

**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, with flexible or solid wedge, rising or non-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.

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.

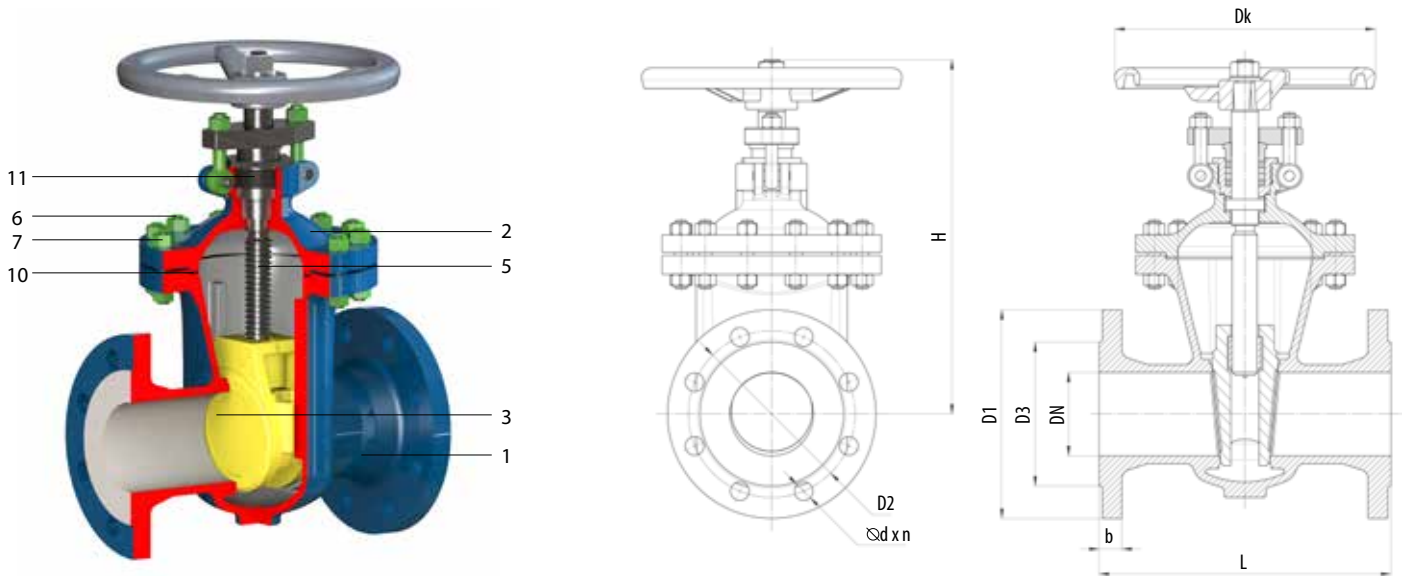
**Production range**

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

\* DN 150 and higher in cast design (S33.1)  
Up to DN 1200 in welded design (S33.4)

DN 50-600 • PN 16 • Tmax 250 °C  
 Body design: bonnet gate valve  
 Body, bonnet, wedge: cast  
 Non-rising stem

Connection: EN 1092-1 FLANGED ENDS



### Material acc. to EN

Position	Component	Carbon steel
1	Body + overlay	1.0619 / A216 WCB + 13Cr
2	Bonnet	1.0619 / A216 WCB
3	Wedge + overlay	1.0619 / A216 WCB + 13Cr
5	Stem	1.4021 / A182 F6a
6	Bonnet bolts*	1.7218 / A193 B7
7	Bonnet nuts*	1.1191 / A194 2H
10	Gasket	Graphite with stainless steel insert
11	Packing	Braided graphite cord + formed graphite rings

\* Equivalent or according to customer's request

### PN 16

DN	D1	D2	D3	L	b	Ød x n	H	Dk	kg
50	165	125	102	180	18	18 x 4	325	200	24
65	185	145	122	200	18	18 x 8	330	200	33
80	200	160	138	210	20	18 x 8	355	200	38
100	220	180	158	230	20	18 x 8	410	200	54
125	250	210	188	255	22	18 x 8	520	250	75
150	285	240	212	280	22	22 x 8	550	250	102
200	340	295	268	330	24	22 x 12	650	300	145
250	405	355	320	450	26	26 x 12	750	350	245
300	460	410	378	500	28	26 x 12	948	550	315
350	520	470	438	550	30	26 x 16	1065	600	380
400	580	525	490	600	32	30 x 16	1234	600	480
500	715	650	610	700	44	33 x 20	1420	460	815
600	840	770	725	800	54	36 x 20	1625	460	1200