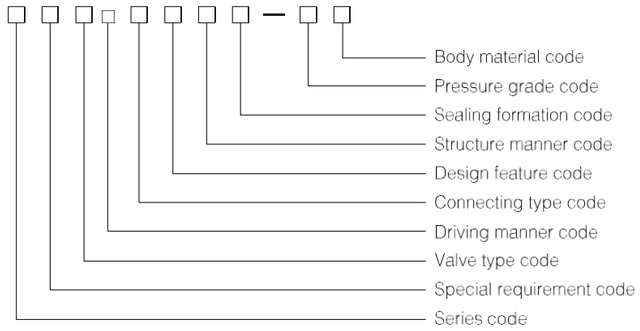
Slab Gate Valve Series

SLAB GATE VALVE

Slab Gate Valve (Single Disc)

Model schedule illustration



- Series code: The series code name of our company is TT
- Special requirement code: K—Antisulphur model L—Adjustment type ZB—Auto compensation
- Valve type code: Z—Gate valve
- Driving manner code: 4—Spur gear transmission 5—Bevel gear transmission 6—Air driving 6s—Take pneumatically manually 7—Hydrodynamic driving 9—Electric driving (Hand wheel driving omitted) 9b—Explosion electric driving
- Connecting type code: 4—Flange-connecting 6—Butt welding connecting
- Design feature code: 3—Rising-stem parallel single-disc 4—Rising-stem parallel double-disc
- Structure manner code: W—Non-diversion hole type (Diversion hole type omitted) P—Light-duty
- Sealing formation code: Y—Hard alloy H—Alloy steel D—Nitriding steel F—Intensified polytetrafluoroethylene(PTFE)
- Pressure grade code: The 10 times of the nominal pressure MPa, pound grade io practical number
- Body material code: C—WCB I—WC6、ZG1Cr5Mo V—WC9、ZG20CrMoV P—CF8、ZG1Cr18Ni9Ti、R—CF8M、ZG1Cr18Ni12Mo2Ti S—CF3 L—CF3M F—LCB N—LC3

Example1: Z543WF-16C

Denoting 1.6MPa nominal rating pressure, bevel gear transmission, flange-connecting, nondiversion hole, Rising-stem parallel single-disc, WCB valve body material and the Intensified polytetrafluoroethylene(PTFE) as sealing material.

Example2: KZ9b44Y-150Lb

Denoting Class150 pressure grade, explosion electric driving, flange-connecting, diversion hole type, antisulphur rising-stem parallel double-disc gate valve, WCB valve body material and the hard alloy sealing material.

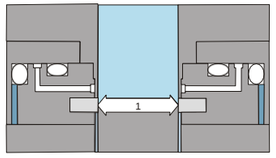
Products Design Features

- Cast and weld two structures with the body
- The seat ring uses the floating seat ring structure with o-seal ring sealed and pre-tightening force applied to have inlet and outlet dual-way sealed; and the open-close moment with this structure is 1/2 that of the common valves only, able to lightly open and close valves.
- The seat ring uses the sealing face inlaid with PTFE, so has dual seals of PTFE to metal and metal to metal, the PTFE sealing face also acts as removing the dirt on the wedge disc.
- For the valve with the metal to metal seal, there is grease injector outside of it, grease gets into the sealing face through the injector and the seat ring to have the valve up to null leak.
- The wedge disc of the valve with flow guide hole is always fitted with the sealing face whether in full open or full close status to have the sealing face protected without being directly eroded by the medium so as to extend the duration.
- When fully opened, the valve's channel is smooth and linear, with an extremely small flow resisting coefficient and no pressure loss, and the pipeline can be cleaned with hair-ball through it.
- This valve uses the packing structure with the ability of self-seal, needs no constant adjustment, features very light open and close and a reliable seal. An assisting sealing grease injection structure is set in the packing to have the sealing performance absolutely reliable and get a true null leak, settling the problem for the packing place of universal valves to be easiest leak outward.
- Automatic removal of the high pressure in the internal cavity when the valve is about to close (see the working principle diagram for the details) so as to ensure safety.
- Fully sealed structure leaves a good protective property, suitable for the requirement of 24-hour duty.
- An indication rod or viewing window is set with the valve to show the open-close condition.

Products Performance Specification

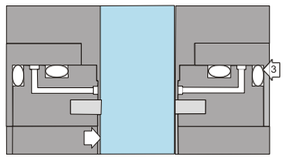
Pressure		Testing pressure at constant temperature (Mpa)				Applicable temperature	Applicable medium	
		The shell testing	The left sealing	Right sealing	Low pressure air tightness		Ordinary type	Antisulphur type
(Mpa) Nominal rating pressure (PN)	1.6	2.4	1.76	1.76	0.6	-29 ~ 121℃ or upon the user requirement	Petroleum, natural gas,water etc.non-corrosive media	Petroleum,natural gas, water etc,containing H2S, CO2 corrosive media
	2.5	3.75	2.75	2.75	0.6			
	4.0	6.0	4.4	4.4	0.6			
	6.4	9.6	7.04	7.04	0.6			
	10.0	15.0	11.0	11.0	0.6			
	16.0	24.0	17.6	17.6	0.6			
	25.0	37.8	27.5	27.5	0.6			
	42.0	63.0	46.2	46.2	0.6			
(Lb) Pound grade (Class)	150	3.0	2.2	2.2	0.6			
	300	7.5	5.5	5.5	0.6			
	400	9.6	7.04		0.6			
	600	15.0	11.0	11.0	0.6			
	900	22.5	17.5	17.5	0.6			
	1500	37.5	27.5	27.5	0.6			
	2500	63.0	46.2	46.2	0.6			

Working Principle



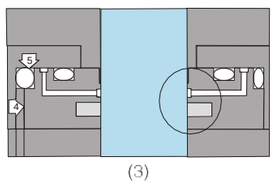
(1)

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)



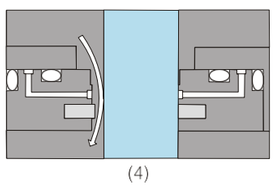
(2)

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)

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 at this point. At the same time. the O-ring (5) forms a tight seal with the seat recess.



(4)

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.

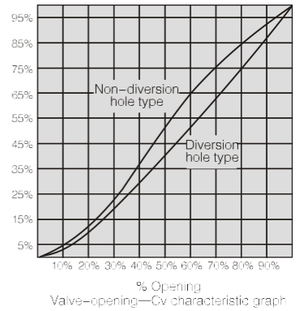
Main Parameter of the Products

Serial models	TT(K)Z43WF、TT(K)Z43WY、TT(K)Z43WD、TT(K)Z44WF、TT(K)Z44WY、TT(K)Z44WD TT(K)Z543WF、TT(K)Z543WY、TT(K)Z543WD、TT(K)Z544WF、TT(K)Z544WY、TT(K)Z544WD TT(K)Z643WF、TT(K)Z643WY、TT(K)Z643WD、TT(K)Z644WF、TT(K)Z644WY、TT(K)Z644WD TT(K)Z943WF、TT(K)Z943WY、TT(K)Z943WD、TT(K)Z944WF、TT(K)Z944WY、TT(K)Z944WD			
Pressure grade range	PN1.6 ~ 15.0MPa			Class150 ~ 900
Drift diameter range	DN25 ~ 1000mm			1" ~ 40"
Driving manner	Hand wheel driving			Gear driving, air-operating, hydrodynamic driving and electric driving
Scope of application	Class150 ~ 300 (PN1.6 ~ 4.0)	Class400 (PN6.4)	Class600 ~ 900 (PN10.0 ~ 15.0)	Class150 ~ 900
	1" ~ 40" (DN25 ~ 1000mm)	1" ~ 28" (DN25 ~ 700mm)	1" ~ 12" (DN25 ~ 300mm)	1" ~ 40" (DN25 ~ 1000mm)

Note: Our company can provide products at customres'request.

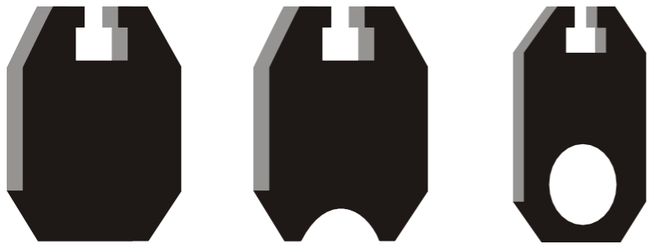
Flow Charalteristic

The flow characteristic of slab gate valve with through conduit is equal to that of pipelines of thesame 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 vales 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 that of the ones with a deversion hole.

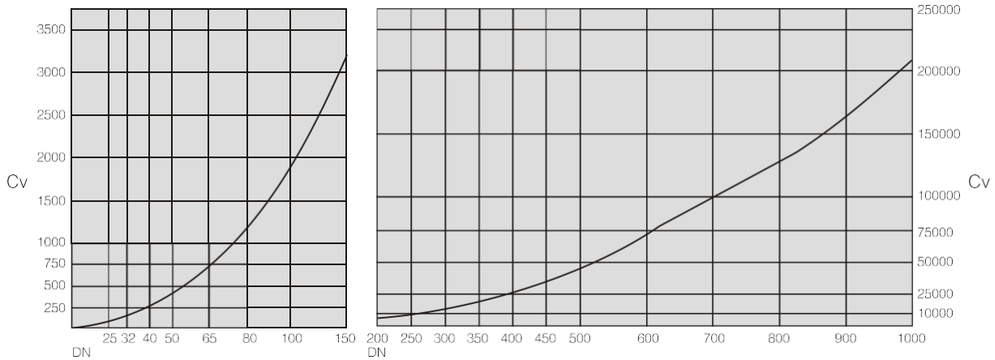


Valve-opening—Cv characteristic graph

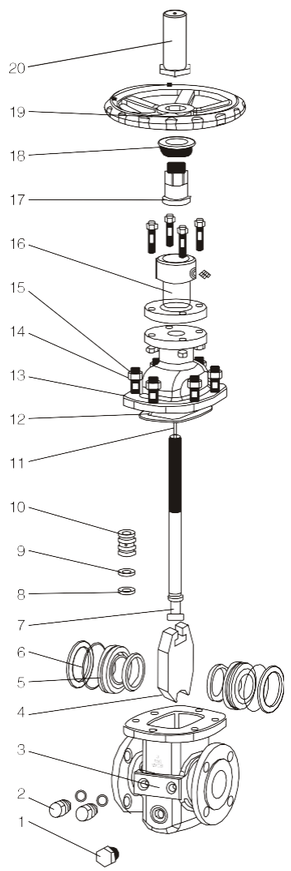
Outside Drawing of Different Types of Shutter



DN-Cv Graph of Flat Valves With Through conduit



Slab Gate Valve (Without Through Conduit)



Technical Specification

Design reference		GB	API
Design standard		JB/T5298 GB/T19672	API 6D ASME B16.34
Structural length	Flanged	GB/T 12221 GB/T19672、JB/T 5298	API 6D ASME B16.10
	Welded connection	GB/T15188.1 GB/T19672	
Flanged ends		GB/T9113 JB/T 79	ASME B16.5 MSS SP44
Butt-welding ends		GB/T 12224	ASME B16.25
Test & inspection		JB/T 9092	API 6D API 598

Note: The sizes of valve connecting flange can be designed according to customers'requirement.

Major Parts Material Form

No.	Accessory name	Material			
		Ordinary type			
		GB	ASTM	GB	ASTM
1	Blowdown stops	25+Zn	A105+Zn	1Cr18Ni9	A276-304
2	Grease injection joint	25+Zn	A105+Zr	25+Zn	A105+Zr
3	Body	WCB	A216-WCB	WCB	A216-WCB
4	Disc	16Mn+ENP	A105+ENP	1Cr18Ni9	A276-304
5	Seat	16Mn+PTFE	A105+PTFE	1Cr18Ni9+PTFE	A276-304+PTFE
6	O-Ring	NBR	NBR	FPM	FPM
7	Stem	2Cr13	A276-420	1Cr18Ni9	A276-304
8	Packing seat	2Cr13	A276-420	2Cr13	A276-420
9	"Y" ring	NBR	NBR	FPM	FPM
10	Sealing shroud	2Cr13	A276-420	2Cr13	A276-420
11	Indicating stem	1Cr18Ni9	A276-304	1Cr18Ni9	A276-304
12	Gasket	Graphite+1Cr18Ni9	Graphite+304	Graphite+1Cr18Ni9	Graphite+304
13	Bonnet	WCB	A216-WCB	WCB	A216-WCB
14	Stud	35CrMoA	A193-B7	35CrMoA	A193-B7
15	Nut	45	A194-2H	45	A194-2H
16	Yoke	WCB	A216-WCB	WCB	A216-WCB
17	Stem nut	ZQA19-4	C95500	ZQA19-4	C95500
18	Gland	25	A105	25	A105
19	Hand whee	25	A536-60-40-18	25	A536-60-40-18
20	Indicating cover	1Cr18Ni9	A276-304	1Cr18Ni9	A276-304

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

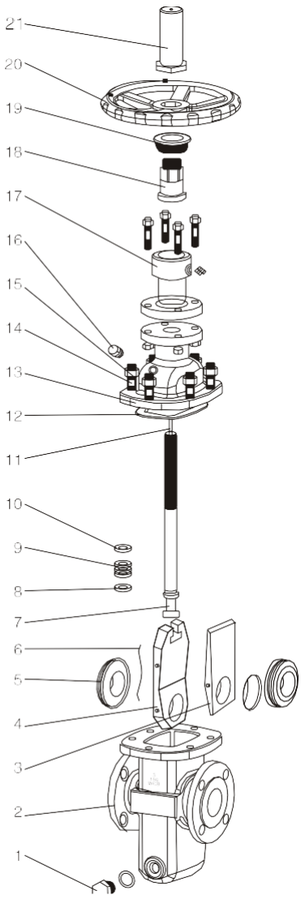
Slab Gate Valve (Expanding Through Conduit)

Technical Specification

Design reference		GB	API
Design standard		JB/T5298 GB/T19672	API 6D ASME B16.34
Structural length	Flanged	GB/T 12221 GB/T19672、JB/T 5298	API 6D ASME B16.10
	Welded connection	GB/T15188.1 GB/T19672	
Flanged ends		GB/T9113 JB/T 79	ASME B16.5 MSS SP44
Butt-welding ends		GB/T 12224	ASME B16.25
Test & inspection		JB/T 9092	API 6D API 598

Note: The sizes of valve connecting flange can be designed according to customers requirement.

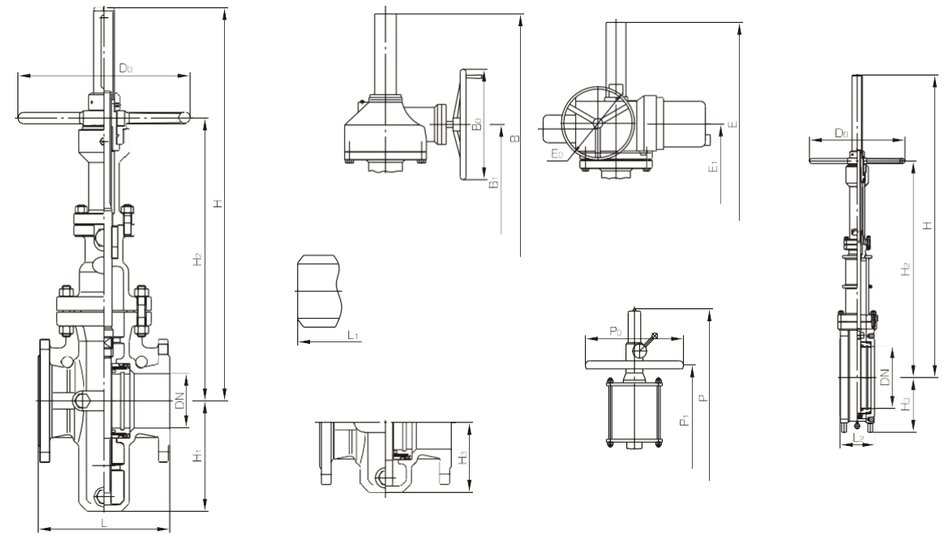
Major Parts Material Form



No.	Accessory name	Material			
		Ordinary type		Antisulphur type	
		GB	ASTM	GB	ASTM
1	Blowdown stops				
2	Body	WCB	A216-WCB	WCB	A216-WCB
3	Disc	16Mn+STL-6	A105+STL-6	1Cr18Ni9+STL-6	A276-304+STL-6
4	Disc	16Mn+STL-6	A105+STL-6	1Cr18Ni9+STL-6	A276-304+STL-6
5	Seat	16Mn+STL-6	A105+STL-6	1Cr18Ni9+STL-6	A276-304+STL-6
6	Spring	65Mn	Inconel X-750	1Cr18Ni9	A276-304
7	Stem	2Cr13	A276-420	1Cr18Ni9	A276-304
8	Packing seat	2Cr13	A276-420	2Cr13	A276-420
9	Packing	Graphite	Graphite	Graphite	Graphite
10	Up Packing	2Cr13	A276-420	2Cr13	A276-420
11	Indicating stem	1Cr18Ni9	A276-304	1Cr18Ni9	A276-304
12	Gasket	Graphite+1Cr18Ni9	Graphite+304	Graphite+1Cr18Ni9	Graphite+304
13	Bonnet	WCB	A216-WCB	WCB	A216-WCB
14	Stud	35CrMoA	A193-B7	35CrMoA	A193-B7
15	Nut	45	A194-2H	45	A194-2H
16	Relief valve	45	A105	45	1045 A105
17	Yoke	WCB	A216-WCB	WCB	A216-WCB
18	Stem nut	ZQA19-4	C95500	ZQA19-4	C95500
19	Gland	25	A105	25	A105
20	Hand whee	25	A536-60-40-18	25	A536-60-40-18
21	Indicating cover	1Cr18Ni9	A276-304	1Cr18Ni9	A276-304

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

SLAB GATE VALVE

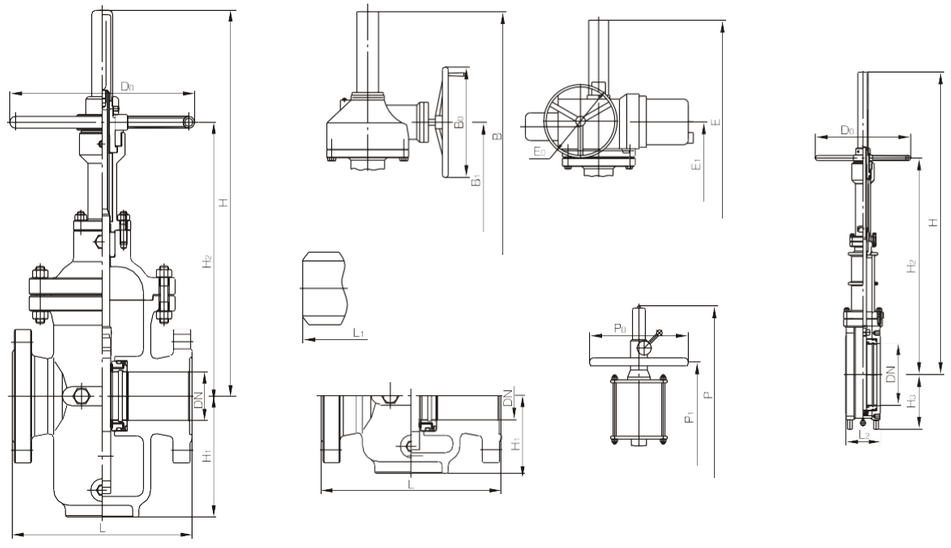


Main Size of Outside

Model：(K)Z5(6、9)4(6)3(4)W(P)(F、Y、D)　　PN1.6、2.5MPa　PN2.0MPa　API 6D Class150

DN (mm)	NPS (in)	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
		L	L1	L2	H	H2	D0	B	B1	B0		P	P1	P0	E	E1	E0		H3	H1
25	1	127	127	–	360	250	180	–	–	–	–	–	–	–	–	–	–	–	60	85
32	1¼	140	140	–	375	260	180	–	–	–	–	–	–	–	–	–	–	–	71	103
40	1½	165	165	–	410	290	250	–	–	–	–	–	–	–	–	–	–	–	75	115
50	2	178	216	108	450	315	250	–	–	–	–	525	430	250	–	–	–	–	85	122
65	2½	190	241	112	550	420	300	–	–	–	–	648	560	300	–	–	–	–	91	154
80	3	203	283	114	610	428	300	–	–	–	–	730	630	300	–	–	–	–	109	169
100	4	229	305	127	700	494	300	770	650	310	BA-0	850	720	300	912	790	200	SMC-04	121	193
150	6	267	403	140	895	625	350	965	800	310	BA-0	1120	920	350	1107	920	500	SMC-03	178	283
200	8	292	419	152	1130	784	350	1200	960	310	BA-0	1430	1160	350	1390	1120	500	SMC-03	211	352
250	10	330	457	165	1290	937	400	1360	1080	310	BA-0	1665	1380	400	1550	1250	500	SMC-03	215	440
300	12	356	502	178	1480	1080	450	1560	1200	310	BA-0	1930	1550	450	1740	1400	305	SMC-00	245	514
350	14	381	572	190	1660	1283	500	1740	1350	460	BA-1	2185	1750	450	1913	1550	305	SMC-00	280	602
400	16	406	610	216	1850	1417	500	1930	1500	460	BA-1	2450	2000	500	2103	1620	305	SMC-00	310	678
450	18	432	660	222	2080	1489	600	2160	1680	460	BA-1	2755	2250	500	2365	1830	305	SMC-0	346	785
500	20	457	711	229	2300	1672	700	2420	1850	460	BA-1	3050	2450	600	2585	1980	305	SMC-0	363	855
600	24	508	813	267	2680	2012	800	2800	2120	460	BA-2	3580	2900	800	2990	2300	305	SMC-1	442	1045
700	28	610	914	292	3080	2250	800	3200	2450	460	BA-2	4130	3350	800	3390	2600	305	SMC-1	505	1190
800	32	660	965	318	3491	2550	1000	3640	2800	460	BA-2	–	–	–	3850	2980	305	SMC-1	560	1350
900	36	800	1016	330	3897	2850	1000	4050	3080	600	BA-3	–	–	–	4260	3200	458	SMC-2	610	1510
1000	40	811	–	460	4317	3250	1200	4467	3400	600	BA-3	–	–	–	4677	3600	458	SMC-2	715	1715
1050	42	1124	–	–	–	–	–	4650	3550	600	BA-3	–	–	–	4870	3790	458	SMC-2	785	1795
1100	44	1219	–	–	–	–	–	4870	3700	620	BAA-3	–	–	–	5060	3950	610	SMC-3	867	1894
1200	48	1264	–	–	–	–	–	5350	4100	620	BAA-3	–	–	–	5500	4250	610	SMC-3	993	2150

SLAB GATE VALVE

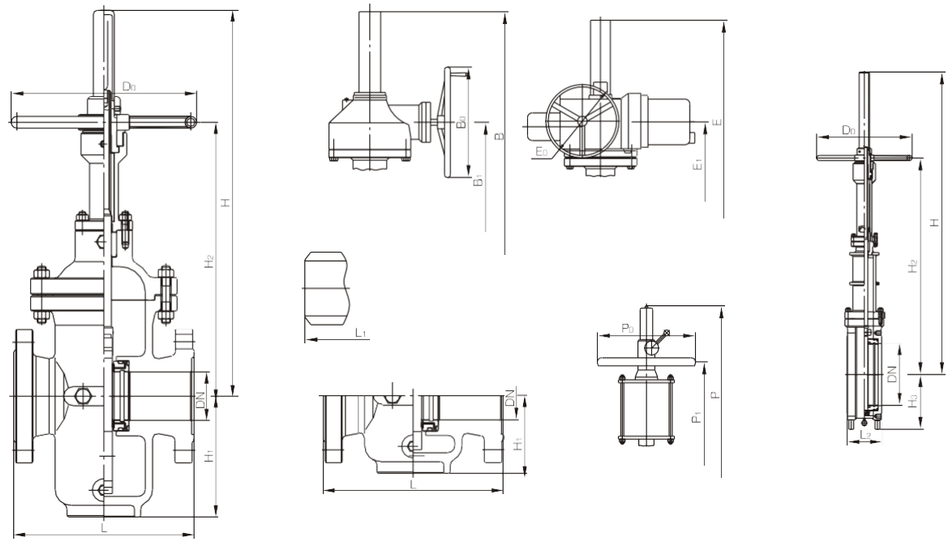


Main Size of Outside

Model：(K)Z5(6、9)4(6)3(4)W(P)(F、Y、D)　　PN4.0MPa　PN5.0MPa　　API 6D Class300

DN (mm)	NPS (in)	Flange L		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
		GB	API	L_1	H	H_2	D_o	B	B_1	B_o		P	P_1	P_o	E	E_1	E_o		H_3	H_1
25	1	165	165	165	370	260	180	–	–	–	–	–	–	–	–	–	–	–	70	90
32	1¼	178	178	178	385	270	180	–	–	–	–	–	–	–	–	–	–	–	80	115
40	1½	190	190	190	420	300	250	–	–	–	–	–	–	–	–	–	–	–	85	130
50	2	216	216	216	458	325	250	–	–	–	–	533	435	200	–	–	–	–	100	137
65	2½	241	241	241	555	420	300	–	–	–	–	653	565	200	–	–	–	–	106	169
80	3	283	283	283	615	430	300	–	–	–	–	735	635	250	–	–	–	–	124	184
100	4	305	305	305	710	500	300	770	650	310	BA-0	860	730	250	912	790	200	SMC-04	146	218
150	6	403	403	403	900	625	350	965	800	310	BA-0	1125	925	350	1155	960	500	SMC-03	206	311
200	8	419	419	419	1135	790	350	1200	960	310	BA-0	1435	1165	350	1390	1120	305	SMC-00	241	382
250	10	457	457	457	1401	1040	400	1360	1090	310	BA-0	1776	1450	400	1543	1240	305	SMC-00	303	476
300	12	502	502	502	1580	1150	450	1560	1200	310	BA-1	2030	1620	450	1745	1400	305	SMC-0	372	545
350	14	762	762	762	–	–	–	1740	1350	460	BA-1	2305	1900	500	1945	1580	305	SMC-0	405	645
400	16	838	838	838	–	–	–	1930	1540	460	BA-1	2558	2100	600	2135	1640	305	SMC-0	450	728
450	18	914	914	914	–	–	–	2160	1700	460	BA-1	2835	2320	700	2385	1840	305	SMC-1	490	800
500	20	991	991	991	–	–	–	2420	1850	460	BA-2	3120	2510	800	2660	2050	305	SMC-1	520	930
600	24	1143	1143	1143	–	–	–	2800	2120	460	BA-2	3670	2980	900	3010	2310	305	SMC-1	600	1100
700	28	1346	1346	1346	–	–	–	3200	2460	460	BA-2	–	–	–	3480	2680	458	SMC-2	665	1260
800	32	1524	1524	1524	–	–	–	3640	2800	460	BA-2	–	–	–	3890	3020	458	SMC-2	720	1420
900	36	1727	1727	1727	–	–	–	4050	3080	600	BA-3	–	–	–	4260	3200	458	SMC-2	820	1580
1000	40	1880	1880	1880	–	–	–	4467	3400	600	BA-3	–	–	–	4677	3600	458	SMC-2	950	1720
1050	42	1981	1981	1981	–	–	–	4650	3550	600	BA-3	–	–	–	4870	3790	610	SMC-3	1070	1800

SLAB GATE VALVE

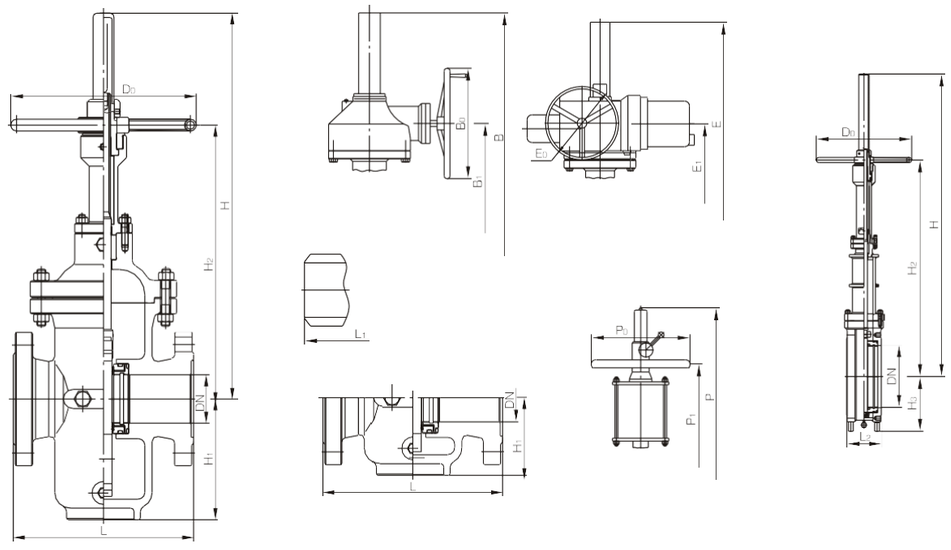


Main Size of Outside

Model：(K)Z5(6、9)4(6)3(4)W(F、Y、D)　　PN6.4MPa　　API 6D Class400

DN (mm)	NPS (in)	Flange L		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
		GB	API	L_1	H	H_2	D_o	B	B_1	B_o		P	P_1	P_o	E	E_1	E_o		H_3	H_1
50	2	216	292	292	458	325	300	505	430	310	BA-0	533	435	200	647	560	200	SMC-04	108	158
65	2½	241	330	330	555	420	300	560	470	310	BA-0	653	565	200	702	610	200	SMC-04	125	190
80	3	283	356	356	615	430	350	610	510	310	BA-0	735	635	250	752	650	500	SMC-03	145	225
100	4	305	406	406	710	500	350	770	650	310	BA-0	860	730	250	912	790	500	SMC-03	165	255
150	6	403	495	495	900	625	400	965	800	310	BA-0	1125	925	350	1138	950	305	SMC-00	220	330
200	8	419	597	597	1135	790	500	1200	960	310	BA-0	1435	1165	350	1373	1100	305	SMC-00	280	410
250	10	457	673	673	1401	1040	500	1370	1090	460	BA-1	1776	1450	400	1575	1280	305	SMC-0	303	490
300	12	502	762	762	1580	1150	600	1560	1200	460	BA-1	2030	1620	450	1725	1390	305	SMC-0	372	570
350	14	762	826	826	–	–	–	1740	1350	460	BA-1	2305	1900	500	1930	1570	305	SMC-1	405	650
400	16	838	902	902	–	–	–	1970	1540	460	BA-2	2558	2100	600	2210	1700	305	SMC-1	450	735
450	18	914	978	978	–	–	–	2260	1700	460	BA-2	2835	2320	700	2500	1940	305	SMC-1	490	810
500	20	991	1054	1054	–	–	–	2420	1850	460	BA-2	3120	2510	800	2630	2020	458	SMC-2	520	935
600	24	1143	1232	1232	–	–	–	2800	2120	600	BA-3	–	–	–	3050	2350	458	SMC-2	600	1170
700	28	1346	1397	1397	–	–	–	3230	2460	600	BA-3	–	–	–	3480	2680	458	SMC-2	665	1330
800	32	1524	1524	1524	–	–	–	3640	2800	600	BA-3	–	–	–	3890	3020	458	SMC-2	720	1420
900	36	1727	1727	1727	–	–	–	4050	3080	600	BA-3	–	–	–	4260	3200	458	SMC-2	820	1580
1050	40	1880	1880	1880	–	–	–	4467	3400	600	BA-3	–	–	–	4677	3600	610	SMC-3	950	1720
1100	42	1981	1981	1981	–	–	–	4650	3550	600	BAA-3	–	–	–	4870	3790	610	SMC-3	1070	1800

SLAB GATE VALVE

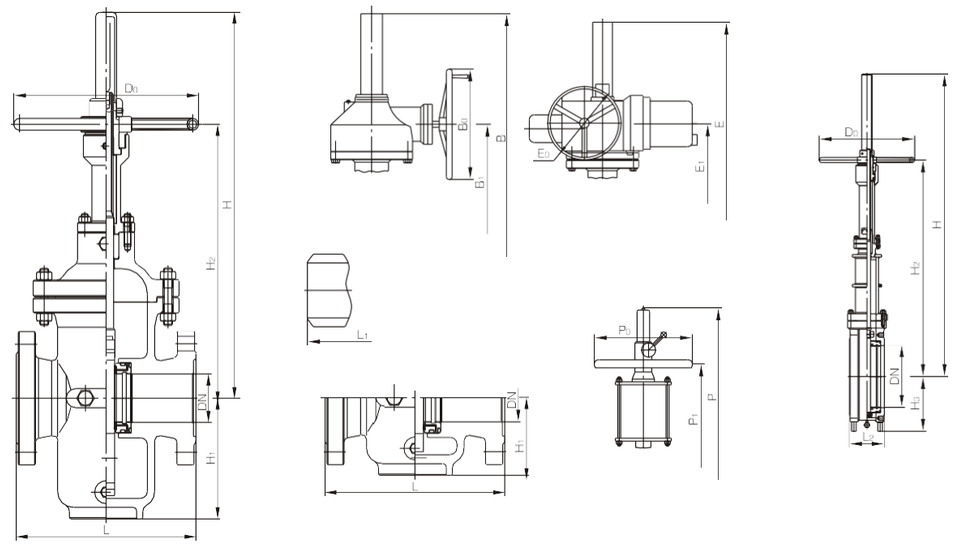


Main Size of Outside

Model：(K)Z5(6、9)4(6)3(4)W(F、Y、D)　　PN10.0MPa　　API 6D Class600

DN (mm)	NPS (in)	Flange L		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
		GB	API	L_1	H	H_2	D_0	B	B_1	B_0		P	P_1	P_0	E	E_1	E_0		H_3	H_1
50	2	292	292	292	468	335	300	505	430	310	BA-0	543	445	200	647	560	200	SMC-04	108	158
65	2½	330	330	330	565	430	300	560	470	310	BA-0	663	570	200	702	610	200	SMC-04	125	190
80	3	356	356	356	625	440	350	610	510	310	BA-0	745	640	250	752	650	500	SMC-03	145	225
100	4	432	432	432	720	510	350	770	650	310	BA-0	870	740	250	950	820	500	SMC-03	165	255
150	6	559	559	559	910	630	400	965	800	310	BA-0	1135	930	350	1138	950	305	SMC-0	220	330
200	8	660	660	660	1145	800	500	1200	960	310	BA-1	1445	1170	350	1403	1130	305	SMC-0	280	410
250	10	787	787	787	1411	1050	500	1370	1090	460	BA-1	1786	1460	400	1575	1280	305	SMC-0	330	490
300	12	838	838	838	1590	1160	600	1560	1200	460	BA-1	2040	1630	450	1750	1410	305	SMC-1	380	570
350	14	889	889	889	–	–	–	1740	1350	460	BA-2	–	–	–	1930	1570	305	SMC-1	430	650
400	16	991	991	991	–	–	–	1970	1540	460	BA-2	–	–	–	2210	1700	305	SMC-1	480	735
450	18	1092	1092	1092	–	–	–	2260	1700	460	BA-2	–	–	–	2500	1940	458	SMC-2	530	810
500	20	1194	1194	1194	–	–	–	2420	1850	460	BA-2	–	–	–	2630	2020	458	SMC-2	580	905
550	22	1295	1295	1295	–	–	–	2685	2010	600	BA-3	–	–	–	2840	2240	610	SMC-3	640	1075
600	24	1397	1397	1397	–	–	–	2985	2190	600	BA-3	–	–	–	3100	2450	610	SMC-3	700	1160
650	26	1448	1448	1448	–	–	–	3160	2390	600	BA-3	–	–	–	3310	2610	610	SMC-3	760	1220
700	28	1549	1549	1549	–	–	–	3350	2550	600	BA-3	–	–	–	3500	2740	610	SMC-3	830	1330
750	30	1651	1651	1651	–	–	–	3470	2680	600	BAA-3	–	–	–	3690	2890	610	SMC-3	900	1415
800	32	1778	1778	1778	–	–	–	3880	2910	600	BAA-3	–	–	–	3900	3050	610	SMC-3	–	1540
900	36	2083	2083	2083	–	–	–	4250	3115	620	BAA-4	–	–	–	4330	3380	610	SMC-4	–	1650
1000	40	2150	2150	2150	–	–	–	4580	3395	620	BAA-4	–	–	–	4760	3710	610	SMC-4	–	1760
1050	42	2300	2300	2300	–	–	–	4885	3655	620	BAA-4	–	–	–	4970	3860	760	SMC-5	–	1840

SLAB GATE VALVE



Main Size of Outside

Model：(K)Z5(6、9)4(6)3(4)W(F、Y、D)　　PN16.0MPa　　API 6D Class900

DN (mm)	NPS (in)	Flange L		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
		GB	API	L_1	H	H_2	D_0	B	B_1	B_0		P	P_1	P_0	E	E_1	E_0		H_3	H_1
50	2	368	368	368	473	335	300	525	450	310	BA-0	548	450	250	647	560	500	SMC-03	108	158
65	2½	419	419	419	570	435	300	585	490	310	BA-0	668	580	300	702	610	500	SMC-03	125	190
80	3	381	381	381	630	445	350	635	530	310	BA-0	750	650	350	752	650	305	SMC-00	145	225
100	4	457	457	457	725	515	350	800	680	310	BA-0	875	745	400	950	820	305	SMC-00	165	255
150	6	610	610	610	915	640	400	995	830	310	BA-1	1140	940	500	1138	950	305	SMC-0	220	330
200	8	737	737	737	1150	800	500	1250	1000	460	BA-1	1450	1180	550	1403	1130	305	SMC-0	280	410
250	10	838	838	838	1416	1055	500	1420	1140	460	BA-1	1791	1465	600	1575	1280	305	SMC-1	330	490
300	12	965	965	965	1595	1165	600	1600	1230	460	BA-2	2045	1635	700	1750	1410	305	SMC-1	380	570
350	14	1029	1029	1029	–	–	–	1890	1450	460	BA-2	–	–	–	1930	1570	305	SMC-1	–	690
400	16	1130	1130	1130	–	–	–	2175	1660	600	BA-3	–	–	–	2210	1700	458	SMC-2	–	800
450	18	1219	1219	1219	–	–	–	2355	1800	600	BA-3	–	–	–	2500	1940	458	SMC-2	–	890
500	20	1321	1321	1321	–	–	–	2520	1920	600	BA-3	–	–	–	2630	2020	610	SMC-3	–	985
600	24	1549	1549	1549	–	–	–	3050	2240	620	BA-4	–	–	–	3100	2450	610	SMC-3	–	1150

SLAB GATE VALVE

Slab Gate Valve (High Pressure)

Products Design Features

The water injecting valves are high pressure slab gate valves. with a reasonable structure, a reliable seal and an easy operation and the sealing face is built-up welded with carbide alloy, features anti-corrosion, anti-wear and anti-erosion and can be used for throttle, especially suitable for the water, oil, mud pulpy, natural gas pipeline as the open-close and adjusting device to control the medium flowing.

Technical Specification

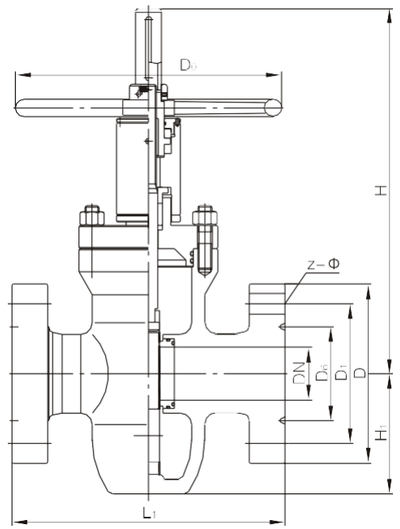
Design standard		GB/T19672、JB/T5298、API 6D
Structural length	Flanged	GB/T 12221、GB/T19672、JB/T 5298
	Welded connection	GB/T15188.1、GB/T19672
Flanged ends		GB/T9113、JB/T 79、ANSI 16.5
Butt-welding ends		GB/T 12224
Test & inspection		GB/T3927、JB/T 9092

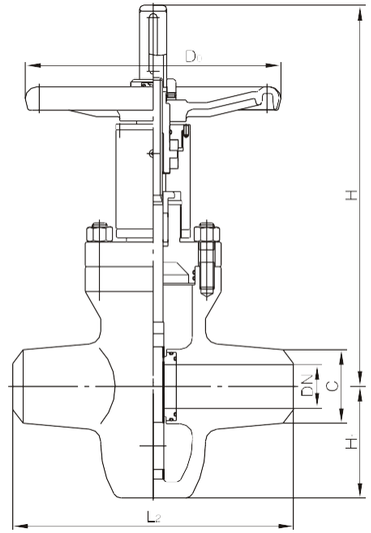
Products Performance Specification

Scope of application	PN10.0～42.0MPa	DN25～200mm
Applicable temperature	-29～121℃	
Applicable medium — Ordinary type	Petroleum, natural gas, readymade oil, water,etc	
Applicable medium — Antisulphur type	Petroleum,natural gas etc,containing H_2S, CO_2	
Connecting type	Flange end, welded end keeper enc	
Driving manner	Manual, electric, pneumatic etc, actuations	

Major Parts Material Form

Accessory name	Valve body, valve covering	Valve disc	Valve stem	Valve seat	Valve stem nut	Packing
"Z" Type	WCB Cr Mo stee	Alloy steel (weld the hard alloy)	Stainless steel	Alloy steel (weld the hard alloy)	Aluminium bronze	PTFE, fluorine rubber
"KZ" Type			Sulfur resisting stainless steel			





Main Size of Outside

Model：ZF43Y、ZF63Y、Z83Y

Nominal pressure PN(MPa)	DN (mm)	Dimensions(mm)				
		L_1	L_2	D_0	H_1	H
10.0 16.0	25	254	254	180	85	350
	32	260	260	220	98	380
	40	260	260	260	110	400
	50	300	300	310	120	450
	65	340	340	350	133	510
	80	380	380	400	158	580
	100	430	430	460	198	650
	125	500	500	460	240	750
	150	550	550	470	260	846
	200	650	650	600	358	1045
	250	775	775	650	415	1225
	300	900	900	700	462	1425
20.0 25.0	25	230	230	180	87	350
	32	260	260	220	100	380
	40	260	260	260	112	400
	50	300	300	310	122	450
	65	340	340	350	135	510
	80	380	380	400	160	580
	100	430	430	460	198	650
	125	500	500	460	240	750
	150	550	550	470	260	846
	200	650	650	600	358	1045
	250	775	775	600	415	1225
	300	900	900	650	462	1425

Nominal pressure PN(MPa)	DN (mm)	Dimensions(mm)				
		L_1	L_2	D_0	H_1	H
32.0 35.0	25	230	254	180	90	350
	32	260	279	220	103	380
	40	260	305	260	115	400
	50	300	368	310	125	450
	65	340	419	350	137	510
	80	380	470	400	164	580
	100	430	546	460	198	650
	125	500	673	460	240	750
	150	550	705	470	260	846
	200	650	832	600	358	1045
	250	991	991	650	415	1225
	300	1130	1130	700	462	1425
40.0 42.0	25	230	254	180	92	350
	32	260	279	220	105	380
	40	260	305	260	117	400
	50	300	368	310	127	450
	65	340	419	350	139	510
	80	380	470	400	166	580
	100	430	546	460	198	650
	125	500	673	460	240	750
	150	550	705	470	260	846
	200	650	832	600	358	1045
	250	991	991	650	415	1225
	300	1130	1130	700	462	1425