www.**snyvalve**.com.cn

SNY VALVE (YANCHENG) CO., LTD.

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API 600
ASTM B16.34

PARALLEL SLIDE GATE VALVE

SNY VALVE
LEADING TECHNOLOGY SOLUTION FOR ENGINEERING VALVE

www.**snyvalve**.com.cn

SNY VALVE (YANCHENG) CO., LTD.
Rev. No.: E1-PSG-2020

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COMPANY PROFILE

SNY Valve (Yancheng) Co., Ltd. is committed to providing global customers with reliable and complete range of solution for engineering valve. Established in 2003 with CNY 150 million registered capital, SNY VALVE is a national high-tech comprehensive enterprise which integrating valve R&D manufacturing and sales. SNY VALVE headquarters is located in Yancheng city with two manufacturing workshops. We have sales centers in Yancheng, Suzhou and Beijing. SNY VALVE covers an area of over 100,000 sq. meters with more than 300 sets of production, test & inspection facilities. SNYVALVE has established long-term cooperative relations with many large enterprises at home and abroad, been approved by many end users and EPC companies, and products export to middle east, Europe, America, etc.

Main Products

SNY VALVE products are widely applied in oil, gas, petroleum refining, petrochemical, power, mining, metallurgy, LNG shipbuilding and other industries. Our product range are NPS 1/4~60 inch (DN6~DN1500), Class150~2500 (PN16~PN420). Our mainly products are gate valves, globe valves, check valves, ball valves, API6D valve, and we are actively developing special valves used for severe service such as cryogenic, ultra-high temperature and high corrosion. Products are designed according to standards of ANSI, ASTM, API, BS, JIS, DIN, GB, ISO, MSS, etc., and design temperature from -196 to 650 Deg.C. Material are available of carbon steel, stainless (including duplex and super duplex), and other alloys steel (low alloy, nickel-based alloy, Inconel, Monel, Hastelloy),etc.

Technical Strength

SNY VALVE has a first-class technology research and development team, and we have nearly 100 of all kinds of patents and copyrights. Company are capable of physical & chemical analysis, mechanical performance testing, NDT, impact test at ambient temperature and low temperature, hardness testing, metallographic analysis, coordinate measuring, valve torque testing, valve life testing, high-temperature & cryogenic testing, etc., products have been certified through fire safe, fugitive emission, TAT tests.

HEADQUARTERS

Established in 2003
Area: 34,000 ㎡
Located in Tinghu District, Yancheng City.

THE SECOND FACTORY

Established in 2006
Area: 58,000 ㎡
Located in Yancheng E&T development zone, Yancheng City.

SUZHOU BRANCH

Located in Suzhou Industrial Zone, Suzhou branch is the global sales & marketing center of SNY VALVE, which plays a comprehensive role in market promotion, sales, and set up distribution system.

BEIJING BRANCH

Located in Beijing International Business Center, Beijing branch is the domestic sales & marketing center of SNY VALVE, and plays a comprehensive role in market promotion, sales, and set up distribution system.

Environment, Health & Safety

Quality, health, safety and environment management have top priority in our growth plans and all our endeavors. SNY VALVE is committed to providing a safe, healthy and positive working environment for our employees and those under our care. SNY VALVE has established management policy and action guidelines regarding environmental issues. We view "harmony with nature" and "sustainable development" as integral to the pursuit of our business.

Social Responsibility

Constantly taking social responsibility, SNY VALVE has set up “SNY Scholarship” through cooperating with local university for aiding excellent students in straitened circumstance.

QUALIFICATION & CERTIFICATE

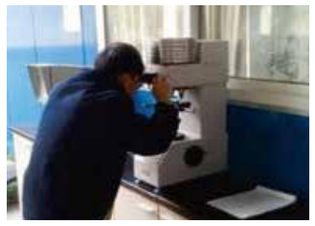
SNY VALVE is committed to provide the highest possible quality industrial valves at the most cost effective way to customers worldwide. We have been certified with ISO9001, ISO14001, OHSAS18001, CE/PED, API6D, API602, API600,ABS, CU-TR,TS,and obtained API607 /API 6Fa fire safe approvals.

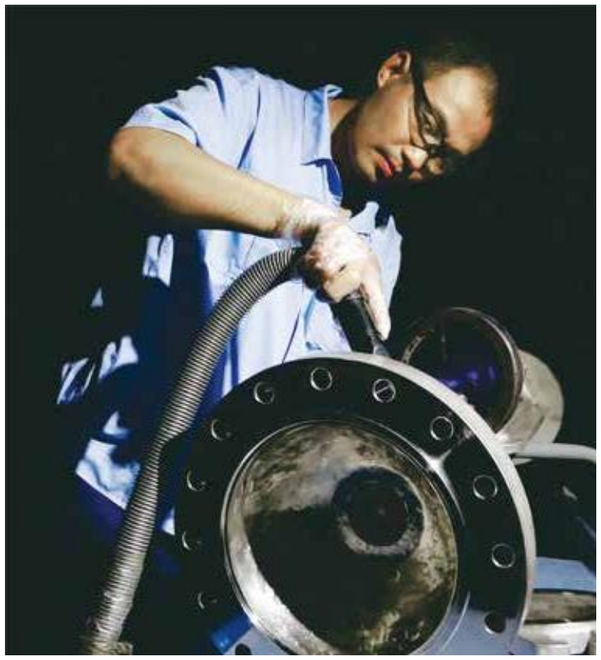
QUALITY CONTROL

SNY VALVE has been certified with ISO 9001 & API Spec. Q1 for quality management system.
SNY quality assurance and quality control capabilities are followed and implemented based on global standards.
We have
· State-of-the-art Quality Control Test Center
· In-house Non-destructive Test Equipment & ASNT Certified Personnel
· Pressure Test Equipment
· Special Testing Equipment for Product Validation

Raw material quality is ensured by a stringent vendor qualification system. By NDT (Radiographic Test, Magnetic Particle Test, Penetrant Test & Ultrasonic Test), Positive Martial Identification (PMI), Tensile Test, and Hardness Test to evaluate samples & small lot production, as well as surveillance audits and sample check to ensure the compliance as per customers' requirements.

Valves manufactured at SNY valves are 100% pressure-tested. The product design has been validated through various special testing as per applicable industry standards such as Fire Safe Test, Low Temperature Test, Cryogenic Test, Vacuum Test, Fugitive Emission Test, High Pressure Gas Test, Elevated Temperature Test and so on.



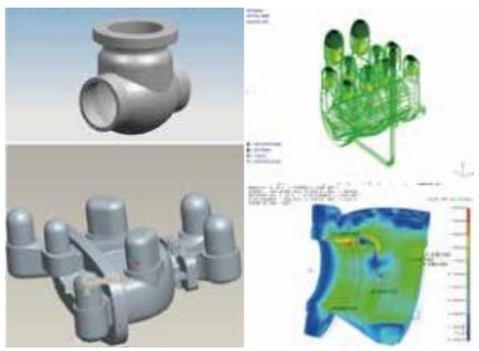


SNY VALVE always focus on technical innovation. It has one province technique center and one cryogenic ball valve engineering center. Technical team utilizes the most advanced computer technology to improve the existing products and develop the new products. Up to now, SNY VALVE possesses more than 90 patents.

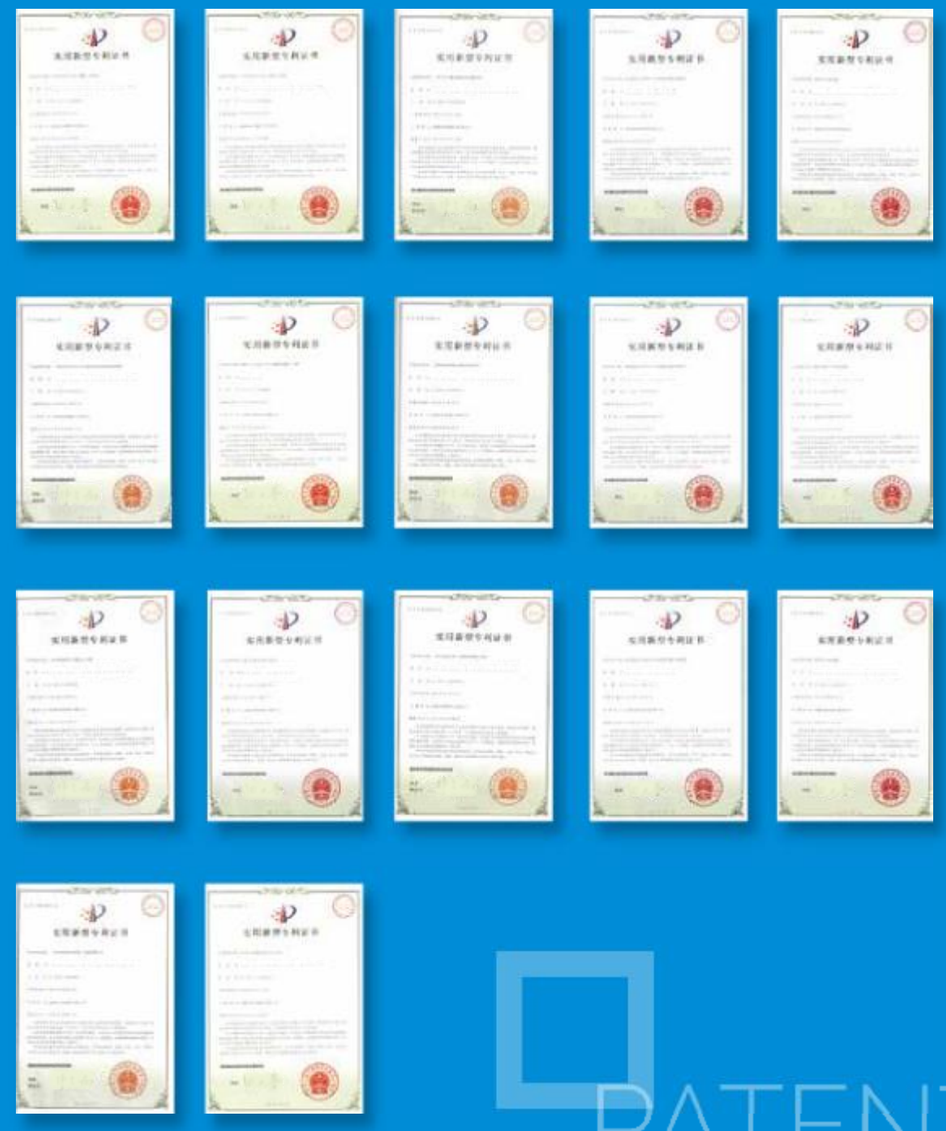
SNY VALVE design philosophy is to develop a safe and cost-efficient valve. Through the latest software of 3D, CAD & Solid works, engineer is available to fictitiously check and verify if the parts & valves can be assembled precisely before they are actually made, which can speed up the development process & saves the costs.

SNY VALVE technical personnel are always ready to offer on-line or on-site technical training and support for all of our customers.

TECHNICAL INNOVATION



TECHNOLOGY PATENT



PATENT

INTRODUCTION OF FOUNDRIES

SNY VALVE realizes the casting quality is the most important to valve life, safety of personnel and environment, especially in the high temperature and high pressure applications. So our strict customers always audit the foundries at first from our approved suppliers before order execution.

SNY VALVE has established unique strategic supply chain management system. We have strategically foundries and one own foundry. They each have a full set of quality inspection facilities, such as spectrometer, NDT and PMI inspection, etc.

FACTORY MANAGEMENT & FACILITIES

SNY VALVE organically integrates the advanced manufacturing equipment and the staffs. By using the most advanced hardware and software, centralizing the production resources, increasing our efficiency and continuously improving the process control, we are able to meet or exceed the different requirement of customers. Company implement 6S management onsite to reduce waste and improve process control. Advanced management software such as K/3 (ERP) & OA (Collaborative Management Software) play an important role in SNY VALVE. Synchronized supervision & management are performed through the whole manufacturing process to improve productivity & efficiency. Our business philosophy is: stable & reliable quality, on-time delivery and reasonable price.

SNY VALVE have more than 300 sets(units) equipment, such as CNC machining Center, CNC lathes, CNC boring-milling machine, general lathes, large-scale vertical lathe, sphere grinders, plasma overlaying welding equipment and heat treatment equipment, etc.
CNC machining Center is Japanese FANUC 0I-MD NC, and the three-way coupling is from Germany S+J/R+W, which realizes the automatic continuous milling of plane, groove, bevel, and a variety of linear processing, and ensure the accuracy of ball.

INDUSTRY APPLICATIONS

- Oil & Gas Pipeline
- Refinery
- Petrochemical
- Power
- Chemical
- LNG & LPG
- Mining
- Metallurgy
- Aerospace
- Water Treatment
- Offshore Engineering

Figure Numbers

	Nominal Size	Valve Type	Nominal Pressure	End Connection	Operation	Special Requirement	Body Material	Trim	Special Material
	A	B	C	D	E	F	G	H	I
Example:	1 0	G P P	1 5	B 1 6 0	G	B W	W C 6	T 8	N C

Explanation: NPS 10, Pressure Seal Parallel Slide Gate Valve, Class 1500, Butt–welding End, SCH160, Gearbox Operated, Belleville Spring at Packing Bolt Shall Be Anti–loosening, Body Material WC6, Trim No.8, NACE Requirement

A Norminal Size

2	NPS2	16	NPS16	D50	DN50	D400	DN400
2 1/2	NPS2 1/2	18	NPS18	D65	DN65	D450	DN450
3	NPS3	20	NPS20	D80	DN80	D500	DN500
4	NPS4	22	NPS22	D100	DN100	D550	DN550
5	NPS5	24	MPS24	D125	DN125	D600	DN600
6	NPS6	26	NPS26	D150	DN150	D650	DN650
8	NPS8	28	NPS28	D200	DN200	D700	DN700
10	NPS10	30	NPS30	D250	DN250	D750	DN750
12	NPS12	32	NPS32	D300	DN300	D800	DN800
14	NPS14	34	NPS34	D350	DN350	D850	DN850

B Valve Type

GP	Bolt Bonnet Parallel Slide Gate Valve
GPP	GPP Pressure Seal Parallel Slide Gate Valve

D End Connection

R	RF Flanged	B**	Butt-welding(** is the pipe norminal size or can be described as OD*Wall Thickness)	
J	RTJ Flanged	F	FF	Flanged

F Special Requirement

B16.47B	ASME B16.47B standard end flange
BW	Belleville spring at packing bolt shall be anti–loosening
CE	valves exported to EU, and shall be CE marked.
CH	closure member (gate/wedge) with pressure relief hole
CW**	sprocket, ** is the dimension from the stem center or Gearbox input shaft to the bottom of the chain link
LN**	non–standard face to face/end to end dimension, ** is the dimension data
SH	SHELL requirement
FN	no machining on raised face
WP**	bypass,**is the bypass size

H Trim Material

In accordance with API 600. Other materials are available upon request.

C Norminal Pressure

1	Class150	–6	PN(DIN)6	–20	PN(ANSI)20
3	Class300	–10	PN(DIN)10	–50	PN(ANSI)50
4	Class400	–16	PN(DIN)16	–110	PN(ANSI)110
6	Class600	–25	PN(DIN)25	–150	PN(ANSI)150
8	Class800	–40	PN(DIN)40	–260	PN(ANSI)260
9	Class900	–63	PN(DIN)63	–420	PN(ANSI)420
15	Class1500	–100	PN(DIN)100		
25	Class2500				

E Operation

Default	Lever/Handle/Handwheel	B	Bare Stem
G	Gearbox	P	Pneumatic Actuator
E	Electric Actuator	H	Hydraulic Actuator

G Body Material

WCA	A216 WCA
WCB	A216 WCB
WCC	A216 WCC
LCB	A352 LCB
LCC	A352 LCC
WC6	A217 WC6
WC9	A217 WC9
C12	A217 C12
C12A	A217 C12A

I Special Material

B7M/2HM	bolt&nut material is B7M/2HM
BZ	galvanized bolt
BN	nickelplated bolt&nut
BP	PTFE plated bolt
NC	NACE Requirement

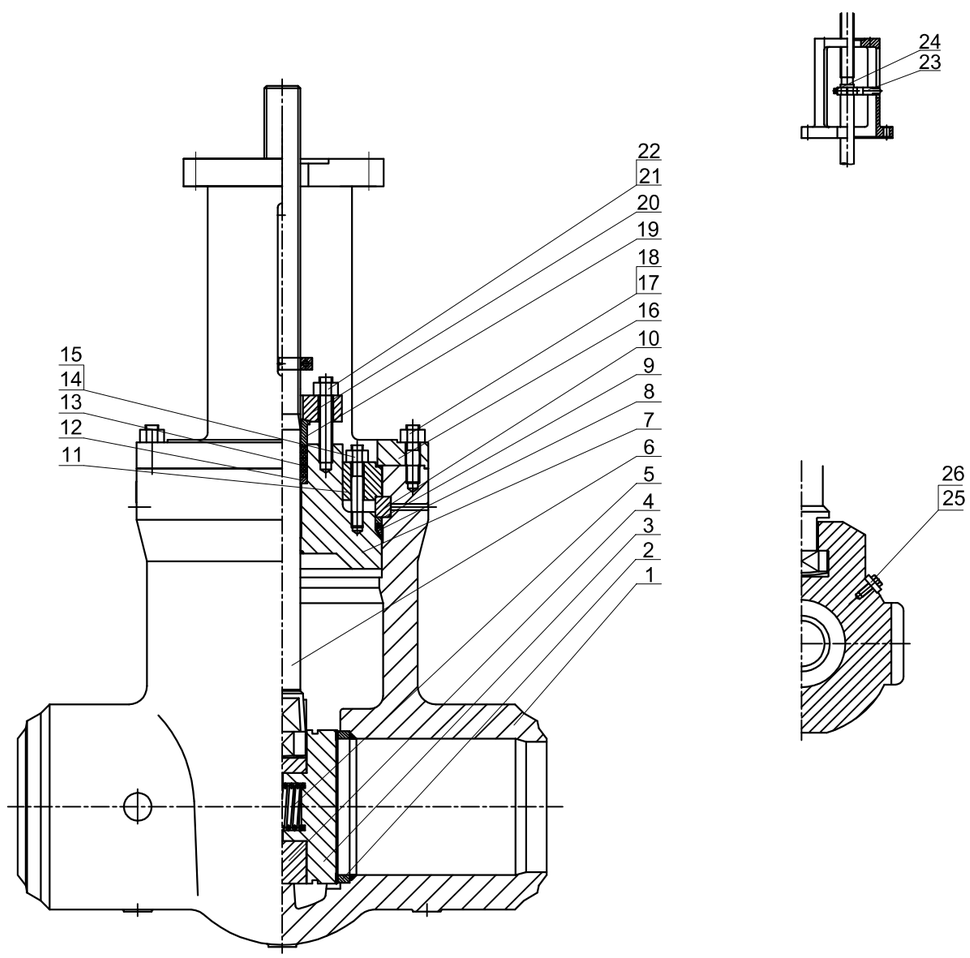
PART 1

Design Standard	
Basic Design	API 600 / ASME B16.34
Face to Face/End to End	ASME B16.10
Flanged End	ASME B16.5/ASME B16.47
BW End	ASME B16.25
Inspection and Testing	API B16.25

Pressure Seal Parallel Slide Gate Valve

1.The advanced design concept eliminates leakage due to the damage of sealing surface caused by the sundries.
2.Significant security performance in high temperature applications.
3. The parallel disc designed to absorb thermally-induced body distortion, thereby making it ideal for high temperature steam or water supply piping.
4. Spring loaded disc not only assures contact between the disc and seat, but at all positions from open to close. The sealing between the disc and the seat is guaranteed under the equilibrate force of the spring between two discs and the valve service life is extended.
5. The parallel slide valve is free of jamming or seizure by temperature changing. At high pressure differential, the disc is pushed to the seat of lower pressure side, thus assures the sealing between the disc and seat by the pressure differential of the medium.
6. By-pass and drains can be supplied as required.

General Assembly Drawing



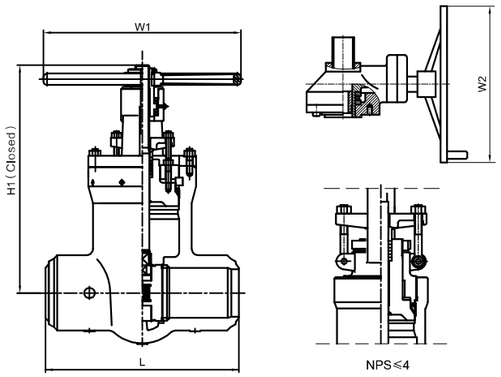
Pressure Seal Parallel Slide Gate Valve

Material of Construction

Part No.	Part Name	Carbon Steel	Stainless Steel	High Temperature
1	Body	ASTM A216 Gr.WCB	ASTM A351 Gr.CF3	ASTM A217 Gr.C12A
2	Seat Ring	ASTM A105+HF*	ASTM A182 F304L	ASTM A182 F91+HF*
3	Disc	ASTM A105+HF*	ASTM A182 F304L	ASTM A182 F91+HF*
4	Disc Holder	ASTM A105	ASTM A182 F304L	ASTM A182 F91
5	Spring	INCONEL X-750	INCONEL X-750	INCONEL X-750
6	Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A565Gr.616HT
7	Bonnet	ASTM A105	ASTM A182 F304L	ASTM A182 F91
8	Pressure Seal Ring	ASTM A182 F304L	ASTM A182 F304L	ASTM A182 F304L
9	Thrust Ring	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F6a
10	Anti-extrusion Ring	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F6a
11	Support Plate	ASTM A182 F6a	ASTM A276 Type 304	ASTM A182 F6a
12	Packing Washer	ASTM A182 F6a	ASTM A276 Type 304	ASTM A182 F6a
13	Packing	Graphite	Graphite	Graphite
14	Bonnet Screw	ASTM A193 Gr.B7	ASTM A193 Gr.B8	ASTM A193 Gr.B16
15	Bonnet Screw Nut	ASTM A194 Gr.2H	ASTM A194 Gr.8	ASTM A194 Gr.7
16	Yoke	ASTM A216 Gr.WCB	ASTM A351 Gr.CF8	ASTM A216 Gr.WCB
17	Yoke Screw	ASTM A193 Gr.B7	ASTM A193 Gr.B8	ASTM A193 Gr.B16
18	Yoke Screw Nut	ASTM A194 Gr.2H	ASTM A194 Gr.8	ASTM A194 Gr.7
19	Gland	ASTM A182 F6a	ASTM A276 Type 304	ASTM A182 F6a
20	Gland Flange	ASTM A216 Gr.WCB	ASTM A351 Gr.CF8	ASTM A216 Gr.WCB
21	Gland Bolt	ASTM A193 Gr.B7	ASTM A193 Gr.B8	ASTM A193 Gr.B16
22	Gland Bolt Nut	ASTM A194 Gr.2H	ASTM A194 Gr.8	ASTM A194 Gr.7
23	Screw	ASTM A29 Gr.1045	ASTM A276 Type 304	ASTM A29 Gr.1045
24	Position Indicator	ASTM A29 Gr.1025	ASTM A276 Type 304	ASTM A29 Gr.1025
25	Screw	ASTM A276 Type 304	ASTM A276 Type 304	ASTM A276 Type 304
26	Lock Plate	ASTM A182 F6a	ASTM A276 Type 304	ASTM A182 F6a

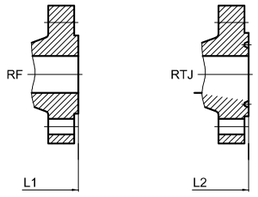
*HF: Hard-faced with stellite 6 or equivalent.

Dimension & Weight



Gear Operation

Pressure Rating	Standard	Optional
CLASS 600	NPS≥8	NPS4-6
CLASS 900		
CLASS 1500		
CLASS 2500		



CLASS 600

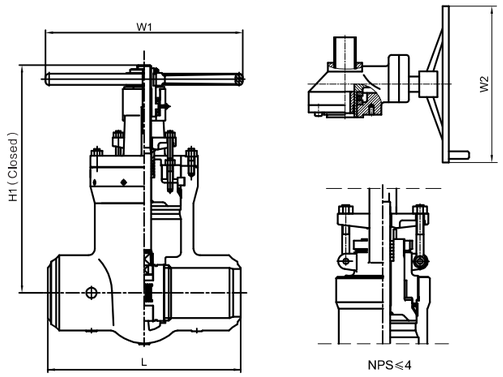
Size		L		L1		L2		W1		W2		H		Approx Weight	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	178	7.00	292	11.50	295	11.62	254	10.00	305	12.01	344	13.54	60	132
80	3	254	10.00	356	14.00	359	14.12	254	10.00	305	12.01	516	20.31	82	181
100	4	305	12.00	432	17.00	435	17.12	305	12.00	305	12.01	620	24.41	102	225
150	6	457	18.00	559	22.00	562	22.12	305	12.00	310	12.20	700	27.56	227	500
200	8	660	26.00	660	26.00	663	26.12	305	12.00	310	12.20	908	35.75	356	785
250	10	711	28.00	787	31.00	790	31.12	457	18.00	460	18.10	975	38.39	530	1168
300	12	813	32.00	838	33.00	841	33.12	540	21.30	540	21.26	1129	44.45	811	1788
350	14	889	35.00	889	35.00	892	35.12	610	24.00	610	24.02	1337	52.64	1156	2549
400	16	991	39.00	99	39.00	994	39.12	610	24.00	710	27.95	1399	55.08	1418	3126
450	18	1092	43.00	1092	43.00	1095	43.12	710	28.00	710	27.95	1668	65.67	1796	3960
500	20	1194	47.00	1194	47.00	1200	47.25	710	28.00	710	27.95	1671	65.79	2280	5027
600	24	1397	55.00	1397	55.00	1407	55.38	810	32.00	810	31.89	2167	85.31	3780	8333

CLASS 900

Size		L		L1		L2		W1		W2		H		Approx Weight	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	216	8.50	368	14.50	371	14.62	305	12.00	305	12.01	499	19.65	68	150
80	3	305	12.00	381	15.00	384	15.12	305	12.00	305	12.01	709	27.91	120	265
100	4	356	14.00	457	18.00	460	18.12	406	16.00	400	15.75	731	28.78	121	267
150	6	508	20.00	610	24.00	613	24.12	305	12.00	310	12.20	851	33.50	260	573
200	8	660	26.00	737	29.00	740	29.12	305	12.00	310	12.20	963	37.91	415	915
250	10	787	31.00	838	33.00	841	33.12	610	24.00	610	24.02	1051	41.38	788	1737
300	12	914	36.00	965	38.00	968	38.12	610	24.00	610	24.02	1182	46.54	1504	3316
350	14	991	39.00	1029	40.50	1038	40.88	610	24.00	610	24.02	1317	51.85	1792	3951
400	16	1092	43.00	1130	44.50	1140	44.88	710	28.00	710	27.95	1467	57.76	1969	4341
450	18	1219	48.00	1219	48.00	1232	48.50	810	32.00	810	31.89	1738	68.43	2351	5183
500	20	1321	52.00	1321	52.00	1334	52.50	810	32.00	810	31.89	1803	70.98	2839	6259
600	24	1549	61.00	1549	61.00	1568	61.75	810	32.00	810	31.89	2070	81.50	3460	7628

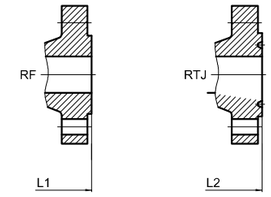
Pressure Seal Parallel Slide Gate Valve

Dimension & Weight



Gear Operation

Pressure Rating	Standard	Optional
CLASS 600	NPS≥8	NPS4-6
CLASS 900		
CLASS 1500		
CLASS 2500		



CLASS 1500

Size		L		L1		L2		W1		W2		H		Approx Weight	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	216	8.50	368	14.50	371	14.62	305	12.00	305	12.01	499	19.65	70	154
80	3	305	12.00	470	18.50	473	18.62	305	12.00	310	12.20	548	21.57	141	311
100	4	406	16.00	546	21.50	549	21.62	305	12.00	310	12.20	675	26.57	200	441
150	6	559	22.00	705	27.75	711	28.00	305	12.00	310	12.20	854	33.62	395	871
200	8	711	28.00	832	32.75	842	33.13	610	24.00	610	24.02	983	38.70	724	1596
250	10	864	34.00	99	39.00	1000	39.38	710	28.00	710	27.95	1175	46.26	1232	2716
300	12	991	39.00	1130	44.50	1146	45.12	710	28.00	710	27.95	1281	50.43	1730	3814
350	14	1067	42.00	1257	49.50	1276	50.25	810	32.00	810	31.89	1540	60.63	2310	5093
400	16	1194	47.00	1384	54.50	1407	55.38	810	32.00	810	31.89	1680	66.14	3068	6764
450	18	1346	53.00	1537	60.50	1559	61.38	810	32.00	810	31.89	1710	67.32	4212	9286
500	20	1473	58.00	1664	65.50	1686	66.38	1000	39.40	1000	39.37	1890	74.41	5135	11321
600	24	1676	66.00	1943	76.50	1972	77.62	1000	39.40	1000	39.37	2248	88.50	7570	16689
650	26	1676	66.00	1676	66.00	/	/	1000	39.40	1000	39.37	2215	87.20	8600	18960
700	28	1778	70.00	1778	70.00	/	/	1000	39.40	1000	39.37	2659	104.69	9300	20503
800	32	1930	76.00	1930	76.00	/	/	1200	47.20	1200	47.24	2885	113.58	14800	32628

CLASS 2500

Size		L		L1		L2		W1		W2		H		Approx Weight	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	279	11.00	451	17.75	454	17.87	305	12.00	305	12.01	585	23.03	82	181
80	3	368	14.50	578	22.75	584	23.00	305	12.00	310	12.20	710	27.95	155	342
100	4	457	18.00	673	26.50	683	26.88	305	12.00	460	18.11	717	28.23	206	454
150	6	610	24.00	914	36.00	927	36.50	457	18.00	460	18.11	941	37.05	420	926
200	8	762	30.00	1022	40.25	1038	40.87	610	24.00	610	24.02	1189	46.81	835	1841
250	10	914	36.00	1270	50.00	1292	50.88	710	28.00	610	24.02	1271	50.04	1322	2915
300	12	1041	41.00	1422	56.00	1445	56.88	810	32.00	810	31.89	1482	58.35	2230	4916
350	14	1118	44.00	1118	44.00	/	/	810	32.00	810	31.89	1556	61.26	2695	5941
400	16	1245	49.00	1245	49.00	/	/	810	32.00	810	31.89	1691	66.57	3495	7705
450	18	1397	55.00	1397	55.00	/	/	1000	39.40	1000	39.37	1852	72.91	4250	9370

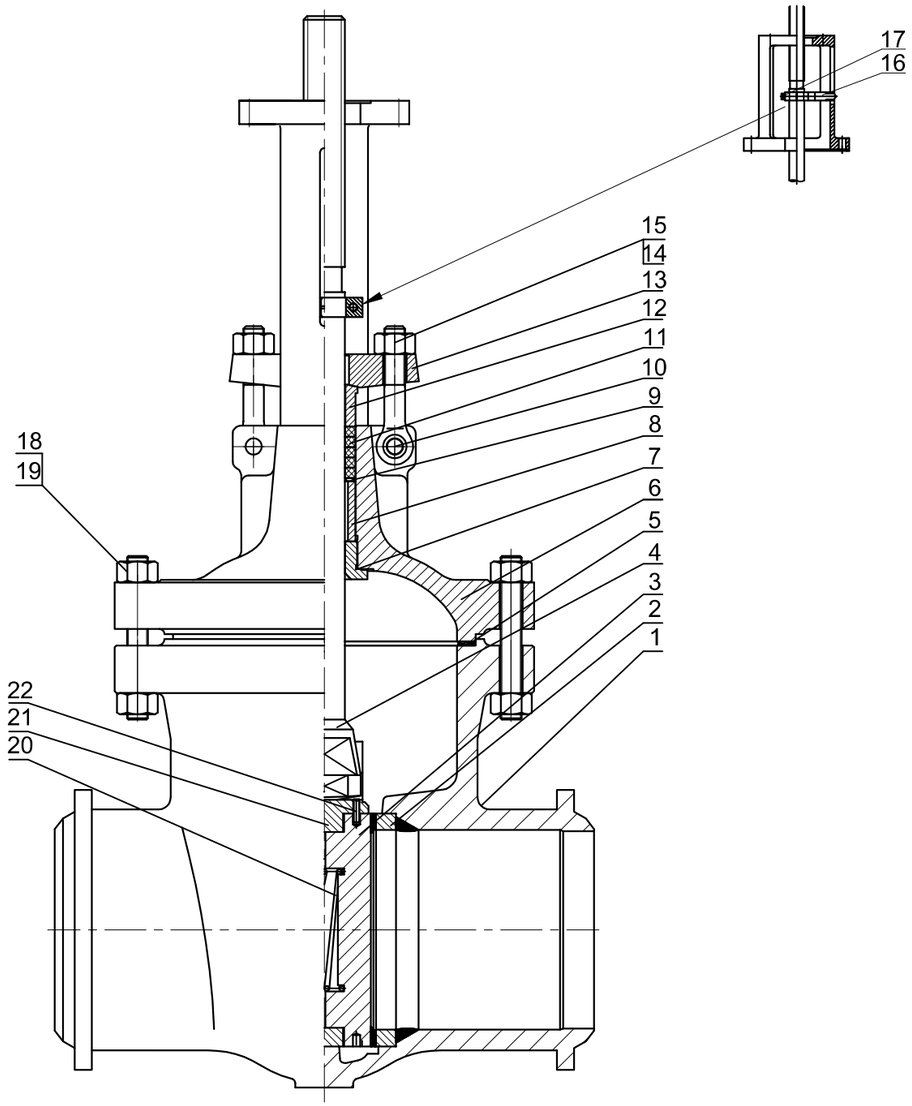
PART 2

Design Standard	
Basic Design	API 600 / ASME B16.34
Face to Face/End to End	ASME B16.10
Flanged End	ASME B16.5/ASME B16.47
BW End	ASME B16.25
Inspection and Testing	API 598

Bolted Bonnet Parallel Slide Gate Valve

1. The advanced design concept eliminates leakage due to the damage of sealing surface caused by the sundries.
2.Significant security performance in high temperature applications.
3. The parallel disc designed to absorb thermally-induced body distortion, thereby making it ideal for high temperature steam or water supply piping.
4. Spring loaded disc not only assures contact between the disc and seat, but at all positions from open to close. The sealing between the disc and the seat is guaranteed under the equilibrate force of the spring between two discs and the valve service life is extended.
5. The position indicator can easily work without reducing the yoke or stem strength.
6. The parallel slide valve is free of jamming or seizure by temperature changing. At high pressure differential, the disc is pushed to the seat of lower pressure side, thus assures the sealing between the disc and seat by the pressure differential of the medium.

General Assembly Drawing



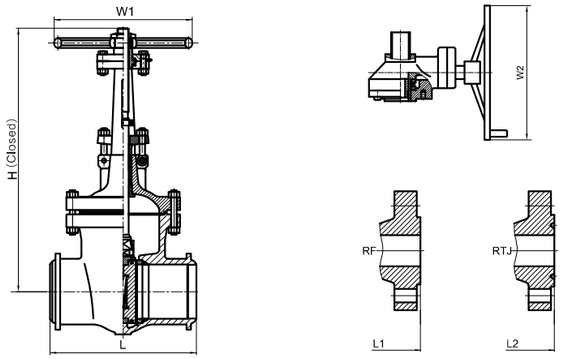
Bolted Bonnet Parallel Slide Gate Valve

Material of Construction

Part No.	Part Name	Carbon Steel	Stainless Steel	High Temperature
1	Body	ASTM A216 Gr.WCB	ASTM A351 Gr.CF3	ASTM A217 Gr.C12A
2	Seat	ASTM A105+HF*	ASTM A182 F304L	ASTM A182 F91+HF*
3	Disc	ASTM A105+HF*	ASTM A182 F304L	ASTM A182 F91+HF*
4	Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A565 Gr.616HT
5	Gasket	SS316+Graphite	SS316+Graphite	SS316+Graphite
6	Bonnet	ASTM A216 Gr.WCB	ASTM A351 Gr.CF3	ASTM A217 Gr.C12A
7	Backseat Bushing	ASTM A182 F6a	ASTM A276 Type 316	ASTM A182 F6a
8	Packing Spacer	ASTM A182 F6a	ASTM A276 Type 316	ASTM A182 F6a
9	Packing Washer	ASTM A182 F6a	ASTM A276 Type 316	ASTM A182 F6a
10	Eye Bolt Pin	ASTM A105	ASTM A276 Type 304	ASTM A105
11	Packing	Graphite	Graphite	Graphite
12	Gland	ASTM A182 F6a	ASTM A276 Type 304	ASTM A182 F6a
13	Gland Flange	ASTM A216 Gr.WCB	ASTM A351 Gr.CF8	ASTM A216 Gr.WCB
14	Eye Bolt	ASTM A193 Gr.B7	ASTM A193 Gr.B8	ASTM A193 Gr.B16
15	Eye Bolt Nut	ASTM A194 Gr.2H	ASTM A194 Gr.8	ASTM A194 Gr.7
16	Position Indicator	ASTM A29 Gr.1025	ASTM A276 Type 304	ASTM A29 Gr.1025
17	Screw	ASTM A29 Gr.1045	ASTM A276 Type 304	ASTM A29 Gr.1045
18	Bonnet Stud	ASTM A193 Gr.B7	ASTM A193 Gr.B8	ASTM A193 Gr.B16
19	Bonnet Stud Nut	ASTM A194 Gr.2H	ASTM A194 Gr.8	ASTM A194 Gr.7
20	Compression Spring	INCONEL X-750	INCONEL X-750	INCONEL X-750
21	Disc Holder	ASTM A105	ASTM A182 F304L	ASTM A182 F91
22	Screw	ASTM A276 Type 304	ASTM A276 Type 304	ASTM A276 Type 304

* HF: Hard-faced with stellite 6 or equivalent.

Dimension & Weight



Gear Operation

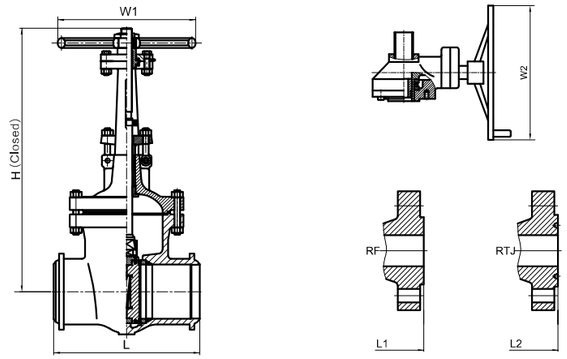
Pressure Rating	Standard	Optional
CLASS150	NPS≥10	NPS6-8
CLASS 300		

CLASS 150

口径		L		L1		L2		W1		W2		H		Approx Weigh	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	216	8.50	178	7.00	191	7.50	178	7.00	305	12.01	314	12.36	19	42
80	3	282	11.12	203	8.00	216	8.50	230	9.00	305	12.01	375	14.76	33	73
100	4	305	12.00	229	9.00	241	9.50	254	10.00	305	12.01	451	17.76	52	115
150	6	403	15.88	267	10.50	279	11.00	305	12.00	400	15.75	620	24.41	98	216
200	8	419	16.50	292	11.50	305	12.00	356	14.00	310	12.20	776	30.55	145	320
250	10	457	18.00	330	13.00	343	13.50	406	16.00	310	12.20	925	36.42	229	505
300	12	502	19.75	356	14.00	368	14.50	508	20.00	310	12.20	1084	42.68	319	703
350	14	572	22.50	381	15.00	394	15.50	508	20.00	460	18.11	1207	47.52	398	877
400	16	610	24.00	406	16.00	419	16.50	560	22.00	460	18.11	1405	55.31	489	1078
450	18	660	26.00	432	17.00	445	17.50	640	25.20	460	18.11	1477	58.15	649	1431
500	20	711	28.00	457	18.00	470	18.50	680	26.80	460	18.11	1615	63.58	735	1620
600	24	813	32.00	508	20.00	521	20.50	720	28.30	540	21.26	1946	76.61	1175	2590

Bolted Bonnet Parallel Slide Gate Valve

Dimension & Weight



Gear Operation

Pressure Rating	Standard	Optional
CLASS150	NPS≥10	NPS6-8
CLASS 300		

CLASS 300

口径		L		L1		L2		W1		W2		H		Approx Weight	
DN	NPS	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb
50	2	216	8.50	216	8.50	232	9.12	178	7.00	305	12.01	314	12.36	19	42
80	3	282	11.12	282	11.12	298	11.74	230	9.00	305	12.01	405	15.94	38	84
100	4	305	12.00	305	12.00	321	12.62	254	10.00	305	12.01	482	18.98	69	152
150	6	403	15.88	403	15.88	419	16.50	356	14.00	400	15.75	674	26.54	142	313
200	8	419	16.50	419	16.50	435	17.12	406	16.00	310	12.20	946	37.24	210	463
250	10	457	18.00	457	18.00	473	18.62	508	20.00	460	18.11	1002	39.45	325	717
300	12	502	19.75	502	19.75	517	20.37	508	20.00	460	18.11	1104	43.46	453	999
350	14	762	30.00	762	30.00	778	30.62	457	18.00	460	18.11	1190	46.85	595	1312
400	16	838	33.00	838	33.00	854	33.62	457	18.00	460	18.11	1328	52.28	736	1623
450	18	914	36.00	914	36.00	930	36.62	540	21.30	540	21.26	1496	58.90	965	2127
500	20	991	39.00	991	39.00	1010	39.75	540	21.30	540	21.26	1585	62.40	1308	2884
600	24	1143	45.00	1143	45.00	1165	45.88	610	24.00	610	24.02	1924	75.75	1960	4321

Operating Torque

Pressure Seal Parallel Slide Gate Valve

Size NPS	Material	CLASS 600		CLASS 900		CLASS 1500		CLASS 2500	
		N · m	Ft · Lbs	N · m	Ft · Lbs	N · m	Ft · Lbs	N · m	Ft · Lbs
2	WCB	36	27	52	38	89	66	122	90
3	WCB	68	50	118	87	235	174	304	224
4	WCB	129	95	206	152	361	266	443	327
6	WCB	343	253	449	331	826	609	116	86
8	WCB	587	433	902	665	1499	1106	2153	1588
10	WCB	938	692	1443	1064	2510	1852	3823	2820
12	WCB	1357	1001	2014	1485	3681	2715	5677	4187
14	WCB	1675	1235	2359	1740	4683	3454	7162	5283
16	WCB	2289	1689	3143	2318	5813	4287	9471	6986
18	WCB	3002	2214	4892	3608	8325	6142	12257	9041
20	WCB	3966	2925	6351	4684	12524	9237	/	/
24	WCB	6100	4425	10737	7920	23700	17481	/	/

Operating Torque

Bolted Bonnet Parallel Slide Gate Valve

Size NPS	Material	CLASS 150		CLASS 300	
		N · m	Ft · Lbs	N · m	Ft · Lbs
2	WCB	24	17	24	17
3	WCB	21	16	36	26
4	WCB	32	23	60	44
6	WCB	67	49	146	108
8	WCB	104	76	269	199
10	WCB	169	125	416	307
12	WCB	240	177	629	463
14	WCB	321	237	788	581
16	WCB	425	313	1062	784
18	WCB	550	405	1360	1003
20	WCB	696	513	1747	1289
24	WCB	1064	785	2821	2080

Flow Coefficient (CV Value)

Size NPS	2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32
Cv	169	426	1070	3403	6766	10572	16274	22151	28931	36616	48827	70311	82517	95700	109860	124996

Notes:
1. Larger size data available on request.
2. Flow coefficient Cv is the volume of water in U.S. gallons at 5℃~40℃ per minute that passes through a valve at a pressure drop of 1 Psi. Cv: is typically calculated from the following formula with unit of gal/min.
Cv:

where
Q = flow rate in cubic metres per hour
G = specific gravity of liquid (water=1)
△P = pressure drop across valve in bar

Performance Parameters

Performance Parameters (MPa)		Nominal Pressure(MPa)					Pressure Rating (Class)		
		1.6	2.5	4.0	6.3	10.0	150	300	600
Test Pressure (Mpa)	Strength Test	2.4	3.75	6.0	9.6	15.0	2.93	7.58	15.0
	Sealing Test	1.76	2.75	4.4	7.04	11.0	2.07	5.52	11.03
	Gas Pressure Test	0.6							
Applicable Temperature		−196℃~300℃ (Note: Different materials shall be used for different temperatures of different services.)							
Applicable Medium	Standard	Water, steam, petroleum, liquefied gas, natural gas, etc.							
	Anti−sulfur	Natural gas, oil, etc. , which contains H2S and CO.							

Note: Due to quick development of products, the data in our catalogue may be updated. SNY reserves the right to change the design, material or specifications without prior notice and free of obligation to furnish or install such changes on products previously sold.

SNY VALVE

PRODUCT WARRANTY

SNY offer the product warranty within 18 months from the date of shipment or 12 months after installation,whichever occurs first.