Gate valve series

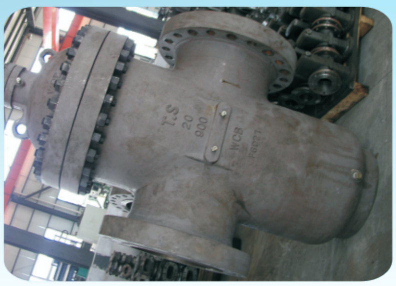













Design Features

Design and manufacture: API 600, API 602, API 603, BS 1414, DIN 3352, ISO 10434
Face to Face dimension: ASME B16.10, BS2080, ISO 5752, JIS B2002, DIN 3202.
Flanged End: ASME B16.5, 26'' and larger sizes according to ASME B 16.47 Series A or Series B, JIS B2212, B2214, EN1092–1.
Butt–weld ends: ASME B16.25; Socket weld ends: ASME B16.11; Threaded ends: ANSI B1.20.1.
Inspection and Test: API 598, BS EN 12266, ISO 5208, JIS B2003, DIN 3230..

Casting Steel Material

Visual check for cast steel material includes: surface quality,dimension,chemical properties,mechanical performance,non–destructive testing to ensure that the comprehensive performance of raw materials comply withthe relevant ASTM, BS, EN, JIS standards,

Body

The design provides the whole structure of low flow resistance channel structure, enables the body stiffness and strength to bear the nominal piping pressure and stress loading, the valve body wall thickness design complies with the API 600 with sufficient margin corrosion resistance for the medium.

Bonnet

Bonnet can be designed with a variety of seal structure of body connection to meet the needs of different operating conditions,the structure can be equipped to connect with jacketed ,flat,spiral or metal ring gasket,and self pressure–seal valve bonnet for class 900/1500/2500.

Seat

Seat structure can be designed as per user requirements as a whole alloy steel materials pressed–in sealing structure.welding sealing.or screw connection in assembly. The austenitic stainless steel body material can be provided with integral seat.

Wedge

The wedge structure design can be solid,flexible or parallel dual plates.and has enough strength and stiffness to ensure the valve sealing performance,

Seat and other seal material

The choice of materials for the seat and other seal material can be as per API 600 standard, or users design and manufacturing requirements.

Stem

The stem is thoroughly forged,its T–shape connecting end is of good stiffness and strength to ensure its safe use and reliability,The stem transmission bearing structure applies sophisticated ACME trapezoidal thread to enable its up and down travel.

Backseat

All backseats are used on the valve seat seal design.they are replacable,and for austenitic stainless steel material it can be integral backseat design.

Bonnet and Body seal structure

Class 150: jacketed flexible graphite and stainless steel gasket
Class 300, 600: spiral stainless steel and flexible graphite wound gasket
Class 900 and above: metal ring gasket
Choice for bonnet and body seal can be bassed on the use of specific operating conditions (medium temperature and pressure)

Stuffing box

Stuffing box is designed in accordance with API 600 standards with precise control of surface finish in 32RMS below and its inner verticality.

Packing gland / bushing

Packing gland / bushing are separate structure to ensure packing seal performance.

Stem Nut

Stem drive nut bearing structure is provided with sophisticated ACME trapezoidal thread,top entry connection design to the yoke,so even the valves are taken off the handwheel at service,the locking device can be ensured to be at original position and working.

Operator

The valve operators are normally handwheel, gearbox with clear open and close marking. Electric or other operation device can be supplied according to customers requirements.

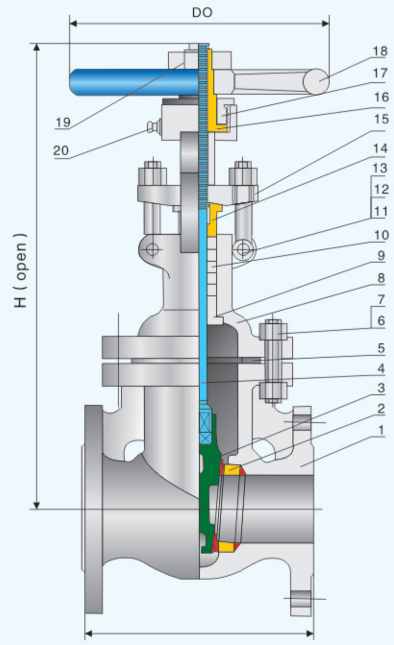
Class150 / JIS10K Bolted bonnet, outside screw & yoke, rising stem, flexible wedge

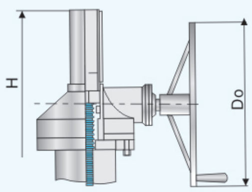
Features

Design and manufacture: API 600, API 603, JIS B2073, B2083
Face–to–Face dimension: 36" and smaller to ASME B16.10.
40"and larger to manufacturer's standard
Flanged End: 24" and smaller to ASME B16.5
26"and larger to ASME B16.47 series A & B
B.W. End: ASME B16.25
Shell Wall Thickness: API 600, ASME B16.34, API 603
26" and larger to manufacturer's standard
8" and smaller valves have a one–piece bonnet and yoke design
10" and larger valves have a split bonnet and yoke design.

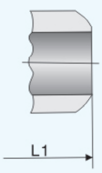
Parts List

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr,2H
8	Bonnet	ASTM A216 Gr,WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Stem nut	Aluminum Bronze
17	Retaining nut	C.S
18	Handwheel	Malleable Iron
19	H.W. lock nut	C.S.
20	Lubricator	Assembly

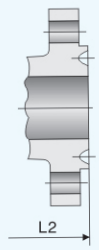




Gear operation for 14'' and larger



BW End



RTJ End

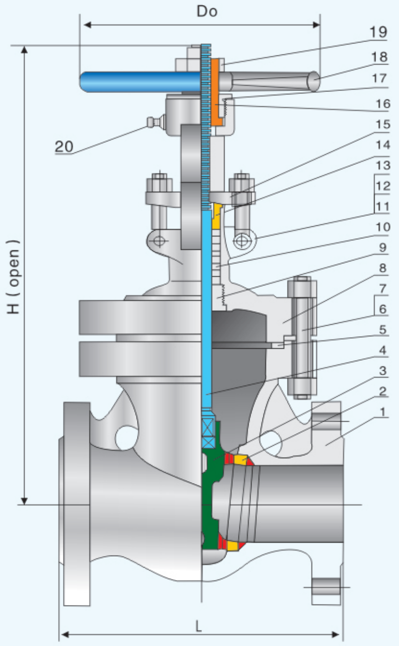
Note: Available LCB, LCC, WC6, C5, WC9, C12, CF8, CF8M,4A, 5A etc for body material. And trim can be customized upon request.

Dimensions & Weights

Valve Size	in. mm	1–1/2 40	2 50	2–1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	28 700	30 750	32 800	36 900	40 1000	42 1050	48 1200
L(RF)	in. mm	6.5 165	7 178	7.5 190	8 203	9 229	10 254	10.5 267	11.5 292	13 330	14 356	15 381	16 406	17 432	18 457	20 508	24 610	24 610	26 660	28 711	30 762	31 787	34 864
L1 (BW)	in. mm	6.5 165	8.5 216	9.5 241	11.13 282	12 305	15 381	15.88 403	16.5 419	18 457	19.75 502	22.5 572	24 610	26 660	28 711	32 813	36 914	36 914	38 965	40 1016	42 1067	43 1092	46 1168
L2 (RTJ)	in. mm	7.0 178	7.5 191	8 203	8.5 216	9.5 242	10.5 267	11 280	12 305	13.5 343	14.5 369	15.5 394	16.5 419	17.5 445	18.5 470	20.5 521	24.5 623	24.5 622	26.5 673	28.5 724	-- --	-- --	-- --
H (open)	in. mm	15.7 392	16.13 409	18.56 472	20.94 532	24.13 612	27.94 710	31.75 806	39 990	46.69 1186	55.31 1405	63.56 1615	71.31 1811	78.19 1986	87 2210	106.25 2698	119.31 3030	130.56 3317	137.25 3487	150.56 3825	183.86 4670	193.75 4920	217.5 5525
Do	in. mm	7.86 200	7.86 200	7.86 200	9.86 250	9.86 250	11.81 300	11.81 300	13.75 350	17.69 450	19.69 500	18.13 460	18.13 460	18.13 460	24 610	24 610	24 610	24 610	24 610	30 760	30 760	30 760	30 760
WT (kg)	RF BW	18.5 15.5	20 17	30 26	36 29	53 46	71 66	85 77	136 116	220 202	323 294	387 350	553 506	660 575	810 720	1250 1130	1931 1765	2380 2028	2490 2280	3600 3080	4815 4840	5300 5275	7110 7050

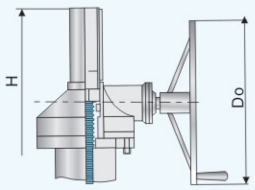
Features

Design and manufacture: API 600, API 603, JIS B2073, B2083.
Face–to–Face dimension: 36"and smaller to ASME B16.10.
40"and larger to manufacturer"s standard
Flanged End: 24"and smaller to ASME B16.5
26"and larger to ASME B16.47 series A & B
B.W. End: ASME B16.25
Shell Wall Thickness: API 600, ASME B16.34, API 603
26" and larger to manufacturer's standard
8" and smaller valves have a one–piece bonnet and yoke design
10" and larger valves have a split bonnet and yoke design.

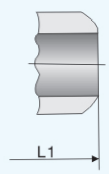


Parts List

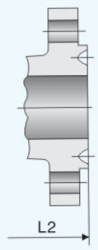
No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr,2H
8	Bonnet	ASTM A216 Gr,WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Stem nut	Aluminum Bronze
17	Retaining nut	C.S
18	Handwheel	Malleable Iron
19	H.W. lock nut	C.S.
20	Lubricator	Assembly



Gear operation for 12" and larger



BW End



RTJ End

Note: Available LCB, LCC, WC6, C5, WC9, C12, CF8, CF8M,4A, 5A etc for body material. And trim can be customized upon request.

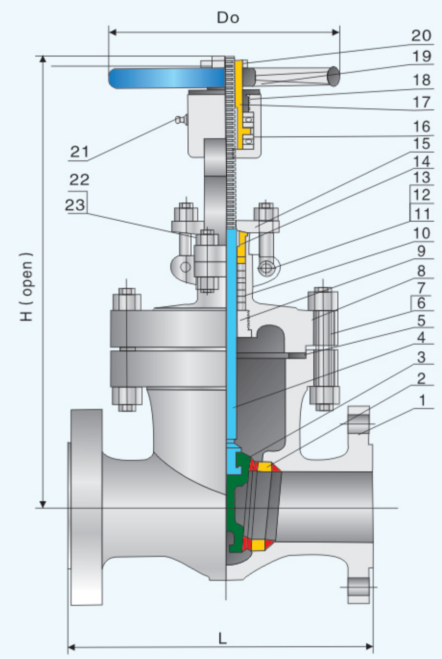
Dimensions & Weights

Valve Size	in. mm	1–1/2 40	2 50	2–1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	28 700	30 750	32 800	36 900	40 1000	42 1050	48 1200
L–L1	in. mm	7.5 190	8.5 216	9.5 241	11.12 282	12 305	15 381	15.88 403	16.5 419	18 457	19.75 502	30 762	33 838	36 914	39 991	45 1143	54 1346	55 1397	61.12 1524	68 1727	76 1930	78 1981	88 2235
L2 (RTJ)	in. mm	8.0 203	9.12 232	10.12 257	11.74 298	12.62 321	15.62 397	16.5 419	17.12 435	18.62 473	20.27 518	30.62 778	33.62 854	36.62 930	39.75 1010	45.88 1165	54 1371	56 1422	61.12 1581	69.12 1755	–– ––	–– ––	–– ––
H (open)	in. mm	14.7 374	15.75 400	18.75 477	21.38 543	25.63 650	30.31 770	34.63 880	40.81 1037	50.19 1275	56.63 1438	65 1650	72.44 1840	79.94 2030	88.19 2240	114.19 2900	122 3100	139.38 3540	152 3860	169.75 4312	188.63 4791	198.13 5032	217.38 5522
Do	in. mm	7.88 200	7.88 200	9.88 250	9.88 250	11.81 300	11.81 300	13.75 350	17.69 450	19.69 500	18.13 460	18.13 460	18.13 460	24 610	24 610	24 610	24 610	30 760	30 760	30 760	24 610	24 610	24 610
WT (kg)	RF BW	26 22	30 26	39 34	55 47	83 68	92 77	137 118	240 195	333 271	536 432	699 595	1010 848	1205 1025	1720 1460	2800 2294	3150 2870	3786 3220	4210 3675	6850 4990	8460 6160	9500 6800	12400 9000

Class 600 Bolted bonnet, outside screw & yoke, rising stem, flexible wedge

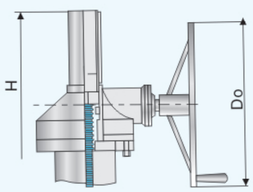
Features

Design and manufacture: API 600, API 603, JIS B2073, B2083.
Face–to–Face dimension:36" and smaller to ASME B16.10.
40" and larger to manufacturer's standard
Flanged End: 24" and smaller to ASME B16.5
26" and larger to ASME B16.47 series A & B
B.W.End; ASME B 16.25
Shell Wall Thickness: API 600, ASME B16.34, API 603
26" and larger to manufacturer's standard
6" and smaller valves have a one–piece bonnet and yoke design
8" and larger valves have a split bonnet and yoke design.

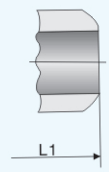


Parts List

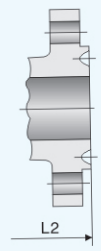
No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr.2H
8	Bonnet	ASTM A216 Gr.WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Eyebolt	ASTM A 193 Gr.B7
13	Hex. nut	ASTM A194 Gr.2H
14	Gland	ASTM A276 410
15	Gland flange	ASTM A216 Gr.WCB
16	Bearing	Assembly
17	Stem nut	Aluminum Bronze
18	Retaining nut	C.S
19	Handwheel	Malleable Iron
20	H.W. lock nut	C.S.
21	Lubricator	Assembly
22	Yoke bolt	ASTM A 193 Gr.B7
23	Yoke nut	ASTM A 194 Gr.2H



Gear operation for 10'' and larger



BW End



RTJ End

Note: Available LCB, LCC, WC6, C5, WC9, C12, CF8, CF8M,4A, 5A etc for body material. And trim can be customized upon request.

Dimensions & Weights

Valve Size	in. mm	2 50	2–1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	30 750	32 800	36 900
L-L1 (RF–BW)	in. mm	11.5 292	13 330	14 356	17 432	20 508	22 559	26 660	31 787	33 838	35 889	39 991	43 1092	47 1194	55 1397	57 1448	61 1549	65 1651	70 1778	82 2083
L2 (RTJ)	in. mm	11.62 295	13.12 333	14.12 359	17.12 435	20.12 511	22.12 562	26.12 663	31.12 790	33.12 841	35.12 892	39.12 994	43.12 1095	47.25 1200	55.38 1407	––	––	––	––	––
H (open)	in. mm	18.63 474	21.75 553	23.38 593	28.06 713	30.3 770	38.19 970	44.19 1122	52.38 1330	59./81 1519	68.13 1730	72.75 1835	90.13 2290	98.81 2510	119 3022	127.25 3232	140.25 2562	152.75 3880	163 4140	179.5 4560
Do	in. mm	9.88 250	9.88 250	11.81 300	13.75 350	15.7 400	19.69 500	22.06 560	18.13 460	18.13 460	24 610	24 610	24 610	30 760	30 760	30 760	30 760	24 610	24 610	24 610
WT (kg)	RF BW	41 35	58 50	88 68	131 104	205 192	253 208	413 328	623 496	784 637	1288 1120	1820 1448	2150 1828	2540 2201	4080 3360	5220 4295	6050 4980	6945 5710	7965 5223	10000 8220

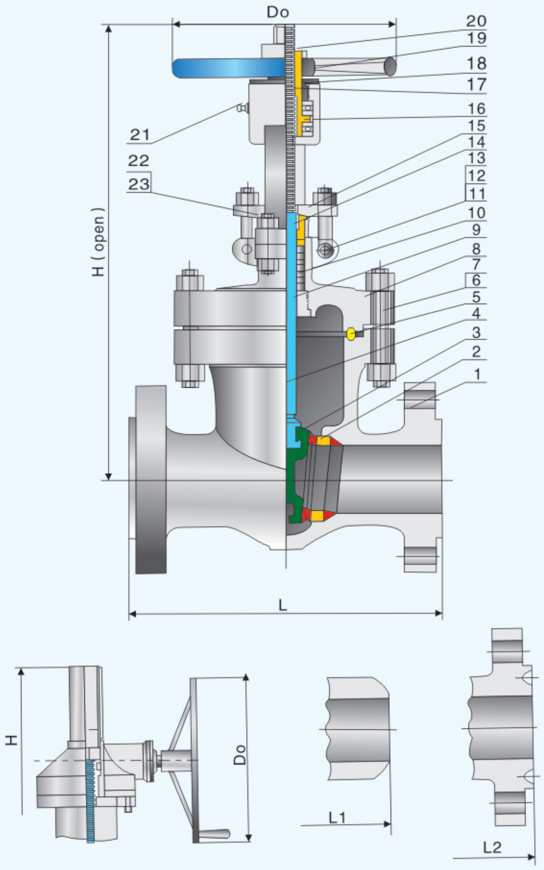
Class 900 / 1500 / 2500 Bolted bonnet, outside screw & yoke, rising stem, flexible wedge

Features

Design and manufacture: API 600, API 603, JIS B2073, B2083.
Face–to–Face dimension: 36"and smaller to ASME B16.10.
40"and larger to manufacturer's standard
Flanged End: 24" and smaller to ASME B16.5
26" and larger to ASME B16.47 series A
B.W. End: ASME B16.25
Shell Wall Thickness: API 600, ASME B16.34, API 603
26" and larger to manufacturer's standard
6" and smaller valves have a one–piece bonnet and yoke design
8" and larger valves have a split bonnet and yoke design.

Parts List

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+STL
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	Soft Iron
6	Stud	ASTM A 193 Gr.B7
7	Nut	ASTM A194 Gr.2H
8	Bonnet	ASTM A216 Gr WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Eyebolt	ASTM A 193 Gr.B7
13	Hex. nut	ASTM A194 Gr.2H
14	Gland	ASTM A276 410
15	Gland flange	ASTM A216 Gr.WCB
16	Bearing	Assembly
17	Stem nut	Aluminum Bronze
18	Retaining nut	C.S
19	Handwheel	Malleable Iron
20	H.W. lock nut	C.S.
21	Lubricator	Assembly
22	Yoke bolt	ASTM A 193 Gr.B7
23	Yoke nut	ASTM A 194 Gr.2H



Class 900≥6" and larger
Class 1500≥4" and larger
Class 2500≥3" and larger

BW End

RTJ End

Note: Available LCB, LCC, WC6, C5, WC9, C12, CF8, CF8M,4A, 5A etc for body material. And trim can be customized upon request.

Dimensions & Weights

	Valve Size	in. mm	2 50	2–1/2 65	3 80	4 100	6 150	8 200	10 250	12 300
Class 900	L–L1 (RF–BW)	in. mm	14.5 368	16.5 419	15 381	18 457	24 610	29 737	33 838	38 965
	L2 (RTJ)	in. mm	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968
	H (open)	in. mm	21.56 547	27.56 700	28.15 715	28.69 729	41 1041	49.63 1260	62.63 1590	70.69 1795
	D0	in. mm	11.81 300	14 355	15.75 400	17.69 450	22.06 560	24 610	24 610	24 610
	WT (kg)	RF BW	90 82	110 93	123 108	148 122	420 359	650 566	1160 980	1700 1450
Class 1500	L–L1 (RF–BW)	in. mm	14.5 368	16.5 419	18.5 470	21.5 546	27.75 705	32.75 832	39 991	44.5 1130
	L2 (RTJ)	in. mm	14.62 371	16.62 422	18.62 473	21.62 549	28 711	33.13 842	39.38 1001	45.12 1146
	H (open)	in. mm	22.63 574	27.56 700	31.75 806	34.94 887	42.5 1079	53.94 1370	59.81 1520	65 1651
	D0	in. mm	13.75 350	15.75 400	17.75 450	22.06 560	24 610	24 610	30 760	30 760
	WT (kg)	RF BW	117 93	175 144	240 185	337 385	680 584	1228 978	2278 1990	3260 2850
Class 2500	L–L1 (RF–BW)	in. mm	17.75 451	20 508	22.75 578	26.5 673	36 914	40.25 1022	50 1270	––
	L2 (RTJ)	in. mm	17.87 454	20.25 514	23 584	26.88 683	36.5 927	40.87 1038	50.88 1292	––
	H (open)	in. mm	27.56 700	29.5 750	34.63 887	42.5 1079	53.94 1370	60.25 1530	80.5 2045	––
	Do	in. mm	13.75 350	17.75 450	22.06 560	28.38 720	18.13 460	24 610	30 760	––
	WT (kg)	RF BW	132 99	206 155	256 192	498 390	1550 1230	2395 1980	4460 3700	––

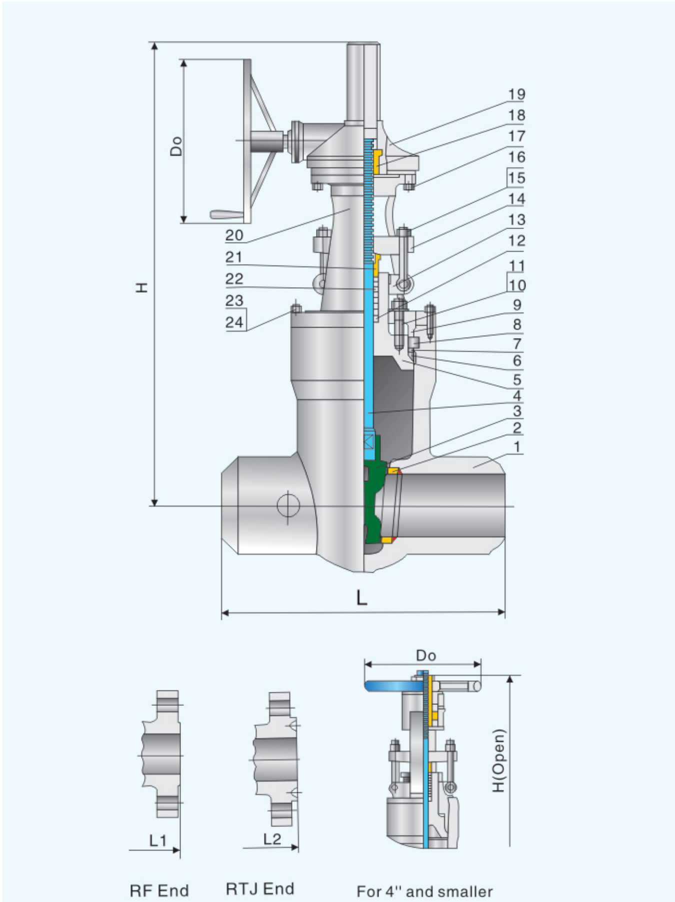
Class 900 / 1500 / 2500 Pressure seal bonnet gate valve

Features

Design and manufacture: API 600 and ASME B16.34.
Face–to–Face dimension: ASME B16.10.
Flanged dimension: ASME B16.5.
B.W. End: ASME B16.25
Shell Wall Thickness: API 600, ASME B16.34
Inspection & Test: API 598

Parts List

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+STL
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Bonnet	ASTM A216 Gr.WCB
6	Sealing ring	ASTM A182 F304
7	Spacer ring	ASTM A182 F6a
8	Segment ring	ASTM A182 F6a
9	Supporting plate	ASTM A105
10	Stud	ASTM A193 Gr.B7
11	Nut	ASTM A 194 Gr.2H
12	Packing seat	ASTM A276 410
13	Lifting jack	ASTM A216 Gr.WCB
14	Gland flange	ASTM A216 Gr.WCB
15	Eyebolt	ASTM A193 Gr.B7
16	Hex. nut	ASTM A 194 Gr.2H
17	Bolt	C.S
18	Stem nut	Aluminum Bronze
19	Gear box	Assembly
20	Yoke	ASTM A 216 Gr.WCB
21	Gland	ASTM A276 410
22	Packing	Graphite
23	Bolt	ASTM A 193 Gr B7
24	Nut	ASTM A 194 Gr 2H



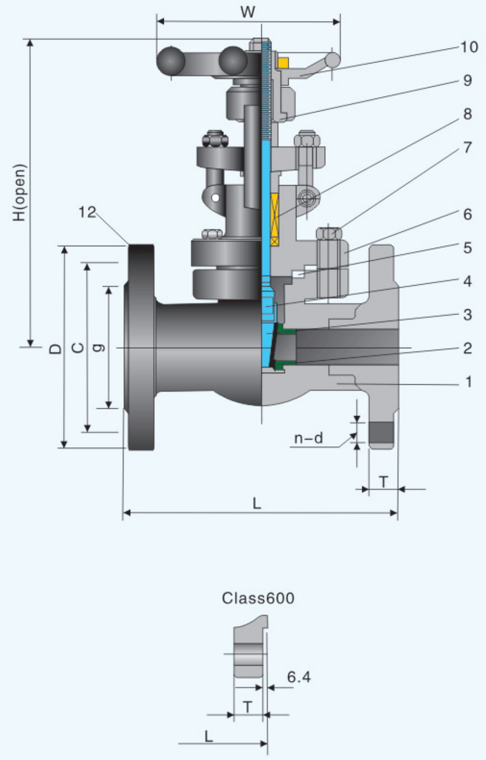
Note: Available LCB, LCC, WC6, C5, WC9, C12, CF8, CF8M,4A, 5A etc for body material. And trim can be customized upon request.

Dimensions & Weights

	Valve Size	in. mm	2 50	2–1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400
Class 900	BW(L)	in. mm	8.5 216	10 254	12 305	13.98 356	20 508	26 660	31 787	36 914	39 991	43 1092
	RF(L1)	in. mm	14.5 368	16.5 419	15 381	18 457	24 610	29 737	33 838	38 965	40.5 1029	44.5 1130
	RTJ(L2)	in. mm	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968	40.88 1039	44.88 1140
	Open(H)	in. mm	21.81 554	25.08 637	26.77 680	31,34 796	42.68 1084	54.02 1372	58.82 1494	61.02 1550	77.17 1960	87 2210
	Do	in. mm	11.81 300	13.78 350	13.78 350	15.75 400	22.05 560	18.11 460	24 610	24 610	24 610	30 760
	WT(kg)	RF BW	48 37	82 62	90 80	152 118	339 364	620 522	948 758	1293 1088	1718 1448	2378 2016
Class 1500	BW(L)	in. mm	8.5 216	10 254	12 305	16 406	22 559	28 711	34 864	39 991	42 1067	47 1194
	RF(L1)	in. mm	14.5 368	16.5 419	18.5 470	21.5 546	27.75 705	32.75 832	39 991	44.5 1130	49.5 1257	54.5 1384
	RTJ(L2)	in. mm	14.62 371	16.62 422	18.62 473	21.62 549	28 711	33.13 842	39.38 1001	45.12 1146	50.25 1276	55.38 1407
	Open(H)	in. mm	21.81 554	25.08 637	30.2 767	34.45 875	43.07 1094	54 1372	65.16 1655	72.20 1834	84.65 2150	88.98 2260
	Do	in. mm	11.81 300	17.72 450	17.72 450	22.05 560	12 305	18.11 460	24 610	24 610	30 760	30 760
	WT(kg)	RF BW	58 44	89 69	126 83	180 128	392 290	793 585	1368 972	2118 1613	2798 2008	3868 2813
Class 2500	BW(L)	in. mm	11 279	13 330	14.5 368	18 457	24 610	30 762	36 914	41 1041	––	––
	RF(L1)	in. mm	17.75 451	20 508	22.75 578	26.50 673	36 914	40.25 1022	50 1270	56 1422	––	––
	RTJ(L2)	in. mm	17.87 454	20.25 514	23 584	26.88 683	36.50 927	40.87 1038	50.88 1292	56.88 1445	––	––
	Open(H)	in. mm	24 610	25.75 654	29.65 753	33.46 850	49.37 1254	54.09 1374	66.34 1685	74 1873	––	––
	Do	in. mm	19.69 500	19.69 500	23.62 600	23.62 600	18.11 460	18.11 460	24 610	24 610	––	––
	WT(kg)	RF BW	119 86	173 133	193 142	227 156	718 498	1293 890	2248 1548	3091 2330	––	––

Technical specification

1、Design and manufacture: API 602, BS 5352.
2、Consturction feature: B.B OS&Y or WB OS&Y
3、Face to face dimensions: ANSI B 16.10.
4、Flanged connection: ANSI B 16.5.
5、Test and inspection: API 598.
6、Available LF2, F5, F9, F11, F22, F304(L), F316(L), aluminium bronze, inconel, monel etc for body material. And trim can be customized upon request.



Main parts and materials

No	Parts	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182–F6a
5	Gasket	304S.S. Jacketed Graphite
6	Bonnet	A105
7	Bolt	A193–B7
8	Packing	Graphite
9	Stem nut	13Cr
10	Handwheel	Malleable Iron
11	Flange	A105

Main dimensions and weights

DN		Class	L	D	C	g	T	n–d	H(Open)		W		WT(kg)	
inch	mm								Reduced Bore	Full Bore	Reduced Bore	Full Bore	Reduced Bore	Full Bore
		150	108	90	60.3		11.5	4–16					4.5	5
1/2''	15	300	140	95	66.5	35	14.5	4–16	166	169	100	100	4.8	5.2
		600	165	95	66.5		14.5	4–16					5.9	5.9
		150	117	100	70		13	4–16					5.2	6.1
3/4''	20	300	152	115	82.5	43	16	4–19	169	193	100	125	6.2	6.3
		600	190	115	82.5		16	4–19					7.4	7.5
		150	127	110	79.5		14.5	4–16					8.2	8.4
1''	25	300	165	125	89	51	18	4–19	193	230	125	160	9.3	8.6
		600	216	125	89		18	4–19					10.4	10.2
		150	140	115	89		16	4–16					11.5	14.3
11/4''	32	300	178	135	98.5	63	19.5	4–19	230	246	160	160	14	14.5
		600	229	135	98.5		21	4–19					16.2	16.7
		150	165	125	98.5		18	4–16					12.5	15.4
1^{1}/2''	40	300	190	155	114.5	73	21	4–22.5	246	283	160	180	15.5	15.6
		600	241	155	114.5		22.5	4–22.5					17.5	17.4
		150	178	150	120.5		19.5	4–19					20.3	22.7
2''	50	300	216	165	127	92	22.5	8–19	283	330	180	200	23.4	22.8
		600	292	165	127		26	8–19					28.3	28.7

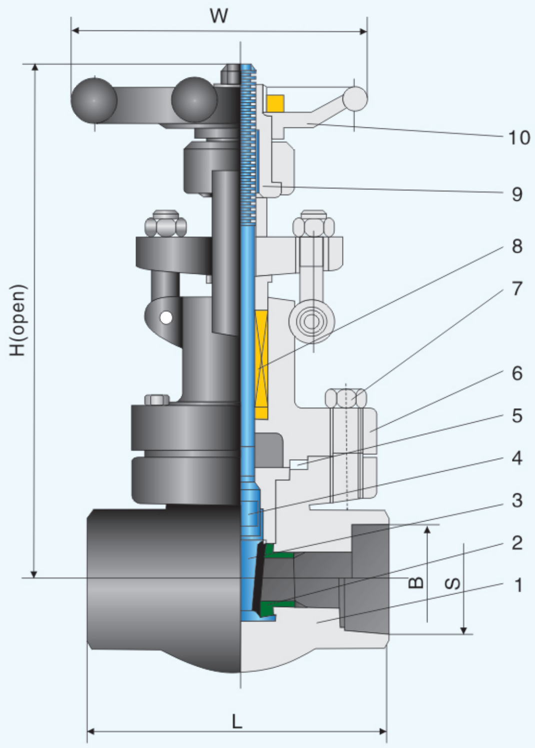
Class 800 Forged steel NPT, socket weld gate valve

Technical specification

1、Design and manufacture: API 602, BS 5352.
2、Consturction feature: B.B OS&Y or WB OS&Y
3、FNPT connection: ANSI B1.20.1
Socket weld connection: ANSI B16.11
4、Test and inspection: API 598.
5、Available LF2, F5, F9, F11, F22, F304(L), F316(L), aluminium bronze, inconel, monel etc for body material. And trim can be customized upon request.

Main parts and materials

No	Parts	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182–F6a
5	Gasket	304S.S. Jacketed Graphite
6	Bonnet	A105
7	Bolt	A193–B7
8	Packing	Graphite
9	Stem nut	13Cr
10	Handwheel	Malleable Iron



Main dimensions and weights

DN		L	B(SW)		S(Screwed)			H(Open)	W	WT(kg)
inch	mm		ANSI	JIS	ANSI NPT600	ISO、BS RC560	JIS PT550			
1/2''	15	92	21.8	22.2	1/2''			169	100	2.2
3/4''	20	111	27.1	27.7	3/4''			193	125	4.3
1''	25	120	33.8	34.5	1''			230	160	5.9
1 1/4''	32	120	42.6	43.2	1 1/4''			246	160	6.9
1 1/2''	40	140	48.7	49.1	1 1/2''			283	180	11.1
2''	50	178	61.1	61.1	2''			330	200	15.2

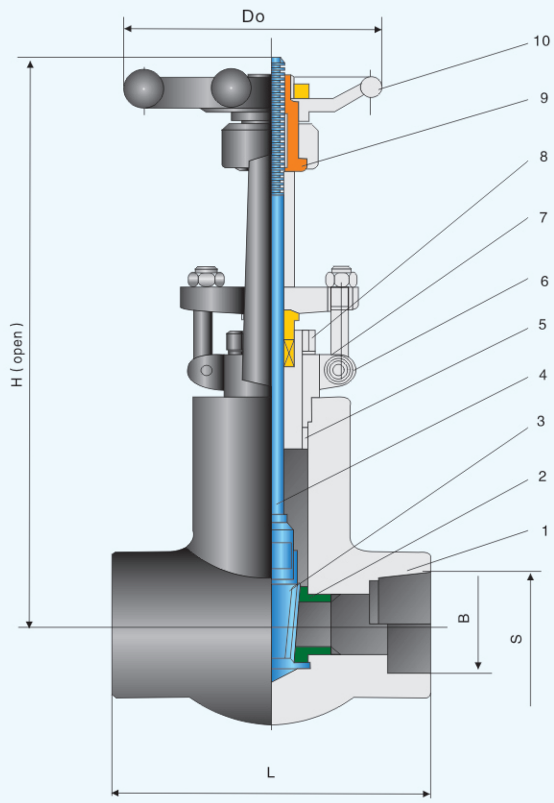
Class 900 / 1500 / 2500 Forged steel gate valve

Technical specification

1、Design and manufacture: API 602, BS 5352.
2、Consturction feature: PSB OS&Y or WB OS&Y
3、FNPT connection: ANSI B1.20.1
Socket weld connection: ANSI B16.11
4、Test and inspection: API 598.
5、Available LF2, F5, F9, F11, F22, F304(L), F316(L), aluminium bronze, inconel, monel etc for body material. And trim can be customized upon request.

Main parts and materials

No	Parts	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182–F6a
5	Sealed ring	304
6	Yoke	A105
7	Bonnet	A105
8	Packing	Graphite
9	Stem nut	13Cr
10	Handwheel	Malleable Iron



Main dimensions and weights

DN		L		B(SW)		S(Screwed)			H(Open)	W	WT(kg)
inch	mm	Class 900 Cass 1500	Class 2500	ANSI	JIS	ANSI NPT600	ISO、BS RC560	JIS PT550			
1/2''	15	140	186	21.8	22.2	1/2''			321	125	12.3
3/4''	20	140	186	27.1	27.7	3/4''			321	125	11.6
1''	25	140	186	33.8	34.5	1''			321	160	10.8
1 1/4''	32	178	232	42.6	43.2	1 1/4''			380	160	26
1 1/2''	40	178	232	48.7	49.1	1 1/2''			414	180	28.4
2''	50	216	279	61.1	61.1	2''			502	200	60

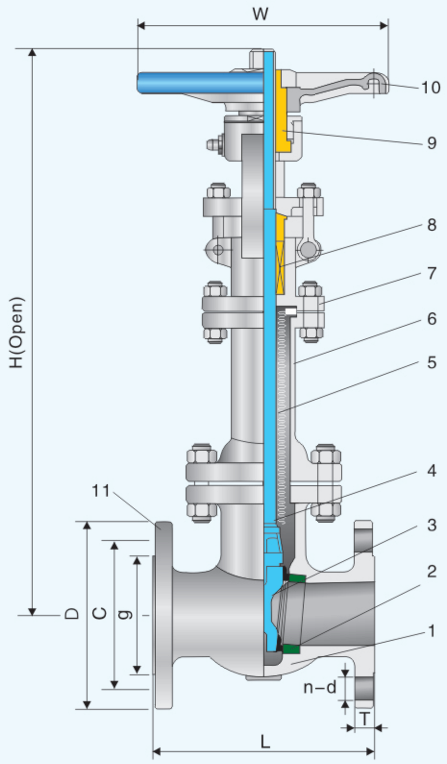
Class 150 / 300 Bellow sealed gate valve

Technical specification

1、Design and manufacture: API 602, BS 5352.
2、Face to face dimensions: ANSI B 16.10.
3、Flanged connection: ANSI B16.5.
4、Test and inspection: API 598.
5、Available LF2, F5, F9, F11, F22, F304(L), F316(L), aluminium bronze, inconel, monel etc for body material. And trim can be customized upon request.

Main parts and materials

No	Parts	Material
1	Body	A105
2	Seat	13Cr+STL
3	Wedge	13Cr+STL
4	Stem	A182–F6a
5	Bellow	304L
6	Bonnet	A105
7	Yoke	A105
8	Packing	Graphite
9	Stem nut	Copper alloy
10	Handwheel	Malleable Iron
11	Flange	A105

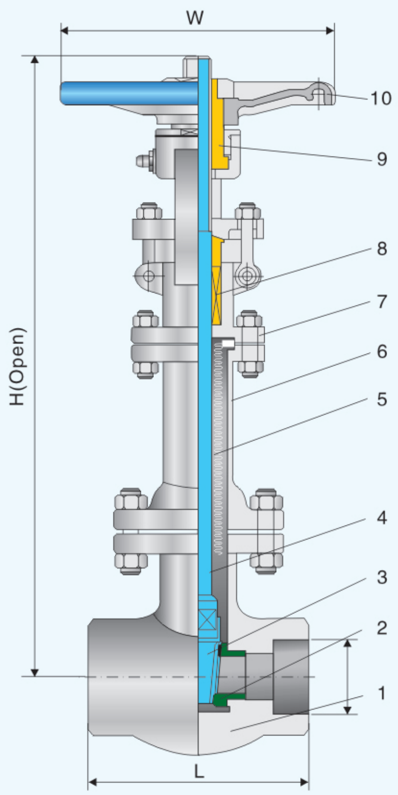


Main dimensions and weights

Pressure (LB)	DN		L	D	C	g	T	n–d	H(Open)	W	KT(kg)
	inch	mm									
Class 150	1/2''	15	108	90	60.5	35	11.5	4–16	253	100	15
	3/4''	20	117	100	70	43	13	4–16	292	125	19
	1''	25	127	110	79.5	51	14.5	4–16	335	160	23
	1 1/2''	40	165	125	98.5	73	18	4–16	442	180	35
	2''	50	178	150	120.5	92	19.5	4–19	536	200	38
Class 300	1 1/2''	15	140	95	66.5	35	14.5	4–16	265	100	17
	3/4''	20	152	115	82.5	43	16	4–19	310	125	21
	1''	25	165	125	89	51	18	4–19	345	160	25
	1 1/2''	40	190	155	114.5	73	21	4–22	350	180	37
	2''	50	216	165	127	92	22.5	8–19	548	200	40

Technical specification

1、Design and manufacture: API 602, BS 5352.
2、Socket Weld connection: ANSI B16.11
3、Test and inspection: API 598.
4、Available LF2, F5, F9, F11, F22, F304(L), F316(L), aluminium bronze, inconel, monel etc for body material. And trim can be customized upon request.



Main parts and materials

No	Parts	Material
1	Body	A105
2	Seat	13Cr+STL
3	Wedge	13Cr+STL
4	Stem	A182–F6a
5	Bellow	304L
6	Bonnet	A105
7	Yoke	A105
8	Packing	Graphite
9	Stem nut	Copper alloy
10	Handwheel	Malleable Iron

Main dimensions and weights

DN		L	B	H(Open)	W	KT(kg)
inch	mm					
1/2"	15	92	21.8	253	100	15
3/4"	20	111	27.1	292	125	19
1"	25	120	33.8	335	160	23
1 1/2"	40	140	48.7	442	180	35
2"	50	178	61.1	536	200	38

Products design features

1)、The valve body adopts molten and welded structures.

2)、PTFE is inlaid on the seal face of the seat, and it has double seal of PTFE to metal and metal to metal. At the same time, PTFE seal face has the function of cleaning the dirt of disc.

3)、The seat adopts O ring and the floating seat struclure with pre–tightening force,so the inlet and outlet of valve are double seal And the torque of the starting and closing force is only half of one of the common valve, so it can easily turn on or off the valve.

4)、Injecting seal grease structure is set outside of the valve with metal to metal seal, and the seal grease enter the seal face by injecting grease and seat. that has urgent seal effect. So the valve can reach zero leakage.

5)、The disc of the valve with diversion hole is always inosculating with the seal of the seat whenever it is full open or full close And that can make the seal face get protection. So fhe seal face is not directly washed out by fhe medium and prolongs lts lite.

6)、When the valve with diversion hole is fully open, the channels is smooth like a beeline. The coefficient of flew resistance is very small and there is no loss of pressure, so it can use hair bulb to clean pipeline.

7)、When the valve is closed it can automatically release high pressure of the inner cavity of the body to ensure the safety(See working principle drawing.)

8)、The valve adopts full closed structure, so the defending performance is very good and it is suitable for all day's demands.

9)、The observing window or open indicator or pointer is set on the valve so it can show the opening or closing of the valve.

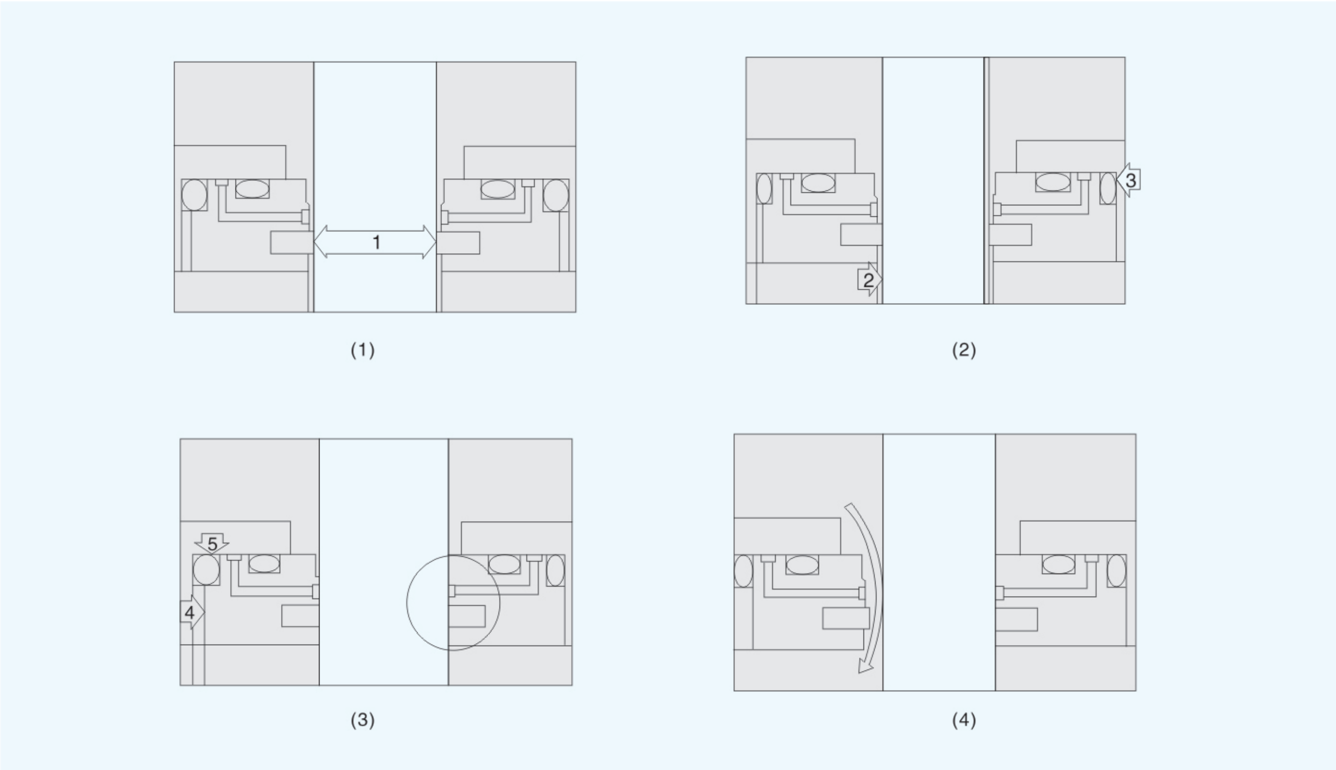
10)、The seal of the stem adopts the packing structure with self–seal sbility,so it doesn't need usual adjusting and it is very portable when closing or opening. Also the seal is very reliable, and packing culvert has injecting seal grease structure, it has secondary and urgent seal function. So the seal performance is very reliable and really reach zero leakage. And that solves the disadvantage(easyleakage)of the packing of common valve.

11)、Outside face of direct burial valve adopts epoxy coal tar as anticorrosive treatment, so its longevity is same as the pineline.

Products performance specification

<table>
<tr><th colspan="2" rowspan="2">Pressure(LB)</th><th colspan="3">Test pressure</th><th rowspan="2">Applicable temperature ℃</th><th colspan="2">Applicable medium</th></tr>
<tr><th>Shell test</th><th>High–Pressure seal test</th><th>Low–Pressure seal test</th><th>Ordinary type</th><th>Antisulphur type</th></tr>
<tr><td rowspan="5">Class (Lb)</td><td>150</td><td>3.0</td><td>2.2</td><td rowspan="5">0.6</td><td rowspan="5">–29~121℃</td><td rowspan="5">Petroleum Natural gas Water</td><td rowspan="5">Natural gas and Petroleum with H2S、and Co2</td></tr>
<tr><td>300</td><td>7.5</td><td>5.5</td></tr>
<tr><td>400</td><td>10.2</td><td>7.48</td></tr>
<tr><td>600</td><td>15.0</td><td>11.0</td></tr>
<tr><td>900</td><td>22.5</td><td>17.5</td></tr>
</table>

Working principle



(1) (2) (3) (4)

1). With equal pressure throughout the valve(and the gate in closed position), and initial seal(1) is formed with the raised PTFE ring on the faces of the seats(The seat-inserts clean both sides of the gate each time the valve is opened or closed)

2). As line pressure(2)is applied to the valve. It acts on the gate,forcing it against the PTFE ring on the downstream seat,compressing it until the seat against the steel seat. Thus, a double seal is formed.first.a PTFE-to-metal seal, then,metal-to-metal. The seat is also forced firmly into its recess. The O-ring(3)prevents any downstream flow at this point.

3). Upstream seal is provided when valve cavity pressure is bled off. This is caused by the force of line pressure acting against the upstream seat (4) moving the seat against the gate and providing a tight PTFE-to metal seal as this point. At the same time, the O-ring (5)forms a tight seal with the seat recess.

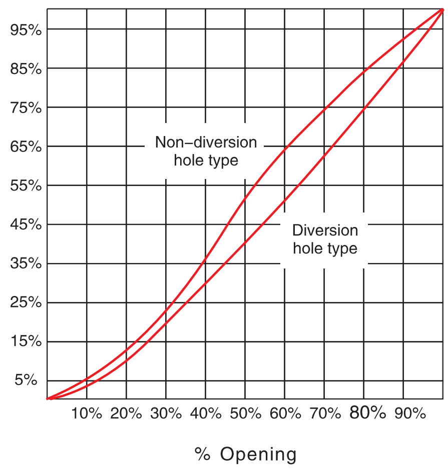
4). Valve automatically relieves itself of excessive valve cavity pressure When valve cavity pressure exceeds line pressure from such causes as thermal expansion the upstream seat is forced back into its recess and the excess pressure in the valve cavity is bled between the seat and the gate into the line.

Main parameter of the products

Serial models	(k)Z43WF、 (k)Z43WY、 (k)Z43WD、 (k)Z44WF、 (k)Z44WY、 (k)Z44WD、 (k)Z543WF、(k)Z543WY、(k)Z543WD、(k)Z544WF、(k)Z544WY、(k)Z544WD、 (k)Z463WF、(k)Z643WY、(k)Z643WD、(k)Z644WF、(k)Z644WY、(k)Z644WD、 (k)Z943WF、(k)Z943WY、(k)Z943WD、(k)Z944WF、(k)Z944WY、(k)Z944WD、			
Pressure grade range	Class 150~900			
Drift diameter range	--	DN25~1000mm	--	1"~40"
Driving manner	--	Hand wheel driving	--	Gear driving,air-operating,hydrodynamic drving and electric driving
Scope of application	Class 150~300 (PN1.6~4.0)	Class 400 (PN6.4)	Class 600~900 (PN10.0~15.0)	Class 150~900
	1"~40" (DN25~1000mm)	1"~28" (DN25~700mm)	1"~12" (DN25~300mm)	1"~40" (DN25~1000mm)

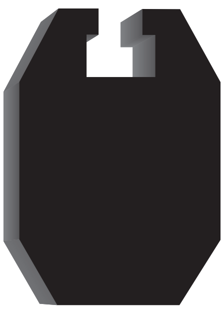
Flow charalteristic

The flow characte ristic of flat gate valves with a diversion hole Is equal to that of pipelines of the same specification.The characteristic is shown in per centum form. As for valves without a diversion hole its cavity fly span is smaller than that of wedge gate valves and it is a regular cylindrical object. Therefore, characteristics of the valves are similar except that they have a larger pressure loss. Besides their flux adjustment behavior is better than of the ones with a deversion hole.

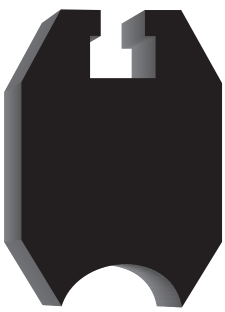


Valve-opening—Cv characteristic graph

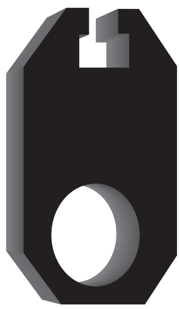
Outside drawing of different types of shutter



Ordinary type

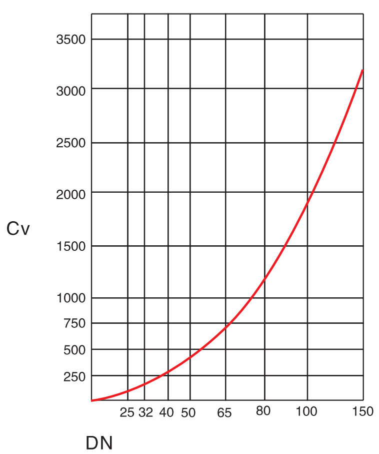


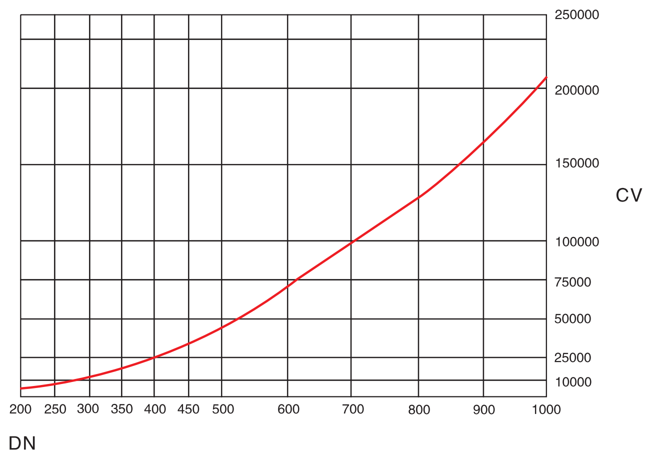
Adjustment type



Type diversion hole

DN-Cv graph of flat valves with a diversion hole

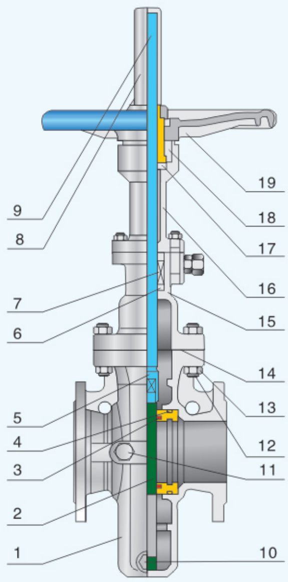




Technical specification

Design reference		API
Design standard		API 6D ASME B 16.34
Structural length	Flanged	API 6D ASME B 16.10
	Welded connection	
Flanged ends		API B16.5 MSS SP44
Butt-welding ends		ASME B16.25
Test & inspection		API 598 or API 6D

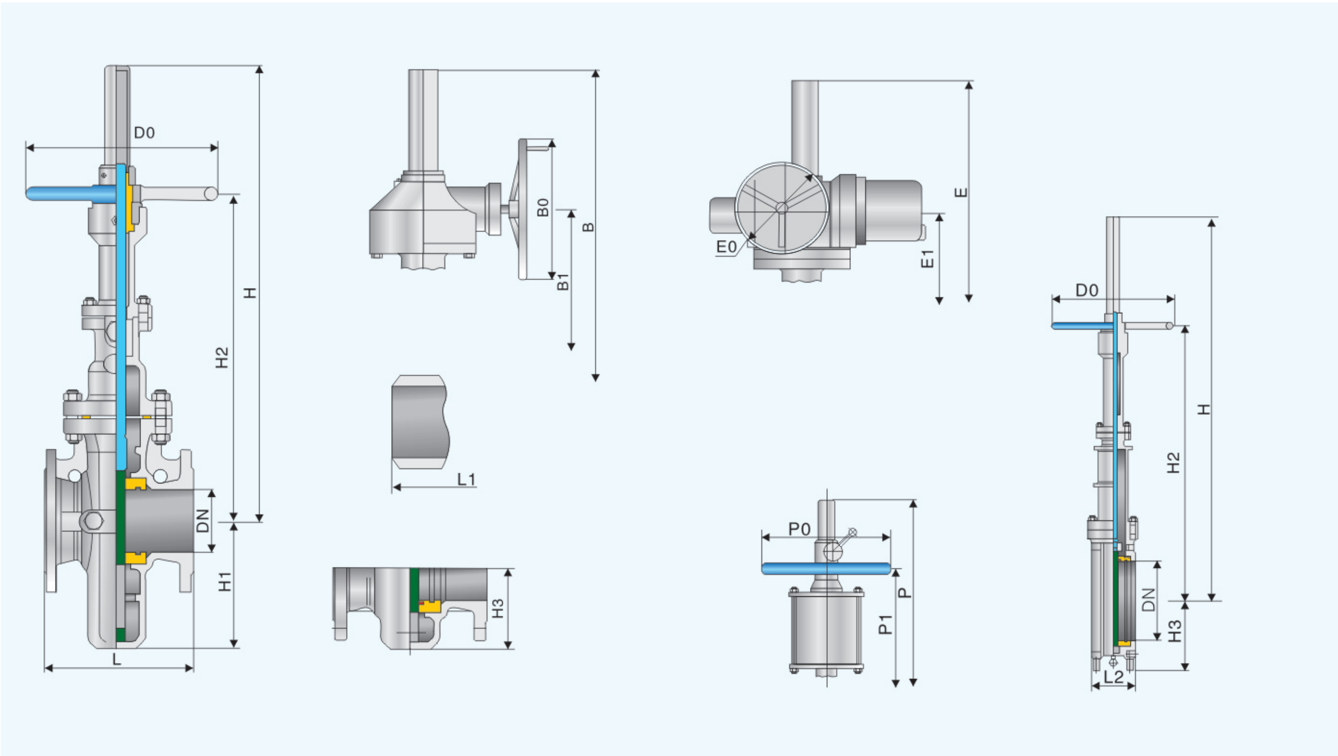
Notes: The sizes of valve conneting flange can be designed according to customers' requirement.



Major parts material form

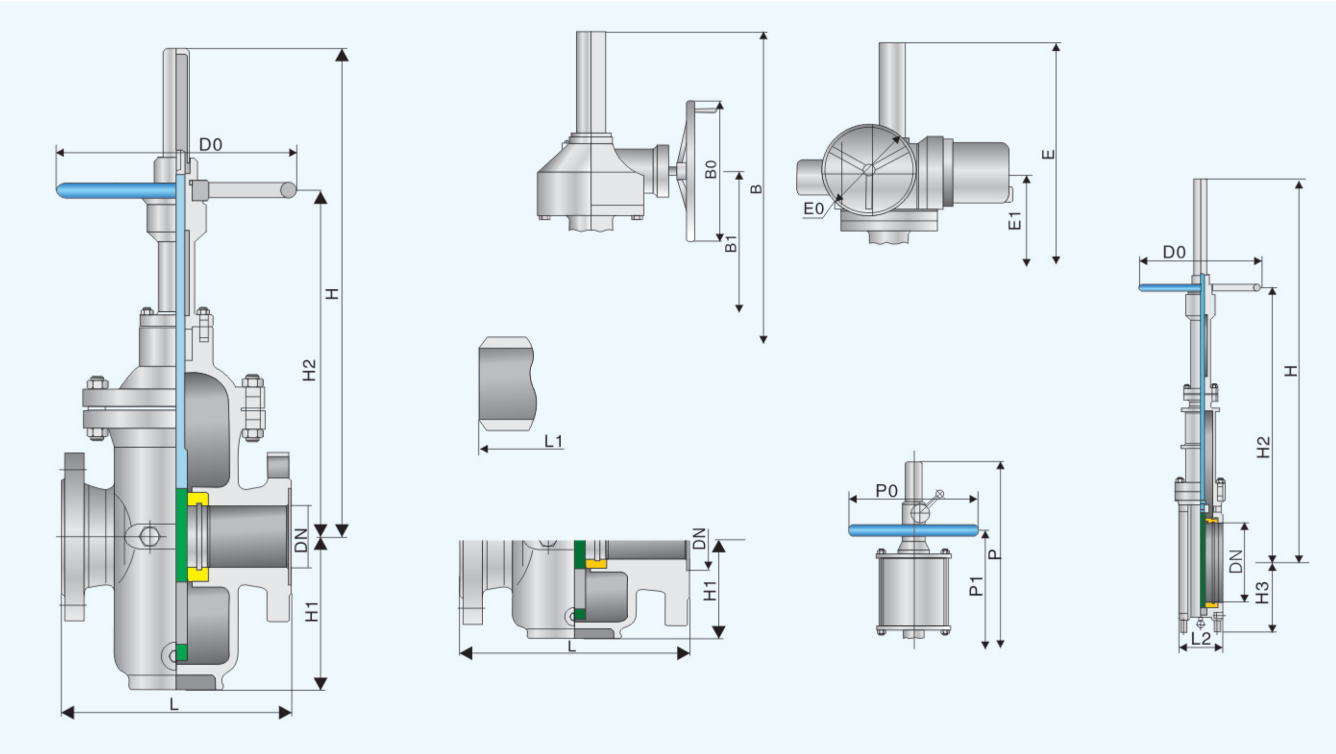
No	Parts	Material			
		Ordinary type		Antisulphur type	
		GB	ASTM	GB	ASTM
1	Body	WCB	A216-WCB	WCB	A216-WCB
2	Gate disc	16Mn+ENP	A105+ENP	1Cr18Nig	AZ76-304
3	Seat	16Mn+PTFE	A105+PTFE	1Cr18Nig+PTFE	AZ76-304+PTFE
4	O-Ring	NBR	NBR	FPM	FPM
5	Stem	2Cr13	A276-420	1Cr18Nig	AZ76-304
6	Packing seat	2Cr13	A276-420	2Cr13	A276-420
7	Packing	NBR	NBR	FPM	FPM
8	Sealing shroud	2Cr13	A276-420	2Cr13	A276-420
9	Indicating window	Film	Film	Film	Film
10	Blowdown stops	25+Zn	A105+Zn	1Cr18Nig	A1276-304
11	Grease injection joint	25+Zn	A105+Zn	25+Zn	A105+Zn
12	Stud	35CrMoA	A194-B7	35CrMoA	A193-B7
13	Nut	45	A194-2H	45	A194-2H
14	Gasket	Graphite+1Cr18Ni9	Graphite+304	Graphite+1Cr18Ni9	Graphite+304
15	Bonnet	WCB	A216-WCB	WCB	A216-WCB
16	Yoke	WCB	A216-WCB	WCB	A216-WCB
17	Stem unt	ZQA 19-4	C95500	ZQA 19-4	C95500
18	Gland	25	A105	25	A1065
19	Hand wheel	25	A536-60-40-18	25	A536-60-40-18

Notes: The major parts of the valves can be designed and selected according to actual work condition or customers' specific requirement.



Main Connection Dimensions 150LB

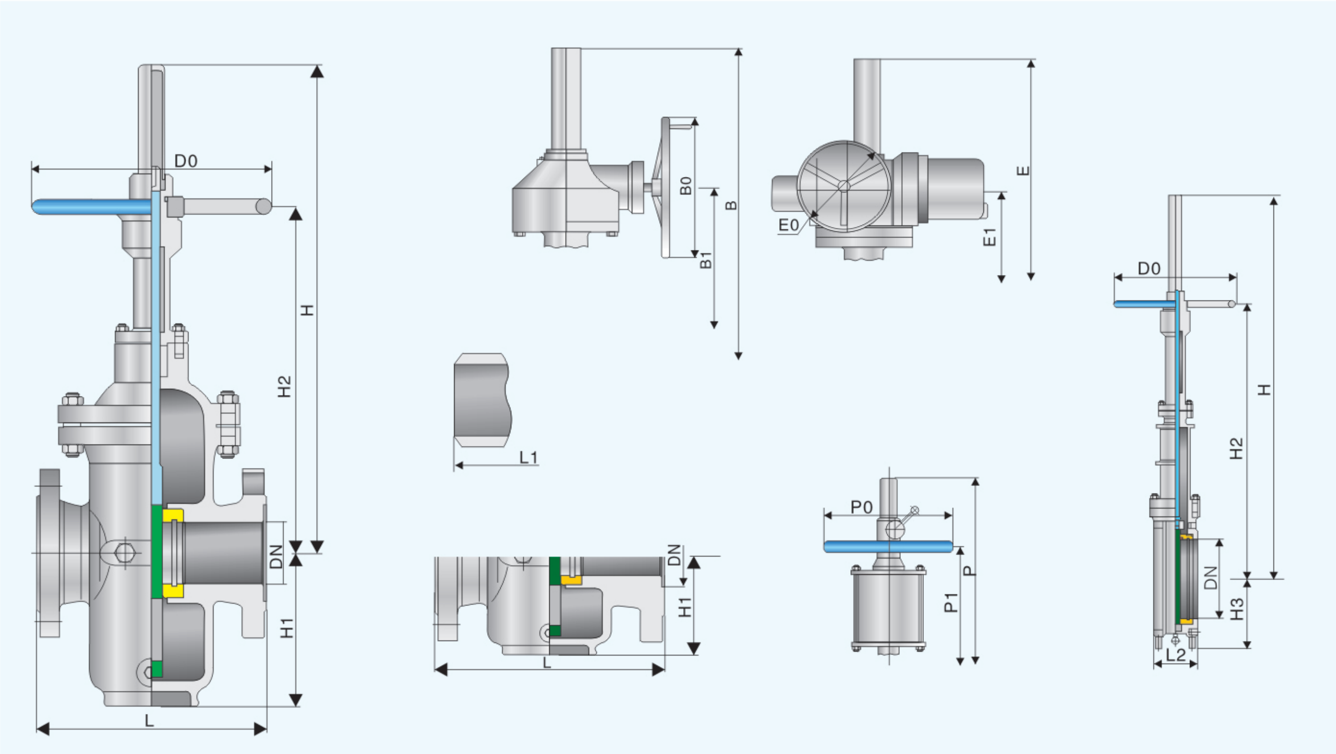
Specifications		Flange	Light-duty	Hand-operated			Geared driving			Geared driving	Air-operating and Fluid driving			Electric driving device			Electric driving device	Non-diversion hole type	Diversion hole type
NPS	DN	L	L2	H	H2	Ho	B	B1	Bo		P	P1	Po	E	E1	Eo		H3	H1
1	25	127	--	360	250	180	--	--	--	--	--	--	--	--	--	--	--	60	85
11/4	32	140	--	375	260	180	--	--	--	--	--	--	--	--	--	--	--	71	103
11/2	40	165	--	410	290	250	--	--	--	--	--	--	--	--	--	--	--	75	115
2	50	178	108	450	315	250	--	--	--	--	525	430	250	--	--	--	--	85	122
21/2	65	190	112	550	420	300	--	--	--	--	648	560	300	--	--	--	--	91	154
3	80	203	114	610	428	300	--	--	--	--	730	630	300	--	--	--	--	109	169
4	100	229	127	700	494	300	770	650	310	BA-0	850	720	300	912	790	200	SMC-04	121	193
6	150	267	140	895	625	350	965	800	310	BA-0	1120	920	350	1107	920	500	SMC-03	178	283
8	200	292	152	1130	784	350	1200	960	310	BA-0	1430	1160	350	1390	1120	500	SMC-03	211	352
10	250	330	165	1290	937	400	1360	1080	310	BA-0	1665	1380	400	1550	1250	500	SMC-03	215	440
12	300	356	178	1480	1080	450	1560	1200	310	BA-0	1930	1550	450	1740	1400	305	SMC-00	245	514
14	350	381	190	1660	1283	500	1740	1350	460	BA-1	2185	1750	450	1913	1550	305	SMC-00	280	602
16	400	406	216	1850	1417	500	1930	1500	460	BA-1	2450	2000	500	2103	1620	305	SMC-00	310	678
18	450	432	222	2080	1489	600	2160	1680	460	BA-1	2755	2250	500	2365	1830	305	SMC-0	346	785
20	500	457	229	2300	1672	700	2420	1850	460	BA-2	3050	2450	600	2585	1980	305	SMC-0	363	855
24	600	508	267	2680	2012	800	2800	2120	460	BA-2	3580	2900	800	2990	2300	305	SMC-1	442	1045
28	700	610	292	3080	2250	800	3200	2450	460	BA-2	4130	3350	800	3390	2600	305	SMC-1	505	1190
32	800	660	318	3491	2550	1000	3640	2800	460	BA-2	--	--	--	3850	2980	305	SMC-1	560	1350
36	900	711	330	3897	2850	1000	4050	3080	600	BA-3	--	--	--	4260	3200	458	SMC-2	610	1510
40	1000	811	460	4317	3250	1200	4467	3400	600	BA-3	--	--	--	4677	3600	458	SMC-2	715	1715
42	1050	1124	--	--	--	--	4650	3550	600	BA-3	--	--	--	4870	3790	458	SMC-2	785	1795
44	1100	1219	--	--	--	--	4870	3700	620	BA-3	--	--	--	5060	3950	610	SMC-3	867	1894
48	1200	1264	--	--	--	--	5350	4100	620	BA-3	--	--	--	5500	4250	610	SMC-3	993	2150



Main Connection Dimensions 300LB

Specifications		Flange	Butt welding	Light–duty	Hand–operated			Geared driving			Geared driving	Air–operating and Fluid driving			Electric driving device			Electric driving device	Non–diversion hole type	Diversion hole type
NPS	DN	L	L1	L2	H	H2	Ho	B	B1	Bo		P	P1	Po	E	E1	Eo		H3	H1
1	25	165	165	––	370	260	180	––	––	––	––	––	––	––	––	––	––	––	70	90
11/4	32	178	178	––	385	270	180	––	––	––	––	––	––	––	––	––	––	––	80	115
11/2	40	190	190	––	420	300	250	––	––	––	––	––	––	––	––	––	––	––	85	130
2	50	216	216	––	458	325	250	––	––	––	––	533	435	200	––	––	––	––	100	137
21/2	65	241	241	––	555	420	300	––	––	––	––	653	565	200	––	––	––	––	106	169
3	80	282	282	––	615	430	300	––	––	––	––	735	635	200	––	––	––	––	124	184
4	100	305	305	150	710	500	300	770	650	310	BA–0	860	730	250	912	790	200	SMC–04	146	218
6	150	403	403	150	900	625	350	965	800	310	BA–0	1125	925	350	1155	960	500	SMC–03	206	311
8	200	419	419	180	1135	790	350	1200	960	310	BA–0	1435	1165	350	1390	1120	305	SMC–00	241	382
10	250	457	457	180	1401	1040	400	1360	1090	310	BA–0	1776	1450	400	1543	1240	305	SMC–00	303	476
12	300	502	502	200	1580	1150	450	1560	1200	310	BA–1	2030	1620	450	1745	1400	305	SMC–0	372	545
14	350	762	762	200	––	––	––	1740	1350	460	BA–1	2305	1900	500	1945	1580	305	SMC–0	405	645
16	400	838	838	218	––	––	––	1930	1540	460	BA–1	2558	2100	600	2135	1640	305	SMC–0	450	728
18	450	914	914	218	––	––	––	2160	1700	460	BA–1	2835	2320	700	2385	1840	305	SMC–1	490	800
20	500	991	991	229	––	––	––	2420	1850	460	BA–2	3120	2510	800	2660	2050	305	SMC–1	520	930
24	600	1143	1143	248	––	––	––	2800	2120	460	BA–2	3670	2980	800	3010	2310	305	SMC–1	600	1100
28	700	1346	1346	286	––	––	––	3200	2460	460	BA–2	––	––	––	3480	2680	458	SMC–2	665	1260
32	800	1524	1524	286	––	––	––	2640	2800	460	BA–2	––	––	––	3890	3020	458	SMC–2	720	1420
36	900	1727	1727	––	––	––	––	4050	3080	600	BA–3	––	––	––	4260	3200	458	SMC–2	820	1580
40	1000	1880	1880	––	––	––	––	4467	3400	600	BA–3	––	––	––	4677	3600	610	SMC–2	950	1720
42	1050	1981	1981	––	––	––	––	4650	3550	600	BA–3	––	––	––	4870	3790	610	SMC–3	1070	1800

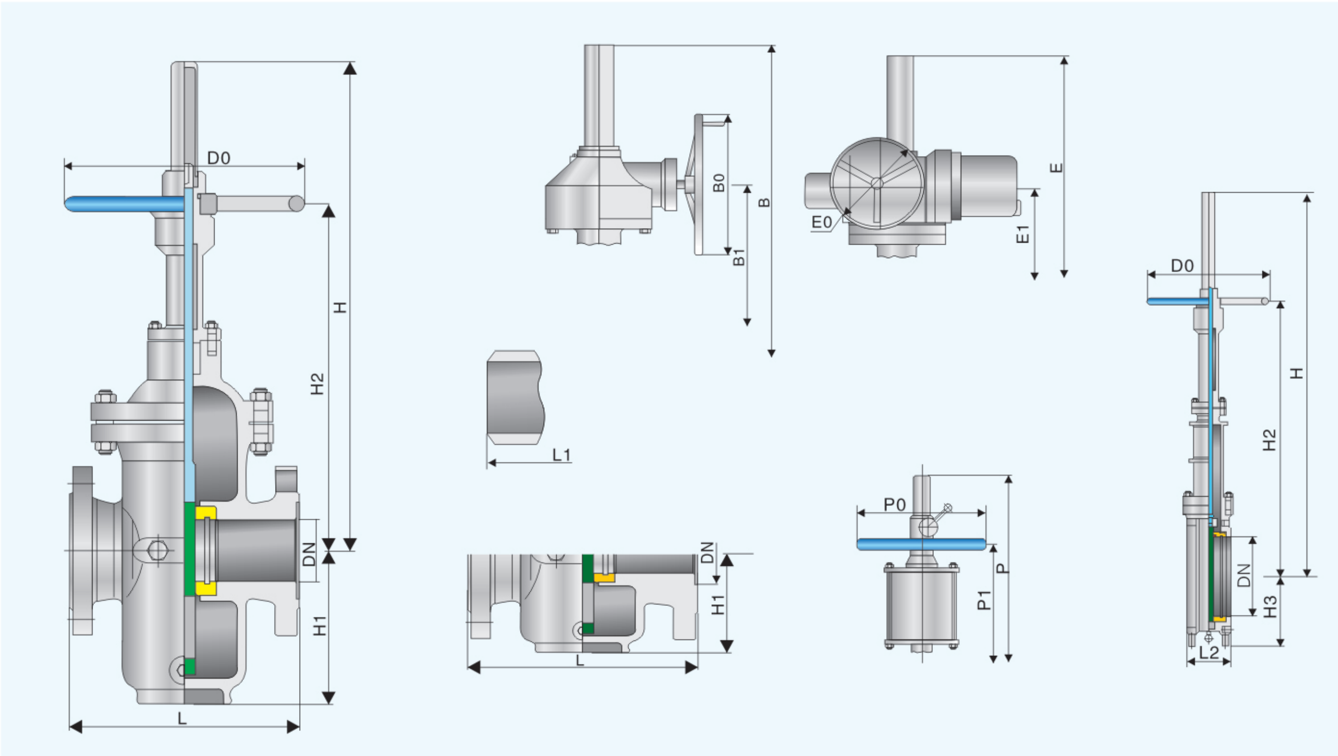
Class 600 Electronic / bevel gear flat-plate gate valve



Main Connection Dimensions 600LB

Specifications		Flange	Hand-operated			Geared driving			Geared driving	Air-operating and Fluid driving			Electric driving device			Electric driving device	Non-diversion hole type	Diversion hole type
NPS	DN	L	H	H2	Ho	B	B1	Bo		P	P1	Po	E	E1	Eo		H3	H1
2	50	292	468	335	300	505	430	310	BA-0	543	445	200	647	560	200	SMC-04	108	158
11/2	65	330	565	430	300	560	470	310	BA-0	663	570	200	702	610	200	SMC-04	125	190
3	80	356	625	440	350	610	510	310	BA-0	745	640	250	752	650	500	SMC-03	145	225
3	100	432	720	510	350	770	650	310	BA-0	870	740	250	950	820	500	SMC-03	165	255
6	150	559	910	630	400	965	800	310	BA-0	1135	930	350	1138	950	305	SMC-0	220	330
8	200	660	1145	800	500	1200	960	460	BA-1	1445	1170	350	1403	1130	305	SMC-0	280	410
10	250	787	1411	1050	500	1370	1090	460	BA-1	1786	1460	400	1575	1280	305	SMC-0	330	490
12	300	838	1590	1160	600	1560	1200	460	BA-1	2040	1630	450	1750	1410	305	SMC-1	380	570
14	350	889	--	--	--	1740	1350	460	BA-2	--	--	--	1930	1570	305	SMC-1	430	650
16	400	991	--	--	--	1970	1540	460	BA-2	--	--	--	2210	1700	305	SMC-1	480	735
18	450	1092	--	--	--	2260	1700	460	BA-2	--	--	--	2500	1940	458	SMC-2	530	810
20	500	1194	--	--	--	2420	1850	460	BA-2	--	--	--	2630	2020	458	SMC-2	580	905
22	550	1295	--	--	--	2685	2010	600	BA-3	--	--	--	2840	2240	610	SMC-3	640	1075
24	600	1397	--	--	--	2985	2190	600	BA-3	--	--	--	3100	2450	610	SMC-3	700	1160
26	650	1448	--	--	--	3160	2390	600	BA-3	--	--	--	3310	2610	610	SMC-3	760	1220
28	700	1549	--	--	--	3350	2550	600	BA-3	--	--	--	3500	2740	610	SMC-3	830	1330
30	750	1651	--	--	--	3470	2680	600	BAA-3	--	--	--	3690	2890	610	SMC-3	900	1415
32	800	1778	--	--	--	3880	2910	600	BAA-3	--	--	--	3900	3050	610	SMC-3	--	1540
36	900	2083	--	--	--	4250	3115	620	BAA-4	--	--	--	4330	3380	610	SMC-4	--	1650
40	1000	2150	--	--	--	4580	3395	620	BAA-4	--	--	--	4760	3710	610	SMC-4	--	1760
42	1050	2300	--	--	--	4885	3655	620	BAA-4	--	--	--	4970	3860	760	SMC-5	--	1840

Class 900 Electronic / bevel gear flat-plate gate valve



Main Connection Dimensions 900LB

Specifications		Flange	Butt welding	Hand-operated			Geared driving			Geared driving	Air-operating and Fluid driving			Electric driving device			Electric driving device	Non-diversion hole type	Diversion hole type
NPS	DN	L	L1	H	H2	Ho	B	B1	Bo		P	P1	Po	E	E1	Eo		H3	H1
2	50	368	368	473	335	300	525	450	310	BA-0	548	450	250	647	560	500	SMC-03	108	158
11/2	65	419	419	570	435	300	585	490	310	BA-0	668	580	300	702	610	500	SMC-03	125	190
3	80	381	381	630	445	350	635	530	310	BA-0	750	650	350	752	650	305	SMC-00	145	225
4	100	457	457	725	515	350	800	680	310	BA-0	875	745	400	950	820	305	SMC-00	165	255
6	150	610	610	915	640	400	995	830	360	BA-1	1140	940	500	1138	950	305	SMC-0	220	330
8	200	737	737	1150	800	500	1250	1000	460	BA-1	1450	1180	550	1403	1130	305	SMC-0	280	410
10	250	838	838	1416	1055	500	1420	1140	460	BA-1	1791	1465	600	1575	1280	305	SMC-1	330	490
12	300	965	965	1595	1165	600	1600	1230	460	BA-2	2045	1635	700	1750	1410	305	SMC-1	380	570
14	350	1029	1029	--	--	--	1890	1450	460	BA-2	--	--	--	1930	1570	305	SMC-1	--	690
16	400	1130	1130	--	--	--	2175	1660	600	BA-3	--	--	--	22210	1700	458	SMC-2	--	800
18	450	1219	1219	--	--	--	2355	1800	600	BA-3	--	--	--	2500	1940	458	SMC-2	--	890
20	500	1321	1321	--	--	--	2520	1920	600	BA-3	--	--	--	2630	2020	610	SMC-3	--	985
24	600	1549	1549	--	--	--	3050	2240	620	BA-4	--	--	--	3100	2450	610	SMC-3	--	1150

Knife gate valve

Chief Features

Face–to–face dimensions adopt short series,and light valve is adopted,so as to save pipe supporter.During the opening and closing of the valve, the gate disc can automatically scrape off the adhered medium and is beneficial to sealing:

The blade type gate disc helps medum cutoff and residue discharge so that the valve can be operated without blocking.

The valve adopts wafer type connection;

The wedge type limit stopper can provide sealing force,reliable sealing

The guide nali can provide good guiding function;

The anti–abrasive bushings of different materials can be provided according to requirements so as to prolong the service life of the valve.

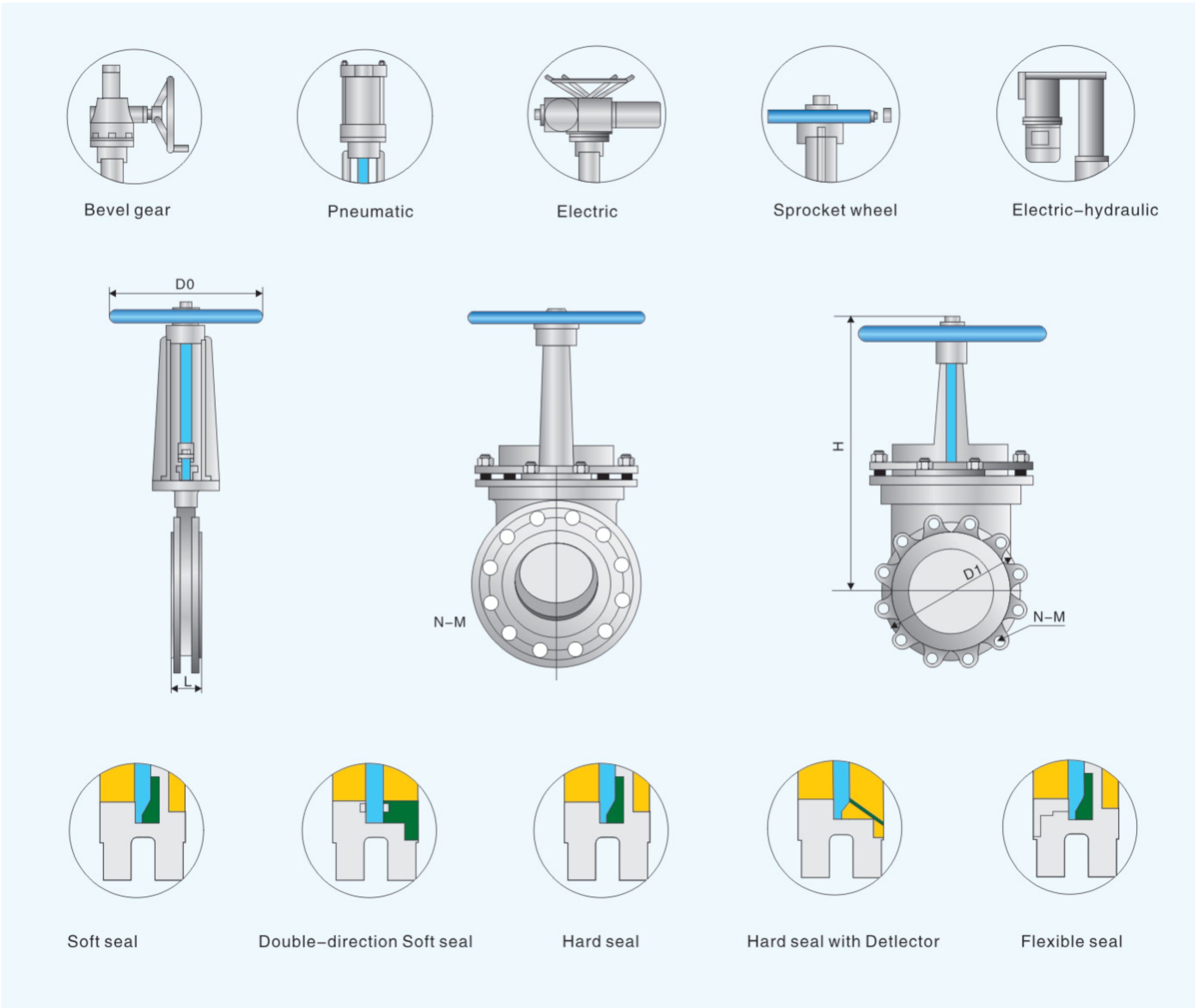
Actuators(electric,gear box.pneumatic,hydraulic)can be freely selected;

Product Specification

	Design spec	Face to Face	Flange End	Test&Check	Marking	Supply
Product Specification	JB/T8691	GB/T12221	JB/T79	JB/T8691	GB/T12220	JB/T7928
	MSS SP–81	MSS SP–81	ASME B16.5	MSS SP–81	MSS SP–25	MSS SP–81

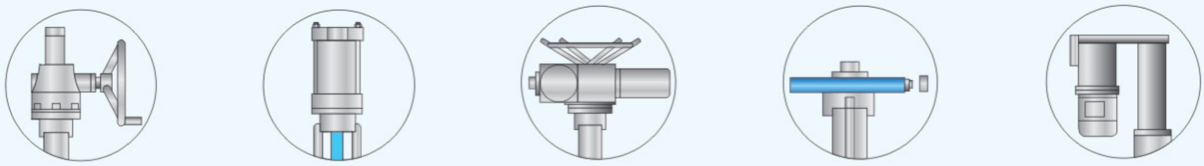
Main Part Specification

Parts	Main Body Matieral Code		Part Name
Body/Bonnet	Crabon steel/Stainless steel	C.S/S.S	Body/Bonet
Disc	Stainless steel	S.S	Disc
Stem	Stainless steel	S.S	Stem
Packing	Rubber/PTFE/Graphite	ASB/PTFE/Graphite	Packing
Applicable medium	Paper Pulp、Mixture of sewage、Coal slurry、ash and seriflux		Suitable Medium

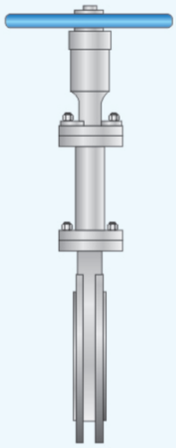


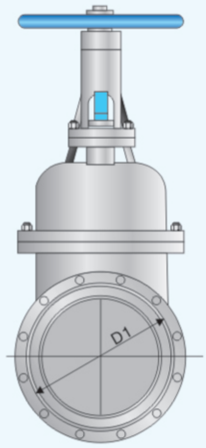
Main Extemal and connection Dimension(ASME B16.5)

Type	DN	1.0Mpa							WT(kg)
		L	D	D1	D2	N-M	Z-Φd	H	
PZ73X-150Lb PZ73F-150Lb PZ73H-150Lb PZ73Y-150Lb	2	48	152	120.5	92	2-M16	2-Φ18	285	11
	2-1/2	48	178	139.5	105	2-M16	2-Φ18	295	12
	3	51	190	152.5	127	2-M16	2-Φ18	315	15
	4	51	229	190.5	157	2-M16	6-Φ18	365	16
	5	57	254	216	186	2-M16	6-Φ22	400	30
	6	57	279	241.5	216	2-M20	6-Φ22	475	49
	8	70	343	298.5	270	4-M22	6-Φ22	540	58
	10	70	406	362	324	4-N22	8-Φ25	630	95
	12	76	480	432	381	4-N27	8-Φ25	780	430
	14	76	533	476	413	6-N27	10-Φ30	885	149
	16	89	597	540	470	6-M27	10-Φ30	990	225
	18	89	635	578	533	6-M30	12-Φ33	1100	345
	20	114	699	635	584	8-M30	12-Φ33	1200	440
	24	114	813	749.5	692	8-M33	12-Φ33	1450	590
	30	117	985	914	857	12-M33	16-Φ36	1950	855
	36	117	1170	1086	1022	14-M39	18-Φ42	2450	970



Bevel gear | Pneumatic | Electric | Sprocket wheel | Electric-hydraulic

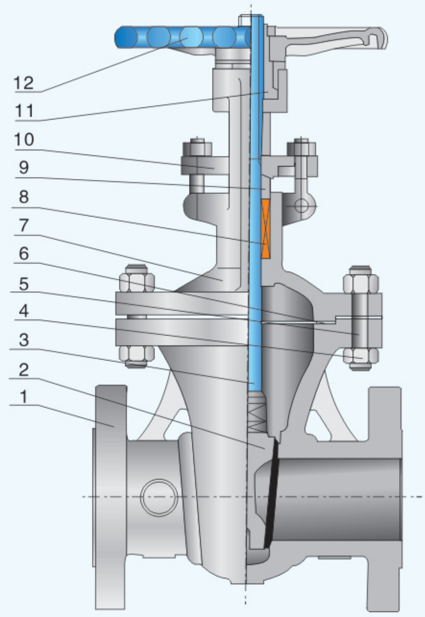




Soft seal | Double-direction Soft seal | Hard seal | Hard seal with Detlector | Flexible seal

Main Extemal and Connection Dimension(ASME B16.5)

Type	DN	1.0Mpa							WT(kg)
		L	D	D1	D2	N-M	Z-ϕd	H	
PZ73X-150Lb PZ73F-150Lb PZ73H-150Lb PZ73Y-150Lb	2	48	152	120.5	92	2-M16	2-ϕ18	370	13.5
	2-1/2	48	178	139.5	105	2-M16	2-ϕ18	400	14.5
	3	51	190	152.5	127	2-M16	2-ϕ18	475	17
	4	51	229	190.5	157	2-M16	6-ϕ18	540	22
	5	57	254	216	186	2-M16	6-ϕ22	630	27.6
	6	57	279	241.5	216	2-M20	6-ϕ22	780	37.5
	8	70	343	298.5	270	2-M20	6-ϕ22	885	51
	10	70	406	362	324	4-M22	8-ϕ25	990	74
	12	76	480	432	381	4-M22	8-ϕ25	1100	90
	14	76	533	476	413	4-M27	10-ϕ30	1200	113
	16	102	597	540	470	6-M27	10-ϕ30	1450	156
	18	114	635	578	533	6-M30	12-ϕ33	1650	240
	20	127	699	635	584	8-M30	12-ϕ33	1900	310
	24	154	813	749.5	692	8-M33	12-ϕ36	2100	448
	30	165	985	914	857	12-M33	16-ϕ36	2600	560
	36	203	1170	1086	1022	14-M39	18-ϕ42	3200	700



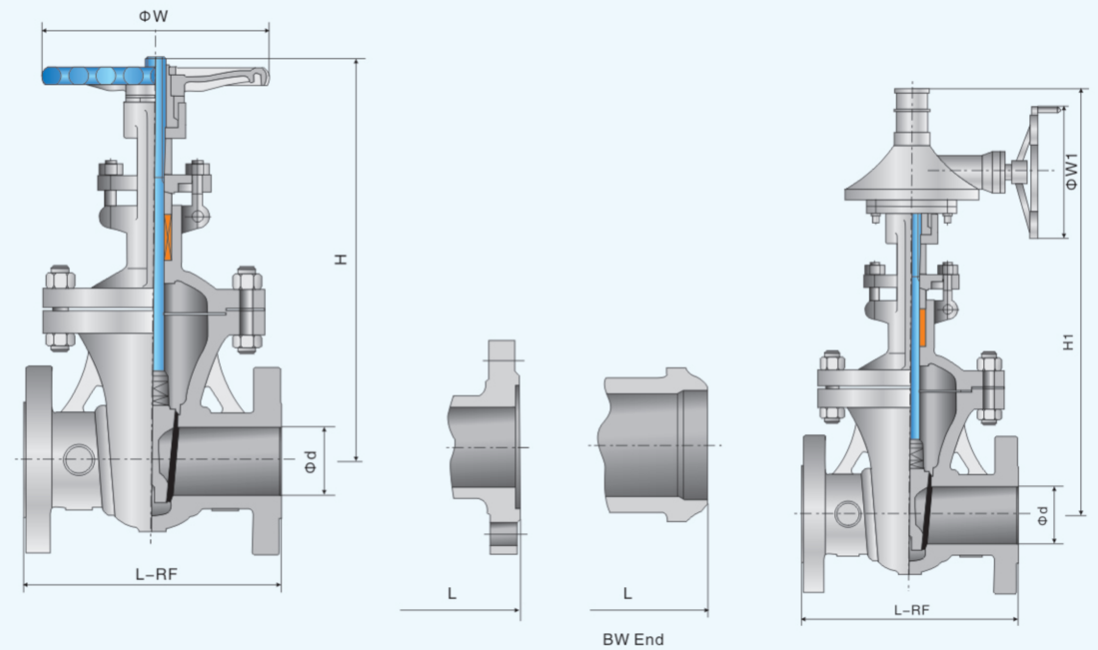
Standards

Design and Manufacture: DIN3352, BS EN 1984
Face to Face Dimensions: DIN3202, BS EN 558–1
Flange Ends Dimensions: DIN2543, EN 1092–1
DIN2544, DIN2545, DIN2546
Test & Inspect: DIN 3230, BS EN 12569

Standard Material Specifications

Part Name		Material				
		Trim 1	Trim 8	Trim 5		
1	Body	DIN 17245 GS–C25+CR13	DIN 17245 GS–C25+STL	DIN 17245 GS–C25+STL	DIN 17445 1.4308	DIN 17445 1.4408
2	Wedge	DIN 17245 GS–C25+CR13	DIN 17245 GS–C25+CR13	DIN 17245 GS–C25+STL	DIN 17445 1.4308	DIN 17445 1.4408
7	Bonnet	DIN 17245 GS–C25+CR13	DIN 17245 GS–C25+CR13	DIN 17245 GS–C25+CR13	DIN 17445 1.4308	DIN 17445 1.4408
9	Gland	ASTM A182 F6a			ASTM A182 F304	ASTM A182 F316
10	Gland Flange	DIN 17245 GS–C25			DIN 17445 1.4308	DIN 17445 1.4408
3	Stem	ASTM A182 F6a			ASTM A182 F304	ASTM A182 F316
4	Nut	A194 2H			A194 8	A194 8
5	Bolt	A193 B7			A193 B8	A193 B8
6	Gasket	SS Spiral Wound W/graphite,or SS Spiral Wound W/PTFE,or Reinforced PTFE				
8	Packing	Braided Graphite or Dieformed Graphite Ring or PTFE				
11	Stem Nut	Copper alloy or A439 D2				
12	Hand Wheel	Ductile iron or Carbon steel				

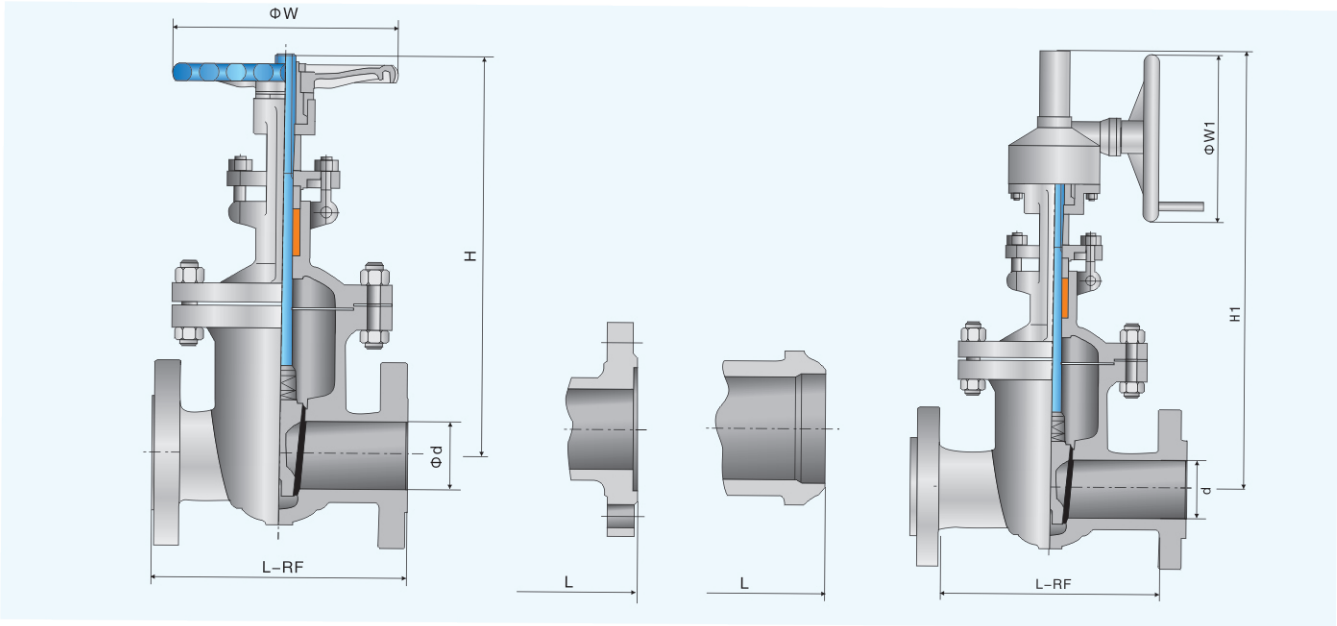
Noted：The chart above only lists out some common composition of steel gate valve. We may provide other different parts material composition according to the customer's request or the actual valve working conditlon



Dimensions & Weights

PN10(DIN 3202-F4)																					
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
L-RF	–	130	140	150	170	180	190	200	210	230	250	270	290	310	330	350	390	430	470	510	550	630
H	–	268	295	305	345	370	445	530	565	725	885	1010	1140	1295	1380	1535	1835	2155	–	–	–	–
H1	–	–	–	–	–	–	–	–	–	965	1220	1365	1545	1755	1890	2085	2435	2925	3275	3670	4220	4845
W	–	180	200	200	200	250	280	280	300	360	400	400	450	500	500	600	700	800	–	–	–	–
W1	–	–	–	–	–	–	–	–	–	310	310	310	310	460	460	460	460	530	530	530	530	600
WT(kg)	–	10	13	18	23	29	38	53	68	108	160	220	275	390	487	563	852	1250	1830	2295	3700	5050
PN16(DIN 3202-F5)																						
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
L-RF	160	180	240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400
H	206	270	305	325	350	415	465	545	610	775	905	1020	1180	1300	1420	1585	1810	–	–	–	–	–
H1	–	–	–	–	–	–	–	–	–	–	1220	1370	1525	1755	1890	2135	2585	2945	3345	3750	4005	4830
W	160	180	200	200	200	250	280	300	360	360	400	450	500	500	600	600	680	–	–	–	–	–
W1	–	–	–	–	–	–	–	–	–	–	310	310	310	460	460	460	600	600	600	600	600	600
WT(kg)	10	15	18	23	25	38	45	72	97	169	258	330	470	572	816	1180	1450	1860	2461	3080	3944	6020
PN25(DIN 3202-F5)																						
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
L-RF	160	180	240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400
H	205	270	305	325	350	415	465	545	610	775	905	1020	1180	1300	1420	1585	1810	–	–	–	–	–
H1	–	–	–	–	–	–	–	–	–	–	1220	1370	1525	1755	1890	2135	2585	2945	3345	3750	4005	4830
W	160	180	200	200	250	250	250	280	300	350	400	450	500	500	600	600	700	–	–	–	–	–
W1	–	–	–	–	–	–	–	–	–	–	310	310	310	460	460	460	600	600	600	600	600	600
WT(kg)	11	16	18	25	30	42	56	76	108	182	280	352	495	652	925	1250	1560	2030	2558	3870	4960	7558
	PN40(DIN 3202-F7)																					
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600	700	800	900	–	–	–
L-RF	160	180	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350	1550	1750	1950	–	–	–
H	210	270	323	377	389	418	489	541	630	824	915	1085	1190	1310	1560	1875	–	–	–	–	–	–
H1	–	–	–	–	–	–	–	–	–	–	1225	1420	1580	1755	2125	2520	2945	3450	3890	–	–	–
W	160	180	200	200	250	250	300	300	360	400	450	500	600	600	650	750	–	–	–	–	–	–
W1	–	–	–	–	–	–	–	–	–	–	310	310	310	460	530	530	600	600	600	–	–	–
WT(kg)	11	16	18	25	33	45	59	78	116	225	360	513	710	955	1368	2150	3050	–	–	–	–	–

Noted: We may provide other different actuators according to the customer's request,such as pneumatic,electic,hydraulic actuators,th e details of them according to the actual valve working conditlon.
Noted: For Dn≤40, the face to face dimension conform to the F1 series
Noted: The face to face demension of BW-end-valve is the same as that of flanged-end-valve.



Dimensions & Weights

PN63(DIN 3202-F7)														
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
L-RF	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
H	323	380	410	450	525	605	675	820	975	1115	1235	1385	1500	1690
H1	–	–	–	–	–	–	890	1080	1285	1475	1635	1840	2180	2500
W	180	200	250	250	300	300	360	400	450	500	600	600	–	–
W1	–	–	–	–	–	–	310	310	460	460	460	530	530	530
W(kg)	22	32	39	53	78	123	176	340	435	560	843	1310	1900	3765
PN100(DIN 3202-F7)														
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
L-RF	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
H	360	390	415	460	510	625	750	890	1050	1208	–	–	–	–
H1	–	–	–	–	–	–	890	1200	1415	1680	1900	2285	–	–
W	180	200	250	280	300	360	450	500	650	700	–	–	–	–
W1	–	–	–	–	–	–	310	310	460	460	460	530	–	–
W(kg)	28	42	55	63	101	147	228	449	608	1020	1350	1650	–	–
PN160(DIN 3202-F8)														
DN	40	50	65	80	100	125	150	200	250	300	–	–	–	–
L-RF	270	300	360	390	450	525	600	750	900	1050	–	–	–	–
H	365	512	560	585	631	670	820	990	–	–	–	–	–	–
H1	–	–	–	–	–	840	955	1235	1500	1725	–	–	–	–
W	250	280	280	300	360	400	500	650	–	–	–	–	–	–
W1	–	–	–	–	–	310	310	460	460	530	–	–	–	–
W(kg)	50	74	107	120	180	342	410	582	950	1380	–	–	–	–

Noted: We may provide other different actuators according to the customer's request,such as pneumatic,electic,hydraulic actuators,the details of them according to the actual valve working conditlon.
Noted:The face to face demension of BW-end-valve is the same as that of flanged-end-valve.