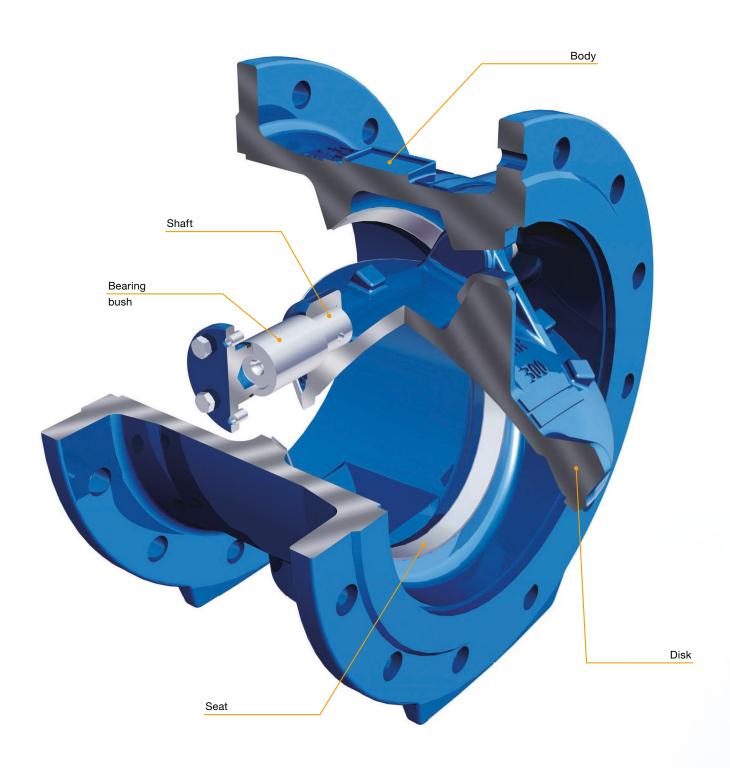


VAG Non-Return Valves Keeping the return in check



VAG SKR Slanted Seat Tilting disk Check Valve





- Disk swings and opens easily even at low flow velocities.
 This results in low headloss and pumping capacity (saving energy).
- Minimum space required for installation due to short faceto-face length and no external assembly components.
- No external shaft bushes due to the slanted seat design, no lever and weight required for assisted closing.
 Therefore no frictional sealing required and no hazardous external moving parts.
- Maintenance-free metallic sealing by way of a microfinished high-alloy weld overlay which ensures corrosion and wear resistant sealing faces.

Technical details

- Nominal pressures PN 10, 16
- Nominal diameters DN 200 ... 1400
- Face-to-face length to EN 558, basic series 14
- · Recommended flow velocity: min. 1,6 m/s
- Standard version: body and disk made of ductile iron EN-GJS-400-15 (GGG-40), seat made of microfinished high-alloy weld overlay
- Inside and outside epoxy coating

Fields of application







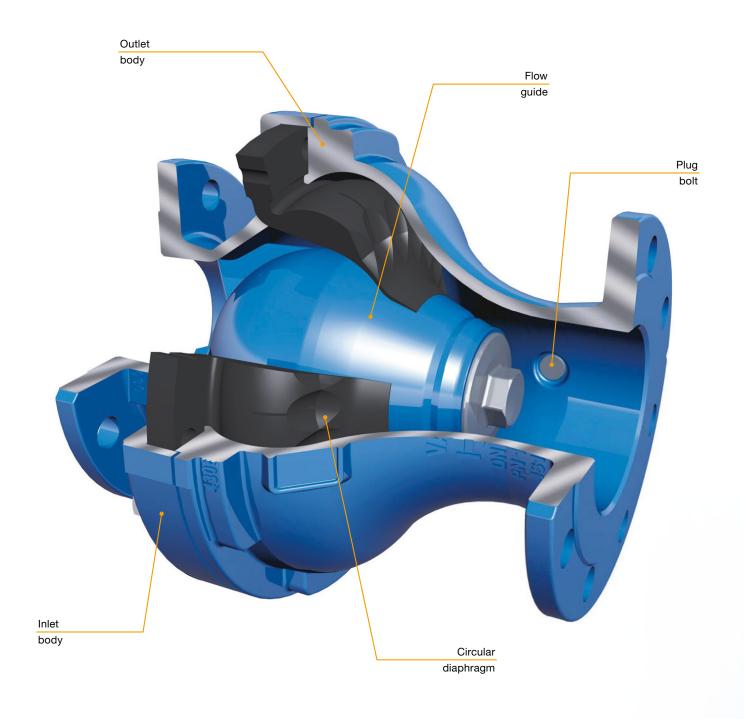
Power plants



Dams and hydropower

- Due to the tilting disk, the stroke is shortened by about 30°. This results in shorter closing times, less backflow and reduced slamming of the disk.
- Additional internal damping units for the reduction of pressure surges – can also be retrofitted. Approximately 10-15 % before the final closed position, the damper takes effect and the disk moves slowly into the seat dampening the pressure surge and without slamming.

VAG TOP-STOP® Non-Return Valve





- Optimum damping of pressure surges caused by quick flow reversal due to pre-tensioned elastic diaphragm.
- · Low space requirement due to compact design.
- Quick and safe response and extremely short closing times due to almost inertial less diaphragm.
- Pre-formed diaphragm ensures safe and reliable operation in any installation position.
- No mechanic moving parts internally or externally. This reduces maintenance and ensures optimum accident prevention in the operating area.
- Maintenance-friendly due to easy replacement of the diaphragm.

Technical details

- Nominal pressures PN 10, 16
- Nominal diameters DN 40 ... 400
- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 1,5 m/s (horizontal installation) / min. 1,5 m/s (vertical installation)
- Standard model: body and flow guide made of ductile iron EN-GJS-400-15 (GGG-40) with epoxy coating, circular diaphragm made of EPDM
- Epoxy coating to GSK guidelines

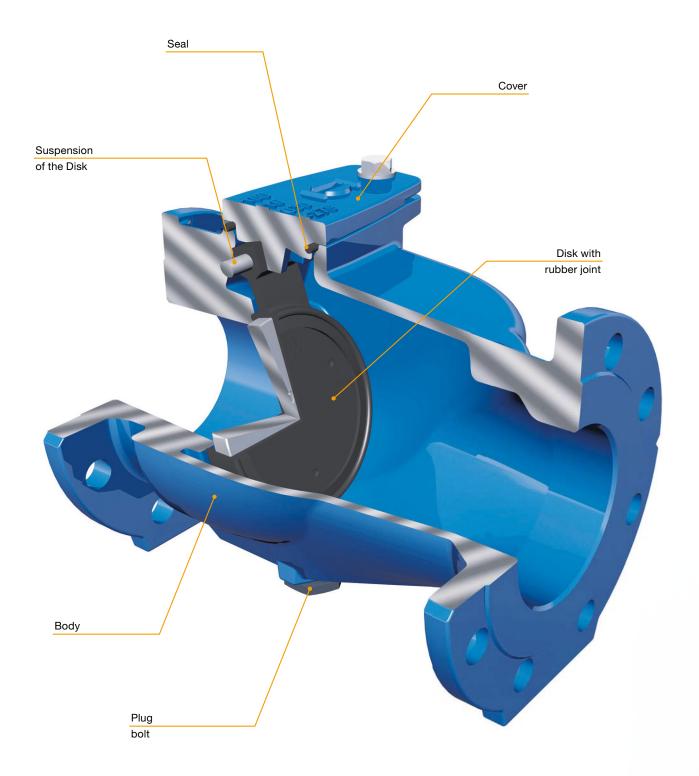
Fields of application



Water distribution

- Integrated plugs allow the simple assembly of a bypass on site.
- At flow reversal, the circular diaphragm closes quickly, emitting little noise. Therefore no metallic slamming while the valve is closing.

VAG RETO-STOP Non-Return Valve





- The low-resistance disk suspension ensures the opening of the valve even at low differential pressures.
- The smooth disk with no sharp edges minimizes the deposit of dirt particles and makes the valve also suitable for polluted media (wastewater).
- No friction of the bearings due to integrated suspension of the disk and therefore no wear.
- The suspension of the disk with pre-formed rubber joint accelerates and supports the closing movement of the disk to reduce pressure surges.
- The rubber joint prevents the jamming or clogging of the disk suspension even in polluted media.
- Maintenance-friendly due to large cover for easy maintenance of the disk.

Technical details

• Nominal pressure: PN 10, 16

• Nominal diameter: DN 40 ... 300

- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 1,5 m/s (horizontal installation) / min. 2,0 m/s (vertical installation)
- Standard model: body and cover made of ductile iron EN-GJS-400-15 (GGG-40), disk made of ductile iron EN-GJS-400-15 (GGG-40), EPDM vulcanized all over
- Epoxy coating to GSK guidelines

Fields of application







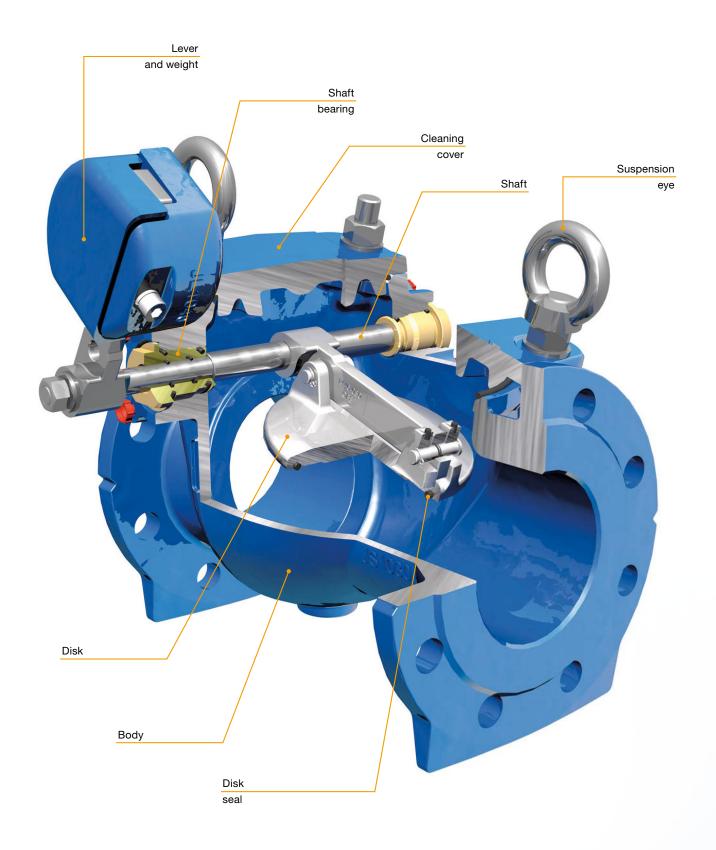
Water treatment

Wastewater

Industry

- Low pressure loss due to the optimized shape of the body with a 90 % opening degree of the disk.
- For maintenance purposes the disk can be reversed and used on both sides (integrated spare part), which doubles the life expectancy of the valve.
- An optional lifting device allows lifting of the disk allowing filling or purging of the pipeline.
- The optional bypass valve allows bypassing even at full operating pressure.

VAG LIMU-STOP® Non-Return Valve





- Little pressure loss due to optimized body design with a 90 % opening degree of the disk.
- Safe and reliable function due to flexible and dampened double bearing of the disk.
- Low-wear bearing of the shaft ensured by low-friction bronze bushes.
- Easy replacement of the disk ensured by O-ring inserted in the disk.
- Shortened stroke due to the slanted seat of the disk. This
 results in a reduced closing time, less backflow and less
 intensive impact of the disk.
- Very long service life due to dampened limit stop of the disk in the body.
- Easy assembly thanks to suspension eyes.

Technical details

- Nominal pressure PN 10, 16
- Nominal diameter DN 50 ... 300
- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 1,5 m/s (horizontal installation) / min. 2,0 m/s (vertical installation)
- Standard version: with lever and weight body and cover made of ductile iron EN-GJS-400-15 (GGG-40), disk made of stainless steel grade 1.4308, disk seal made of NBR, shaft made of stainless steel grade 1.4057, shaft bearing made of zinc-free bronze
- Epoxy coating to GSK guidelines

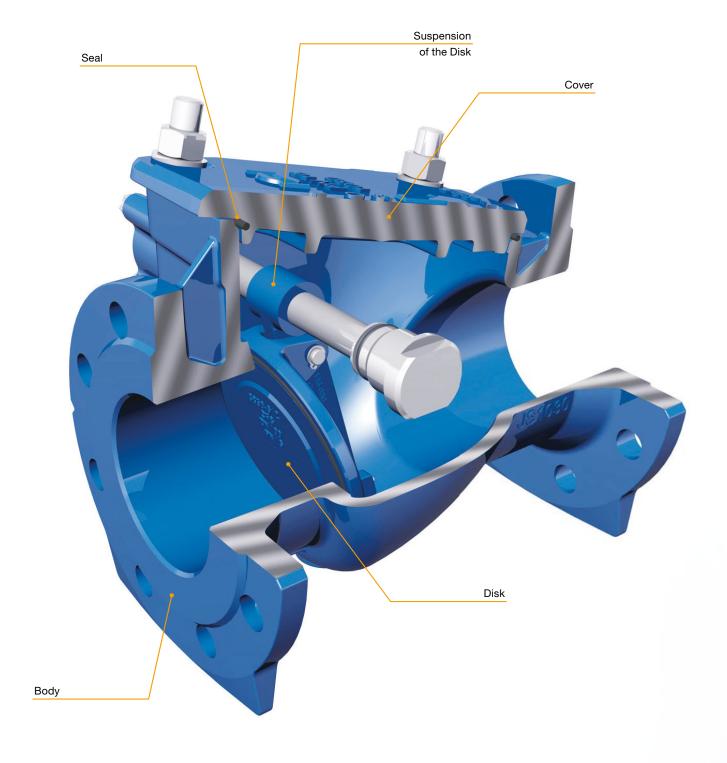
Fields of application



Wastewater

- Piggable in flow direction due to the large opening degree of the disk.
- Large cleaning cover and thus fast, easy and maintenance-friendly cleaning of the disk by turning it out and without the need of disassembly.

VAG RETA Check Valve





- Low pressure loss due to the optimized shape of the body with a 90% opening degree of the disk.
- Maintenance-friendly due to cover for easy replacement of the disk.
- Available with or without lever and weight for optical position indication.

Technical details

- Nominal pressures PN 10, 16
- Nominal diameters DN 40 ... 250
- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 1,5 m/s (horizontal installation) / min. 2,0 m/s (vertical installation)
- Standard version: resilient-seated, body, cover and disk made of cast iron EN-GJL-250 (GG-25)
- Inside and outside epoxy coating

Fields of application







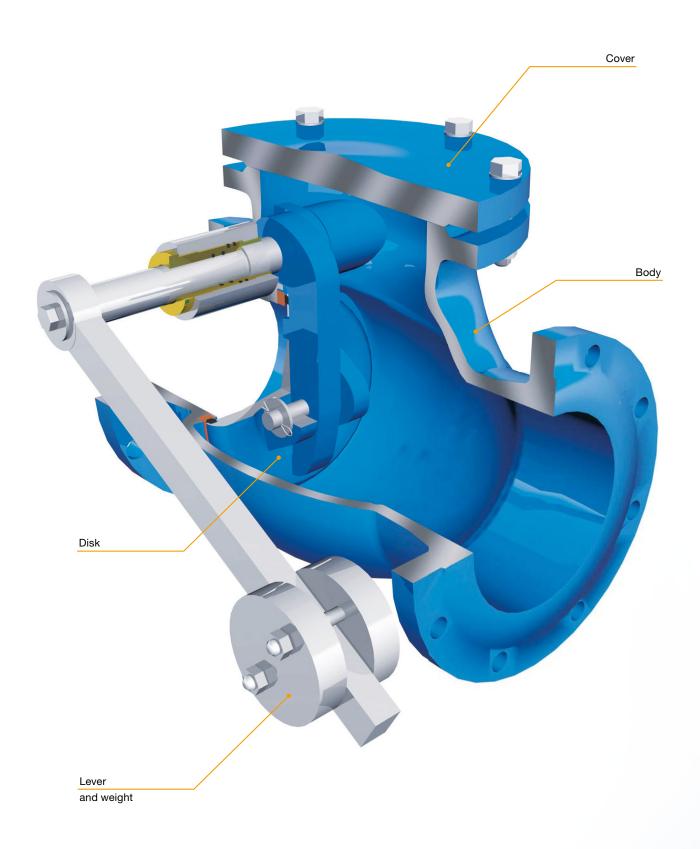
Water distribution



Industry

- Can be adapted to different plant conditions as it can be used in both horizontal and vertical (flow from bottom to top) pipelines.
- The optional bypass valve allows operation even at full operating pressure.

VAG AW disk Check Valve





- Depending on its type, the valve can be used for various plant conditions as well as in horizontal or vertical pipelines.
- Maintenance-friendly due to large inspection cover.

Technical details

- Nominal pressure PN 10, 16
- Nominal diameter DN 50 ... 800
- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 1,5 m/s (horizontal installation) / min. 2,0 m/s (vertical installation)
- Standard version: resilient-seated, with lever and weight, body, cover and disk made of ductile iron EN-GJS-400-15 (GGG-40), shaft made of stainless steel 1.4057, shaft bushing: O-rings made of NBR
- Inside and outside epoxy coating

Fields of application

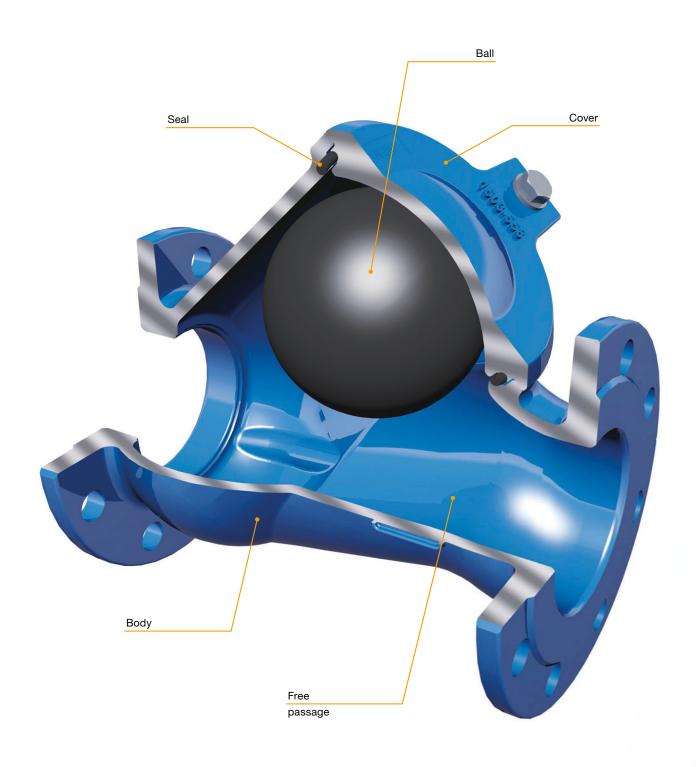


Wastewater

Interesting facts

 Resistance to media due to the use of premium-quality materials.

VAG KRV Ball Check Valve





- The ball is lifted into the dome by the flow and releases the full passage.
- Free flow cross-section without any edges provides optimum suitability for use with polluted media (wastewater) and minimizes the risk of clogging.
- Low pressure loss due to optimized body shape with free passage and thus low flow resistance.
- Maintenance-friendly due to large opening for cleaning the dome.

Technical details

- Nominal pressures PN 10, 16
- Nominal diameters DN 50 ... 200
- Face-to-face length to EN 558, basic series 48
- Recommended flow velocity: min. 3,0 m/s
- Standard model: body and cover made of ductile iron EN-GJS-400-15 (GGG-40), ball core made of aluminum and NBR rubber coated all over
- Inside and outside epoxy coating to GSK guidelines

Fields of application



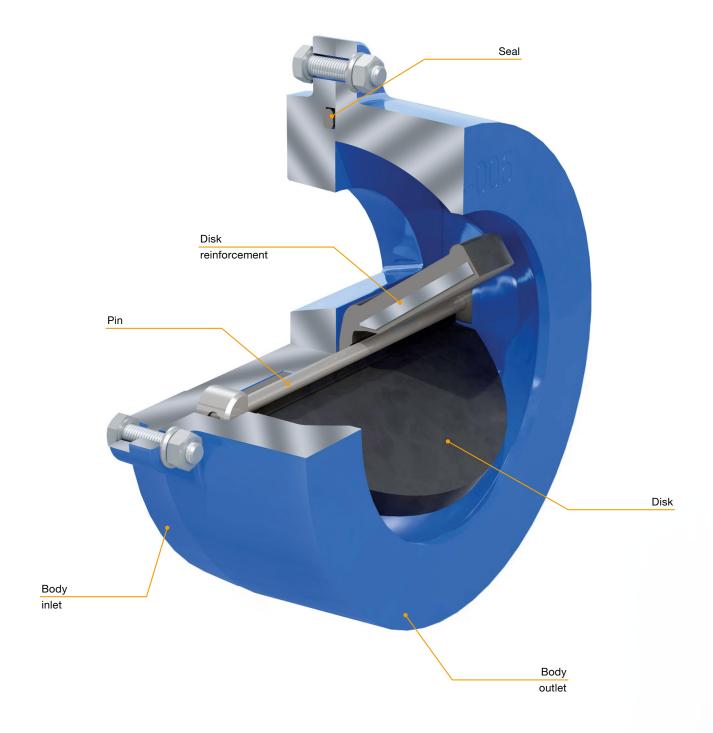


Water treatment

Wastewater

- No mechanically moved parts on the inside and outside.
 This reduces wear and maintenance work and ensures optimum accident prevention in the operating area.
- Prevents back flow even at low differential pressure by making use of the ball-check principle.

VAG ZETKA Non-Return Valve





- Applicable for low pressure differences.
- · Easy installation between pipeline flanges.

Technical details

- Nominal pressures PN 10, 16
- Nominal diameters DN 40 ... 300
- Face-to-face length to EN 558, basic series 16
- Recommended flow velocity: max. 3,5 m/s
- Standard model: body parts made of ductile iron EN-GJS-400-15 (GGG-40) and cast iron EN-GJL-250 (GG-25), check valve disk made of steel 1.0570, EPDM or NR vulcanized all over
- · Inside and outside epoxy coating

Fields of application





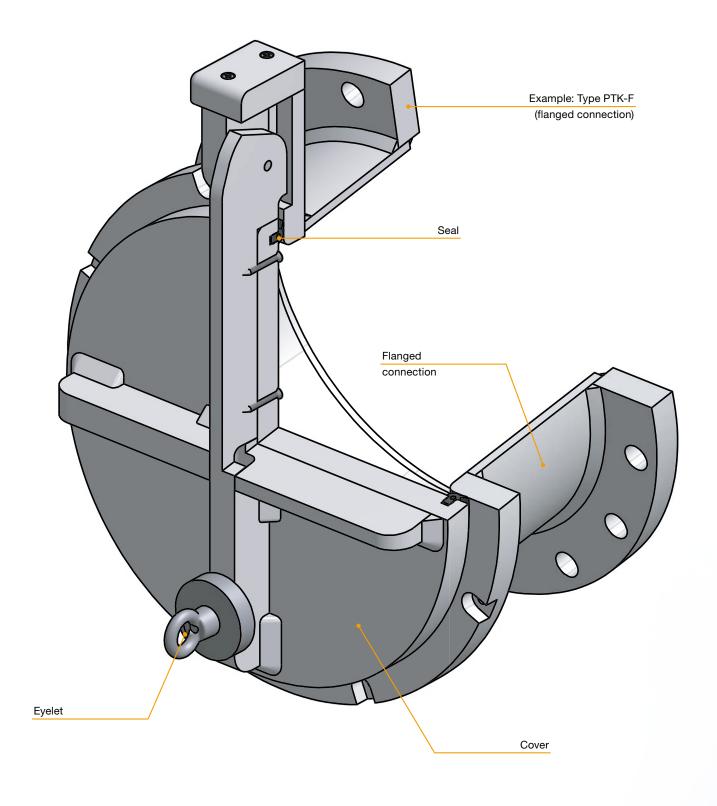


Water distribution

Interesting facts

• Short closing time due to design of the disk.

VAG HADE® Flap Valve





- The low-resistance flap suspension ensures the opening of the valve even at low differential pressure.
- For discharge above and below the external water level.
- Corrosion-resistant due to the use of rust-proof materials.
- Equipped with an attachment possibility for manual opening of the flap valve.
- Damping of the flap via the circumferential seal.
- Maintenance-friendly due to few moved components.
- Wide range of applications due to various attachment possibilities (fixing by dowels, insertion, flange mounting).

Technical details

- Nominal diameters DN 150 ... 1000
- Applications: gravity lines and pump lines, wastewater (storm water, mixed water)
- · Vertical or slanted disk
- Standard version: body made of PE-HD, for dowelling to even concrete walls
- Installation on the wall or end of pipeline.

Fields of application



Wastewater

Interesting facts

• Low weight due to the PE-HD material used.



The Valve Experts Die Armaturen-Experten

