

# Series HAS



### **Every component precisely matched**

#### Handwheel

As standard the gate valves are equipped with a handwheel. On request the valves can be supplied with pneumatic or electric actuator.

### Reliable stem seal

Depending on the process fluid, pressure and temperature, we can advice you on the most suitable stem seal. We ensure that you will not have to worry about the tightness. Stem surface, packing material and design are finely matched so that neither friction, corrosion nor emission limit values will cause you any issues.

#### Bonnet

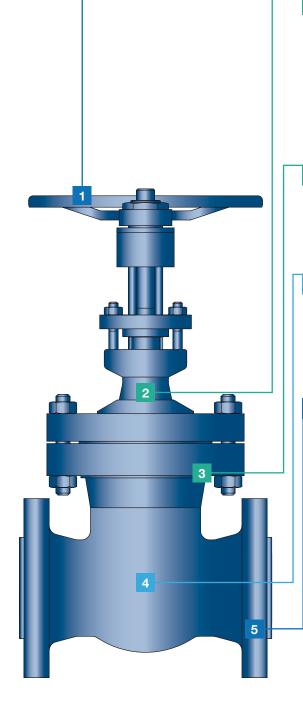
The bonnet enables an easy dismounting of the internal parts.

#### **Inner parts**

The metallic or soft seal of the gate along with the metallic seat ensures a long-life internal tightness.

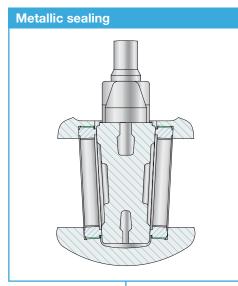
#### Body

The one-piece body is available in cast steel, heat resisting cast steel or stainless steel. The nominal pressure rating goes from PN 10 to PN 400 and reaches temperatures up to 500° C.

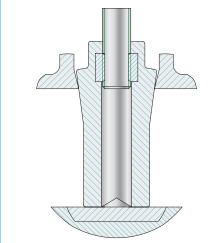


### **Applications**

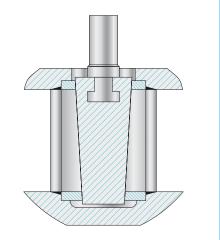
- Chemistry
- Petrochemistry, natural gas
- Paper and pulp
- Food and beverages
- Energy, powerplants, district heating
- Waste management, municipale plants
- Textyle industry, dyeing factories
- Shipbuilding

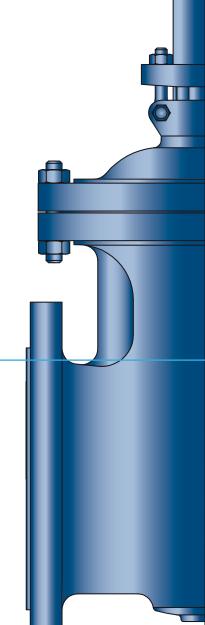


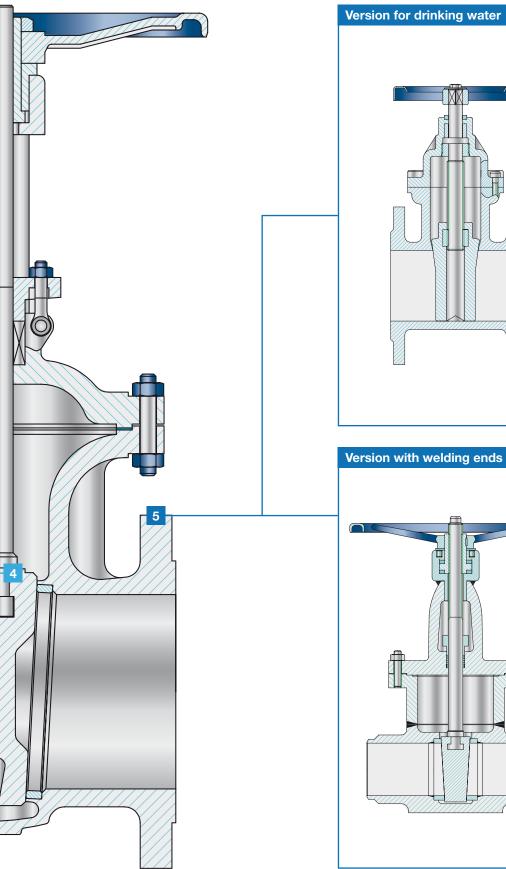
### Soft sealing with EPDM

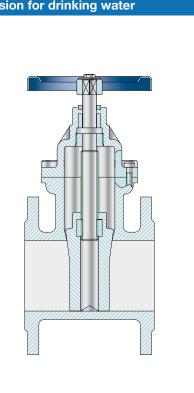


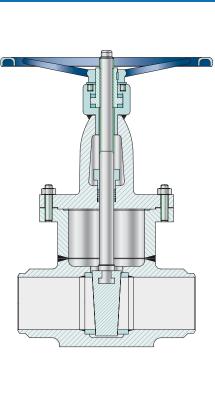
### Metallic sealing with armored seat











## **Series HAS**

### Standard version



Features	Advantages
Body designed to meet flow path criteria	<ul><li>Less noise</li><li>Less wear</li></ul>
Modular design	<ul> <li>Many different combinations of valves and actuators possible</li> <li>Gate/seat combinations <ul> <li>Metallic sealing</li> <li>Soft sealing</li> </ul> </li> <li>Stem/seal combinations <ul> <li>Adjustable stuffing box</li> </ul> </li> </ul>
Highly accurate stem guiding	<ul><li>Precise plug guiding</li><li>Guided stuffing box</li><li>Minimum wear of packing</li></ul>
Compact and robust design	<ul><li>Saves installation space</li><li>Any mounting position possible</li></ul>
Easy interchangeability of components	<ul> <li>Low operating expenses</li> </ul>
Stainless steel internal parts	No corrosion
Optionally available with manual, pneumatic or electric actuator	<ul> <li>Wide range of choice</li> </ul>



### **Series HAS**

### General data

Series	HAS	
Nominal bore DN	15 to 600	
Nominal pressure PN	16 to 400	
Flanges	EN 1092-1 (2), form A to H or welding ends	
Installation length	EN 558-1	
Permissible operating temperature	up to +500° C	

Materials						
Body material	EN	for temperatures	ASTM	for temperatures		
	GG-25 EN-GJL-250	- 10 to 300° C	-	-		
	GGG-40 EN-GJS-400-15	- 10 to 300° C	-	-		
	1.0619 GP240GH*	- 10 to 400° C	A216WCB	– 29 to 400°C		
	1.4408 G-X5CrNiMo 19-11-2*	-196 to 400° C	A351CF8M	-196 to 400°C		
	1.7357 G17CrMo5-5*	- 10 to 500° C	A217WC6	- 29 to 500°C		
	* Depending on the nominal bore					

Stem

Corrosion and acid resistant stainless steel

Swiss precision for fluids and flow control