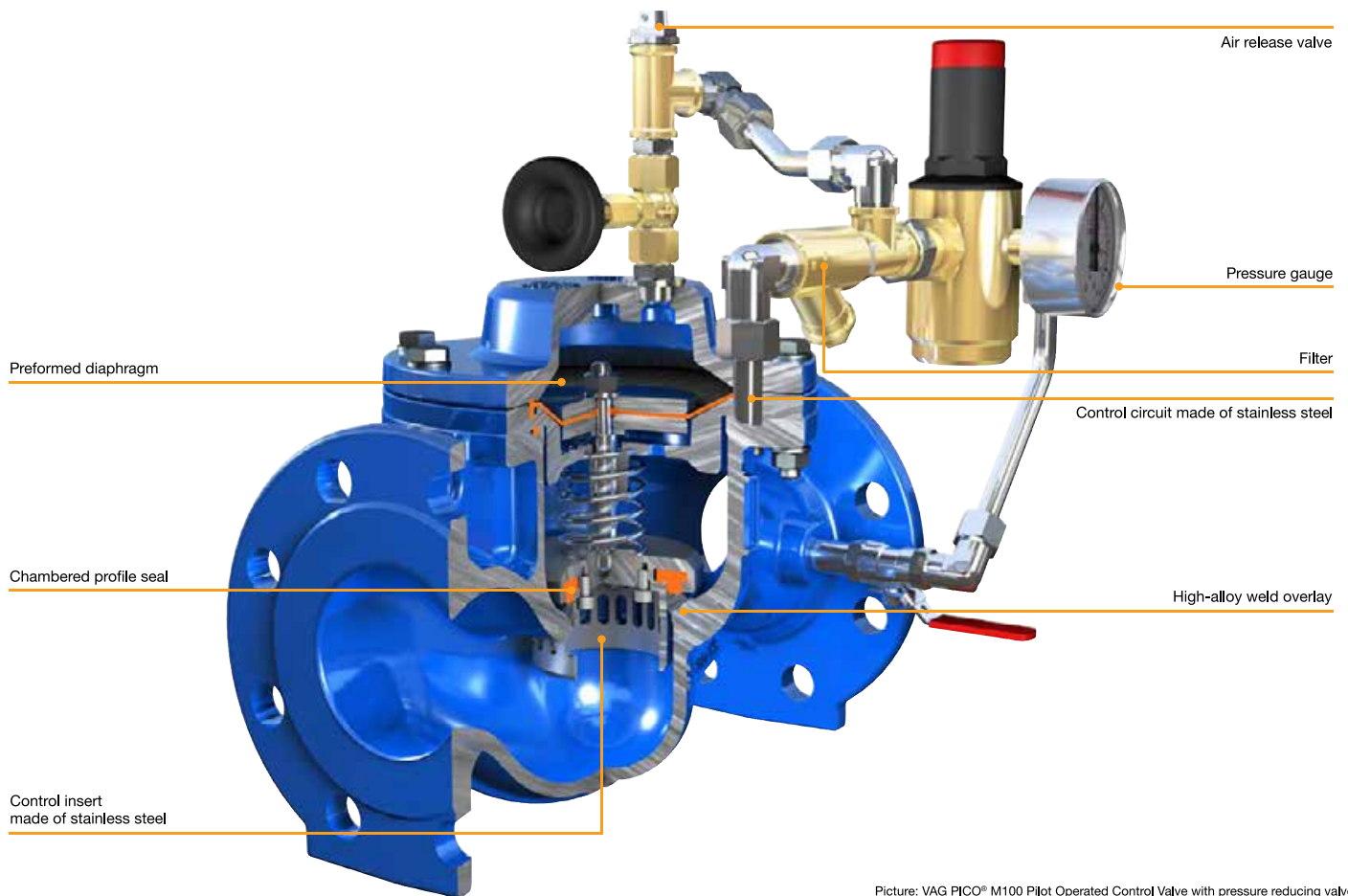
- Nominal pressures PN 10 / PN 16
- Nominal diameters DN 50...DN 300
- Fields of application: Water treatment, water distribution, pressure management, power plants, industry
- Diaphragm valve with own-medium control, suitable for autonomous operation, without external energy supply
- Setup: Control circuit and hydraulically actuated main valve (basic valve for all control valve types, consisting of three main parts: Body, bonnet and valve unit with diaphragm)
- Working according to the balanced pressure principle
- Standard version: Body and cover made of ductile iron EN-GJS-400-15 (GGG-40), pipes, body of filters and pilot valve made of stainless steel 1.4571
- Diaphragm and seals acc. to DVGW W270 bacteriologically safe
- Epoxy coating on the inside and outside
- Special versions:
 - Control circuit, body of filters and pilot valve made of brass

Product features

- Preformed diaphragm with sealing bead prevents installation errors and serves reliable body sealing between the cover and body, so that the control pressure is separated from the pipeline pressure. The already integrated stroke path reduces wear and increases service life as well.
- Diaphragm-actuated guiding rod permits low-friction movement at the lowest hysteresis.
- Chambered profile sealing ring at the valve seat ensures perfect leak-tightness and is pull-out proof – even at high gap flow velocities.
- Integrated air release valve in the cover to prevent pressure variations.
- Inner parts are accessible from above (the pipeline does not need to be taken out of operation) for ease of maintenance.

VAG PICO® Pilot Operated Control Valve – M-Series

Proven quality for diverse requirements



Picture: VAG PICO® M100 Pilot Operated Control Valve with pressure reducing valve

Technical details

- Nominal pressures PN 10 / PN 16
- Nominal diameters DN 50...DN 300
- Fields of application: Water treatment, water distribution, pressure management, power plants, industry
- Diaphragm valve with own-medium control, suitable for autonomous operation, without external energy supply
- Setup: Control circuit and hydraulically actuated main valve (basic valve for all control valve types, consisting of three main parts: Body, bonnet and valve unit with diaphragm)
- Working according to the balanced pressure principle
- Standard version: Body and cover made of ductile iron EN-GJS-400-15 (GGG-40), control inserts made of stainless steel 1.4301, pipes made of stainless steel 1.4571, bodies of filters and pilot valve made of brass
- Diaphragm and seals acc. to DVGW W270 bacteriologically safe
- Epoxy coating on the inside and outside

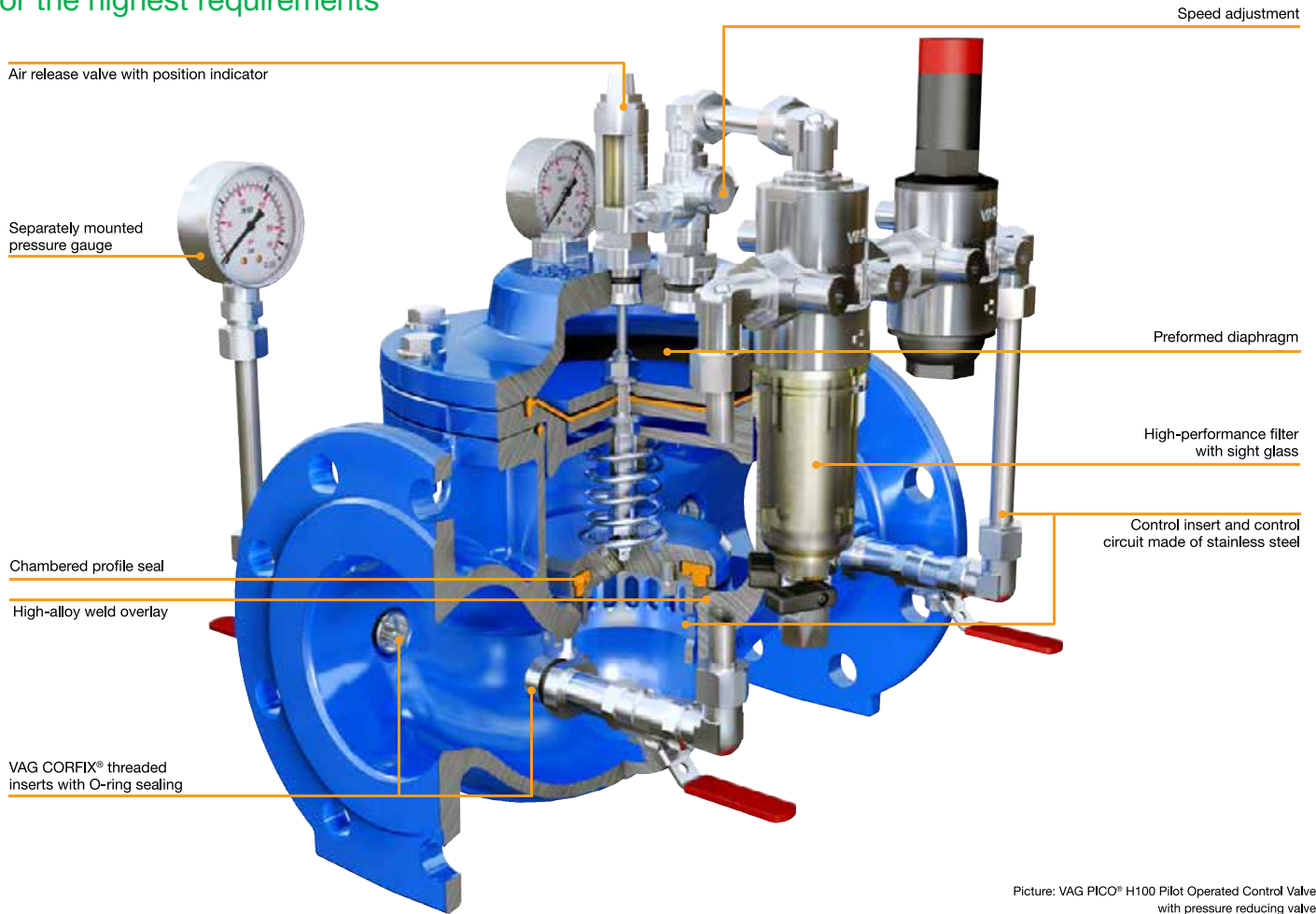
Product features

- Weld overlay on the valve seat increases wear resistance, is infiltration-proof, prevents corrosion formation and thus increases service life.
- Control inserts for better adjustment to operating conditions and cavitation-free operation, leading to more stable network pressures.
- Preformed diaphragm with sealing bead prevents installation errors and serves reliable body sealing between the cover and body, so that the control pressure is separated from the pipeline pressure. The already integrated stroke path reduces wear and increases service life as well.
- Diaphragm-actuated guiding rod permits low-friction movement at the lowest hysteresis.
- Chambered profile sealing ring at the valve seat ensures perfect leak-tightness and is pull-out proof – even at high gap flow velocities.
- Integrated air release valve in the cover to prevent pressure variations.
- Maintenance-friendly fine-pored filter in the control circuit prevents the control valve from being blocked. Flushing is possible during operation and in the installed condition as well.
- Inner parts are accessible from above (the pipeline does not need to be taken out of operation) for ease of maintenance.



VAG PICO® Pilot Operated Control Valve – H-Series

For the highest requirements



Picture: VAG PICO® H100 Pilot Operated Control Valve with pressure reducing valve

Technical details

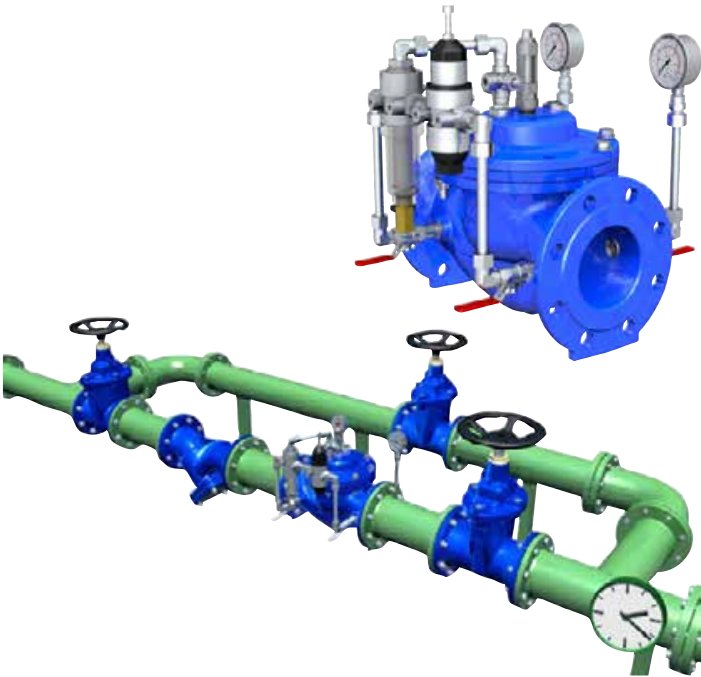
- Nominal pressures PN 10 / PN 16
- Nominal diameters DN 50...DN 300
- Fields of application: Water treatment, water distribution, pressure management, power plants, industry
- Diaphragm valve with own-medium control, suitable for autonomous operation, without external energy supply
- Setup: Control circuit and hydraulically actuated main valve (basic valve for all control valve types, consisting of three main parts: Body, bonnet and valve unit with diaphragm)
- Working according to the balanced pressure principle
- Standard version: Body and cover made of ductile iron EN-GJS-400-15 (GGG-40), control inserts made of stainless steel 1.4301, pipes and screw joints made of stainless steel 1.4571, bodies of filters and pilot valve made of stainless steel 1.4404
- Diaphragm and seals acc. to DVGW W270 bacteriologically safe
- Network-optimised adjustment of the opening and closing speed
- Pressure gauge for up- and downstream pressure
- Inner and outer epoxy coating according to GSK guidelines
- Special versions:
 - DN ≥ 350 on request
 - PN 25 on request

Product features

- Weld overlay on the valve seat increases wear resistance, is infiltration-proof, prevents corrosion formation and thus increases service life.
- Control inserts for better adjustment to operating conditions and cavitation-free operation, leading to more stable network pressures.
- Preformed diaphragm with sealing bead prevents installation errors and serves reliable body sealing between the cover and body, so that the control pressure is separated from the pipeline pressure. The already integrated stroke path reduces wear and increases service life as well.
- Diaphragm-actuated guiding rod permits low-friction movement at the lowest hysteresis.
- Chambered profile sealing ring at the valve seat ensures perfect leak-tightness and is pull-out proof – even at high gap flow velocities.
- Integrated air release valve in the cover to prevent pressure variations.
- Maintenance-friendly fine-pored filter in the control circuit prevents the control valve from being blocked. Flushing is possible during operation and in the installed condition as well.
- Inner parts are accessible from above (the pipeline does not need to be taken out of operation) for ease of maintenance.
- Patented press-fitted VAG CORFIX® inserts prevent uncoated casting points in the area of the connections, preventing corrosion formation and incrustation in the control circuit – for a long service life.
- Sight glass and stop cock to visually check the degree of contamination in the control circuit.
- Air release valve with position indicator, makes the position of the diaphragm clear and legible at all times.
- Compact control block for separate setting of opening and closing speeds for adjustment of the response times to the operating situation.

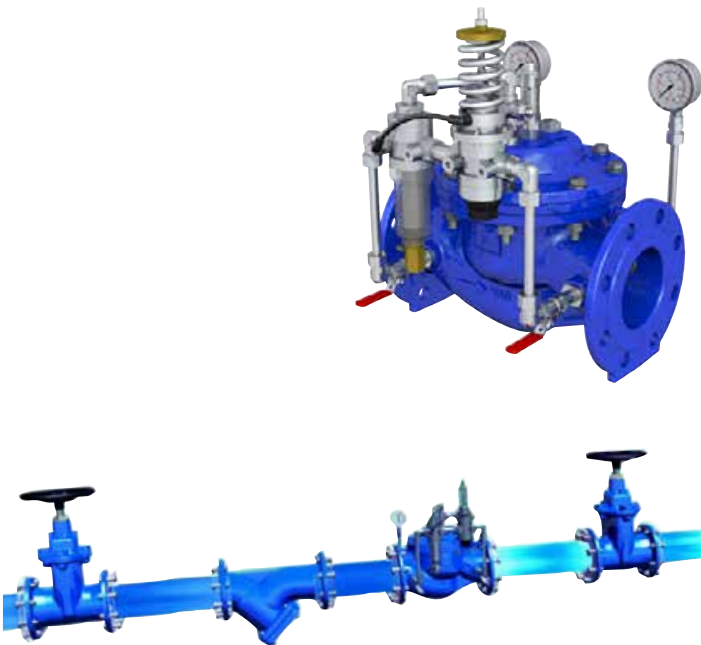


Available valve variants



Pressure-reducing valve

- For reducing a higher inlet pressure to a consistently lower outlet pressure irrespective of the flow rate or fluctuations of the inlet pressure.
- Further versions with:
 - Two-level pressure-reducing valve for day-night operation,
 - Pressure sustaining valve,
 - Bypass function,
 - Additional non-return valve.



Pressure sustaining / overflow valve

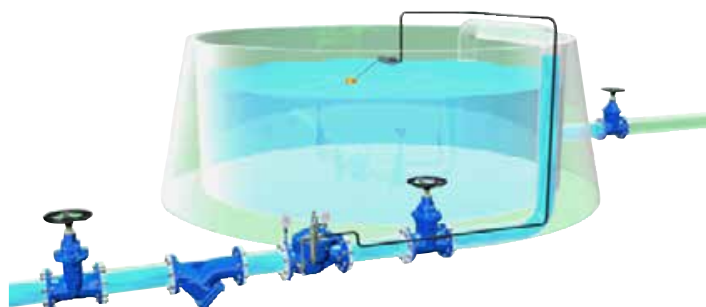
- Only available for the H-series.
- The inlet pressure is kept at a constant level: Releases the flow rate when the set upstream pressure is exceeded or closes when the upstream pressure falls below the set value.
- Further versions with:
 - Additional non-return valve.

Available valve variants



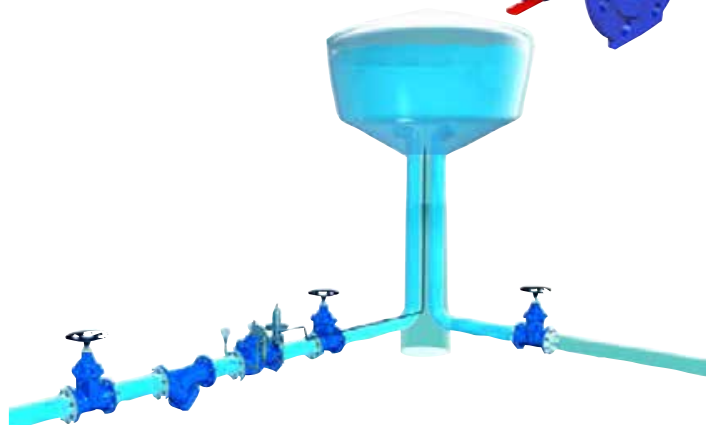
Float valve

- Only available for the H-series.
- As open / close valve, closing and opening function controlled by a float. Can be chosen with one or two float pilots for checking fill levels in tanks, as well as filling them.
- Further versions with:
 - Second float valve for min. / max. control,
 - Pressure sustaining valve.



Level control valve

- Only available for the H-series.
- As open / close valve, closing and opening function by level pilot. To check fill levels in tanks, as well as filling them.
- Further versions with:
 - Pressure sustaining valve.



Further versions for all variants:

- Available with:
 - Solenoid valve (normally open or closed),
 - Solenoid valve for flushing the filter,
 - Solenoid valve for automatic closing of the valve in the event of a power outage,
 - Additional ball valve between the control circuit and bonnet to close the main valve for maintenance of the control circuit.

Reference projects

Schnaittach project, Germany

Replacement of an old VAG PICO® Diaphragm Valve by a VAG PICO® H100 Pilot Operated Control Valve of the new generation in a drinking water supply pipeline



Chamber installation of a VAG PICO® H100 Pilot Operated Control Valve as pressure reducing valve



The VAG PICO® H100 Pilot Operated Control Valve regulates the inlet pressure from 10 bar to a constant 4 bar on the downstream pressure side

Flow rate Qmax: 96 m³/h
Flow rate Qmin: 1000 m³/d



View of the pipeline system with installed VAG PICO® H100 Pilot Operated Control Valve and a VAG BETA® 200 Gate Valve installed upstream



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info@vag-group.com

For detailed information about nominal diameters, nominal pressures and types the technical documentation KAT-A is relevant. Pictures are non-binding