

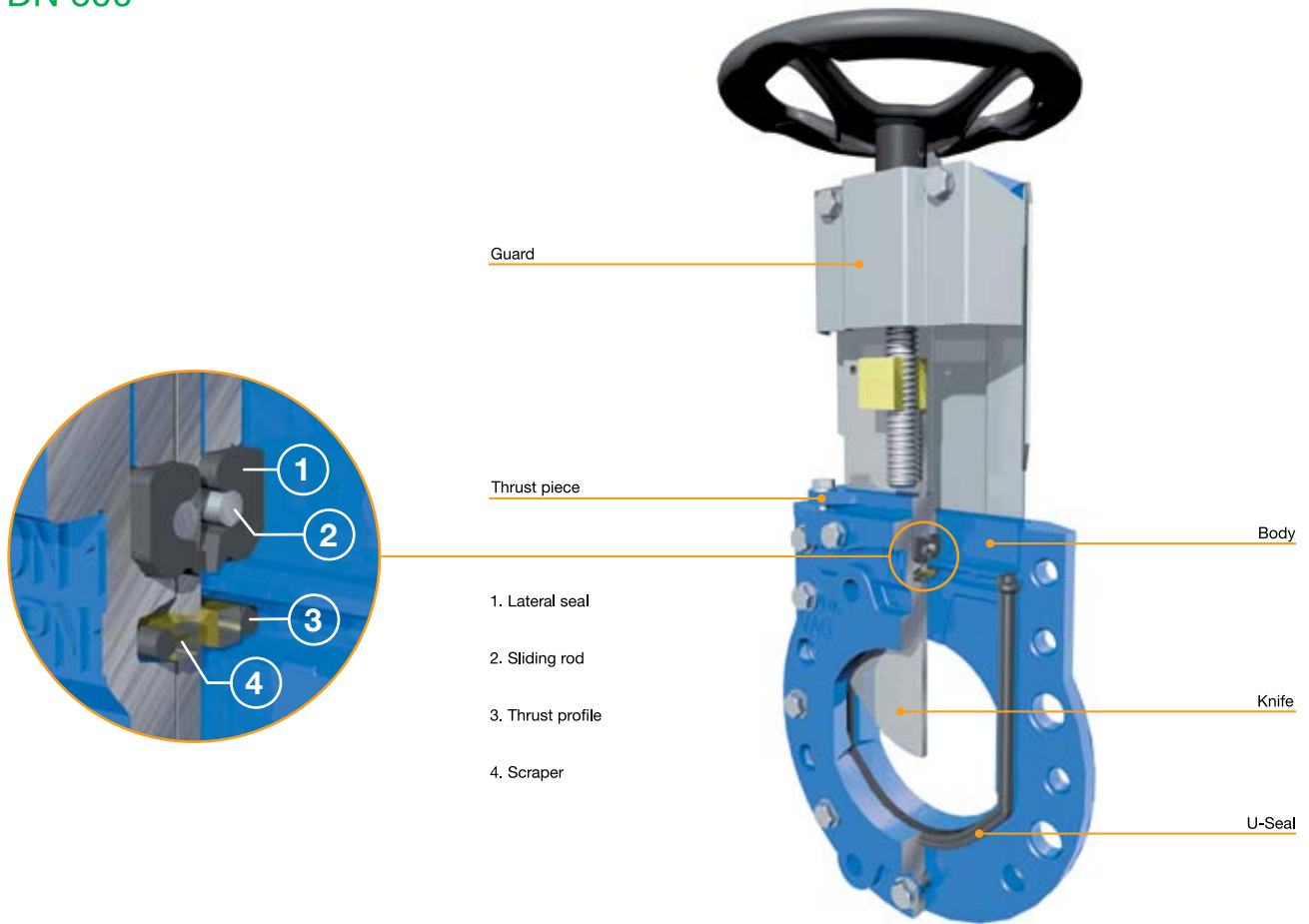
VAG Penstocks / Knife Gate Valves





VAG ZETA® Knife Gate Valve

Up to DN 600



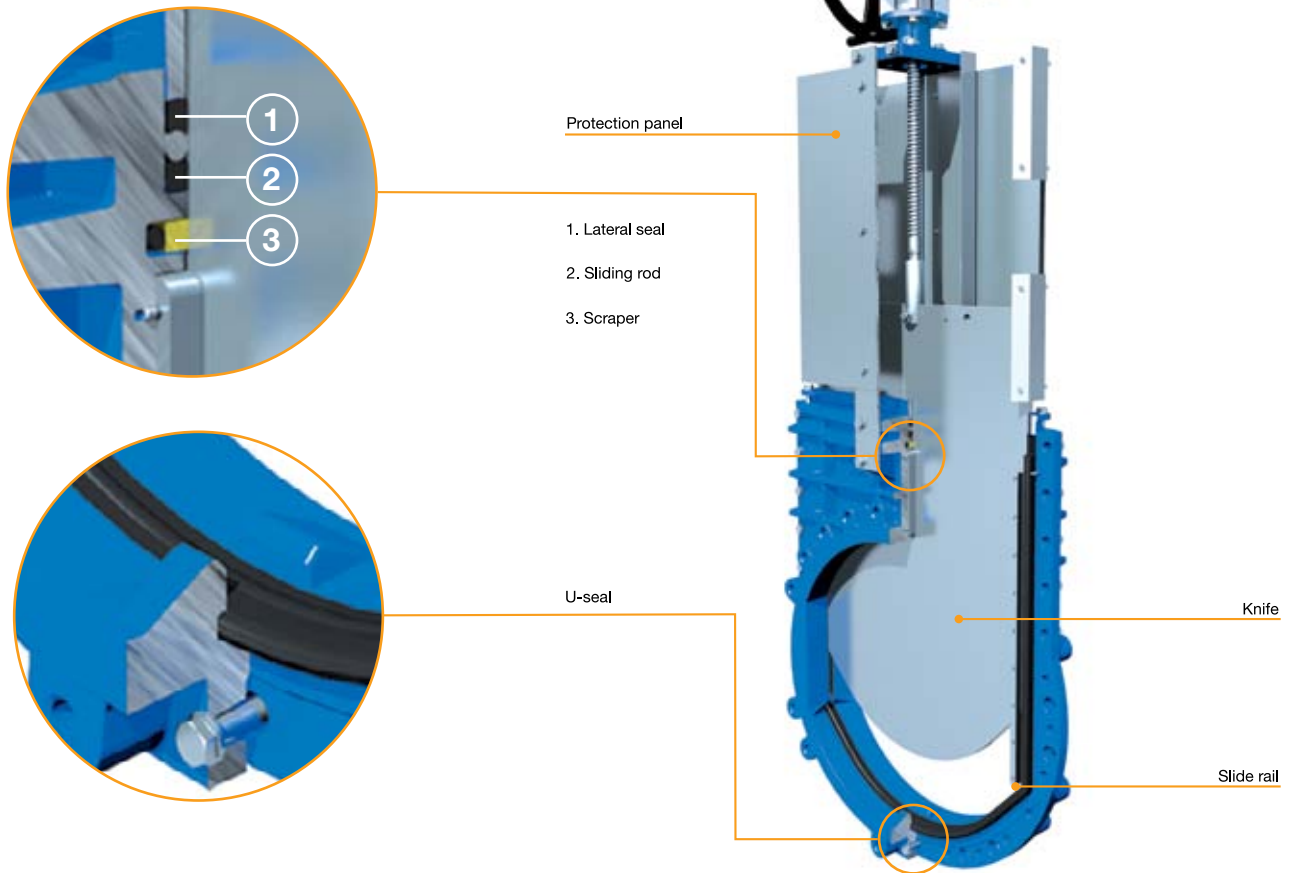
Technical details

- Flange connection to EN 1092-2, PN 10
- Maximum operating pressure PS 6 / 8 / 10 bar
- Nominal diameters DN 50...DN 600
- Field of application: Wastewater
- Face-to-face length to EN 558-1 Basic series 20 (DIN 3202 K1)
- Standard version: Body parts made of EN-GJL-250 (GG-25), bearing plate and thrust piece made of EN-GJS-400-15 (GGG-40), U-seal and lateral seal made of elastomer (NBR), sheet-metal yoke structure made of stainless steel grade 1.4301, knife made of stainless steel grade 1.4301, stem made of stainless steel 1.4021
- Internally and externally epoxy coated
- Actuator types:
 - With handwheel
 - With hand lever
 - With electric actuator
 - With pneumatic actuator
- Special versions:
 - With stem made of stainless steel grade 1.4057
 - With knife made of stainless steel grade 1.4571
 - With encapsulated yoke for submerged installation

Product features

- Fully flanged valve, can be used as wafer-type or end-of-line valve without additional counter-flange at full operating pressure.
- Free passage prevents deposits in the valve bore.
- Tight in both flow directions. This prevents installation errors.
- Integrated scraper profiles on both sides for continuous cleaning of the knife increases the safety of operation and the service life.
- The lateral seal can be readjusted during operation and replaced without dismantling the valve from the pipeline. This reduces maintenance time and downtime.
- The soft, profiled, elastic lateral guide of the knife ensures fail-safe sealing function.
- The specially profiled seal width in the bottom passage reduces maintenance work and guarantees safe operation.
- The compact body with stainless steel sheets effectively protects the valve against dirt and atmospheric influences.

VAG ZETA® Knife Gate Valve DN 700 and larger



Technical details

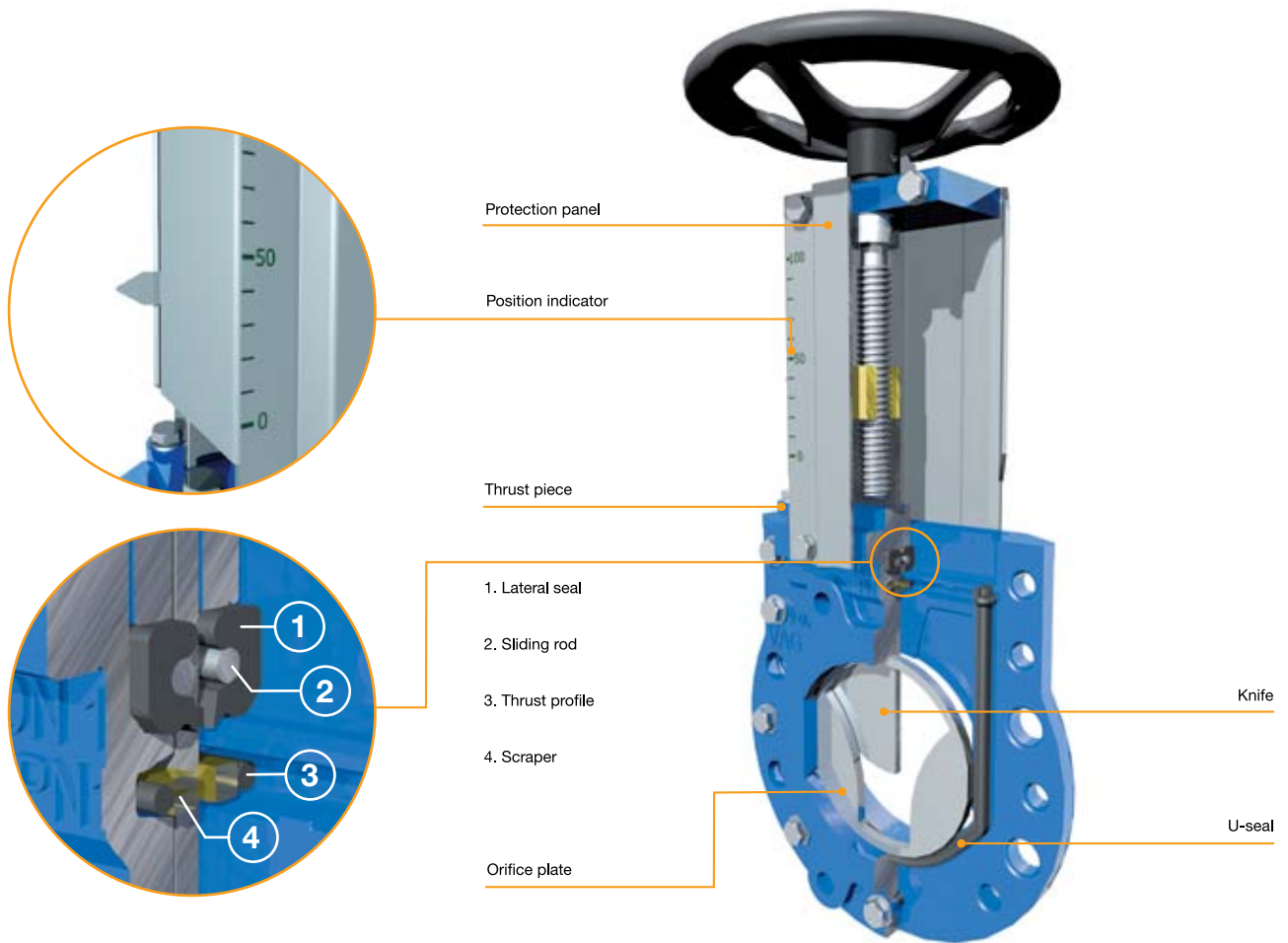
- Flange connection to EN 1092-2, PN 10
- Maximum operating pressure PS 2 / 2.5 / 4 bar
- Nominal diameters: DN 700...DN 1400
- Field of application: Wastewater
- Face-to-face length to EN 558-1 Basic series 20 (DIN 3202 K1)
- Standard type: Body parts made of EN-GJL-250 (GG-25), bearing plate and thrust piece made of EN-GJS-400-15 (GGG-40), U-seal and lateral seal made of elastomer (NBR), yoke and sheet-metal guard made of stainless steel grade 1.4301, knife made of stainless steel grade 1.4301, stem made of stainless steel 1.4021
- Internally and externally epoxy coated
- Actuator types:
 - With handwheel
 - With electric actuator
- Special versions:
 - With stem made of stainless steel grade 1.4057
 - With knife made of stainless steel grade 1.4571

Produkt features

- Fully flanged valve, can be used as wafer-type or end-of-line valve without additional counter-flange at full operating pressure.
- Free passage prevents deposits.
- Tight in both flow directions. This prevents installation errors.
- Integrated scraper profiles on both sides for continuous cleaning of the knife increase the safety of operation and the service life.
- The lateral seal can be readjusted during operation and replaced without dismantling the valve from the pipeline. This reduces maintenance time and downtimes.
- Specially profiled lateral seal with double Quadring profile and integrated PTFE sliding rods for optimum guiding of the knife.
- The bearing of the knife and its axial guiding by PTFE sliding rails with elastic bearing reduce operation forces.
- The soft, profiled and elastic lateral guide of the knife ensures fail-safe sealing function.
- The specially profiled seal width in the bottom passage ensures that the valve is drop-tight.



VAG ZETA®control Knife Gate Valve



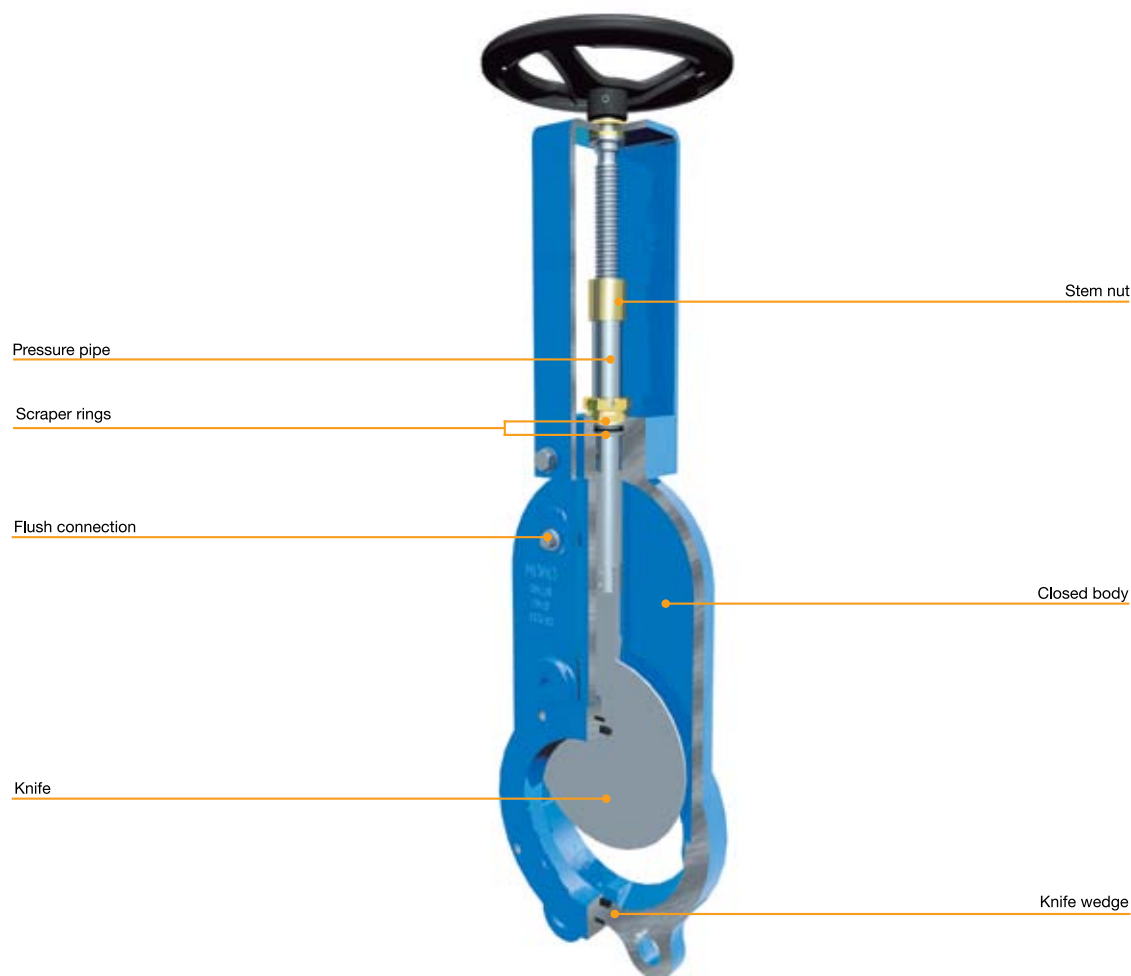
Technical details

- Flange connection to EN 1092-2, PN 10
- Maximum operating pressure PS 6 / 8 / 10 bar
- Nominal diameters DN 100...DN 600
- Field of application: Wastewater
- Face-to-face length to EN 558-1 Basic series 20 (DIN 3202 K1)
- Standard version: Body parts made of EN-GJL-250 (GG-25), bearing plate and thrust piece made of EN-GJS-400-15 (GGG-40), U-seal and lateral seal made of elastomer (NBR), protection panels made of stainless steel grade 1.4301; orifice plate made of stainless steel grade 1.4571, knife made of stainless steel grade 1.4571 or 1.4301 (DN 400 – 600), stem made of stainless steel grade 1.4057 (DN 50 – 350) or stainless steel grade 1.4021 (DN 400 – 600), stem nut made of brass
- Internally and externally epoxy coated
- Actuator types:
 - With handwheel
 - With electric actuator
 - With pneumatic actuator
- Special versions:
 - With stem: stainless steel grade 1.4057 (DN 400... 600)
 - With knife: stainless steel grade 1.4571 (DN 400...600)
 - With special accessories for air regulation

Product features

- Fully flanged valve, can be used as wafer-type or end-of-line valve without additional counter-flange at full operating pressure.
- Free passage prevents deposits.
- Tight in both flow directions. This prevents installation errors.
- Integrated scraper profiles on both sides for continuous cleaning of the knife increase the safety of operation and the service life.
- The lateral seal can be readjusted during operation and replaced without dismantling the valve from the pipeline. This reduces maintenance time and downtimes.
- Integrated orifice plate with optimised control characteristic and free bottom passage.
- The mechanical position indicator of the knife makes the adjustment of the opening degree easier.

VAG MONO Knife Gate Valve with handwheel



Technical details

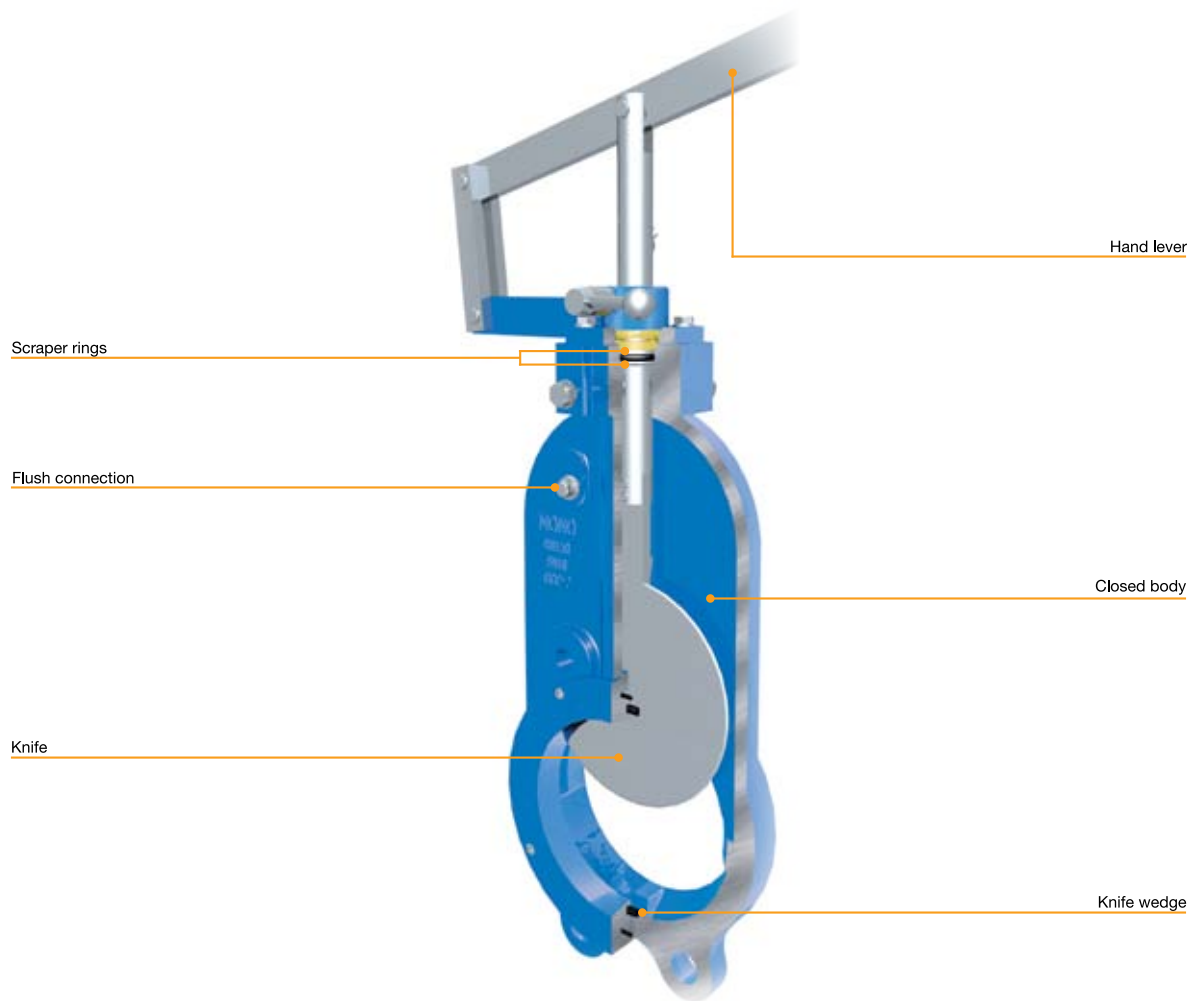
- Flange connection to EN 1092-2, PN 10
- Maximum operating pressure PS 10 bar
- Nominal diameters DN 50...DN 300
- Field of application: Wastewater
- Standard version: Body parts made of EN-GJS-400-15 (GGG-40), chambered O-ring made of NBR, pressure pipe and forked part made of stainless steel grade 1.4571, knife made of stainless steel grade 1.4301, stem made of stainless steel grade 1.4021, counter-flange made of steel St35
- Internally and externally epoxy coated
- Actuator types:
 - With handwheel
 - With electric actuator
 - With pneumatic actuator
- Special versions:
 - Stem made of stainless steel grade 1.4057
 - Knife made of stainless steel grade 1.4571
 - For buried installation

Product features

- Single piece monobloc body reduces the risk of corrosion.
- Completely chambered knife ensures fail-safe sealing function.
- With flush connection (G 1/4") as a standard; prevents clogging of the pipelines.
- No lateral seal on the knife to ensure extreme ease of operation.
- Single maintenance-free shaft seal with additional scrapers increases the service life.



VAG MONO Knife Gate Valve with hand lever



Technical details

- Flange connection to EN 1092-2, PN 10
- Maximum operating pressure PS 10 bar
- Nominal diameters DN 50...DN 300
- Field of application: Wastewater
- Standard type: Body parts made of EN-GJS-400-15 (GGG-40), chambered O-ring made of NBR, pressure pipe and forked part made of stainless steel grade 1.4571, knife made of stainless steel grade 1.4301, counter-flange made of steel St35
- Internally and externally epoxy coated
- Actuator type: Hand lever
- Special versions:
 - Stem made of stainless steel grade 1.4057
 - Knife made of stainless steel grade 1.4571

Product features

- One-piece monobloc body reduces the risk of corrosion.
- Completely chambered knife ensures fail-safe sealing function.
- With flush connection (G 1/4") as a standard; prevents clogging of the pipelines.
- No lateral seal on the knife to ensure extreme ease of operation.
- Single maintenance-free shaft seal with additional scrapers increases the service life.

VAG ERI[®]plus Penstock



Technical details

- Sizes 150x150...1000x1000
- Nominal pressures:
 - 150x150...200x200: 10mWC
 - 300x300: 8mWC
 - 400x400...800x800: 6mWC
 - 900x900...1000x1000: 4mWC
- Fields of application: Water, wastewater
- Standard version: Frame and gate made of stainless steel A2, stem made of stainless steel grade 1.4057 and stem nut made of zinc-free, wastewater-resistant bronze
- Sealing system: Wastewater- and UV-resistant EPDM
- All stainless steel parts immersion pickled and passivated
- Actuator types:
 - With handwheel
 - With electric actuator
 - With pneumatic actuator
 - With VAG REMO remote control system
- Special versions:
 - Other nominal pressures upon request
 - Material quality stainless steel A4 (SS316)
 - Stem thread located outside the medium
 - Comprehensive VAG REMO remote control range

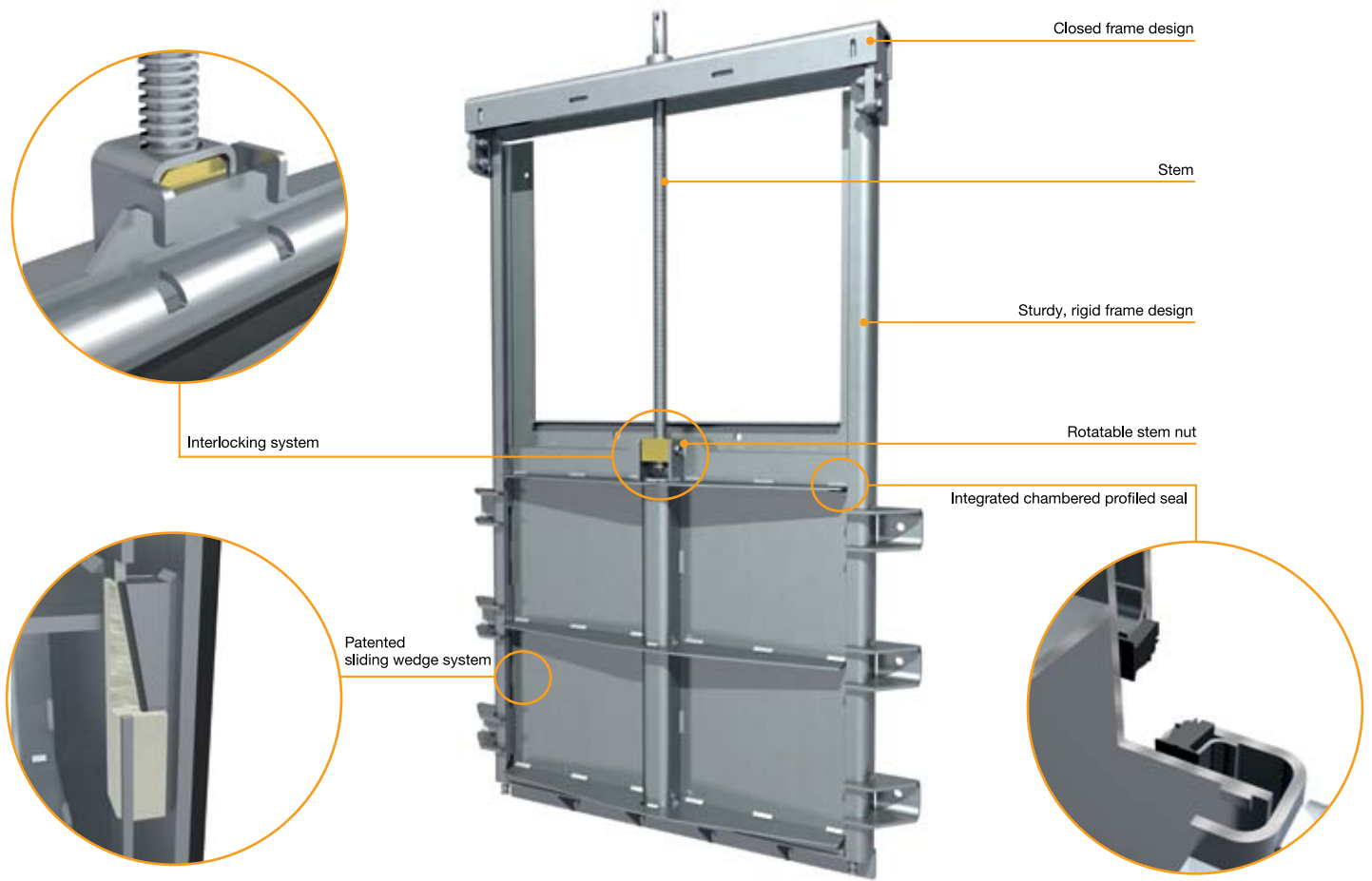
Product features

- Leak-tightness (5% max. leakage) considerably exceeds the requirements of DIN 19569 Part 4
- Sealing on four sides.
- Compact valve with self-supporting frame design, factory assembled and ready for operation, allows fast installation / commissioning.
- The robust and rigid design of the frame and gate ensures high reliability of operation.
- Due to the non-rising stem and integrated stem bearing, less installation space is required.
- The pivoted stem nut reduces operating torques.
- The sliding system with plastic sliding wedges ensures vibration-free guiding of the gate inside the frame and low operating torques.
- The on-seat and off-seat pressure acting on the gate is reliably absorbed by the sliding system, which prevents excessive pressure on the seal.
- The integrated and chambered profiled seal improves leak-tightness and can be replaced.
- The wall seal mounted on the frame makes the penstock ready for installation and allows fast and easy assembly.



VAG EROX[®]plus Penstock

With closed frame design



Technical details

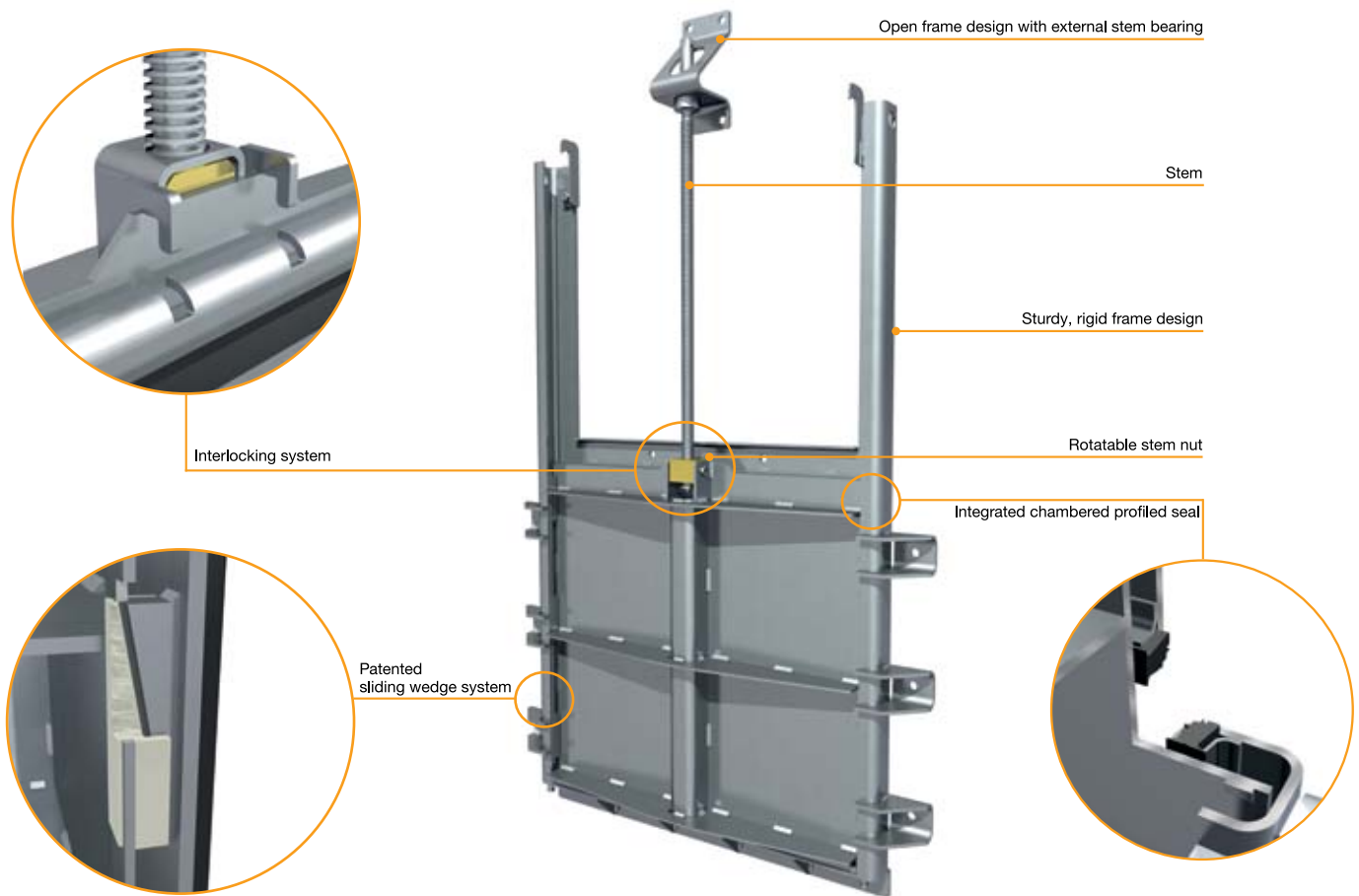
- Sizes 400x400...1200x1200
- Nominal pressure 6 / 8 mWS on-seat and off-seat
- Fields of application: Water, wastewater
- Standard version: Closed frame structure and gate made of stainless steel 1.4301, stem made of stainless steel 1.4057, stem nut made of zinc-free, wastewater-resistant bronze
- Sealing system: Wastewater- and UV-resistant EPDM
- All stainless steel parts dip pickled and passivated
- With non-rising stem and integrated stem bearing
- Actuator types:
 - With handwheel
 - With electric actuator
 - With pneumatic actuator
 - With VAG REMO remote control system
- Special versions:
 - Other nominal pressure upon request
 - Special materials upon request
 - Available with stem thread outside the medium
 - Version for highest tightness requirements

Product features

- Tightness (leak rate 1% max.) considerably exceeds the permissible leak rate according to DIN 19569 Part 4 - corresponds to EN 12266-2 Leak Rate G.
- Compact valve with self-supporting frame structure; allows fast putting into service as it is preassembled and ready for operation.
- The sturdy and rigid design of the frame and gate ensures highly reliable operation.
- The rotatable stem nut reduces operating torques.
- The patented VAG sliding wedge system ensures vibration-free guiding of the gate in the frame and low operating torques.
- The patented VAG sliding wedge system increases the compression between the gate and profiled seal in the end position and thus improves tightness.
- The additional interlocking system between the gate and top traverse ensures reliable tightness.
- The integrated and chambered profiled seal improves tightness.
- The seal between the valve and wall is mounted to the valve and ready for operation, making installation fast and easy.
- Sealing on four sides.

VAG EROX®*plus*-O Penstock

With open frame design



Technical details

- Sizes 400x400...1200x1200
- Nominal pressure 6 / 8 mWS on-seat and off-seat
- Fields of application: Water, wastewater
- Standard version: Open frame structure and gate made of stainless steel 1.4301, stem made of stainless steel 1.4057, stem nut made of zinc-free wastewater-resistant bronze
- Sealing system: Wastewater- and UV-resistant EPDM
- All stainless steel parts dip pickled and passivated
- With non-rising stem and external stem bearing or as system solution with rising stem
- Actuator types:
 - With handwheel
 - With electric actuator
 - With pneumatic actuator
 - With VAG REMO remote control system
- Special versions:
 - Other nominal pressure upon request
 - Special materials upon request
 - Version for highest tightness requirements

Product features

- Tightness (leak rate 1 % max.) considerably exceeds the permissible leak rate according to DIN 19569 Part 4 - corresponds to EN 12266-2 Leak Rate G.
- The open frame design also allows a system solution with rising stem where the moving actuation components can be positioned outside the medium.
- The system solution with rising stem reduces operating torques and wear of the moving actuation components and thus ensures increased reliability and a longer service life.
- The sturdy and rigid design of the frame and gate ensures highly reliable operation.
- The rotatable stem nut reduces operating torques.
- The patented VAG sliding wedge system ensures vibration-free guiding of the gate in the frame and low operating torques.
- The patented VAG sliding wedge system increases the compression between the gate and profiled seal in the end position and thus improves tightness.
- The additional interlocking system between the gate and top traverse ensures reliable tightness.
- The integrated and chambered profiled seal improves tightness.
- The seal between the valve and wall is mounted to the valve and ready for operation, making installation fast and easy.
- Sealing on four sides.

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Notes



Reference projects

Prague Zoo, Czech Republic
VAG ZETA® Knife Gate Valves



Slovenia / Czech Republic
VAG EROX®plus Penstocks with open frame design



Wastewater treatment plant
Seebergen, Germany
VAG ZETA® Knife Gate Valves



Flood protection of Prague,
Czech Republic
VAG HADE® Non-Return Valves with
VAG ZETA® Knife Gate Valves

