



MVC FACTORY

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MVC VALVES.

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Flat Gate Valve

MVC Industrial Valves

In order to efficiently serve our customers, we have opened MVC in USA. All this infrastructure enables us to serve the market of North America, Central America, South America, Europe and Africa

It is fully committed to promoting technological development in the fields of low temperature, high temperature, high pressure air sealing, low torque and minimal leakage.

In 2012, we established factory in China. With extensive application experience and comprehensive capabilities, we provide tailor-made solutions for your valve automation needs.



Production&Management Team

Quality System

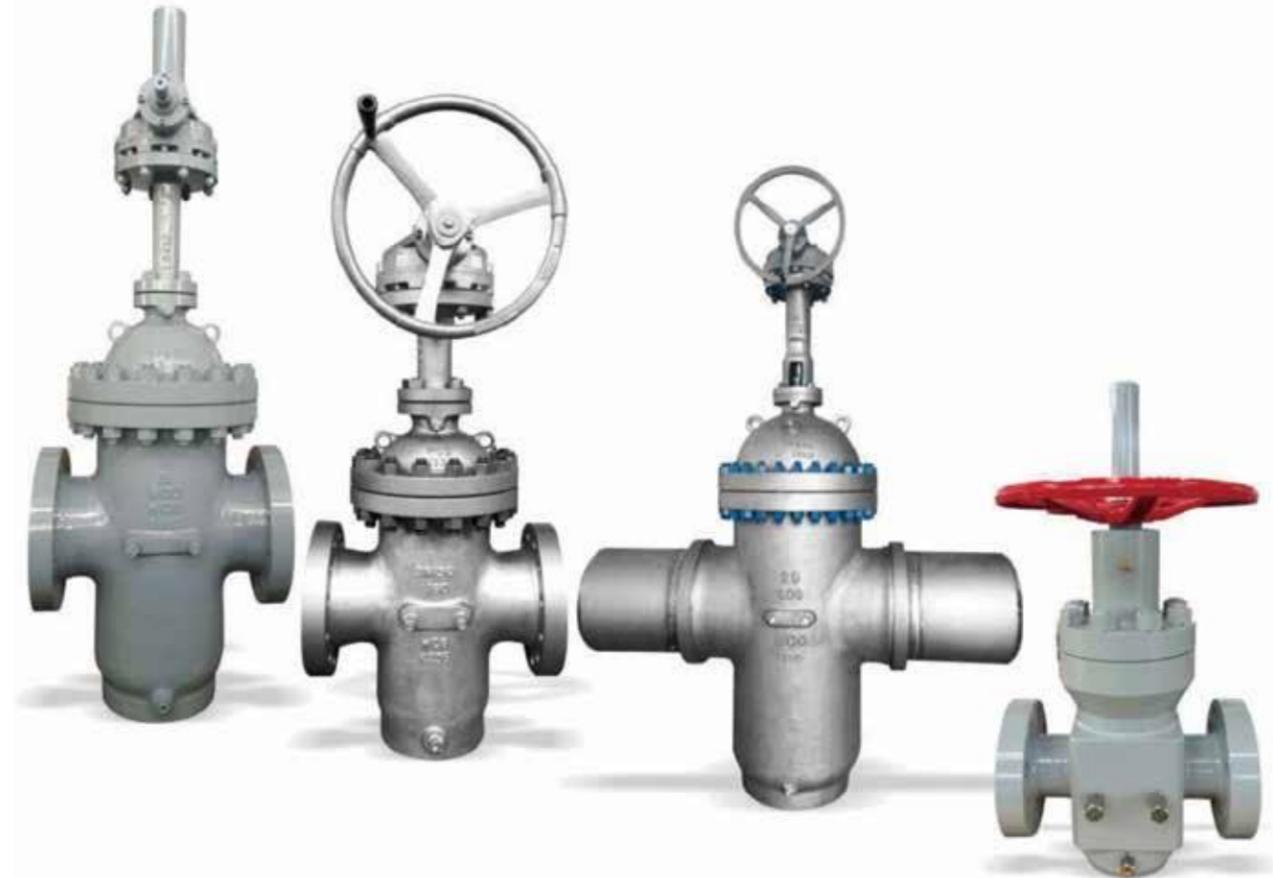
MVC's management team adheres to strict policies ensuring that no defects occur in the valves used for industrial services. To maintain this discipline, we enforce internal regulations and a robust working process system. Third parties and customers are regularly invited to audit and approve our system.

MVC holds ISO9001, API6D, CE, TS, and other key certifications. All raw materials undergo re-testing for properties and mechanical performance upon arrival at our factory to ensure they meet machining standards. Non-destructive testing (NDE), including UT, MT, PT, and RT, is conducted by our quality control department during or before machining.

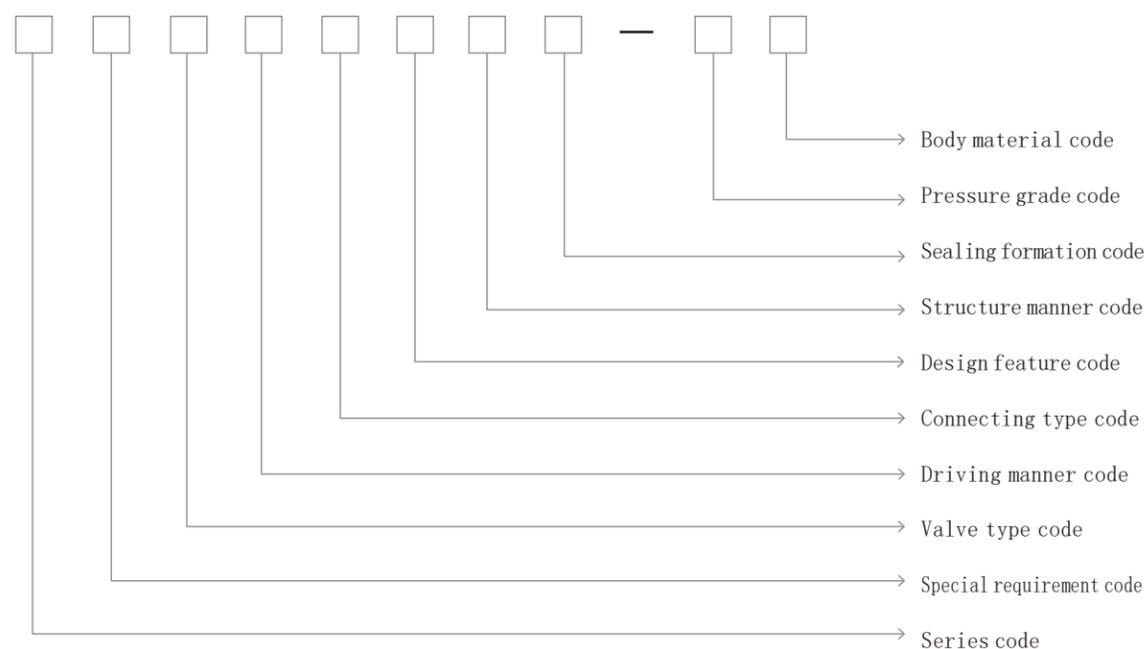
Every valve undergoes shell and sealing hydraulic tests, as well as air sealing tests. For valves used in special applications, additional tests such as fugitive emission, high/low temperature cycling, life, fire safety, cryogenic, and cleanliness tests after degreasing are available upon client request.



PRODUCT EXHIBITION



Model Schedule Illustration



- Series code: The series code name of our company is SJ
- 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) 9e—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 is 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: KZ9e44Y-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.

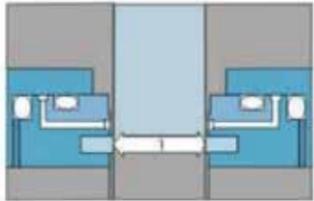
Products Design Features

- 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 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.

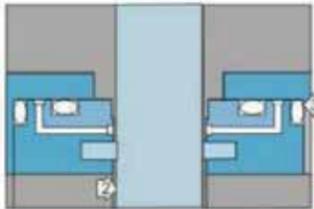
Products Performance Specification

Pressure level	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	
Nominal rating pressure (MPa) (PN)	1.6	2.4	1.76	1.76	0.6	-29 ~ 121° C or upon the user requirement	Petroleum, natural gas, water etc. non - corrosive media	Petroleum, natural gas, water etc. containing H ₂ S, CO ₂ 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			
Pound grade (Class) (Lb)	16.0	24.0	17.6	17.6	0.6			
	150	3.0	2.2	2.2	0.6			
	300	7.5	5.5	5.5	0.6			
	600	15.0	11.0	11.0	0.6			
900	22.5	17.5	17.5	0.6				

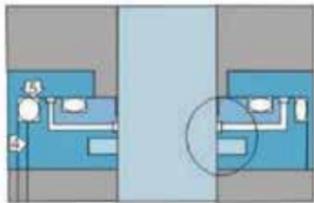
Working Principle



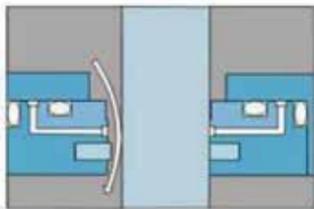
With equal pressure throughout the valve (and the gate in closed position), and initial seal (1) is formed with the raised PTFE ring on the faces of the seats. (The seat - inserts clean both sides of the gate each time the valve is opened or closed)



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.



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.



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.

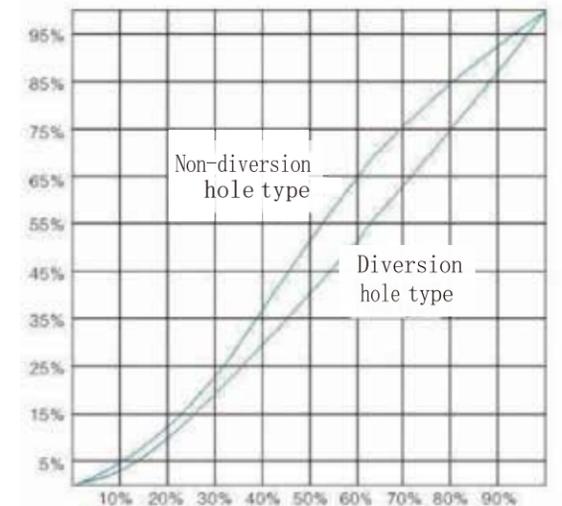
Main Parameter of the Products

Serial models	FY (K) Z43WF、FY (K) Z43WY、FY (K) Z43WD、FY (K) Z44WF、FY (K) Z44WY、FY (K) Z44WD FY (K) Z543WF、FY (K) Z543WY、FY (K) Z543WD、FY (K) Z544WF、FY (K) Z544WY、FY (K) Z544WD FY (K) Z643WF、FY (K) Z643WY、FY (K) Z643WD、FY (K) Z644WF、FY (K) Z644WY、FY (K) Z644WD FY (K) Z943WF、FY (K) Z943WY、FY (K) Z943WD、FY (K) Z944WF、FY (K) Z944WY、FY (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)
	1" ~ 40" (DN25 ~ 1000mm)	1" ~ 28" (DN25 ~ 700mm)	1" ~ 12" (DN25 ~ 300mm)
	1" ~ 40" (DN25 ~ 1000mm)		

Notes: Our company can provide products at customers' request.

Flow characteristic

The flow characteristic of flat gate valves with a diversion hole is equal to that of pipelines of the same specification. The characteristics are shown in percent form. As for valves without a diversion hole, its cavity flow 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 that of the ones with a diversion hole.



Outside drawing of different types of shutter



Without diversion hole with external regulation gate

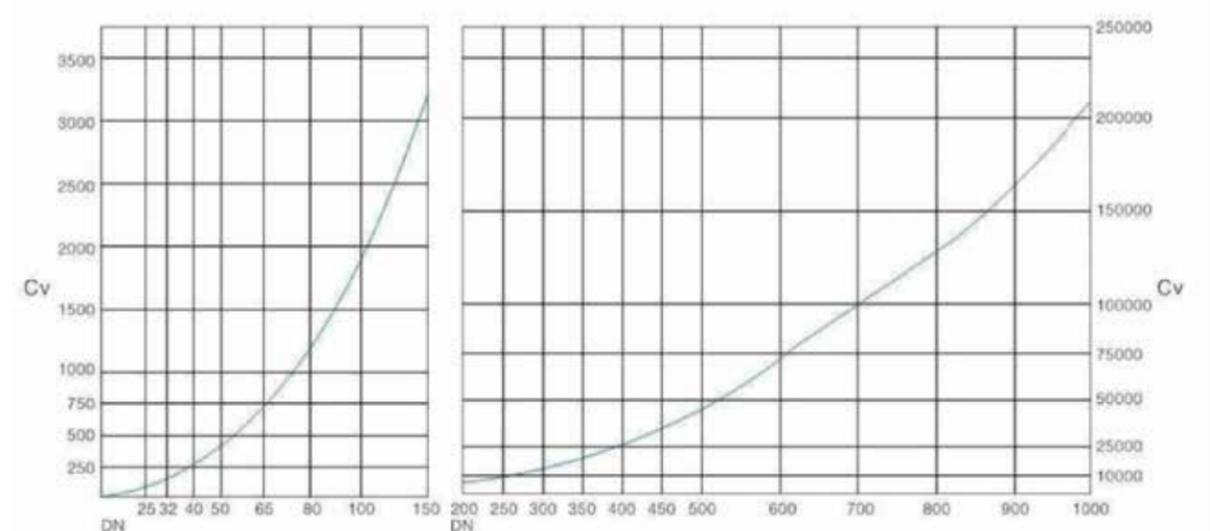


Type a diversion hole



Guide groove on the disc

DN-Cv graph of flat valves with a diversion hole



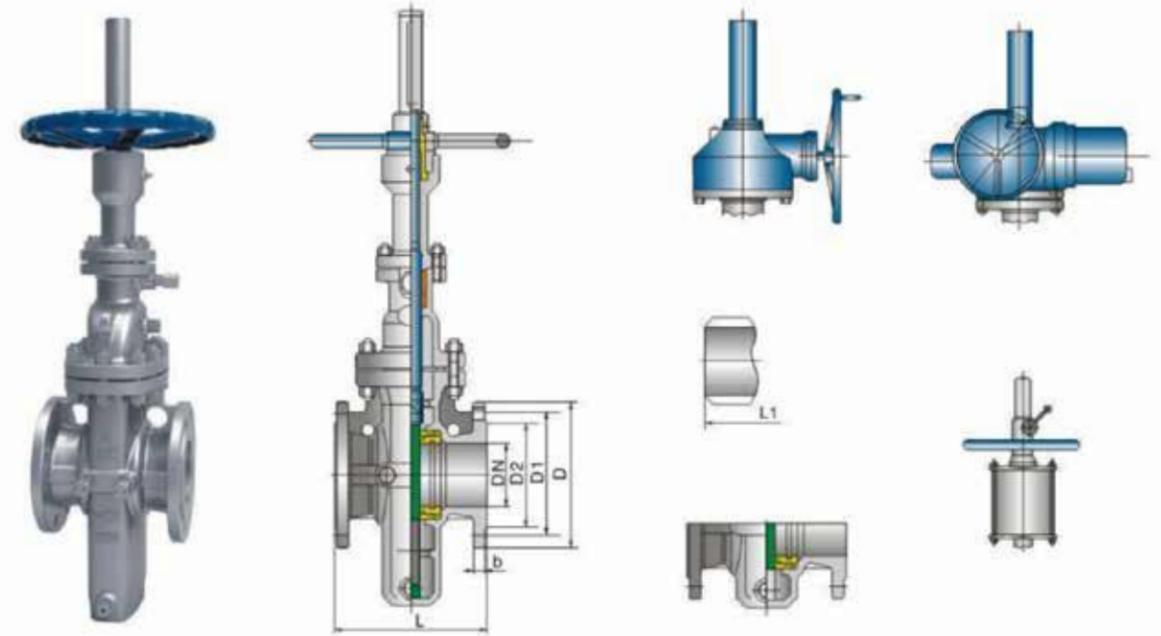
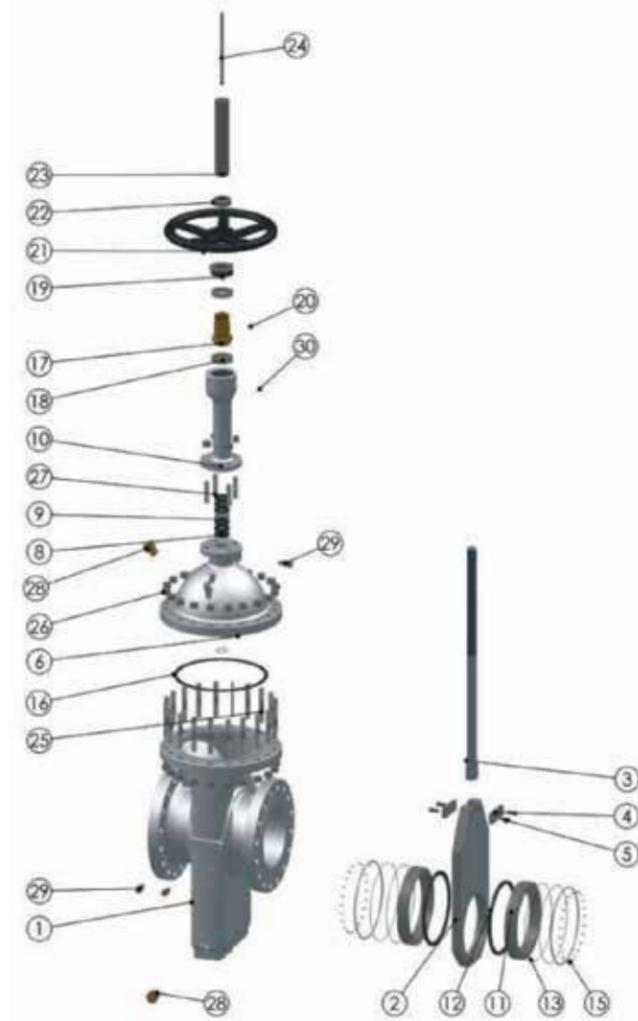
Technical specification

Design reference		GB	API
Design standard		B/T5298	API 6D ASME B16.34
Face to face	Flanged	GB/T 12221 JB/T 5298	API 6D
	Welded connection	GB/T15188.1	ASME B16.10
Flanged ends		GB/T9113 HG20592	ASME B16.5 MSS SP44
Butt-welding ends		GB/T 12224	ASME B16.25
Test & inspection		JB/T 9092	API 6D API 598

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

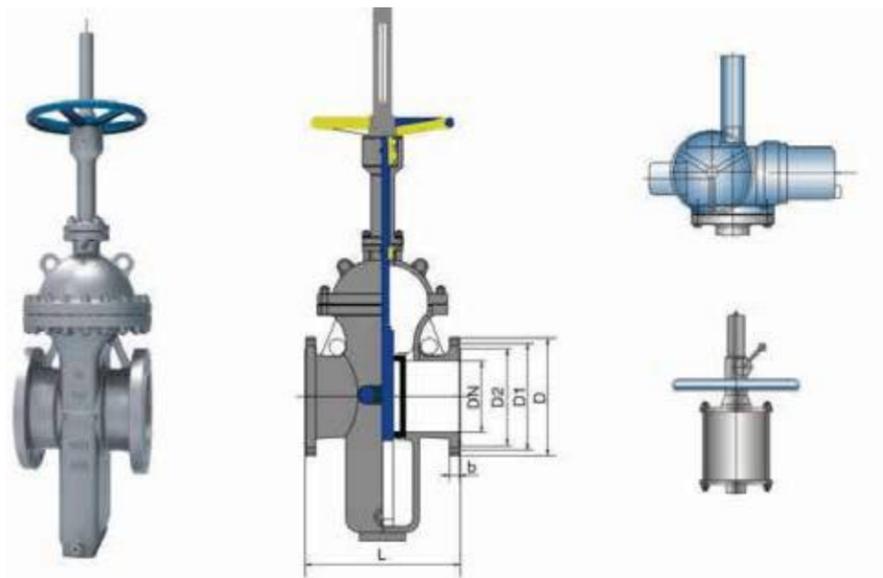
Main Parts

Item	Part Name	QTY
1	Body	1
2	Wedge	1
3	Stem	1
4	Stooper	2
5	Blot	4
6	Bonnet	1
7	O Ring	1
8	Packing	6
9	Packing Ring	1
10	Yoke	1
11	Seat	2
12	Seal Ring	2
13	O Ring	4
14	O Ring	2
15	Spring	48
16	Gasket	1
17	Stem Nut	1
18	Brearing	2
19	Sleeve Nut	1
20	Key	1
21	Hand wheel	1
22	Hand Wheel Nut	1
23	Stem Enclosure	1
24	Stem Indicator	1
25	Bolt	20
26	Nut	44
27	Bolt	4
28	Drains	2
29	Iniection Valve	3
30	Oil Bottle	1



Main Size of Outside

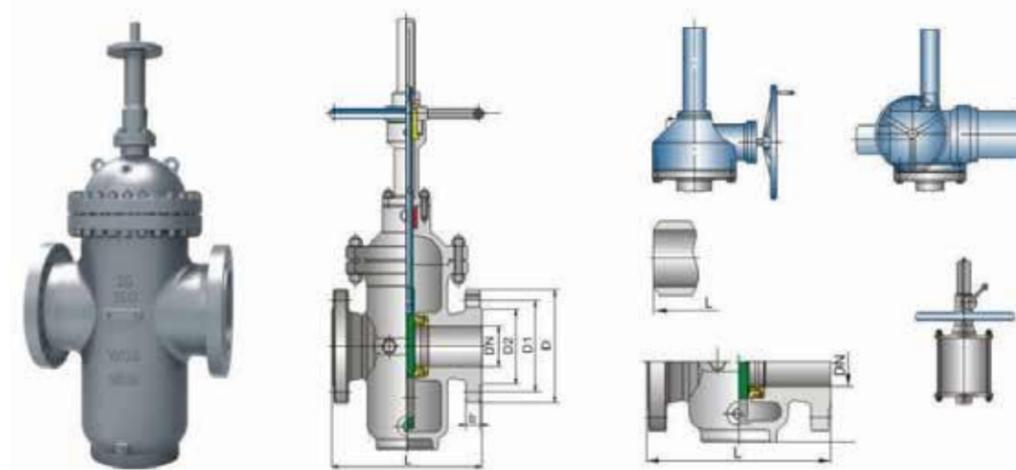
Diameter		Basic size								Convex surface RF
		Face to face		Outer circle	Center circle	Thickness	Number of holes	Aperture		
NPS	DN	Flanged L	Butt welding L1	D	D1	b	z	d (mm)	d (in)	D2
1/2"	15	108	108	90	60.3	10	4	16	5/8	35
3/4"	20	117	117	100	69.9	11	4	16	5/8	43
1"	25	127	127	110	79.4	12	4	16	5/8	51
1 1/4"	32	140	140	115	88.9	14	4	16	5/8	64
1 1/2"	40	165	165	125	98.4	15	4	16	5/8	73
2"	50	178	216	150	120.7	17	4	19	3/4	92
2 1/2"	65	190	241	180	139.7	18	4	19	3/4	105
3"	80	203	282	190	152.4	20	4	19	3/4	127
3 1/2"	100	229	305	215	177.8	22	8	19	3/4	140
4"	125	254	381	230	190.5	25	8	19	3/4	157
5"	150	267	403	255	215.9	25	8	22	7/8	186
6"	200	292	419	280	241.3	26	8	22	7/8	216
8"	250	330	457	345	298.5	29	8	22	7/8	270
10"	300	356	502	405	362.0	31	12	25	1	324
12"	350	381	572	485	431.8	33	12	25	1	381
14"	400	406	610	535	476.3	36	12	29	1 1/8	413
16"	450	432	660	595	539.8	37	16	29	1 1/8	470
18"	500	457	711	635	577.9	41	16	32	1 1/4	533
20"	550	-	762	700	635.0	44	20	32	1 1/4	584
24"	600	508	813	815	749.3	49	20	35	1 3/8	692



Main Size of Outside

Model: (K)Z5 (6, 9) 4 (6) 3w (F, Y, D)-300Lb

Diameter		Basic size							Convex surface
		Face to face	Outer circle	Center circle	Thickness	Number of holes	Aperture		RF
NPS	DN	Flanged L	D	D1	b	z	d (mm)	d (in)	D2
1/2"	15	140	95	66.7	15	4	16	5/8	35
3/4"	20	152	115	82.6	17	4	19	3/4	43
1"	25	165	125	88.9	18	4	19	3/4	51
1 1/4"	32	178	135	98.4	20	4	19	3/4	64
1 1/2"	40	190	155	114.3	22	4	22	7/8	73
2"	50	216	165	127.0	23	8	19	3/4	92
2 1/2"	65	241	190	149.2	26	8	22	7/8	105
3"	80	282	210	168.3	29	8	22	7/8	127
3 1/2"	100	305	230	184.2	31	8	22	7/8	140
4"	125	381	255	200.0	33	8	22	7/8	157
5"	150	403	280	235.0	36	8	22	7/8	186
6"	200	419	320	269.9	37	12	22	7/8	216
8"	250	457	380	330.2	42	12	25	1	270
10"	300	502	445	387.4	49	16	29	1 1/8	324
12"	350	762	520	450.8	52	16	32	1 1/4	381
14"	400	838	585	514.4	55	20	32	1 1/4	413
16"	450	914	650	571.5	58	20	35	1 3/8	470
18"	500	991	710	628.6	61	24	35	1 3/8	533
20"	550	1092	775	685.8	64	24	35	1 3/8	584
24"	600	1143	915	812.8	71	24	41	1 5/8	692



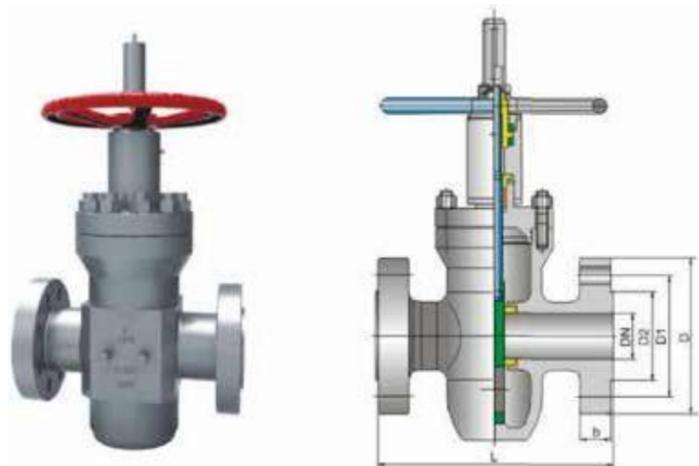
Main Size and Weight

Diameter		Basic size							Convex surface
		Face to face	Outer circle	Center circle	Thickness	Number of holes	Aperture		RF
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2
1/2"	15	165	95	66.7	15	4	16	5/8	35
3/4"	20	190	115	82.6	16	4	19	3/4	43
1"	25	216	125	88.9	18	4	19	3/4	51
1 1/4"	32	229	135	98.4	21	4	19	3/4	64
1 1/2"	40	241	155	114.3	23	4	22	7/8	73
2"	50	292	165	127.0	26	8	19	3/4	92
2 1/2"	65	330	190	149.2	29	8	22	7/8	105
3"	80	356	210	168.3	32	8	22	7/8	127
3 1/2"	100	432	230	184.2	35	8	25	1	140
4"	125	508	275	215.9	39	8	25	1	157
5"	150	559	330	266.7	45	8	29	1 1/8	186
6"	200	660	355	292.1	48	12	29	1 1/8	216
8"	250	787	420	349.2	56	12	32	1 1/4	270
10"	300	838	510	431.8	64	16	35	1 3/8	324
12"	350	889	560	489.0	67	20	35	1 3/8	381
14"	400	991	605	527.0	70	20	38	1 1/2	413
16"	450	1092	685	603.2	77	20	41	1 5/8	470
18"	500	1194	745	654.0	83	20	44	1 3/4	533
20"	550	1295	815	723.9	89	24	44	1 3/4	584
24"	600	1397	940	838.2	102	24	51	2	692

Model: (K)Z5(6, 9)4(6)
3w(F, Y, D)-600Lb
Flange: ASME B16.5-2009

Diameter		Basic size							Convex surface
		Face to face	Outer circle	Center circle	Thickness	Number of holes	Aperture		RF
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2
3"	80	381	240	190.5	39	8	25	1	127
4"	100	457	290	235.0	45	8	32	1 1/4	157
5"	125	559	350	279.4	51	8	35	1 3/8	186
6"	150	610	380	317.5	56	12	32	1 1/4	216
8"	200	737	470	393.7	64	12	38	1 1/2	270
10"	250	838	545	469.9	70	16	38	1 1/2	324
12"	300	965	610	533.4	80	20	38	1 1/2	381
14"	350	1029	640	558.8	86	20	41	1 5/8	413
16"	400	1130	705	616.0	89	20	44	1 3/4	470
18"	450	1219	785	685.8	102	20	51	2	533
20"	500	1321	855	749.3	108	20	54	2 1/8	584
24"	600	1549	1040	901.7	140	20	67	2 5/8	692

Model: (K)Z5(6, 9)4(6)
3w(F, Y, D)-900Lb
Flange: ASME B16.5-2009
3" following in accordance with 1500LB



Main Size and Weight

Diameter		Basic size							Convex surface	
		Face to face	Outer circle	Center circle	Thickness	Number of holes	Aperture		RF	
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2	
1/2"	15	—	120	82.6	23	4	22	7/8	35	
3/4"	20	—	130	88.9	26	4	22	7/8	43	
1"	25	254	150	101.6	29	4	25	1	51	
1 1/4"	32	279	160	111.1	29	4	25	1	64	
1 1/2"	40	305	180	123.8	32	4	29	1 1/8	73	
2"	50	368	215	165.1	39	8	25	1	92	
2 1/2"	65	419	245	190.5	42	8	29	1 1/8	105	
3"	80	470	265	203.2	48	8	32	1 1/4	127	
4"	100	546	310	241.3	54	8	35	1 3/8	157	
5"	125	673	375	292.1	74	8	41	1 5/8	186	
6"	150	705	395	317.5	83	12	38	1 1/2	216	
8"	200	832	485	393.7	93	12	44	1 3/4	270	
10"	250	991	585	482.6	108	12	51	2	324	
12"	300	1130	675	571.5	124	16	54	2 1/8	381	
14"	350	1257	750	635.0	134	16	60	2 3/8	413	
16"	400	1384	825	704.8	147	16	67	2 5/8	470	
18"	4E0	1537	915	774.7	162	16	73	2 7/8	533	
20"	500	1664	985	831.8	178	16	79	3 1/8	584	
24"	600	1943	1170	990.6	204	16	92	3 5/8	692	

Model: (K) Z5 (6, 9) 4 (6)
3w (F, Y, D) -1500Lb
Flange: ASME B16.5-2009

Diameter		Basic size							Convex surface	
		Face to face	Outer circle	Center circle	Thickness	Number of holes	Aperture		RF	
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2	
1/2"	15	264	135	88.9	31	4	22	7/8	35	
3/4"	20	273	140	95.2	32	4	22	7/8	43	
1"	25	308	160	108.0	35	4	25	1	51	
1 1/4"	32	349	185	130.2	39	4	29	1 1/8	64	
1 1/2"	40	384	205	146.0	45	4	32	1 1/4	73	
2"	50	451	235	171.4	51	8	29	1 1/8	92	
2 1/2"	65	508	265	196.8	58	8	32	1 1/4	105	
3"	80	578	305	228.6	67	8	35	1 3/8	127	
4"	100	673	355	273.0	77	8	41	1 5/8	157	
5"	125	794	420	323.8	93	8	48	1 7/8	186	
6"	150	914	485	368.3	108	8	54	2 1/8	216	
8"	200	1022	550	438.2	127	12	54	2 1/8	270	
10"	250	1270	675	539.8	166	12	67	2 5/8	324	
12"	300	1422	760	619.1	185	12	73	2 7/8	381	

Model: (K) Z5 (6, 9) 4 (6)
3w (F, Y, D) -1500Lb
Flange: ASME B16.5-2009

3" following in accordance with 1500LB

Products Design Features

High pressure flat-plate 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 High pressure flat-plate 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

Technical Specification

Design standard	JB/T5298、API 6D	
Face to Face	Flanged	GB/T 12221、JB/T 5298
	Welded connection	GB/T15188.1
Flanged ends		GB/T9113、HG20592、ANSI 16.5a
Butt-welding ends		GB/T 12224
Tset & inspection		GB/T3927、JB/T 9092

Products Performance Specification

Scope of application	PN10. 0~42. OMPa	DN25-200mm
Applicable temperature	-29-121℃	
Applicable medium	Ordinary type	Petroleum, natural gas, readymade oil, water, etc.
	Antisulphur type	Petroleum, natural gas etc, containing H2S, CO2
Connecting type	Flange end, welded end, keeper end	
Driving manner	Manual, electric, pneumatic etc. actuations	

Major Parts Material Form

Accessory name	Valve body; valve covering	Floodgate board	Valve stem	Valve seat	Valve stem nut	Packing
"Z" Type	WCB, Cr Mo steel	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			

Products Design Features

Auto compensation balanced double parallel gate valve is a product with new structure, which has small open-and-closemoment, high speed, litle vibration,long performance life and reliable operation,t is mainly applied to cut-of or discharae of gasand liquid delivery pipelines.

The structural features include:

- A sealing structure consists of two parallel shutters and a wedge-tightening device it is taken to replace the traditional wedgedshaped gate valve structure;
- The components of valve sealing mechanism are separated so the sealing can retain when transmting caused by the temperature changes,and will not jam where swelling in high temperature:
- The sealing surface of the valve adopts abrasion-resistant and anti-corrosive materials which can lengthen the performancelife of the valve:
- In high temperature or pressure,the disc on inlet side can be designed in pressure relief style which can avoid abnormalpressure rising in cavity caused by temperature changes,thus to ensure used safely.
- The valve adopts full-shut structure which has good protection function and can be used in all weath-er.

Products Design Features

Serial models	FY (K) Z44WH (Y)、FY (K) Z544WH (Y)、FY (K) Z644WH (Y)、FY (K) Z744WH (Y)、FY (K) Z944WH (Y) FY (K) Z64WH (Y)、FY (K) Z564WH (Y)、FY (K) Z664WH (Y)、FY (K) Z764WH (Y)、FY (K) Z964WH (Y)		
Pressure grade range	PN1.6~10.0MPa		Class150-600
Drift diameter range	DN50-1000mm		2"~40"
Driving manner	Hand wheel driving		Gear driving, air-operating, hydrodynamic driving and electric driving
Scope of application	Class150~300 (PN1.6~4.0) 2"~6" (DN50~150mm)	Class400 (PN6.4) 2"~4" (DN50~100mm)	Class600 (PN10.0) 2"~3" (DN50~80mm) 4"~36" (DN100~900mm)

Products Design Features

Pressure	Testing pressure at constant temperature (Mpa)					Applicable temperature	Applicable medium	
	The shell testing	The left sealing	Right sealfing	Low pressure air tightness	Ordinary type		Antisulphur type	
Nominal rating pressure (PN)	1.6	2.4	1.76	1.76	0.6	-29~121°C or upon the user requirement	Petroleum, natural gas, water etc non-corrosive media	Petroleum, natural gaswater etc, containing H2SC02 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			
Pound grade (Class)	600	3.0	2.2	2.2	0.6			
	150	7.5	5.5	5.5	0.6			
	300	15.0	11.0	11.0	0.6			

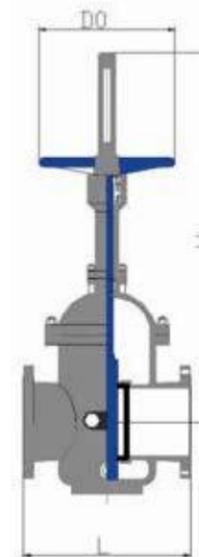
Technical Specification

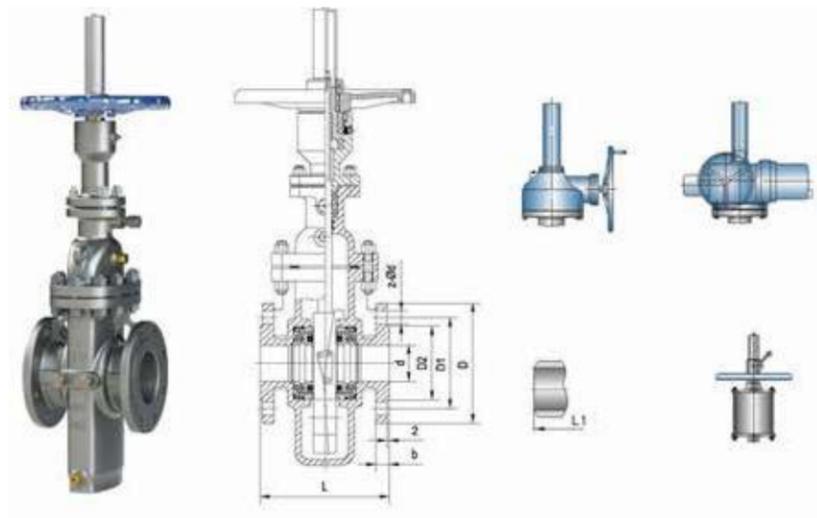
Design reference	GB	API
Design standard	B/T5298	API 6D ASME B16. 34
Face to face	Flanged	GBIT 12221 JB/T 5298
	Welded connection	GB/T15188. 1
Flanged ends	GB/T9113 JB/T 79	ASME B16. 5 MSS SP44
Butt-welding ends	GB/T 12224	ASME B16. 25
Test & inspection	JB/T 9092	API 6D API 598

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	Body	WCB	A216-WCB	WCB	A216-WCB
2	Disc frame	WCB	A216-WCB	WCB	A216-WCB
3	Wedge block	WCB+STL	A216-WCB+STL	WCB+STL	A216-WCB+STL
4	Disc	25+STL	A105+STL	1Cr18Ni9+STL	A276-304+STL
5	Seat	25+STL	A105+STL	1Cr18Ni9+STL	A276-304+STL
6	Stem	2Cr13	A276-410	1Cr18Ni9	A276-304
7	Gasket	Graphite+1Cr18Ni9	Graphite+1Cr18Ni	Graphite+1Cr18Ni9	Graphite+1Cr18Ni9
8	Stud	35CrMoA	A193-B7	35CrMoA	A193-B7
9	Nut	35	A194-2H	35	A194-2H
10	Bonnet	WCB	A216-WCB	WCB	A216-WCB
11	Back seat	1Cr13	A276-410	1Cr18Ni9	A276-304
12	Packing	Graphite			
13	Packing press-sleeve	2Cr13	A276-420	2Cr13	A276-420
14	Packing gland	WCB	A276-WCB	WCB	A216-WCB
15	Yoke	WCB	A216-WCB	WCB	A216-WCB
16	Stem nut	ZQA19-4	C95500	ZQA19-4	C95500
17	Gland	25	A105	25	A105
18	Hand wheel	QT400-17	A536-60-40-18	QT400-17	A536-60-40-18
19	Indicating cover	25	A105	25	A105

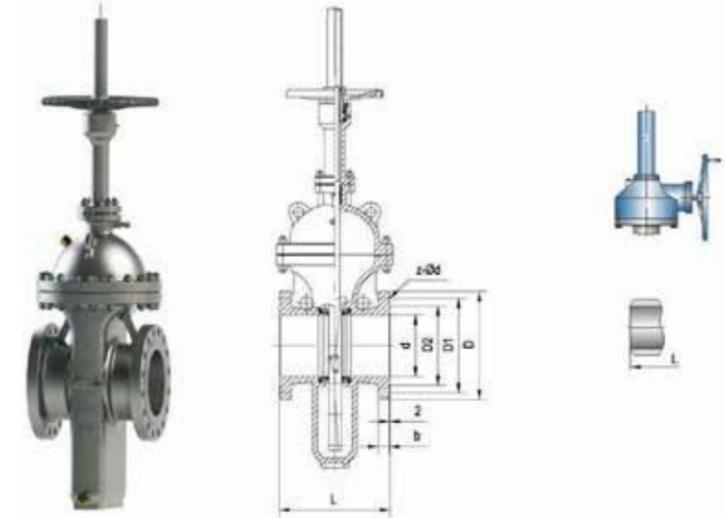




Model: Model: (K)Z516, 9)4(6)4W(F, Y, D)-150Lb PN2.0Mpa
Flange: ASME B16.5-2009

Main Size and Weight

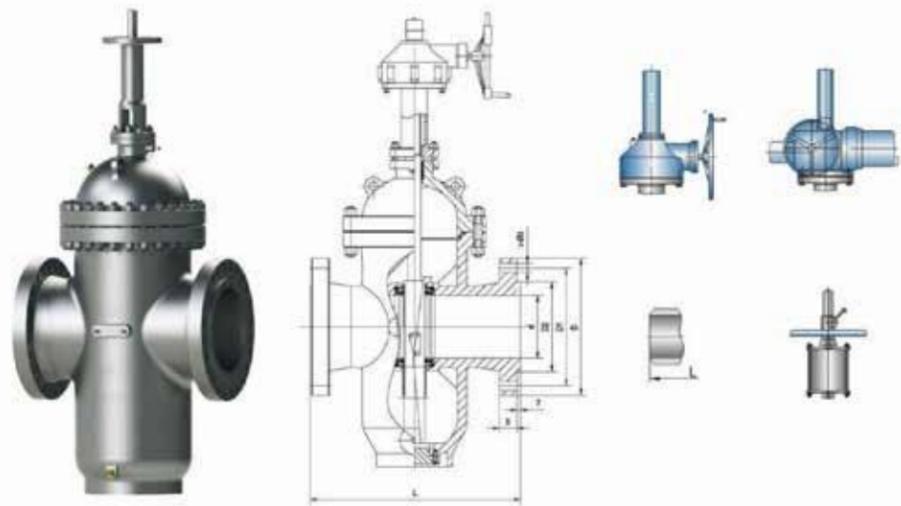
Diameter		Basic size							Convex surface	
		Face to Face		Outer circle	Center circle	Thickness	number of holes	Aperture		RF
NPS	DN	Flanged L	Butt welding L1					D	D1	
1/2"	15	108	108	90	60.3	10	4	16	5/8	35
3/4"	20	117	117	100	69.9	11	4	16	5/8	43
1"	25	127	127	110	79.4	12	4	16	5/8	51
1 1/4"	32	140	140	115	88.9	14	4	16	5/8	64
1 1/2"	40	165	165	125	98.4	15	4	16	5/8	73
2"	50	178	216	150	120.7	17	4	19	3/4	92
2 1/2"	65	190	241	180	139.7	18	4	19	3/4	105
3"	80	203	282	190	152.4	20	4	19	3/4	127
3 1/2"	100	229	305	215	177.8	22	8	19	3/4	140
4"	125	254	381	230	190.5	25	8	19	3/4	157
5"	150	267	403	255	215.9	25	8	22	7/8	186
6"	200	292	419	280	241.3	26	8	22	7/8	216
8"	250	330	457	345	298.5	29	8	22	7/8	270
10"	300	356	502	405	362.0	31	12	25	1	324
12"	350	381	572	485	431.8	33	12	25	1	381
14"	400	406	610	535	476.3	36	12	29	1 1/8	413
16"	450	432	660	595	539.8	37	16	29	1 1/8	470
18"	500	457	711	635	577.9	41	16	32	1 1/4	533
20"	550	—	762	700	635.0	44	20	32	1 1/4	584
24"	600	508	813	815	749.3	49	20	35	1 3/8	692



Model: Model: (K)Z5(6, 9)4(6)4W(F, Y, D)-300Lb PN5.0Mpa
Flange: ASME B16.5-2009

Main Size and Weight

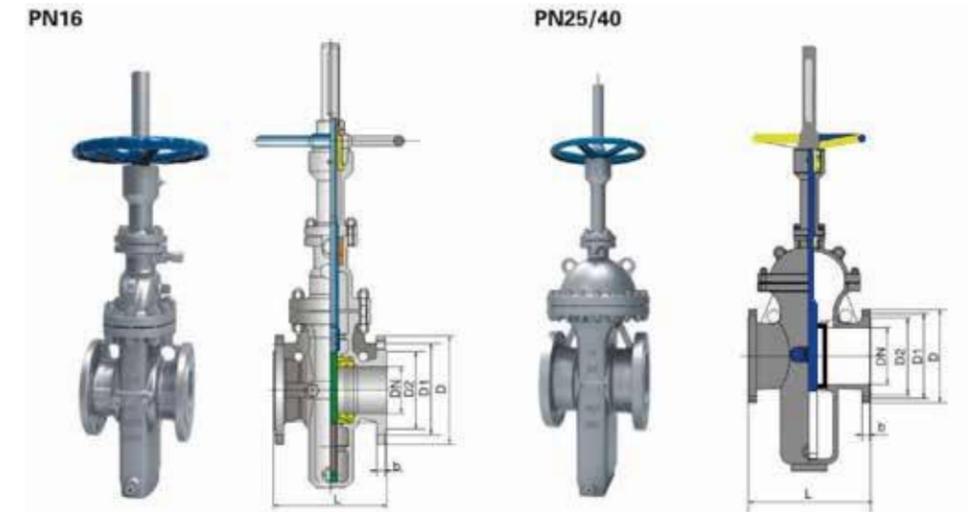
Diameter		Basic size							Convex surface	
		Face to Face		Outer circle	Center circle	Thickness	number of holes	Aperture		RF
NPS	DN	L	D					D1	b	
1/2"	15	140	95	66.7	15	4	16	5/8	35	
3/4"	20	152	115	82.6	17	4	19	3/4	43	
1"	25	165	125	88.9	18	4	19	3/4	51	
1 1/4"	32	178	135	98.4	20	4	19	3/4	64	
1 1/2"	40	190	155	114.3	22	4	22	7/8	73	
2"	50	216	165	127.0	23	8	19	3/4	92	
2 1/2"	65	241	190	149.2	26	8	22	7/8	105	
3"	80	282	210	168.3	29	8	22	7/8	127	
3 1/2"	100	305	230	184.2	31	8	22	7/8	140	
4"	125	381	255	200.0	33	8	22	7/8	157	
5"	150	403	280	235.0	36	8	22	7/8	186	
6"	200	419	320	269.9	37	12	22	7/8	216	
8"	250	457	380	330.2	42	12	25	1	270	
10"	300	502	445	387.4	49	16	29	1 1/8	324	
12"	350	762	520	450.8	52	16	32	1 1/4	381	
14"	400	838	585	514.4	55	20	32	1 1/4	413	
16"	450	914	650	571.5	58	20	35	1 3/8	470	
18"	500	991	710	628.6	61	24	35	1 3/8	533	
20"	550	1092	775	685.8	64	24	35	1 3/8	584	
24"	600	1143	915	812.8	71	24	41	1 5/8	692	



Model: Model: (K) Z5/6、9) 4(6) 4W(F、Y、D)-600Lb
Flange: ASME B16.5-2009

Main Size and Weight

Diameter		Basic size							Convex surface
		Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture		RF
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2
1/2	15	165	95	66.7	15	4	16	5/8	35
3/4"	20	190	115	82.6	16	4	19	3/4	43
1"	25	216	125	88.9	18	4	19	3/4	51
1 1/4"	32	229	135	98.4	21	4	19	3/4	64
1 1/2"	40	241	155	114.3	23	4	22	7/8	73
2"	50	292	165	127.0	26	8	19	3/4	92
2 1/2"	65	330	190	149.2	29	8	22	7/8	105
3"	80	356	210	168.3	32	8	22	7/8	127
3 1/2"	100	432	230	184.2	35	8	25	1	140
4"	125	508	275	215.9	39	8	25	1	157
5"	150	559	330	266.7	45	8	29	1 1/8	186
6"	200	660	355	292.1	48	12	29	1 1/8	216
8"	250	787	420	349.2	56	12	32	1 1/4	270
10"	300	838	510	431.8	64	16	35	1 3/8	324
12"	350	889	560	489.0	67	20	35	1 3/8	381
14"	400	991	605	527.0	70	20	38	1 1/2	413
16"	450	1092	685	603.2	77	20	41	1 5/8	470
18"	500	1194	745	654.0	83	20	44	1 3/4	533
20"	550	1295	815	723.9	89	24	44	1 3/4	584
24"	600	1397	940	838.2	102	24	51	2	692



Model: (K) Z5(6、9) 4(6) 4W(F、Y、D)-PN16
GB/T9113-2010

Main Size and Weight

Diameter		Basic size						Convex surface
		Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	RF
DN	L	D	D1	b	z	d	D2	
10	102	90	60	16	4	14	40	
15	108	95	65	16	4	14	45	
20	117	105	75	18	4	14	58	
25	127	115	85	18	4	14	68	
32	140	140	100	18	4	18	78	
40	165	150	110	18	4	18	88	
50	178	165	125	18	4	18	102	
65	190	185	145	18	8	18	122	
80	203	200	160	20	8	18	138	
100	229	220	180	20	8	18	158	
125	254	250	210	22	8	18	188	
150	267	285	240	22	8	22	212	
200	292	340	295	24	12	22	268	
250	330	405	355	26	12	26	320	
300	356	460	410	28	12	26	378	
350	381	520	470	30	16	26	438	
400	406	580	525	32	16	30	490	
450	432	640	585	40	20	30	550	
500	457	715	550	44	20	33	610	
600	508	840	770	54	20	36	725	

Main Size and Weight

Model: Model: (K) Z516、9) 4(6) 4W(F、Y、D)-PN25
GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	RF
DN	L	D	D1	b	z	d	D2
10	—	90	60	16	4	14	40
15	—	95	65	16	4	14	45
20	—	105	75	18	4	14	58
25	—	115	85	18	4	14	68
32	—	140	100	18	4	18	78
40	240	150	110	18	4	18	88
50	250	165	125	20	4	18	102
65	270	185	145	22	8	18	122
80	280	200	160	24	8	18	138
100	300	235	180	24	8	22	162
125	325	270	210	26	8	26	188
150	350	300	240	28	8	26	218
200	400	360	295	30	12	26	278
250	450	425	355	32	12	30	335
300	500	485	410	34	16	30	395
350	550	555	470	38	16	33	450
400	600	620	525	40	16	36	505
450	650	670	585	46	20	36	555
500	700	730	550	48	20	36	615
600	800	845	770	58	20	39	720

Main Size and Weight

Model: Model: (K) Z516、9) 4(6) 4W(F、Y、D)-PN40
GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	RF
DN	L	D	D1	b	z	d	D2
10	—	90	60	16	4	14	40
15	140	95	65	16	4	14	45
20	152	105	75	18	4	14	58
25	165	115	85	18	4	14	68
32	178	140	100	18	4	18	78
40	190	150	110	18	4	18	88
50	216	165	125	20	4	18	102
65	241	185	145	22	8	18	122
80	283	200	160	24	8	18	138
100	305	235	190	24	8	22	162
125	381	270	220	26	8	26	188
150	403	300	250	28	8	26	218
200	419	375	320	34	12	30	285
250	457	450	385	38	12	33	345
300	502	515	450	42	16	33	410
350	572	580	510	46	16	36	465
400	610	660	585	50	16	39	535
450	660	685	610	57	20	39	560
500	711	755	670	57	20	42	615
600	787	890	795	72	20	48	735



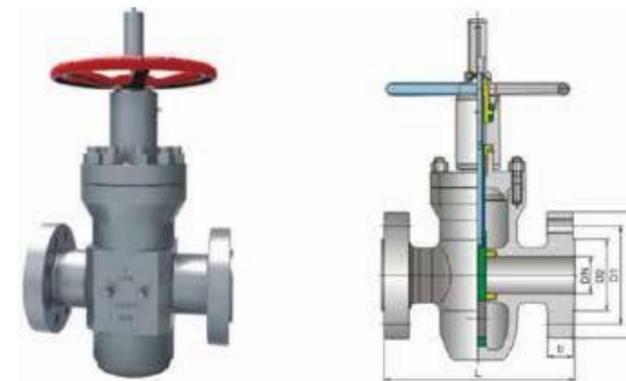
Main Size and Weight

Model:(K)Z5(6, 9)4(6)4W(F, Y, D)-PN63 GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	
DN	L	D	D1	b	z	d	D2
10	—	100	70	4	20	14	40
15	—	105	75	4	20	14	45
20	—	130	90	4	22	18	58
25	—	140	100	4	24	18	68
32	—	155	110	4	26	22	78
40	—	170	125	4	28	22	88
50	250	180	135	4	26	22	102
65	280	205	160	8	26	22	122
80	310	215	170	8	28	22	138
100	350	250	200	8	30	26	162
125	400	295	240	8	34	30	188
150	450	345	280	8	36	33	218
200	550	415	345	12	42	36	285
250	650	470	400	12	46	36	345
300	750	530	460	16	52	36	410
350	850	600	525	16	56	39	465
400	950	670	585	16	60	42	535

Model:(K)Z5(6, 9)4(6)4W(F, Y, D)-PN100 GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	
DN	L	D	D1	b	z	d	D2
10	—	100	70	20	4	14	40
15	—	105	75	20	4	14	45
20	—	130	90	22	4	18	58
25	—	140	100	24	4	18	68
32	—	155	110	26	4	22	78
40	—	170	125	28	4	22	88
50	250	195	145	30	4	26	102
65	280	220	170	34	8	26	122
80	310	230	180	36	8	26	138
100	350	265	210	40	8	30	162
125	400	315	250	40	8	33	188
150	450	355	290	44	12	33	218
200	550	430	360	52	12	36	285
250	650	505	430	60	12	39	345
300	750	585	500	68	16	42	410
350	850	655	560	74	16	48	465



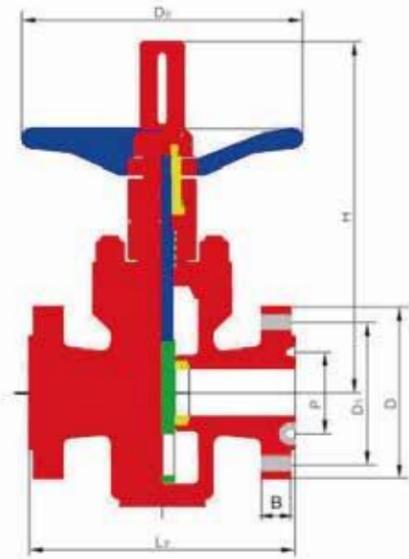
Model:(K)Z516, 9)4(6)4W(F, Y, D)-PN160 GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	
DN	L	D	D1	b	z	d	D2
10	—	100	70	20	4	14	40
15	—	105	75	20	4	14	45
20	—	130	90	24	4	18	58
25	254	140	100	24	4	18	68
32	273	155	110	28	4	22	78
40	305	170	125	28	4	22	88
50	368	195	145	30	4	26	102
65	419	220	170	34	8	26	122
80	470	230	180	36	8	26	138
100	546	265	210	40	8	30	162
125	673	315	250	44	8	33	188
150	705	355	290	50	12	33	218
200	832	430	360	60	12	36	285
250	991	515	430	68	12	42	345
300	1130	585	500	78	16	42	410

Model:(K)Z516, 9)4(6)4W(F, Y, D)-PN250 GB/T9113-2010

Diameter	Basic size						Convex surface
	Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture	
DN	L	D	D1	b	z	d	D2
10	—	125	85	24	4	18	40
15	264	130	90	26	4	18	45
20	273	135	95	28	4	18	58
25	308	150	105	28	4	22	68
32	349	165	120	32	4	22	78
40	384	180	135	34	4	26	88
50	451	200	150	38	8	26	102
65	508	230	180	42	8	26	122
80	578	255	200	46	8	30	138
100	673	300	235	54	8	33	162
125	794	340	275	60	12	33	188
150	914	390	320	68	12	36	218
200	1022	485	400	82	12	42	285
250	1270	585	490	100	16	48	345
300	1422	690	590	120	16	52	410

Z43Y16~42MPa



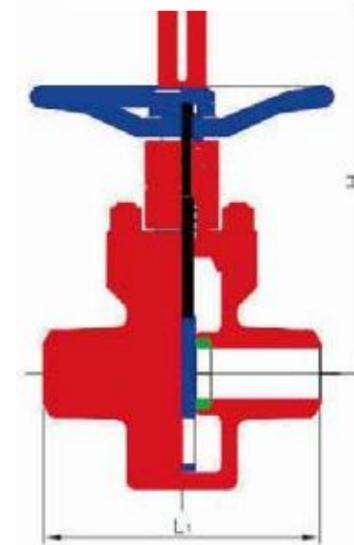
Nominal pressure (MPa)	16.0	20.0	25.0	35.0	42.0
Shell test pressure (MPa)	24.0	30.0	37.5	52.5	63.0
Seal test pressure (MPa)	17.6	22.0	27.5	38.5	46.2
Applicable medium	Water, oil and other non corrosive media				
Applicable temperature	-29℃—121℃				

Flange standard:GB9113.4-2000
Valve test:GB/T13927-1992

External And Connecting Dimensions

Nominal Pressure (MPa)	Nominal diameter (mm)	Size (mm)								
		B	D	D1	P	L2	c	H	Z-d	Do
16.0	25	22	150	101.5	50.80	210	29	255	4-26	180
	32	28	160	111	60.32	230	29	307	4-26	200
	40	38	180	124	68.28	260	32	356	4-30	240
	50	47	215	165	95.25	300	38.5	379	8-26	250
	65	57	245	190.5	107.95	340	41.5	402	8-30	300
	80	72	240	190.5	123.82	390	38.5	475	8-26	350
	100	92	295	235	149.22	450	44.5	548	8-33	400
	150	136	380	317.5	211.12	550	56	775	12-33	500
20.0	25	22	150	101.5	50.80	210	29	255	4-26	180
	32	28	160	111	60.32	230	29	307	4-26	200
	40	35	180	124	68.28	260	32	356	4-30	240
	50	47	215	165	95.25	300	38.5	379	8-26	260
	65	57	245	190.5	107.95	340	41.5	402	8-30	280
	80	70	270	203	136.52	390	48	475	8-33	320
	100	92	310	241.5	161.92	450	54	548	8-36	350
	150	136	395	317.5	211.12	550	83	775	12-39	450
25.0	25	22	150	101.5	50.80	210	29	255	4-26	180
	32	28	160	111	60.32	230	29	307	4-26	200
	40	35	180	124	68.28	260	32	356	4-30	240
	50	47	215	165	95.25	300	38.5	379	8-26	260
	65	57	245	190.5	107.95	340	41.5	402	8-30	280
	80	70	270	203	136.52	390	48	475	8-33	320
	100	92	310	241.5	161.92	450	54	548	8-36	350
	150	136	395	317.5	211.12	550	83	775	12-39	450
35.0	25	20	160	108	60.32	210	35	255	4-26	180
	32	26	185	130	72.24	230	38.5	307	4-30	200
	40	29	205	146	82.55	260	44.5	356	4-33	240
	50	38	235	171.5	101.60	300	51	379	8-30	260
	65	48	270	197	111.12	340	57.5	402	8-33	280
	80	57	305	228.5	127.00	390	67	475	8-36	320
	100	73	353	273	157.18	450	76.5	548	8-42	350
	150	111	485	368.5	228.60	550	108	775	8-56	450
42.0	25	20	160	108	60.32	210	35	255	4-26	180
	32	26	185	130	72.24	230	38.5	307	4-30	200
	40	29	205	146	82.55	260	44.5	356	4-33	240
	50	38	235	171.5	101.60	300	51	379	8-30	260
	65	48	270	197	111.12	340	57.5	402	8-33	280
	80	57	305	228.5	127.00	390	67	475	8-36	320
	100	73	353	273	157.18	450	76.5	548	8-42	350
	150	111	485	368.5	228.60	550	108	775	8-56	450

Z63Y16~45MPa



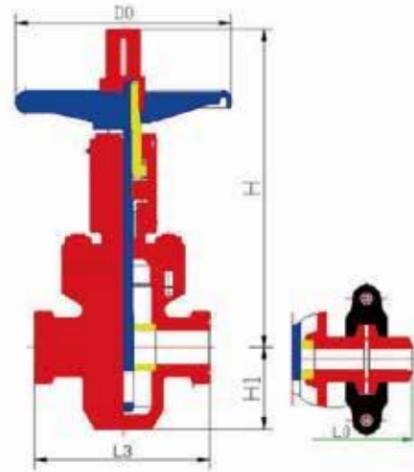
Nominal pressure (MPa)	16.0	20.0	25.0	35.0	42.0
Shell test pressure (MPa)	24.0	30.0	37.5	52.5	63.0
Seal test pressure (MPa)	17.6	22.0	27.5	38.5	46.2
Applicable medium	Water, oil and other non corrosive media				
Applicable temperature	-29℃—121℃				

Flange standard:GB9113.4-2000
Valve test:GB/T13927-1992

External And Connecting Dimensions

Nominal Pressure (MPa)	Nominal diameter (mm)	Size (mm)						
		D	G	C	L1	E	H	W
16.0	25	22	27	52	150	64	255	180
	32	28	33	58	180	70	307	200
	40	38	40	68	260	95	339	240
	50	47	52	78	300	115	375	250
	65	57	63	89	340	135	399	300
	80	72	78	108	380	160	476	350
	100	92	98	133	460	185	564	400
	150	140	143	195	610	268	744	500
20.0	25	22	27	52	150	64	255	180
	32	28	33	58	180	70	307	200
	40	38	40	68	260	95	339	240
	50	47	52	78	300	115	375	250
	65	57	63	89	340	135	399	300
	80	72	78	108	380	160	476	350
	100	92	98	133	460	185	564	400
	150	140	143	195	610	268	744	500
25.0	25	22	27	52	150	64	255	180
	32	28	33	58	180	70	307	200
	40	38	40	68	260	95	339	240
	50	47	52	78	300	115	375	250
	65	57	63	89	340	135	399	300
	80	72	78	114	380	160	476	350
	100	92	98	133	450	185	564	400
	150	136	143	195	610	268	744	500
35.0	25	22	27	52	150	64	255	160
	32	28	33	58	180	70	307	200
	40	38	40	68	260	95	339	240
	50	46	52	82	300	115	375	250
	65	53	63	93	340	135	399	300
	80	72	78	114	380	160	475	350
	100	92	98	133	450	185	564	400
	150	130	143	195	610	268	744	500
42.0	25	22	27	52	150	64	255	160
	32	28	33	58	180	70	307	200
	40	38	40	68	260	95	339	240
	50	45	52	70	310	120	375	250
	65	53	53	100	340	138	466	350
	80	65						
	100	80						
	150	130						

ZF82Y-16~60MPa



Nominal pressure (MPa)	16.0	20.0	25.0	35.0	42.0
Shell test pressure (MPa)	24.0	30.0	37.5	52.5	63.0
Seal test pressure (MPa)	17.6	22.0	27.5	38.5	46.2
Applicable medium	Water, oil and other non corrosive media				
Applicable temperature	-29°C—121°C				

Flange standard: GB9113.4-2000
Valve test: GB/T13927-1992

External And Connecting Dimensions

Nominal Pressure (MPa)	Nominal diameter (mm)	Size (mm)							
		D	G	C	L3	E	H	W	Lo
16.0 20.0	25	22	27	35	180	64	255	180	270
	32	28	33	48	210	69	307	200	430
	40	35	40	64	250	82	356	240	430
	50	47	52	70	260	100	400	260	460
	65	57	63	89	280	126	420	280	500
	80	72	78	108	310	157	475	320	550
25.0	100	92	98	130	350	183	585	350	630
	25	22	27	54	180	64	255	180	380
	32	29	34	60	210	69	307	200	430
	40	36	43	64	250	82	356	240	430
	50	46	52	70	260	100	379	260	460
	65	58	63	89	280	125	402	280	500
	80	72	78	108	310	157	475	320	550
	100	90	96	130	350	183	548	350	630
35.0	25	22	27	54	180	64	255	180	380
	32	29	34	60	210	69	307	200	430
	40	36	43	64	250	82	356	240	430
	50	46	52	70	260	100	379	260	460
	65	58	63	89	280	125	402	280	500
	80	72	78	108	310	157	475	320	550
	100	90	96	130	350	183	548	350	630



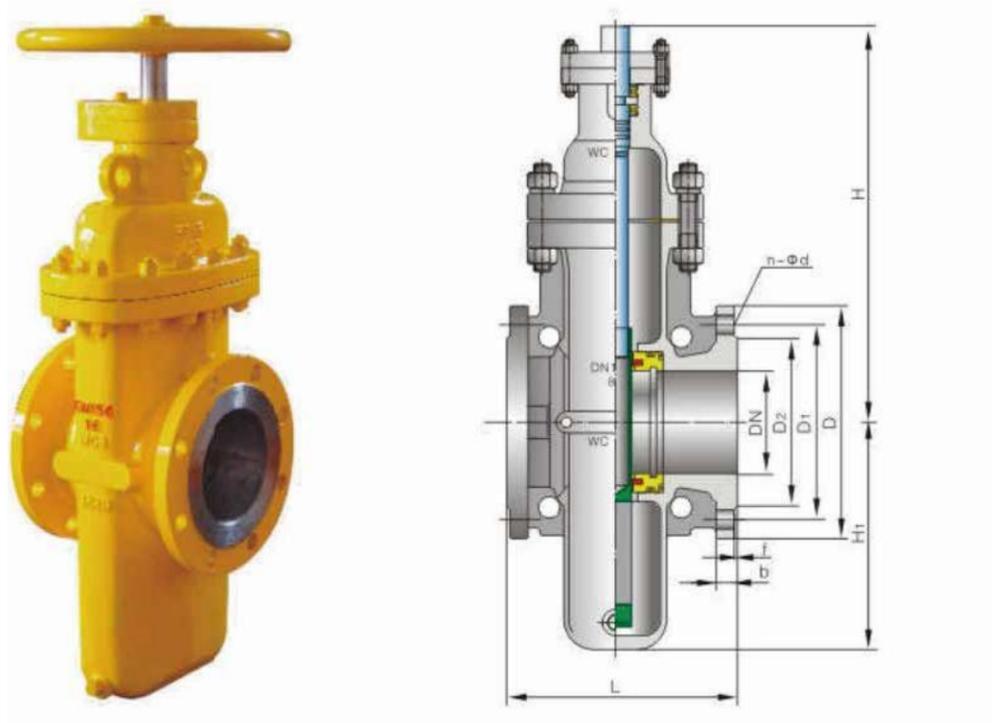
Diameter		Basic size							Convex surface
		Face to Face	Outer circle	Center circle	Thickness	number of holes	Aperture		
NPS	DN	L	D	D1	b	z	d (mm)	d (in)	D2
6"	200	133	280	241.3	26	8	22	7/8	216
8"	250	133	345	298.5	29	8	22	7/8	270
10"	300	140	405	362.0	31	12	25	1	324
12"	350	140	485	431.8	33	12	25	1	381
14"	400	146	535	476.3	36	12	29	11/8	413
16"	450	152	595	539.8	37	16	29	11/8	470
18"	500	159	635	577.9	41	16	32	11/4	533
20"	550	165	700	635.0	44	20	32	11/4	584
24"	600	178	815	749.3	49	20	35	13/8	692

Buried Flat Gate Valve

RQZ47F、RQZ447F、RQZ547F、RQZ9B47F

Antisalfur valve type add "K"; Temper valve type front add "L"; Wearable type "F" back add "M".

Not leakage gas-fired gate valve is a kind of new product for special to natural gas city coal gas, LRG and warrant receipt gas-fired pipeline for city. It ravel out impession and fiadly's question because gas-fired kink coke for valve and according to unique design novelty constrult and good sealing pereformance and in crease sealing performance and in crease sealing performance availably and arrive at naught leakage useful life longer an operaing torque smaller.



Main Size and Weight

Spec: 2° -36° in、DN50-900mm
Pressure: 150Lb、PNO. 8-2.5MPa

DN	NPS	0.8、1.0(MPa)						1.6、2.5(MPa)					
		L		H	H1		DO	L		H	H1		DO
50	2	178	216	255	80	130	250	178	216	255	80	130	250
65	2 1/2	190	241	355	95	160	300	190	241	355	95	160	300
80	3	203	283	360	100	180	300	203	283	360	100	180	300
100	4	229	305	400	114	214	300	229	305	400	114	214	300
125	5	254	381	460	132	257	350	254	381	460	132	257	350
150	6	267	403	500	150	300	350	267	403	500	150	300	350
200	8	292	419	570	188	388	350	292	419	570	188	388	350
250	10	330	457	680	225	475	400	330	457	680	225	475	400
300	12	356	502	750	247	547	450	356	502	750	247	547	450
350	14	381	572	875	275	625	450	381	572	875	275	625	450
400	16	406	610	1000	312	712	500	406	610	1000	312	712	500
450	18	432	660	1130	335	785		432	660	1200	335	785	
500	20	457	711	1200	380	880		457	711	1130	380	880	
600	24	508	813	1420	445	1045		508	813	1420	445	1045	
700	28	610	914	1650	490	1190		610	914	1650	490	1190	
800	32	660	914	1880	560	1360		660	914	1880	560	1360	
900	36	771	1016	2100	610	1510		771	1016	2100	610	1510	
1000	40	811		2300	715	1715		811		2300	715	1715	

- Note: 1. Remark face to face dimension 'L' in list according to GB 12221 oprorision
 2. Flange dimension in list according to GB 9113. 24~9113. 25 provision.
 3. In list 'L' is given out according to flange connecton which must remark when weld connection.