

Application

Gate valves are isolating valves designed for full closing or opening of working media flow. If the gate valves are used for regulating or throttling purposes, the manufacturer does not guarantee tightness of the gate valves. For regulation we recommend to use special control gate valve type S33.C.

Working medium

- water
- non-corrosive liquids
- steam
- air
- gases of group 1 and 2
- petroleum and petroleum products

The service fluids shall not contain rough impurities.

Technical description

The gate valve is an outside-screw-and-yoke, full bore with flexible wedge and rising stem. The body and the bonnet are made of castings and are connected by a flanged joint. The seating surfaces of the seats and the wedge are made in compliance with API 600. The seat rings are welded into the body. The gate valves are equipped with a back seat. The gate valves are a bi-directional sealing valves. The body-bonnet joint and the packing chamber are sealed with asbestos-free gasket and packing which guarantee a long life service. The requirement for an automatic body cavity pressure relief shall be specified in the purchase order. Pressure relief can be achieved by:

- drilling a hole through one disc of the wedge,
- special valve incorporated into the wedge,
- external bypass,
- use of solid wedge.

TA-Luft design on request.

Connection to the piping

- **flanged ends** - acc. to EN 1092-1 or GOST, face-to-face dimensions are acc. to EN 558, Series 14, 15 and 26 or GOST
- **welded ends** - acc. to EN 12627

Operation

The gate valves are delivered with a handwheel, a manual bevel gear, an electric actuator or bare stem ready for connection to an actuator. The standard connecting dimensions for connection to a manual gear or an electric actuator meet the requirements of ISO 5210.



Accessories

The gate valves can be equipped with the following accessories:

- drain valve,
- air-vent valve,
- by-pass valves,
- stand for remote control, including chains and chain wheels,
- vent plugs,
- gland packing „live loading“.

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.

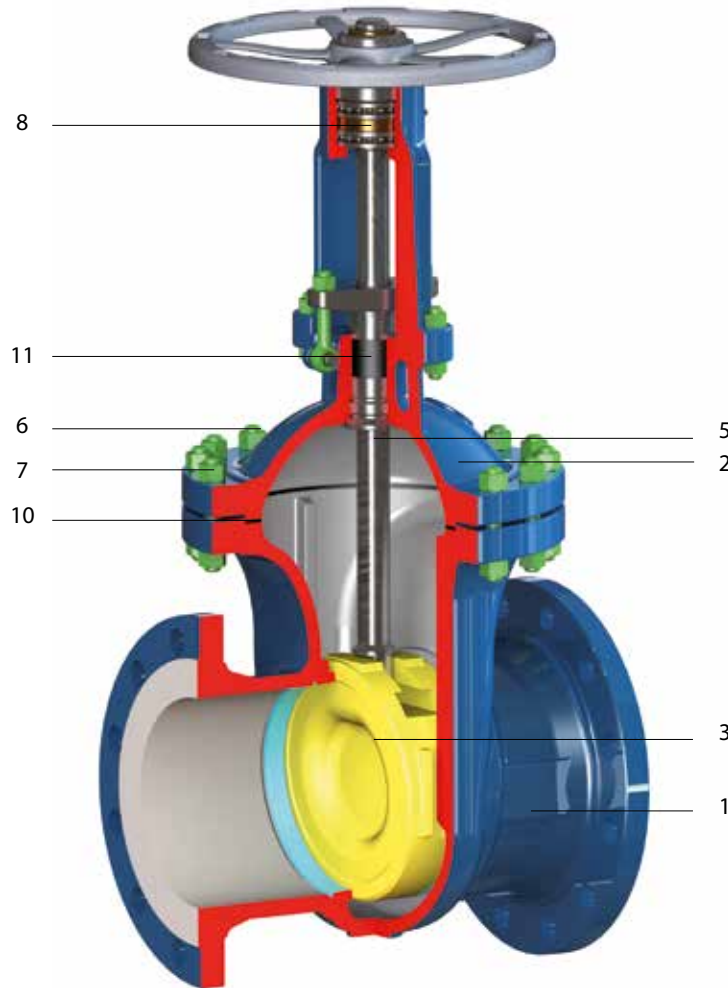
Production range

Type	PN	DN																									
		40	50	65	80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000	
S33.1 S33.C	16	
	25	
	40	
	63	
	100	
S33.2	6, 10, 16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
S33.3	16		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
S33.4	2,5													.	.	.	.	.	.	.	.	.	.	.	.	.
	6													.	.	.	.	.	.	.	.	.	.	.	.	.
	10													.	.	.	.	.	.	.	.	.	.	.	.	.
	16													.	.	.	.	.	.	.	.	.	.	.	.	.
	25													.	.	.	.	.	.	.	.	.	.	.	.	.



DN 40-600 • PN 6-16 • Tmax 450 °C
Body design: yoke gate valve
Body, bonnet: cast
Rising stem
Solid wedge

Connection: Ⓢ EN 1092-1 FLANGED ENDS



Material acc. to EN

Position	Component	Carbon steel	Stainless steel
1	Body + overlay	1.0619 + 13Cr	1.4408
2	Bonnet	1.0619	1.4408
3	Wedge + overlay	1.0619 + 13Cr	1.4408
5	Stem	1.4021	1.4401
6	Bonnet bolts*	1.7218*	1.4301*
7	Bonnet nuts*	1.1191*	1.4301*
8	Stem nut	Ni-rezist, Al-bronze	
10	Gasket	Graphite	
11	Packing	Graphite	

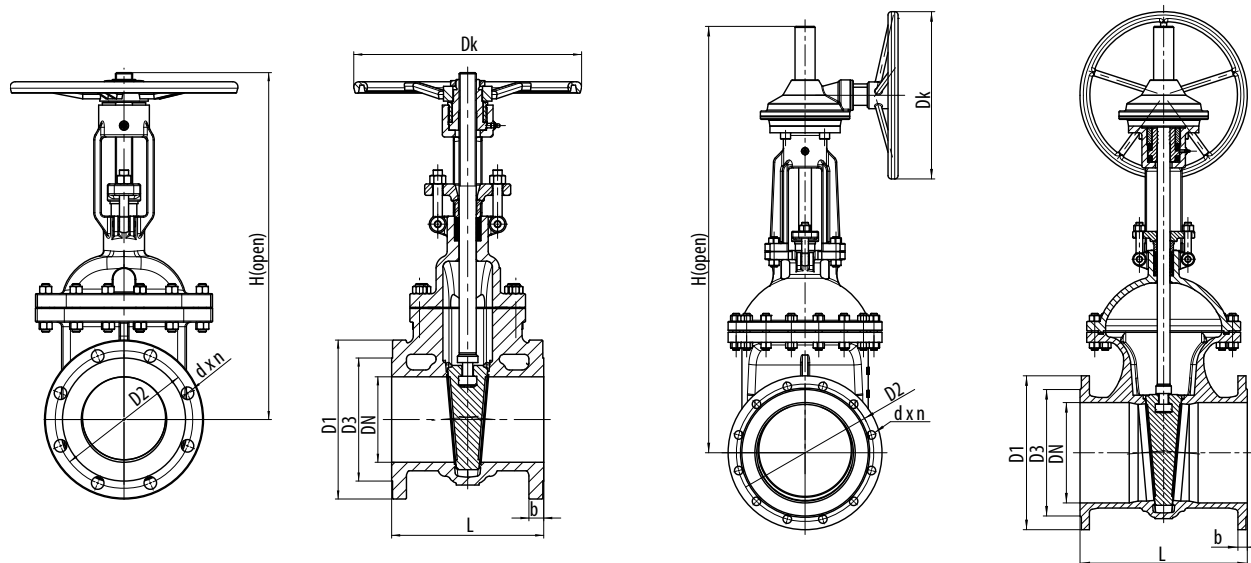
* equivalent or according to customer's request

Buttweld ends on request.



DN 40-600 • PN 6-16 • Tmax 450 °C
Body design: yoke gate valve

Connection: EN 1092-1 FLANGED ENDS



PN 6

DN	D1	D2	D3	L	H(open)	Dk	b	d x n	kg
40	130	100	80	140	340	160	14	14 x 4	14
50	140	110	90	150	405	160	14	14 x 4	16
65	160	130	110	170	480	160	14	14 x 4	18
80	190	150	128	180	510	160	16	18 x 4	23
100	210	170	148	190	600	200	16	18 x 4	36
125	240	200	178	200	640	200	18	18 x 8	48
150	265	225	202	210	785	200	18	18 x 8	60
200	320	280	258	230	980	250	20	18 x 8	97
250	375	335	312	250	1190	320	22	18 x 12	166
300	440	395	365	270	1400	400	22	22 x 12	210
350	490	445	415	290	1585	450	22	22 x 12	345
400	540	495	465	310	1720	500	22	22 x 16	480
500	645	600	570	350	2095	500	24	22 x 20	645
600	755	705	670	390	2680	600	30	26 x 20	895

PN 10

DN	D1	D2	D3	L	H(open)	Dk	b	d x n	kg
40	150	110	88	140	340	200	18	18 x 4	15
50	165	125	102	150	405	200	18	18 x 4	17
65	185	145	122	170	480	200	18	18 x 8	19
80	200	160	138	180	510	250	20	18 x 8	25
100	220	180	158	190	600	280	20	18 x 8	36
125	250	210	188	200	640	300	22	18 x 8	52
150	285	240	212	210	785	300	22	22 x 8	62
200	340	295	268	230	980	350	24	22 x 8	88
250	395	350	320	250	1190	400	26	22 x 12	180
300	445	400	370	270	1400	450	26	22 x 12	230
350	505	460	430	290	1585	500	26	22 x 16	380
400	565	515	482	310	1720	600	26	26 x 16	505
500	670	620	585	350	2095	600	28	26 x 20	700
600	780	725	685	390	2680	600	34	30 x 20	985

PN 16

DN	D1	D2	D3	L	H(open)	Dk	b	d x n	kg
40	150	110	88	170	360	160	18	18 x 4	16
50	165	125	102	180	405	200	18	18 x 4	20
65	185	145	122	200	480	200	18	18 x 8	21
80	200	160	138	210	510	200	20	18 x 8	32
100	220	180	158	230	605	250	20	18 x 8	40
125	250	210	188	255	640	250	22	18 x 8	49
150	285	240	212	280	785	320	22	22 x 8	74
200	340	295	268	330	980	400	24	22 x 12	117
250	405	355	320	450	1015	450	26	26 x 12	210
300	460	410	378	500	1190	500	28	26 x 12	300
350	520	470	438	550	1350	600	30	26 x 16	510
400	580	525	490	600	1460	600	32	30 x 16	670
500	715	650	610	700	1800	700	44	33 x 20	930
600	840	770	725	800	2200	800	54	36 x 20	1310