

## Cast Steel Gate Valves Outside Screw & Yoke



Symbol	DN	PN	Working temperature
RSP-TA-OT	40 ... 600	16; 25; 40	-10 °C ... +400°C
RSP-TA-OT	40 ... 500	63	-10 °C ... +400°C
RSP-TA-OT	1000	25	-10 °C ... +400°C
RSP-AE-OT (for electric driving)	40 ... 600	16; 25; 40	-10 °C ... +400°C
RSP-AE-OT (for electric driving)	40 ... 500	63	-10 °C ... +400°C

### Application

The cast steel gate valves with rising stem are used at installations for water, steam, gas, petroleum products or for other similar products with low corrosive action, except hydrogen, hydrogen and hydrocarbons mixtures, and aggressive agents containing sulphur, hydrogen sulphide etc.

### Service and Tests

Nominal Pressure	Temperature ( ° C)						Test Pressure (bar)	
	120	200	250	300	350	400	Shell	Seat
PN	Max. working pressure (bar)							
16	16	14	13	11	10	8	38	28
25	25	22	20	17	16	13		
40	40	35	32	28	24	21	96	70
63	63	50	45	40	36	32		

### Constructive and functional characteristics

- type: bolted bonnet;
- flexible wedge;
- rising stem, outside screw and yoke;
- full bore;
- flanged ends;
- shutting-off: by rotating the handwheel in clockwise direction;
- mounting position: any.

### Execution

- basic design: DIN 3352 and EN1984;
- face to face according to: DIN 3202 part 1 line F5 and EN 558-1 series 15 for PN 16; PN 25; DIN 3202 part 1 line F7 and EN 558-1 series 26 for PN 40 and PN 63;
- flanges connecting dimensions: according to EN1092-1 and ISO 7005-1;
- flange facings: raised face according to ISO 7005-1 type B, and type B1 for PN16-40 and type B2 for PN63 according to EN1092-1
- pressure - temperature ratings according to DIN 2401 part 2 and ISO 7005-1;
- seats rings: stainless steel /stainless steel;
- testing according to ISO 5208 and EN12266-1 (hydrostatic test).

### On request

- other seats rings (brass /stainless steel) with brass rings inserted in the wedge;
- other flange facings according to EN1092-1 and ISO 7005-1;
- other steel materials:
  - alloy steel low temperature (-50° .. 300°C);
  - alloy steel high temperature (-10° .. 500°C);
  - stainless steel (-50° .. 300°C);
- seat air test according to ISO 5208 and EN12266-1;
- gear operation;
- electric motor operation.

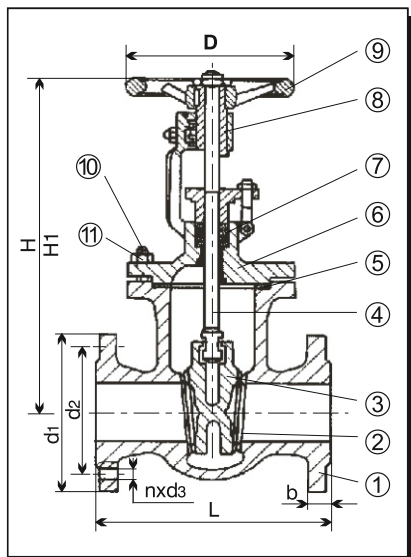


Fig. 1

Table 1

No.	Description	Material
11	Nuts	Gr. 8
10	Studs	Gr. 5.8
9	Handwheel	EN GJL 250
8	Yoke sleeve	EN GJS 400-15
7	Packing	Graphite
6	Bonnet	GP 240 GH (GSC - 25)
5	Gasket	Graphite
4	Stem	13% Cr
3	Wedge	GP 240 GH (GSC - 25)
2	Seats Ring	13% Cr
1	Body	GP 240 GH (GSC - 25)

PN	DN	d <sub>1</sub>	d <sub>2</sub>	n x d <sub>3</sub>	H	H <sub>1</sub>	L	b	D	Weight (kg)
16	50	165	125	4 x 18	344	400	250	18	228	21,5
	80	200	160	8 x 18	430	520	280	20	250	34,5
	100	220	180	8 x 18	500	610	300	20	304	46,5
	150	285	240	8 x 22	660	880	350	22	406	95,0
	200	340	295	12 x 22	800	1020	400	24	406	142
	250	405	355	12 x 26	960	1240	450	26	457	220
	300	460	410	12 x 26	1060	1390	500	28	559	280
	350	520	470	16 x 26	1300	1670	550	30	610	415
	400	580	525	16 x 30	1500	1960	600	32	720	620
	500	715	650	20 x 33	1800	2350	700	44	720	1010
**	600	840	20 x 36	2100	2730	800	54	1000	1560	
25	40	150	110	4 x 18	325	370	240	18	228	18
	50	165	125	4 x 18	344	400	250	20	228	24,5
	65	185	145	8 x 18	430	520	270	22	250	38,5
	80	200	160	8 x 18	465	570	280	24	304	46,5
	100	235	190	8 x 22	510	630	300	24	304	57
	125	270	220	8 x 26	600	735	325	26	406	96
	150	300	250	8 x 26	660	880	350	28	406	132
	200	360	310	12 x 26	820	1040	400	30	457	175
	250	425	370	12 x 30	964	1235	450	32	559	290
	300	485	430	16 x 30	1060	1390	500	34	610	303
	350	555	490	16 x 33	1330	1720	550	38	610	520
400	620	550	16 x 36	1540	1980	600	40	720	665	
500	730	660	20 x 36	1860	2390	700	48	1000	1060	
600	845	770	20 x 39	2100	2730	800	58	1000	1600	
1000	1320	1210	28 x 56	3276	4376	1200	64	1000	4600	
40	40	150	110	4 x 18	325	370	240	18	228	18
	50	165	125	4 x 18	344	400	250	20	228	24,5
	65	185	145	8 x 18	430	520	290	22	250	39
	80	200	160	8 x 18	465	570	310	24	304	47
	100	235	190	8 x 18	510	630	350	24	355	59
	125	270	220	8 x 22	600	735	400	26	406	110
	150	300	250	8 x 26	660	880	450	28	406	138
	200	375	320	12 x 30	820	1040	550	34	559	198
	250	450	385	12 x 33	964	1235	650	38	610	312
	300	515	450	16 x 33	1060	1390	750	42	610	392
	350	580	510	16 x 36	1330	1720	850	46	720	550
400	660	585	16 x 39	1540	1980	950	50	1000	690	
500	755	670	20 x 42	1860	2390	1150	57	1000	1100	
600	890	795	20x48	2100	2730	1350	72	1000	2150	
63	40	170	125	4 x 22	325	370	240	28	228	21,0
	50	180	135	4 x 22	344	400	250	28	250	29,5
	65	205	160	8 x 22	430	520	290	28	304	42,0
	80	215	170	8 x 22	465	570	310	28	304	49,0
	100	250	200	8 x 26	520	630	350	30	355	67,0
	125	295	240	8 x 30	600	735	400	34	406	136
	150	345	280	8 x 33	750	910	450	36	559	214
	200	415	345	12 x 36	910	1130	550	42	610	290
	250	470	400	12 x 36	1014	1270	650	46	720	445
	300	530	460	16 x 36	1060	1390	750	52	720	480
	350	600	525	16 x 39	1350	1750	850	58	1000	810
400	670	585	16 x 42	1550	1990	950	60	1000	1010	
*	500	800	20 x 48	1860	2390	1150	68	1000	1980	

Note: \* - to be homologated  
\*\* - round body type

Table 2