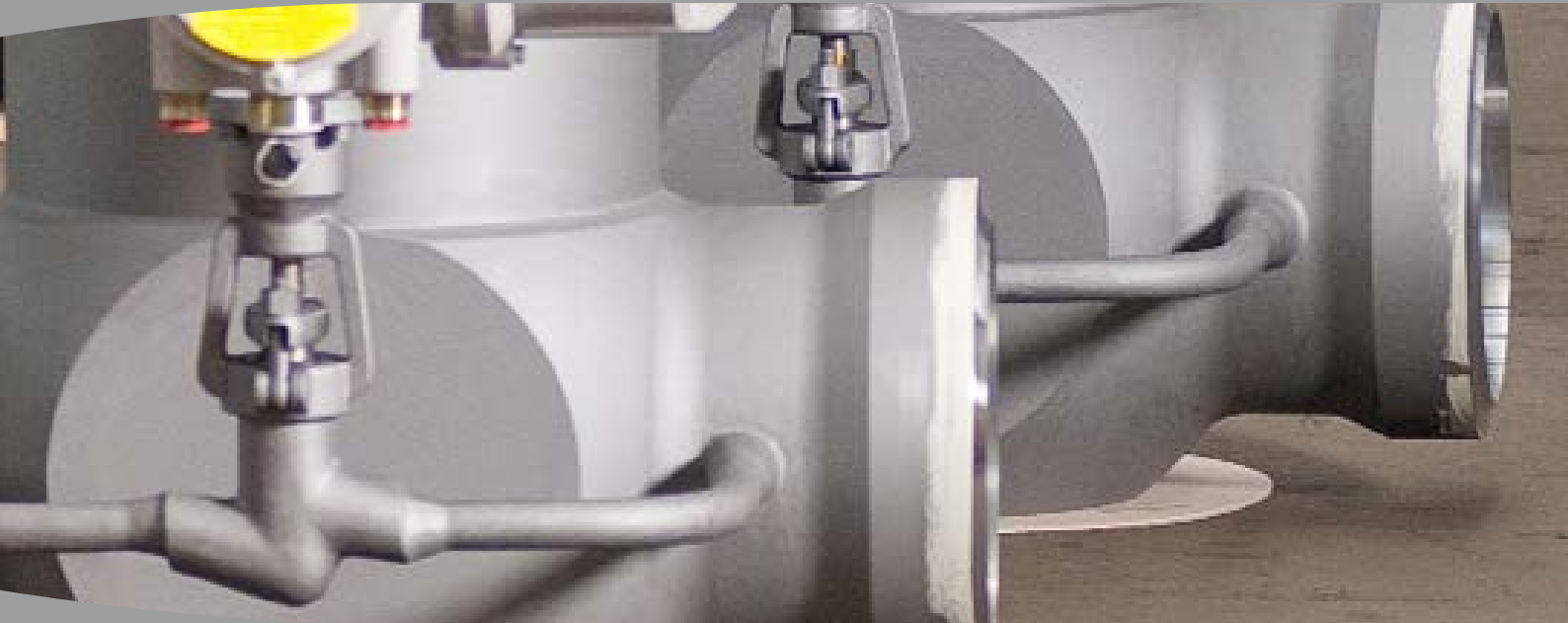




BOMAFA[®]
Special Valve Solutions

www.bomafa.de



HP Gate Valves

- Up to PN 630 / Class 4500
- Pressure Seal
- Flexible double wedge plates
- Forged body materials

BOMAFA Valves



Power



Chemistry



Industry

BOMAFA develops and produces high-quality valves for steam, gas and water. The valves are used in nearly all kinds of power plants, chemical and petrochemical plants and a range of various other industrial applications.

Safe shut-off with BOMAFA technology



BOMAFA high pressure gate valves are designed for optimal use at high pressures and temperatures. Through the cylindrical passage in the valve, the speed of the flowing medium is not substantially changed. Therefore the smallest pressure drop possible is as nearly as small as in pipe with the same dimensions.

The shut-off system of the double wedge plate gate valve is characterized in that the sealing plates on the inlet and outlet side are pressed tightly against the seat. Additionally, through the medium pressure, the sealing force is further enhanced. Thus a complete sealing is ensured.

To prevent overpressure while the slide is closed, caused by heating of trapped feedwater or condensate in the body, appropriate relief devices are provided.

Design Features

Reliable and efficient sealing

Stellited sealing surfaces

Good sliding properties of the seat face material

Regrindable seat faces

Easy assembly and disassembly

Technical Data

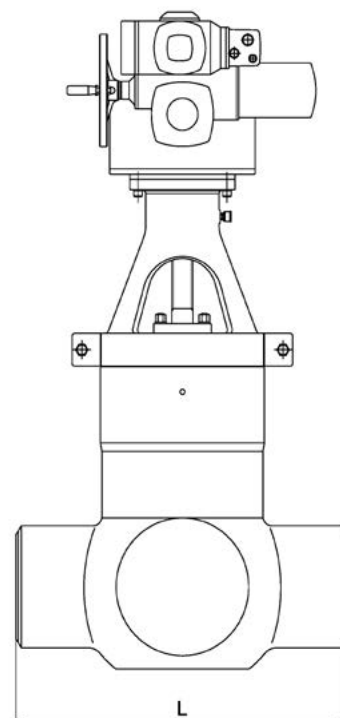
Diameter nominal	DN 80 - DN 600 3" - 24"
Pressure nominal	PN 160 - PN 630 Class 900 - Class 4500
Operation temperature	Up to 650 °C
Design	Passage in pipe dimension for the prevention of pressure losses.
Actuators	- Gearbox with handwheel - Electric Actuators - Pneumatic and hydraulic actuators (Product partnership with asfa Antriebssysteme GmbH from BOMAFA Group).
Bypass	Bypass line for the reduction of opening forces. The bypass valve will be operated by hand or by electric actuator.
Overpressure safety device	- Pressure relief valve and bursting disc - Relief bore in the seat ring
Quality standards	BOMAFA high pressure Gate Valves are manufactured in accordance with the requirements of PED 97/23/EC, DIN EN 12982, ASME or I.B.R regulations.

Design

Standard - size L (mm)

DN (mm)	DN (in.)	PN 160 Cl. 900	PN 250 Cl. 1500	PN 320 Cl. 2500	PN 400
80	3	305	305	305	368
100	4	356	406	406	457
125	5	432	483	483	533
150	6	508	559	559	610
200	8	660	711	711	762
250	10	787	864	864	914
300	12	914	991	991	1041
350	14	991	1067	1067	1118
400	16	1092	1194	1194	1245
450	18	1350	1346	1346	1397
500	20	1500	1473	1473	1950

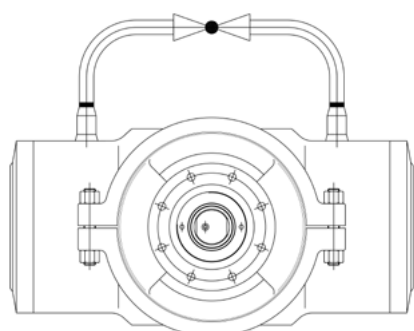
Offers for pressure ratings higher than PN 400 / Class 2500 as well as for special sizes will be created upon request.



Bypass and Overpressure Safety Device

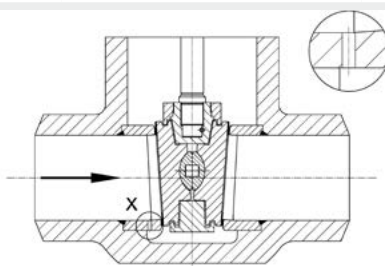
Bypass

When closed, high pressure differences can lead to an increase of the required opening forces. To reduce the opening forces, a bypass line can be used.

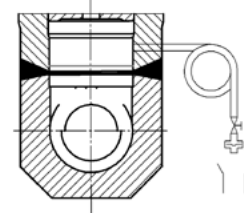


Overpressure Safety Device

When closed, condensed water could remain above the discs in the valve body. Thus, by increasing the temperature, the risk of an undue rise in pressure exists due to evaporation and expansion. To ensure safety on site and to prevent the Gate Valve effectively from damage, BOMAFA has designed two alternative safety devices:



A) Relief bore in the seat ring

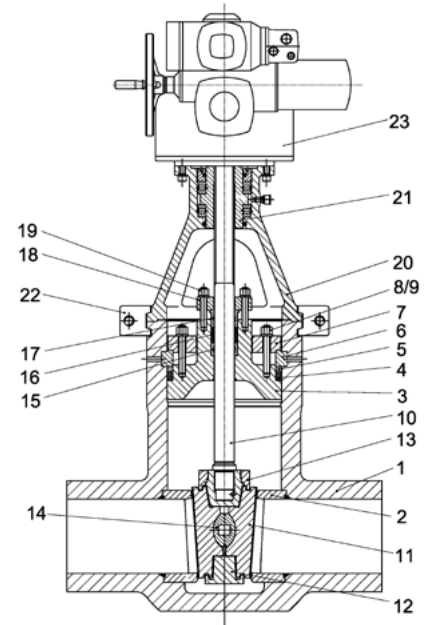


B) Pressure relief valve and bursting disc

Part list

Part list

No.	Name	No.	Name
1	Body	13	Upper wedge holder
2	Seatring	14	Pressure pad
3	Insert	15	Base ring
4	Self sealing gasket	16	Packing
5	Ring	17	Packing ring
6	Split - ring	18	Gland plate
7	Centering plate	19	Stud screw
8	Stud screw	20	Yoke
9	Hexagon nut	21	Threaded bush
10	Stem	22	Clamp
11	Wedge	23	Actuator
12	Lower wedge holder		



Materials

Material selection depending on the temperature

Component	< 400 °C	< 500 °C	< 530 °C	< 550 °C	< 600 °C	< 650 °C
Body						
Seatring						
Wedge	1.0460	1.6368	1.7335	1.7380	1.4903	1.4901
Lower wedge holder	(A 105)	1.5415 (A 182 F1)	(A 182 F11)	(A 182 F22)	(A 182 F91)	(A 182 F92)
Upper wedge holder						
Pressure pad						
Stem	1.4923 (A 182 F9)			1.4913		
Packing	Graphite					
Yoke	1.0460 (A 105)		1.5415 (A182 F1)		1.7335 (A 182 F11)	

Close to limit ranges - corresponding to the pressure rating - deviant materials can be used.

BOMAFA Armaturen GmbH

Hohensteinstr. 52
44866 Bochum / Germany

+49 (0) 2327 992 - 0
+49 (0) 2327 314 - 43

info@bomafa.de
www.bomafa.de