Knife gate valve, wafer type

Nominal diameter options (DN) 50-1200
Nominal pressure options (PN) 6-25
Maximum working pressure 2-10 bar

Applications:
Pulp and Paper
Wastewater treatment plants
Food and Beverage
Power plants
Chemical plants
Mining
Etc.
Bulk handling

Sizes: DN 50 to DN 1200 (larger diameters on request)

Working pressure:
DN 50 to DN 250 10 bar
DN 300 to DN 400 6 bar
DN 450 5 bar
DN 500 to DN 600 4 bar
DN 700 to DN 1200 2 bar

Standard flange connection:
DIN PN 10 and ANSI B16.5 (class 150)
- Other flange connections available on request
DIN PN 6  DIN PN 16  DIN PN 25
BS “D” and “E”  ANSI 125

Part | Cast iron | Stainless steel
--- | --- | ---
1. Body | GJL250(GG25) | CF8M
2. Gate | AISI 304 | AISI 316
3. Seat | Metal/Metal or EPDM | Metal/Metal or EPDM
5. Gland follower | Alum. (DN50-300) or Ductile Iron (DN350-1200) | CF8M
6. Stem | AISI 430 | AISI 430
7. Stem nut | Brass | Brass
8. Yoke | Epoxy-coated Carbon Steel | Epoxy-coated Carbon Steel
9. "A" ring | AISI 304 | AISI 316
10. Handwheel | GJS400 (GGG40) | GJS400 (GGG40)
11. Cap | Plastic | Plastic
12. Stem protector | Epoxy-coated Carbon Steel | Epoxy-coated Carbon Steel
13. Friction washer | Brass | Brass
14. Nut | Zinc Plated Carbon Steel | Zinc Plated Carbon Steel

Directives:
2006/42/EC (MACHINES)
97/23/EC (PED) Fluid: Group 1(b), 2 (Cat mod. A)
94/9/EC (ATEX)

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Knife gate valve, wafer type
SERIE 02 - 02395

FEATURES:

BODY:
Wafer style cast monoblock with raised faces and reinforcing ribs in large diameters for extra body strength. Internal cast-in gate wedges and guides allow for a tighter shut-off between gate and seat. Full port design for greater flow capacity and minimal pressure drop. The internal body design avoids any accumulation of solids that would prevent the valve from closing.

GATE:
Stainless steel gate. Gate is polished on both sides to avoid jamming and seat damage. Bottom of the gate edge is machined to a bevel to cut through solids for a tighter seal in the closed position. The thickness and/or material of the gate can be changed on request for higher pressure requirements.

SEAT:
Unique design that mechanically locks the seal in the internal of the valve body with a stainless steel retainer ring. Standard EPDM also available in different materials such as Viton, PTFE, etc.

PACKING:
Long-life packing with several layers of braided fibre plus an EPDM o-ring, with an easy access packing gland ensuring a tight seal. Long-life braided packing is available in a wide range of materials. The standard stainless steel stem offers a long corrosion resistant life. For rising stem handwheel actuators only, a stem protector is provided for additional protection against dust while the valve is in the open position.

STEM:
The standard stainless steel stem offers a long corrosion resistant life. For rising stem handwheel actuators only, a stem protector is provided for additional protection against dust while the valve is in the open position.

ACTUATORS:
All actuators supplied are interchangeable, and supplied with a standard mounting kit for installation purposes on site.

YOKE or ACTUATOR SUPPORT:
Made of EPOXY coated steel (stainless steel available on request). Compact design makes it extremely robust even under the most severe conditions.

EPOXY COATING: The epoxy coating on valve bodies and components is applied by means of an electrostatic process, making the valves corrosion-resistant with a high quality finished surface.

GATE SAFETY PROTECTION:
Automated valves are provided with gate guards in accordance with EU Safety Standards. The design feature prevents any objects from being caught accidentally while the gate is moving.
ACTUATOR TYPES

MANUAL:
- Handwheel (rising stem)
- Handwheel (non-rising stem)
- Chainwheel
- Lever
- Bevel Gear
- Other (square nut)

AUTOMATIC:
- Electric (rising & non-rising stem)
- Pneumatic (single & double-acting)
- Hydraulic

All actuators are interchangeable

ACCESSORIES:
- Mechanical Stops
- Actuator manual override
- Positioners
- Proximity Switches
- Stem Extensions
- Locking device
- Solenoid valves
- Limit Switches
- Floor stands

Standard handwheel (rising stem) Handwheel (non rising stem) Pneumatic cylinder Electric Lever
### SEAT / SEALS

<table>
<thead>
<tr>
<th>Material</th>
<th>Max. T (°C)</th>
<th>Applications</th>
</tr>
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<tbody>
<tr>
<td>Metal/Metal</td>
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<td>High temp. / low tightness</td>
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<td>EPDM</td>
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<td>Acids and non-mineral oils</td>
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<td>Nitril (N)</td>
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<td>Resistance to petroleum products</td>
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<td>Viton (V)</td>
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<td>Chemical service / High temp.</td>
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<td>Silicon (S)</td>
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<td>Food service / High temp.</td>
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<td>PTFE (T)</td>
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<td>Corrosion resistance</td>
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More details and materials under request.

### PACKING

<table>
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<tr>
<th>Material</th>
<th>Max. T (°C)</th>
<th>pH</th>
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<tbody>
<tr>
<td>Dry cotton (AS)</td>
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<td>PTFE impregn. synth. fibre (ST)</td>
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<td>Braided PTFE (TH)</td>
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<td>Ceramic fibre (FC)</td>
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Note: all types include an an elastomere O-ring (same material as seal), excl. TH, GR, FC.

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**METAL/METAL**
- For applications with:
  - High temperature
  - High density media application
  - In those cases when full tightness is not required

**TYPE “B” SEAT (metal/metal)**
- For applications with:
  - High temperature
  - High density media application
  - In those cases when full tightness is not required
  - Replaceable design without disassembling the valve

**DEFLECTION CONE “C”**
- Deflects the media away from any valve internal exposed parts (gate, seat, .)
- Material: AISI 316, CA15, Ni-Hard, etc.
- Face-to-face dimension increases:
  - DN 50 to DN 250 X = 9mm
  - DN 300 to DN 600 X = 12mm
  - Larger diameters on request

**RESILIENT TYPE “A”**
- Standard resilient seat.
- Temperature limitations according to the selected seat material. Review the above chart or contact our Technical Department for more information.
- Seat with replaceable retainer ring

**TYPE “B” SEAT (resilient)**
- Temperature limitations according to the selected seat material. Review the above chart or contact our Technical Department for more information.
- Replaceable and reinforced seat ring available in different materials such as: stainless steel, CA1 5, Ni Hard,…
HANDWHEEL (rising stem)

- Standard manual actuator

- Consists of:
  - Handwheel: Epoxy coated Cast Iron
  - Stem
  - Stem nut
  - Stem protector

- Available from DN 50 to DN 1000

- Options:
  - Locking Device
  - Extensions

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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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