



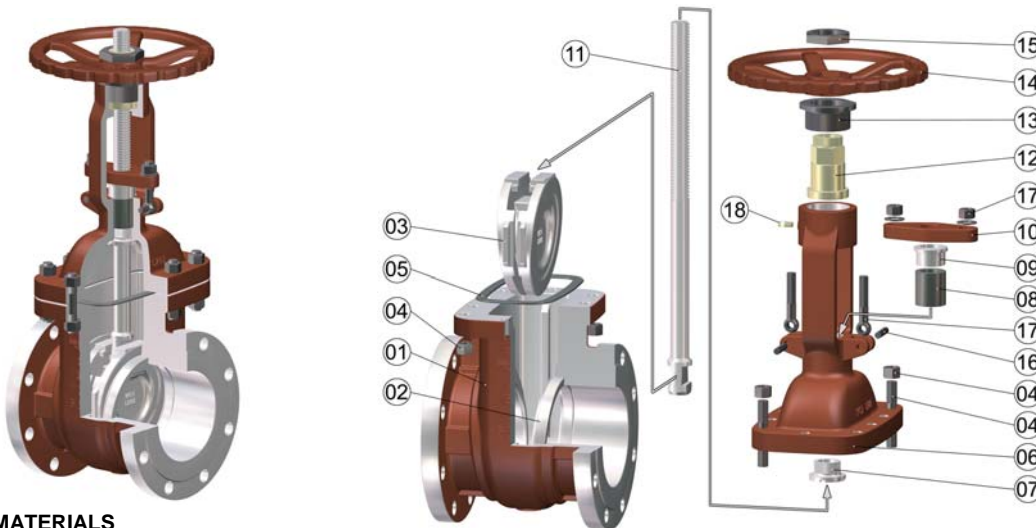
CLASS 150# - 2500# GATE VALVES



Series 900 B

DIAVAL Series 900B Gate Valves are of conventional full bore with **flexible wedge** that provides flexure of the gate seating surfaces. The two inclined seats allow for tight shut off even against high pressures. Outside Screw and yoke design. Series 900B are serialised products being some parts interchangeable to other valve types thus increasing the assembly flexibility. Gate valves are bi directional valves and of easy operation being widely used in power, chemical and oil industry. The range is also comprehensive of **Pressure seal valves**, which are used for high temperature – high pressure service, specially on power plants. Valves incorporate, standard hand wheel or, optionally, worm gears, pneumatic, electric, hydraulic and hydro-pneumatic actuators.

** Please observe Operating and Maintenance Rules as well as all essential safety requirements and labour health care guidance before valve installation and plant start up. More detailed information not found in these data sheets can be provided by our Product Specialists on request.*

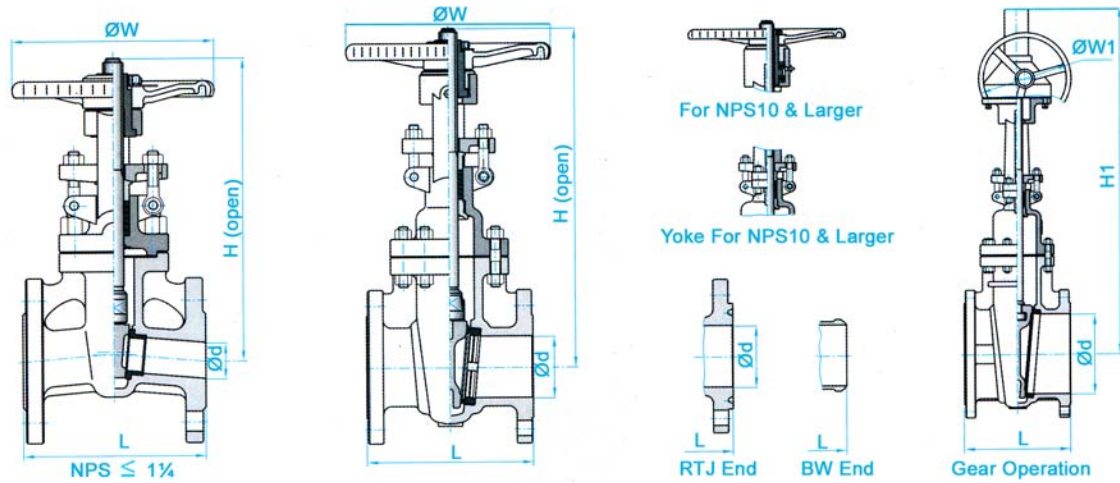


PARTS & MATERIALS

Part N°	Parts name	WCB/Trim1	WCB/Trim 5	WCB/Trim 8	CF8/304	CF8M/316
1	Body	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
2	Seat Ring	A105+13Cr	A105+STL	A105+STL	ASTM A351 CF8	ASTM A351 CF8M
3	Gate	ASTM A216 WCB+13Cr	ASTM A216 WCB+ STL	ASTM A216 WCB+13Cr	ASTM A351 CF8	ASTM A351 CF8M
4	Bonnet bolt	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B8	ASTM A 193 B8M
4	Bonnet nut	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 8	ASTM A 194 8M
5	Gasket	Soft Iron + Graphite or 304 + Graphite			304 + Graphite	316 + Graphite
6	Bonnet	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A351 CF8	ASTM A351 CF8M
7	Backseat bushing	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A351 CF8	ASTM A351 CF8M
8	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
9	Gland	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A182 F304	ASTM A182 F316
10	Gland flange	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A351 CF8	ASTM A351 CF8M
11	Stem	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A 182 F6a	ASTM A182 F304	ASTM A182 F316
12	Stem nut	ASTM A439 D2	ASTM A439 D2	ASTM A439 D2	ASTM A439 D2	ASTM A439 D2
13	Yoke sleeve nut	Carbon steel	Carbon steel	Carbon steel	Carbon steel	Carbon steel
14	Hand wheel	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
15	Hand wheel nut	Carbon steel	Carbon steel	Carbon steel	Carbon steel	Carbon steel
16	Eyebolt pin	ASTM A 36	ASTM A 36	ASTM A 36	304ss	316ss
17	Gland eyebolt	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A193 B8	ASTM A193 B8M
17	Eyebolt nut	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H	ASTM A194 8	ASTM A194 8M
18	Nipple	Carbon steel	Carbon steel	Carbon steel	Carbon steel	Carbon steel

The 5 tabulated materials are the standard manufacturing range which combines 3 body materials(A216WCB; A351CF8; A351CF8M) and 5 Trim combinations (parts n° 3 and 4). Other shell and trim combinations can be provided on request.

Class 150# Gate Valves



DIMENSIONAL DATA

NPS	DN	RF	Dimensions (mm)							Approx. weight (Kg)	
			L	RTJ	BW	d	H	H1	W	W1	H.W
1/2	15	108	119	108	14	195	-	120	-	4	-
3/4	20	117	130	117	19	210	-	120	-	5	-
1	25	127	140	127	25	240	-	140	-	7	-
1.1/4	32	140	153	140	32	300	-	180	-	10	-
1.1/2	40	165	178	165	38	395	-	200	-	14	-
2	50	178	191	216	51	400	-	200	-	19	-
2.1/2	65	191	203	241	64	435	-	200	-	25	-
3	80	203	216	283	76	515	-	250	-	33	-
4	100	229	241	305	102	595	-	280	-	49	-
5	125	254	267	381	127	725	-	280	-	62	-
6	150	267	279	403	152	780	820	300	310	77	104
8	200	292	305	419	203	975	1020	350	310	123	150
10	250	330	343	457	254	1150	1200	400	310	188	215
12	300	356	368	502	305	1380	1430	450	310	288	315
14	350	381	394	572	337	1545	1580	500	310	385	435
16	400	406	419	610	387	1733	1780	500	460	500	552
18	450	432	445	660	438	1915	1990	500	460	601	653
20	500	457	470	711	489	2122	2220	600	460	764	816
24	600	508	521	813	591	2520	2600	600	460	1007	1185
26	650	559	-	864	633	-	2800	-	600	-	1550
28	700	610	-	914	684	-	3050	-	600	-	1880
30	750	610	-	914	735	-	3130	-	600	-	2300
32	800	711	-	965	779	-	3280	-	600	-	2550
34	850	762	-	1016	830	-	3500	-	600	-	2950
36	900	711	-	1016	874	-	3720	-	600	-	3390

Valves 2" and below are of solid wedge design whilst 2" and above are of flexible wedge design.

**Valves 2" and below are also available in wrought steel material (please refer to Data Sheet Series 900).

Dimensions are not contractual and might differ from the table. Arrangement Drawings available on request.

MANUFACTURE DESIGN STANDARDS

-Design and Manufacture:

Cast steel gate valve to API 600 (ISO 10434) or API 6D; Cast stainless steel gate valve to API 603 or API 600.

-**Inspection and Test criteria** conforms to API 598, API 600 or API 6D

-**End flange dimension:** ASME B16.5 (for NPS ≤ 24); ASME B16.47 series B, API 605 Or ASME B16.47 series A, MSS SP-44 (for NPS>24)

-**BW end dimension:** ASME B16.25. /// **SW end dimension:** ASME B16.11.

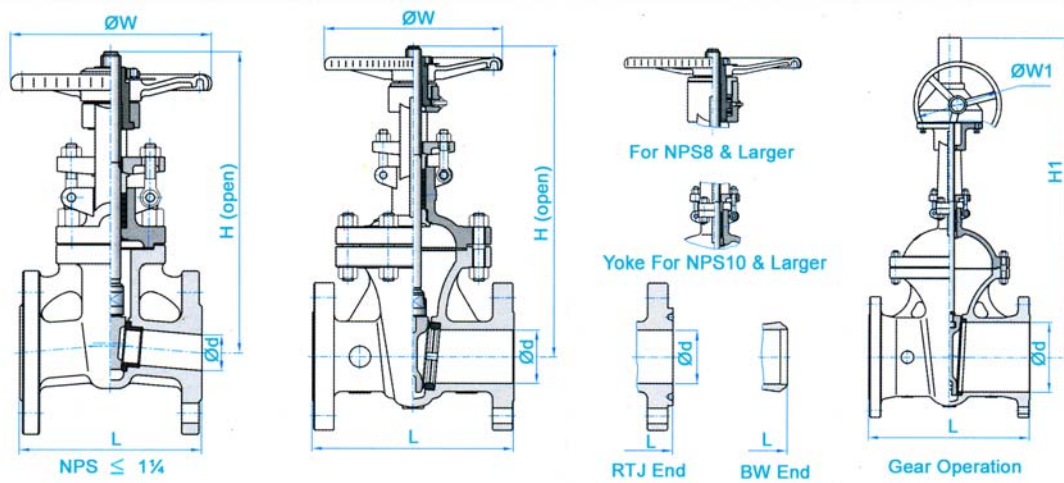
-**Face to Face length:** ASME B16.10.

Pressure – temperature ratings conforms to ASME B16.34.

QA: ISO 9001:2000



Class 300 Gate Valves



DIMENSIONAL DATA

			Dimensions (mm)							Approx. weight (Kg)	
NPS	DN	RF	L	d	H	H1	W	W1	H.W	G.O	
½	15	140	151	140	14	198	-	120	6	-	
¾	20	152	165	152	19	215	-	140	7	-	
1	25	165	178	165	25	245	-	160	10	-	
1.1/4	32	178	191	178	32	306	-	180	15	-	
1.1/2	40	190	203	190	38	400	-	200	21	-	
2	50	216	232	216	51	420	-	200	25	-	
2.1/2	65	241	257	241	64	446	-	200	30	-	
3	80	283	298	283	76	537	-	250	48	-	
4	100	305	321	305	102	619	650	280	73	100	
5	125	381	397	381	127	722	750	300	99	126	
6	150	403	419	403	152	806	835	350	130	186	
8	200	419	435	419	203	1000	1030	400	208	235	
10	250	457	473	457	254	1240	1280	450	334	386	
12	300	502	518	502	305	1425	1460	500	450	502	
14	350	762	778	762	337	1585	1620	600	704	756	
16	400	838	854	838	387	1790	1830	500	923	965	
18	450	914	930	914	438	1960	2000	650	1131	1224	
20	500	991	1010	991	489	2158	2220	750	1345	1400	
24	600	1143	1165	1143	591	2576	2620	900	2122	2385	
26	650	1245	1270	1245	633	-	2850	-	-	3000	
28	700	1346	1372	1346	684	-	3080	-	-	3300	
30	750	1397	1422	1397	735	-	3180	-	-	3550	
32	800	1524	1553	1524	779	-	3300	-	-	4400	
34	850	1626	1654	1626	830	-	3550	-	-	5200	
36	900	1727	1756	1727	874	-	3760	-	-	6050	

Valves 2" and below are of solid wedge design whilst 2" and above are of flexible wedge design.

**Valves 2" and below are also available in wrought steel material (please refer to Data Sheet Series 900).

Arrangement Drawings available on request.

MANUFACTURE DESIGN STANDARDS

-Design and Manufacture:

Cast steel gate valve to API 600 (ISO 10434) or API 6D; Cast stainless steel gate valve to API 603 or API 600.

-Inspection and Test criteria conforms to API 598, API 600 or API 6D

-End flange dimension: ASME B16.5 (for NPS ≤ 24); ASME B16.47 series B, API 605 Or ASME B16.47 series A, MSS SP-44 (for NPS > 24)

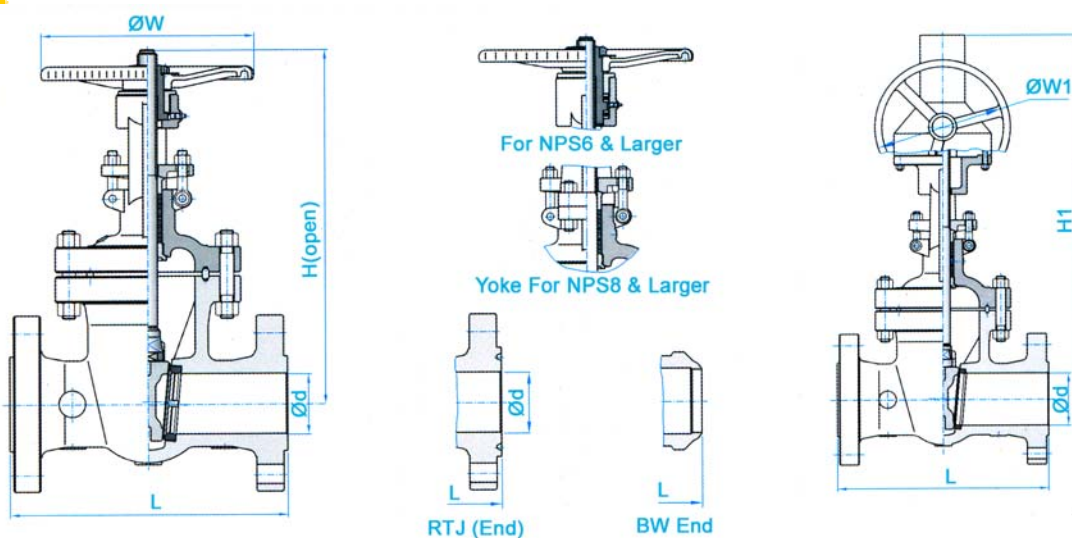
-BW end dimension: ASME B16.25. /// **SW end dimension:** ASME B16.11.

-Face to Face length: ASME B16.10.

Pressure – temperature ratings conforms to ASME B16.34.

QA: ISO 9001:2000

Class 600 & Class 900 Gate Valves



DIMENSIONAL DATA

Size		Class 600									
		Dimensions (mm)					Weight (Kg)				
NPS	DN	RF	RTJ	BW	d	H	H1	W	W1	H.W	G.O
2	50	292	295	292	51	444	-	200	-	32	-
2.1/2	65	330	333	330	64	500	-	250	-	52	-
3	80	356	359	356	76	558	585	280	310	60	87
4	100	432	435	432	102	665	695	300	310	107	134
5	125	508	511	508	127	760	790	350	310	175	227
6	150	559	562	559	152	868	900	450	310	216	268
8	200	660	664	660	203	1073	1110	500	310	399	451
10	250	787	791	787	254	1263	1300	650	460	605	657
12	300	838	841	838	305	1600	1650	700	460	851	893
14	350	889	892	889	337	1705	1750	900	460	1177	1232
16	400	991	994	991	387	1835	1900	900	460	1513	1568
18	450	1092	1095	1092	438	-	2020	-	600	-	1980
20	500	1194	1200	1194	489	-	2172	-	600	-	2460
24	600	1397	1407	1397	591	-	2650	-	600	-	3650
		Class 900									
2	50	368	371	368	51	500	-	280	-	70	-
2.1/2	65	419	422	419	64	550	-	280	-	110	-
3	80	381	384	381	76	610	660	300	310	140	167
4	100	457	460	457	102	702	750	350	310	200	227
5	125	559	562	559	127	850	900	400	310	258	285
6	150	610	613	610	152	980	1060	500	460	358	410
8	200	737	740	737	203	1100	1140	650	460	550	600
10	250	838	841	838	254	1320	1370	700	460	1000	1100
12	300	965	968	965	305	1500	1560	900	460	1215	1310
14	350	1029	1038	1029	322	1900	1950	900	600	1600	1700
16	400	1130	1140	1130	373	2050	2100	900	600	2150	2330

Body - Bonnet style of Valves up to class 900 are provided with bolted studs.

**Valves 2" and below are also available in wrought steel material (please refer to Data Sheet Series 900).

Arrangement Drawings available on request.

MANUFACTURE DESIGN STANDARDS

-Design and Manufacture:

Cast steel gate valve to API 600 (ISO 10434) or API 6D; Cast stainless steel gate valve to API 603 or API 600.

-Inspection and Test criteria conforms to API 598, API 600 or API 6D

-End flange dimension: ASME B16.5 (for NPS ≤ 24); ASME B16.47 series B, API 605 Or ASME B16.47 series A, MSS SP-44 (for NPS > 24)

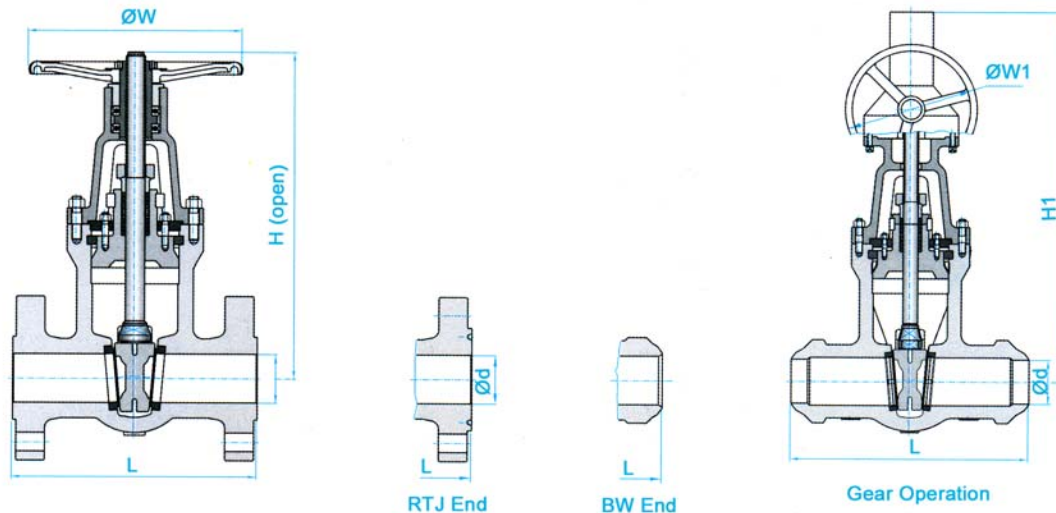
-BW end dimension: ASME B16.25. /// SW end dimension: ASME B16.11.

-Face to Face length: ASME B16.10.

Pressure - temperature ratings conforms to ASME B16.34.

QA: ISO 9001:2000

Class 1500 & Class 2500 Gate Valves



DIMENSIONAL DATA

Size			Class 1500								Weight (Kg)	
			Dimensions (mm)									
NPS	DN	RF	L	RTJ	BW	d	H	H1	W	W1	H.W	G.O
2	50	368	371	368	51	510	-	280	-	70	-	-
2.1/2	65	419	422	419	64	560	-	300	-	110	-	-
3	80	470	473	470	76	620	670	350	310	175	202	-
4	100	546	549	546	102	728	770	400	310	270	300	-
5	125	673	676	673	127	870	920	450	310	378	405	-
6	150	705	711	705	144	1000	1070	500	460	520	575	-
8	200	832	841	832	192	1130	1180	750	460	820	915	-
10	250	991	1000	991	239	1360	1410	900	600	1560	1750	-
12	300	1130	1146	1130	287	-	1620	-	600	-	2120	-
14	350	1257	1276	1257	315	-	2020	-	600	-	2600	-
16	400	1384	1407	1384	360	-	2180	-	600	-	3450	-
			Class 2500									
2	50	451	454	451	42	530	580	280	310	100	130	-
2.1/2	65	508	514	508	52	580	630	300	310	150	180	-
3	80	578	584	576	62	650	700	350	310	245	275	-
4	100	673	683	673	87	750	800	400	310	390	420	-
5	125	794	807	794	96	900	960	500	460	550	580	-
6	150	914	927	914	131	1040	1100	600	460	780	835	-
8	200	1022	1038	1022	179	1150	1200	750	460	1260	1355	-
10	250	1270	1292	1270	223	1400	1460	900	600	2380	2565	-
12	300	1422	1445	1422	265	-	1660	-	600	-	3250	-

These pressure rate valves are of pressure seal design (body and bonnet union)
 Arrangement Drawings available on request

MANUFACTURE DESIGN STANDARDS

-Design and Manufacture:

Cast steel gate valve to API 600 (ISO 10434) or API 6D; Cast stainless steel gate valve to API 603 or API 600.

-Inspection and Test criteria conforms to API 598, API 600 or API 6D

-End flange dimension: ASME B16.5 (for NPS ≤ 24); ASME B16.47 series B, API 605 Or ASME B16.47 series A, MSS SP-44 (for NPS>24)

-BW end dimension: ASME B16.25. /// **SW end dimension:** ASME B16.11.

-Face to Face length: ASME B16.10.

Pressure – temperature ratings conforms to ASME B16.34.

QA: ISO 9001:2000

