

Application

Gate valves are shut-off valves. It is used especially in power engineering, chemical industry as well as other industries depending on material selection.

Working medium

- water
- steam
- gas
- other fluids

Technical description

The body is a forging into which a flexible wedge is inserted through the yoke-type bonnet or through the pressure seal bonnet. The seating surfaces of the wedge are hard faced and proper seating of the wedge is provided for by precision-machined guides in the body. The seat rings are weld deposited in the body and hard faced as well. The bonnet and the stuffing box are sealed with special graphite gaskets and packing rings. The gate valves can be on request designed with pressure cavity released system against over pressurizing of body cavity. There is an option of drilling a hole on an input side of the disc, using diaphragm or safety valve or making a by-pass. Also upon request, the gate valve can be equipped with one to three bypass valves.

Connection to the piping

- **flanged ends** acc. to EN 1092-1, ISO 7005-1, GOST 33259-2015
- **welded ends** acc. to EN 12627



Operation

- manual (hand wheel)
- electric actuator
- pneumatic actuator
- actuator located out of the valve

Gate valves can be equipped with a locking device.

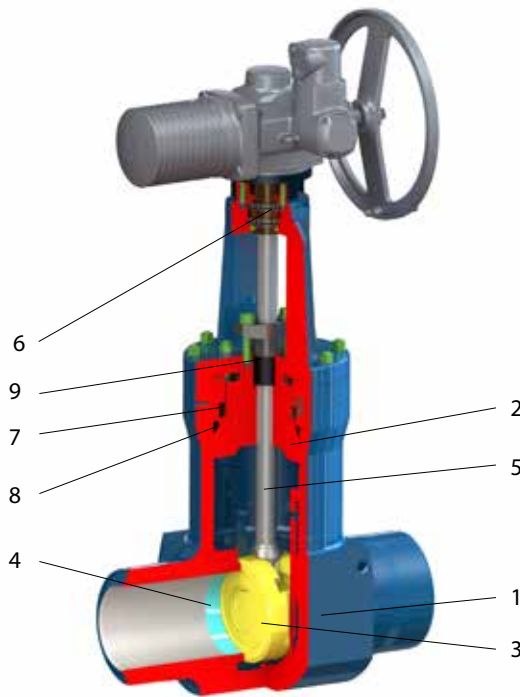
Testing

The gate valves are subjected to the following tests performed with water:

- shell strength test
- shell tightness test
- seat tightness test and operability test according to EN 12266
- other tests by agreement.

Installation

The gate valves may be installed into the piping in vertical or horizontal position. In case of gate valves equipped with an electric actuator or a pneumatic actuator, must you follow instructions of the manufacturer of actuators.



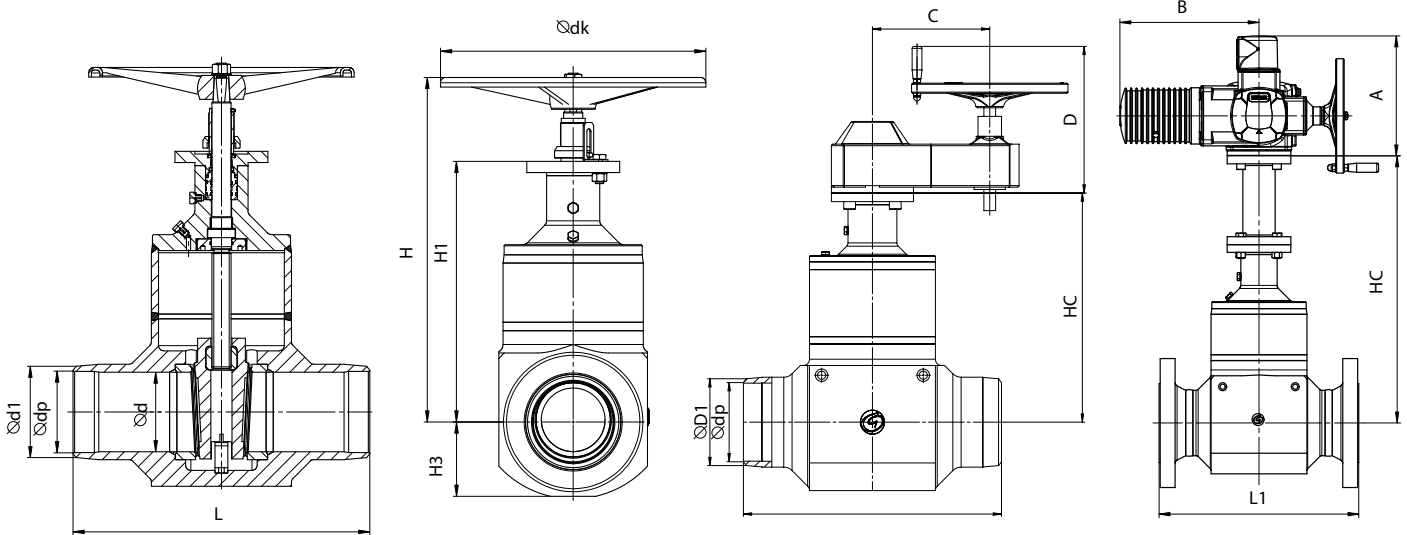
Position	Component
1	Body
2	Pressure seal bonnet
3	Wedge + overlay
4	Seat + overlay
5	Stem
6	Stem nut
7	Segmented ring
8	Gasket
9	Packing

Production range

Typ	PN	DN												
		50	65	80	100	125	150	200	250	300	350	400	500	600
S43.1	63	.	.	.	.	.	.	.	.	.	.	.	.	.
	100	.	.	.	.	.	.	.	.	.	.	.	.	.
S43.3	16	.	.	.	.	.	.	.	.	.	.	.	.	.
	25	.	.	.	.	.	.	.	.	.	.	.	.	.
	40	.	.	.	.	.	.	.	.	.	.	.	.	.
	63	.	.	.	.	.	.	.	.	.	.	.	.	.
S43.5	100	.	.	.	.	.	.	.	.	.	.	.	.	.
	160	.	.	.	.	.	.	.	.	.	.	.	.	.
	250	.	.	.	.	.	.	.	.	.	.	.	.	.
	320	.	.	.	.	.	.	.	.	.	.	.	.	.
	400	.	.	.	.	.	.	.	.	.	.	.	.	.

DN 50-400 • PN 16-100 • Tmax 100 °C
 Body design: fully welded gate valve
 Non-rising stem

Connection: EN 12627 WELDED ENDS
 EN 1092-1, ISO 7005-1 FLANGED ENDS
 (on request)



Material

Component	from - 46 °C to 100 °C	from - 46 °C to 100 °C	from - 46 °C to 100 °C
Body	A350 LF2	A350 LF2 Re340MPa	A350 LF2 Re340MPa
Extension	A350 LF2	A350 LF2 Re340MPa	A350 LF2 Re340MPa
Flanges	A350 LF2	A350 LF2 Re340MPa	A694 F52
Bonnet	A350 LF2	A350 LF2 Re340MPa	A350 LF2 Re340MPa
Wedge + overlay	A350 LF2 + Stellite	A350 LF2 + Stellite	A350 LF2 + Stellite
Stem nut	bronz	bronz	bronz
Seat + overlay	A350 LF2 + Stellite	A350 LF2 + Stellite	A350 LF2 + Stellite
Stem	1.4923	1.4923	1.4923
Stem sealing	1.4021	1.4021	1.4021
Actuator flange	1.0570	1.0570	1.0570
Vent plug	1.4021	1.4021	1.4021
Position indicator	1.0570	1.0570	1.0570

PN 16-100

S43.3 - welded ends, with handwheel															
DN	d	d1	dp	H	H1	H2	HC	L	L1 PN 16	L1 PN 100	Dk	kg	C	D	ISO 5210
50	49	60,3	Acc. to order	340	250	65	380	292	250	300	250	41	-	-	F10
80	74	114,3		382	280	87	440	356	310	380	320	56	-	-	F14
100	100	139,7		510	371	120	590	432	350	430	400	72	-	-	F14
150	150	219,1		650	491	140	736	559	450	550	500	169	-	-	F14
200	201	273		748	586	175	840	660	550	650	630	312	-	-	F16
250	252	323,9		1305	740	210	895	787	650	775	400	485	360	410	F25
300	303	406,4		1380	850	265	970	838	750	900	400	670	360	410	F25
400	385	457		1524	980	320	1100	991	950	1150	500	1250	380	424	F30

Dimensions A and B depend on the particular actuator type.
 Note: DN 250 up to DN 400 are supplied only with gear and handwheel.
 Weight [kg] is only approximate, depending on the actuator type.