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# About us.

Habermann Aurum Pumpen GmbH company specializes in the production and supply of industrial valves. Habermann Aurum Pumpen GmbH has a long history, excellent reputation and one of the most high-tech and wellequipped facilities.

In Germany, we design and manufacture our high-quality valves, which are valued worldwide for its reliability, accuracy and ease of use.

Engineers in our company develop appropriate technologies based on their many years of experience and continuous training.

Our products are successfully used all over the world in such industries as:

- metallurgy;
- chemistry / petrochemistry;
- water supply;
- sewerage;
- mining and processing plants
- etc.

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The modern level of enterprise development places high demands on the reliability of equipment, as well as its efficient and cost-effective operation. The reliability of Habermann Aurum Pumpen GmbH equipment is based on the mandatory use of the latest tools, control methods and equipment production based on an integrated approach to solving engineering issues. The result of the work of our specialists is to achieve increased operating time of equipment and eliminate possible downtime during operation. 



ASSISTANCE IN CALCULATIONS AND SELECTION OF EQUIPMENT

**RELIABLE OPERATION** 



GUARANTEE

DELIVERY TO THE CUSTOMER'S WAREHOUSE



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#### METALLURGY

Metallurgical plants in most CIS countries are at the stage of reconstruction and transition from old technological standards to modern ones: more economical, environmentally friendly and resource-saving. Only a few Metallurgical plants carried out large-scale reconstruction of fixed assets. We offer solutions that are applicable to any technological systems, including according to an individual customer project. Our experience will allow to apply modern solutions in any areas of the metallurgical plant.

#### CHEMISTRY / PETROCHEMISTRY

Each chemical is different, and often toxic, therefore, incorrect selection of valves poses a risk to personnel, the environment and leads to additional maintenance costs. In addition to practical experience and recommendations, Habermann Aurum Pumpen experts have in-depth knowledge in the field of application and production of pipeline valves. Having analyzed your technological needs from the point of view of chemical, thermal, mechanical, abrasive and other characteristics, our experts will advise and help you to choose high-quality accessories for long-term operation.

# WATER SUPPLY / SEWERAGE

Pipeline valves installed on the technological lines of water treatment and sewage stations have special requirements: resistance to mechanical damage, abrasive media, corrosion resistance, equipment must be reliably protected from aggressive environments, alkalis or acids. >

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We offer only reliable pipeline fittings, the quality of which is confirmed by decades of work in various enterprises. We find the right technical solution for each case and customer. The range of valves supplied includes: wedge gate valves, butterfly valves, pressure regulators and other types upon request.

# MINING AND PROCESSING PLANTS

Thanks to many years of experience, as well as close cooperation both with the technical staff of the mining and processing plants, and with specialized design institutes, we are able to choose the optimal solution as part of the selection and use of modern pipeline valves for long-term and reliable operation of equipment in harsh realities of the mining industry. MINING AND PROCESSING PLANTS use special slurry valves to shut off the flow and adjust media with a high abrasive content.

The most commonly used: slurry pinch valves, special slide gate valves, large double eccentricity butterfly valves, butterfly valves with fixed vulcanized seats.



# **Butterfly valves.**

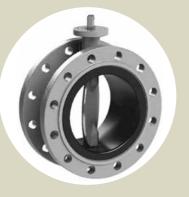
The soft seated centrifugal butterfly valves are widely used. They can be used both as isolation and as control valves. Rubber lined butterfly valves have a very wide range of applications. The main purpose of these valves are liquids and gases with temperatures up to 200 ° C.



AV01-002

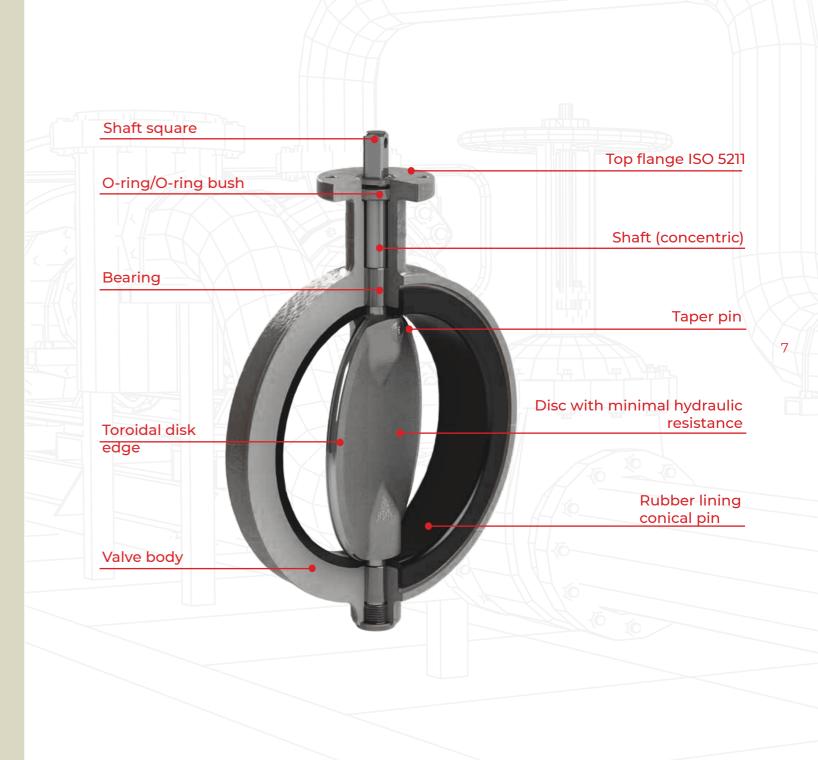


AV01-004



AV01-008

Туре	Nominal diameter	Nominal pressure	Operating temperature
AV01-002	DN 50-1000	PN 6/10/16	t° -20 °C to +200 °C
AV01-004	DN 50-1200	PN 6/10/16	t° -20 °C to +200 °C
AV01-008	DN 50-2000	PN 6/10/16	t° -20 °C to +200 °C



- Low cost
- Simplicity of design
- Reliability

- Small size and weight
- "One-piece" seal
- Bilateral tightness of a class "A"

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### **Double eccentric butterfly valves**

The double eccentric butterfly valves can be used both as isolation valves and as control valves. The difference from the centric design valves is the displacement of the axis of rotation of the shaft in two planes. A useful effect of such displacement, with respect to symmetrical valve shutters, is to minimize the effect on the seals.





AV01-064





AV01-067

Туре	Nominal diameter	Nominal pressu
AV01-061	DN 100-2000	PN 10/16/25/40
AV01-062	DN 100-3000	PN 6/10/16/25/40
AV01-064	DN 50-900	PN 10/16

DN 50-900

DN 50-900



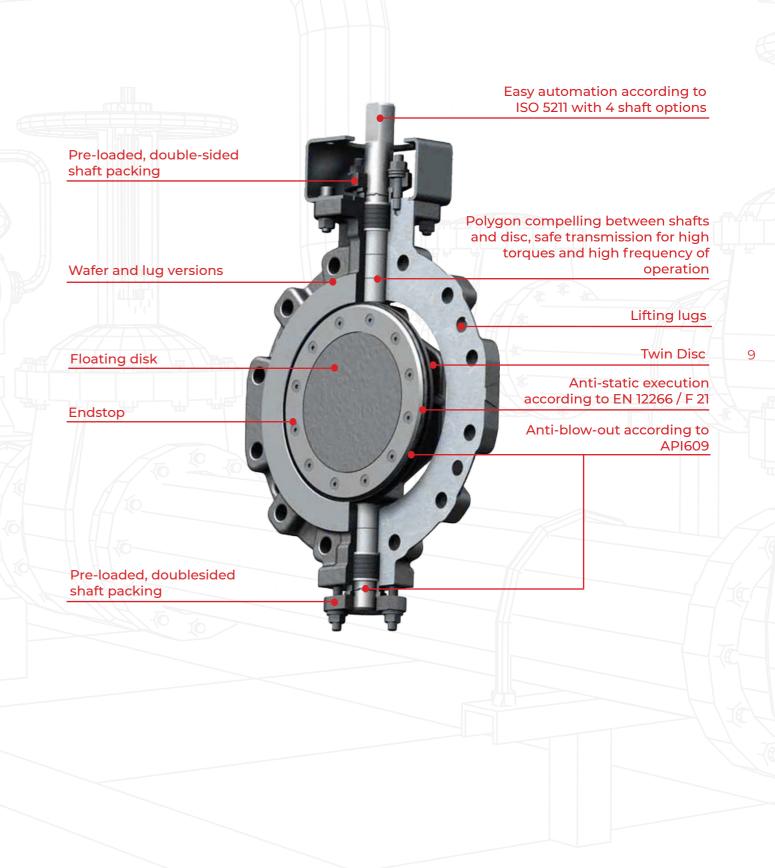


AV01-065

AV01-067

- High level of kv
- Simplicity of design
- Small size and weight
- Higher operating temperature
- Great resource of work seal
- Larger nominal diameters available

- "A" tightness class
- Large selection of sealing materials
- Possibility of using a metal seal



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## Triple eccentric butterfly valves

The triple eccentric butterfly valve has the unique zero friction property between the valve and the seat with very low torque. Useful for use in high-temperature environments.

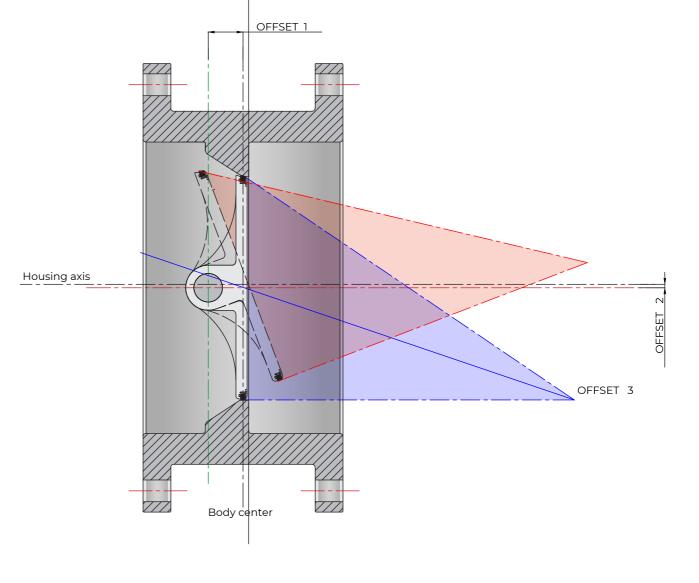


Туре	Nominal diameter	Nominal pressure	Operating temperature
AV01-081	DN 200-1400	PN 10/16/25	t° to +350 °C

### Advantages

- High level of kv
- Simplicity of design
- Small size and weight
- Zero friction between valve and seat

- Larger nominal diameters available
- "A" tightness class
- Metal seal



#### Offset 1

The shaft is placed behind the plane of the sealing surface to provide a continuous seat path.

#### Offset 2

The shaft is placed to one side of the pipe/valve centerline to allow the displacement of the seal from the seat during the 90° opening.

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#### Offset 3

The seat and seal cone centerlines are inclined in respect to the pipe/valve centerline. This third offset completely eliminates rubbing.

# **Ball valves.**

The ball valves have a shutter in the form of a body of revolution, rotating around its axis perpendicular to the medium flow axis. They are used as shut-off valves to shut off the flow of liquids and gases.





**Nominal pressure** 



Operating

temperature



15° V PORT

To be able to adjust the medium, ball valves with a special V-port cutout have been developed. This cut-out allows achieving an equal percentage regulation characteristic. Different cut angles allow to achieve both fine adjustment of small flows (15 °) and a large value of the

DN 15-250 PN 16 t° -20 °C to +200 °C AV02-231 DN 15-200 PN 16/40 AV02-163 t° -20 °C to +200 °C DN 15-250 PN 10-63 t° -20 °C to +280 °C AV02-241

**Nominal diameter** 

#### Advantages

Type

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- Very high level of Kv
- Full-bore construction
- "A" tightness class
- Fire proof satisfies API 607
- V-Port ball with different kv values

- Anti-static design
- Knockout protection

Designs

- All-welded
- Two, three-part
- Ceramic lining
- Threaded, Flanged, Welded joint



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30° V PORT

60° V PORT

throughput kvs (90 °). Thanks to the soft seal of the ball valve, we can achieve the «A» tightness class.

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#### Sealing

- PTFE
- Metal
- Ceramic

Carbon steel

Body

• Cast iron

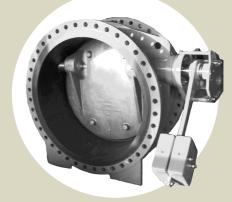
Stainless steel

# **Check valves.**

These series are used to prevent backflow of the working medium in pipelines transporting liquid and gaseous media.

### Butterfly swing check valve

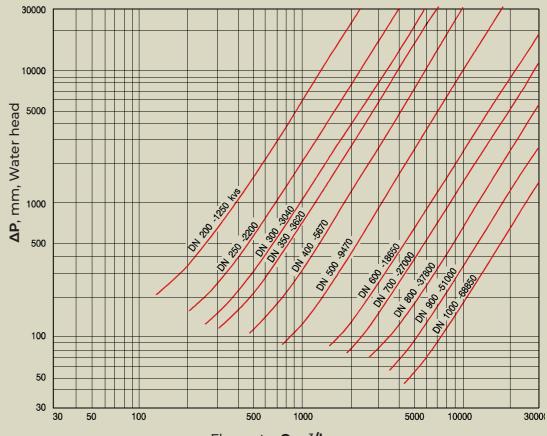
Two-eccentric design valves are used in industrial water supply systems. Liquids and gases that are not aggressive with respect to valve materials can act as a working medium here.



AV03-281

Туре	Nominal diameter	Nominal pressure	Operating temperature	
AV03-281	DN 200-1400	PN 10/16/25/40	t° -20 °C to +200 °C	
AV03-282	DN 150-2000	PN 10/16/25/40	t° to +200 °C	15

Diagram of flow



#### Doppelflügel-Rückschlagklappe



AV03-221



AV03-222



AV03-241

AV03-241

Tellerventil

Туре	Nominal diameter	Nominal pressure	Operating temperature
AV03-221	DN 50-600	PN 6/10/16	t° -40 °C to +200 °C
AV03-222	DN 50-1200	PN 10/16/40	t° -20 °C to +200 °C
AV03-241	DN 8-200	PN 40	t° -20 °C to +200 °C

### **Advantages**

- Tightness of locking mechanisms
- Durability
- Easy installation and maintenance

## Body

- Gray cast iron
- Cast iron with nodular graphite
- Stainless steel
- Bronze
- other materials on request

- Wide functionality
- Operational safety

#### Sealing

- NBR
- EPDM
- Viton
- Metal

Flow rate, **Q m<sup>3</sup>/h** 

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# Gate valves.

The gate valves are designed to operate as a shut-off device in pipelines transporting various liquid and gaseous media, neutral to the main parts' materials.

### Rubber gate valve



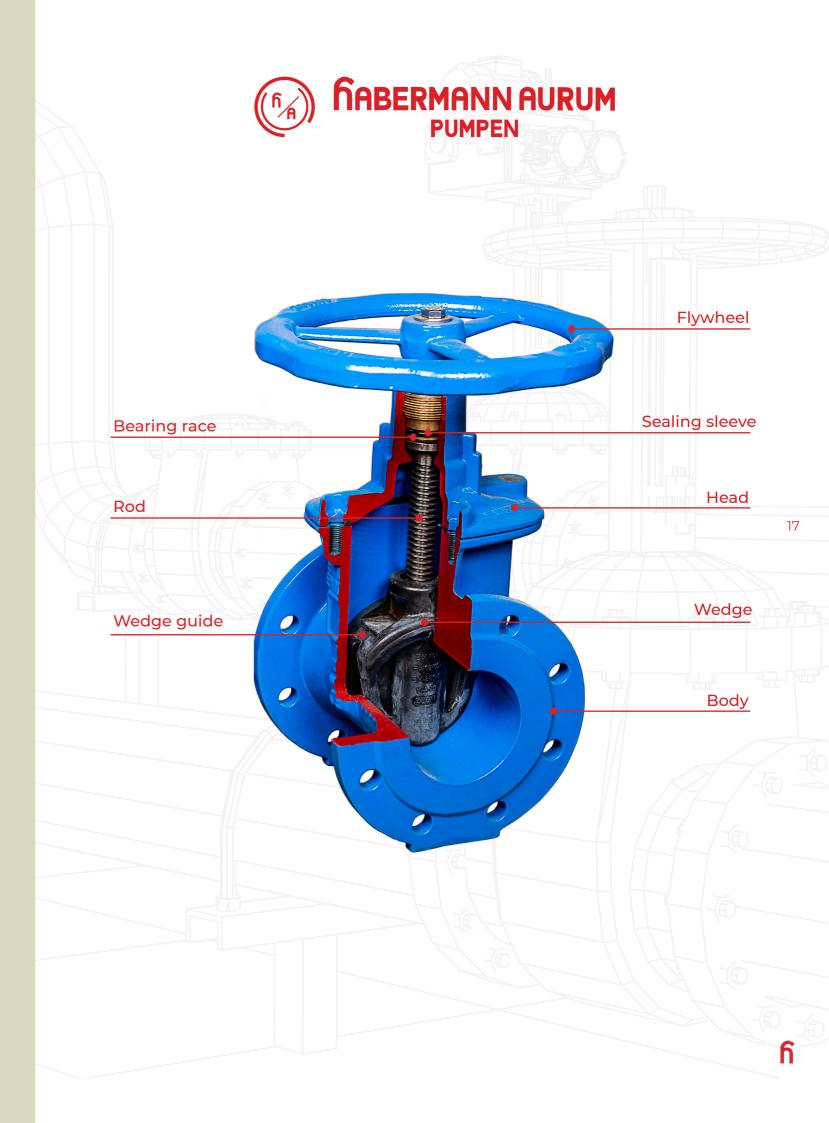
AV04-351

Туре	Nominal diameter	Nominal pressure	Operating temperature
AV04-351	DN 50-500	PN 10/16	t° to +60 °C

### Advantages

- 100% of locking
- Less pressure loss

- "A" tightness class
- Suitable for blocking flow in both directions



### Gate valves with metal seal

The gate valves with metal seal are used to shut off the flow of the working fluid in liquid and gas pipelines containing small abrasive particles. Resistant to medium and high pressure conditions.



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Туре	Nominal diameter	Nominal pressure	Operating temperature
AV04-382	DN 50-1600	PN 10/16/25	t° to +60 °C
AV04-393	DN 15-1200	PN 10/16	t° -20 °C to +200 °C

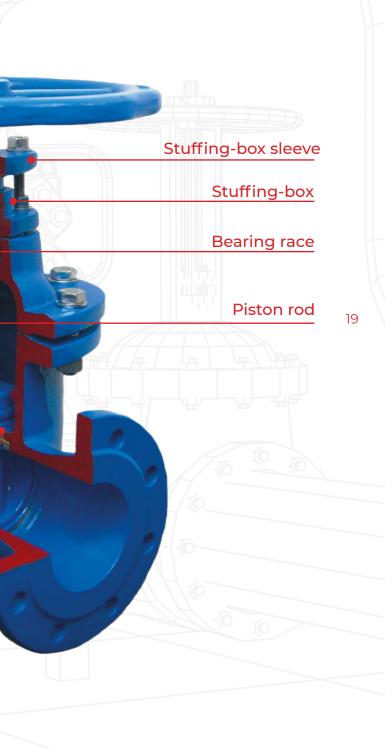
#### Advantages

- Low hydraulic resistance
- Large nominal bores diameter
- Less pressure loss

- Suitable for blocking flow in both directions
- "A" tightness class

H	PUMPI
Handwheel	
Stuffing-box seal	
O-ring seal	
Wedge	
Seat ring	
	and the second second

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# Slurry pinch valves.

The pinch valve is characterized in that the pass of the valve is made in the form of a flexible hose, the pinch pipe under the action of the upper / lower strip moves towards and closes the passage section. Hose valves are designed to shut off and adjust media with high abrasiveness.

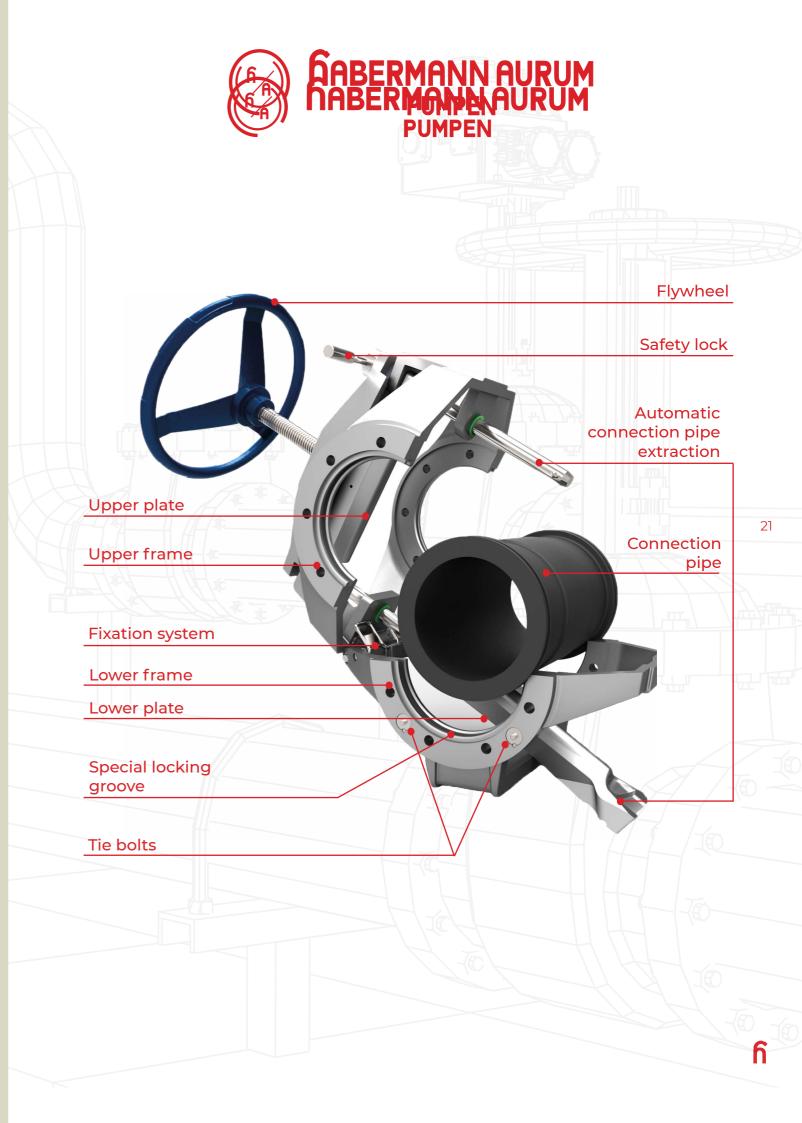


AV07-541

Туре	Nominal diameter	Nominal pressure	Operating temperature
AV07-541	DN 80-300	PN 2/10	t° to +110 °C

### Advantages

- Lightweight aluminum frame
- No need to dismantle from the pipeline
- Quick sealing ring change (up to 10 min)
- Security system (frame lock in the open position);
- Significantly reduced downtime
- High-quality reinforced sealing rings (40,000 cycles of operation)



# Knife gate valves.

The knife gate valves have a leaf-shaped shutter with a sharp edge similar to a guillotine for shutting off viscous, powdery media, pulps, sludges and sewage.





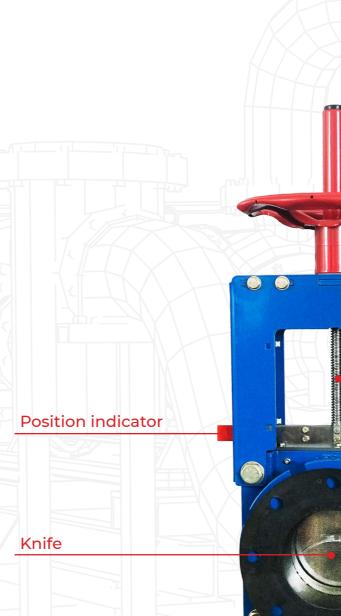
AV05-471

Туре	Nominal diameter	Nominal pressure	Operating temperature
AV05-442	DN 50-700	PN 2/3/5/7/10/16/25	t° to +90 °C
AV05-471	DN 50-400	PN 10/12/14/16	t° to +90 °C

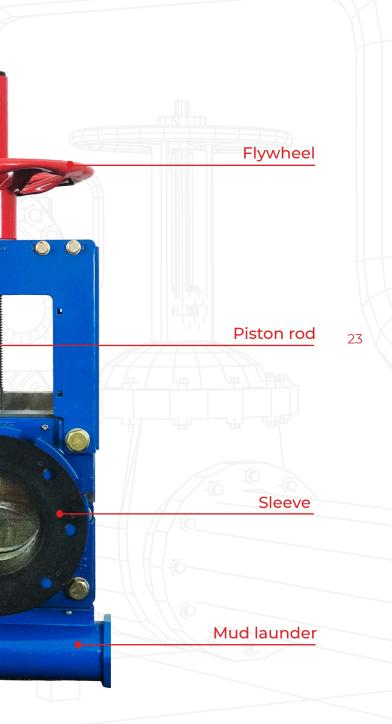
### Advantages

- Reliable flow shutdown
- Modular design
- Wide range of applications
- Possibility of producing different sealing ring types
- Significant increase in operating time
- All types of drives and automation





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# Self-cleaning filter.

An automatic backwash filter is widely used in industry and can ensure the purity and reliability of the filtered fluid. The backwash filter is completely automatically cleaned and operates continuously.



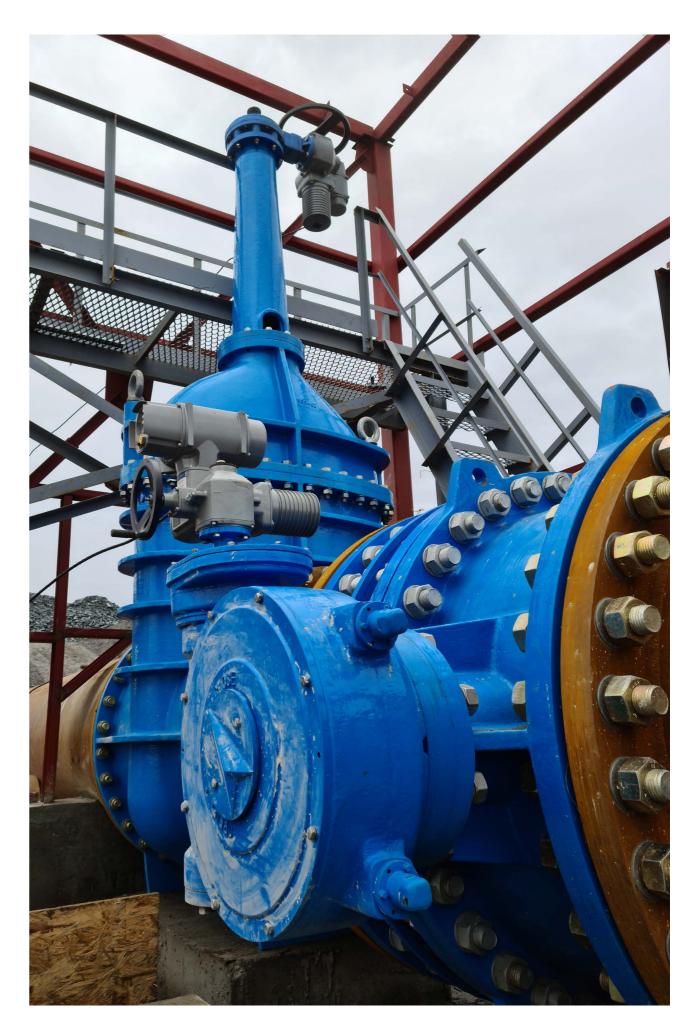
Туре	Nominal diameter	Nominal pressure	Operating temperature
14-20 1/min	DN 50-800	PN 2/10	t° to +75 °C

# Globe valve.

This is the most commonly used TYPE of globe valve for both continuous (analog) and discrete control of flow and pressure.



 AV11-661
 DN 50-800
 PN 10/16/25/40
 t° to +450 °C



# **Referenzliste.**

### WATER SUPPLY & SEWAGE



ArcelorMittal Atasu, Suez Canal Authority

**2019 Atasu, Kazakhstan** Ductile iron Gate valves DN350 PN16 Application: Sewage

**2020 Suez Canal, Egypt** Butterfly valves DN65 - DN125 PN16 Application: Sea water

**2021 Suez Canal, Egypt** Knife gate valves DN150 PN10 Application: Sludge

### METALLURGY



### **CHEMISTRY & PETROCHEMISTRY**



#### Karpatnaftochim

2021 Kalush, Ukraine Cast steel gate valve DN100 -DN400 PN40 Application: Dichloroethane 2021 Kalush, Ukraine Cast steel Gate valve 12» - 30» CLASS600 Application: HP steam

## MINING AND PROCESSING PLANT



#### ArcelorMittal Temirtau, Metinvest Holding

2018-2019 Temirtau, Kazakhstan Goggle, Gate valves DN1500 -DN3000 PN2.5 Application: Blast furnace gas

**2019 Mariupol, Ukraine** Ball valves DN50 PN16 Application: Cooling water

**2021 Zaporizhia, Ukraine** Control globe valve DN250 PN16 Application: Cooling water

Ferrexpo – Poltava Mining, Metinvest Holding

**2019 -2021 Poltava, Ukraine** Pinch valve DN80 PN10 Application: thickened slurry

**2021 Kryvyi Rih , Ukraine** Knife gate valves DN800 PN10 Application: tailings





PUMPEN | ARMATUREN | SAUGBAGGER | ENGINEERING

#### WIR FREUEN UNS AUF DIE ZUSAMMENARBEIT MIT IHNEN!

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