



Cat.no.:E-PS



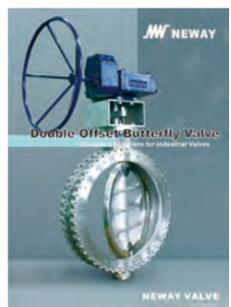
Cat.no.:E-GGC



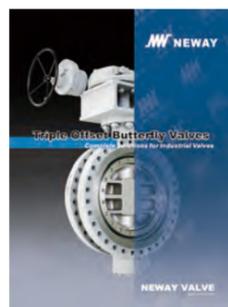
Cat.no.:E-TMBV



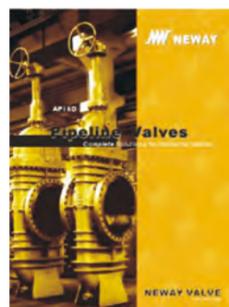
Cat.no.:E-FBV



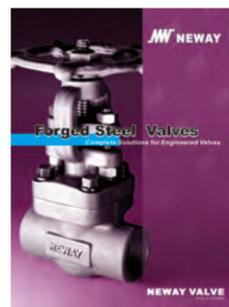
Cat.no.:E-DOV



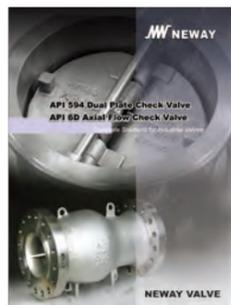
Cat.no.:E-TOV



Cat.no.:E-PLV



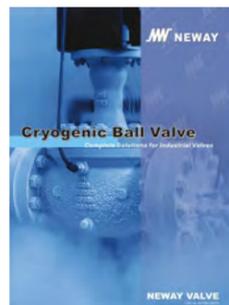
Cat.no.:E-FSV



Cat.no.:E-DAV



Cat.no.:E-CPS



Cat.no.:E-CBV



Cat.no.:E-PV

JW NEWAY
NEWAY VALVE (SUZHOU) CO., LTD.

No.666 Taishan Road, Suzhou New District, P.R. China
Post Code:215129
Tel: 86-512-666-51365
Fax: 86-512-666-18930-2102
E-mail: overseas.sales@neway.com.cn
http://www.newayvalve.com

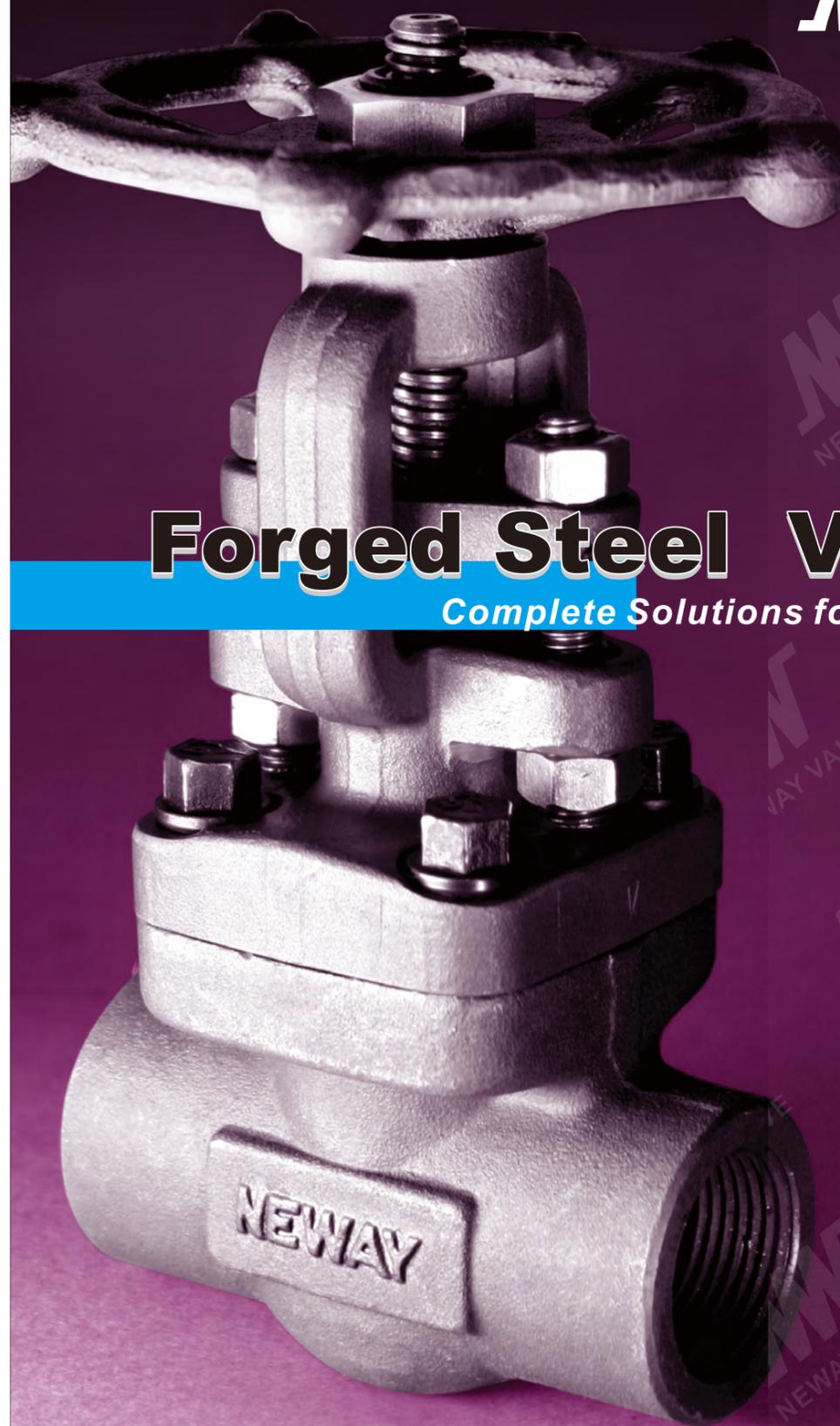
Distributed by:

Cat.no.:E-FSV-2020

JW NEWAY

Forged Steel Valves

Complete Solutions for Engineered Valves



NEWAY VALVE

Cat.no.:E-FSV-2020

Table of Contents

Introduction

- 1 Quality Commitment
- 2 How to Order
- 3~6 Forged Steel Gate Valve
- 7~11 Forged Steel Globe Valve
- 12 Forged Steel Check Valve
- 13~15 Forged Steel Lifting Check Valve
- 16~17 Forged Steel Swing Check Valve
- 18~19 Forged Steel Bellows Gate Valve
- 20~21 Forged Steel Bellows Globe Valve
- 22~23 Forged Steel Cryogenic Gate Valve
- 24~25 Forged Steel Cryogenic Globe Valve
- 26 Forged Steel Cryogenic Lifting Check Valve
- 27 Optional Design Feature
- 28 Neway Factory & Overseas Subsidiaries



Complete Solutions for Industrial Valves

As a global leader of valve manufacturing, Neway(SSE:603699) is dedicated to the production, research, and development of industrial valves. Neway is committed to providing complete valve solutions to all industries through advanced engineering and innovation.

Neway's product line includes Ball, Butterfly, Gate, Globe, Check, Nuclear, Control, Subsea and Safety valves. Our high quality standards and innovative ability are recognized by many global end users and EPCs. Neway valves are utilized in a wide variety of industries and working conditions such as Refining, Chemical, Coal Chemical, Offshore(including subsea), Air Separation, LNG, Nuclear Power, Power Generation, and Pipeline Transmission applications.

Global Facilities & Service

Neway has developed a sophisticated multi-plant management system operating one valve assembly plant, one API6A valve plant, three foundries, and one R&D center. Our Largest assembly plant was expanded in 2013, and it now covers 230,000 square meters.

Advanced software (ANSYS, FE-Safe, CF-Design, Siemens PLM and NX) is applied here at Neway for the Research & Development of products. We use SAP to control the traceability and status of all products during the manufacturing process. In order to ensure the safety, eco-friendliness, and reliability of our products, we use the most advanced fire-safe, cryogenic, high pressure, and fugitive emission test equipment.

As part of Neway's global strategy, to provide better service to our customers, we have established our overseas subsidiaries in USA, Netherlands, Italy, Singapore and Dubai along with over 80 agents and distributors worldwide.

High Quality, High Value

Neway is dedicated to the pursuit of "Zero Defect". We maintain a quality management system that encompasses our entire operation from order entry, to final inspection. Through Neway's continuous efforts, our products have achieved industrial certificates including ISO 9001, API 6A, API 6D, CE/PED, ASME N & NPT, TA-Luft, ABS, CU-TR and Fire-Safe approvals.

ISO 9001



API 6D



API 6A



TA Luft



ABS

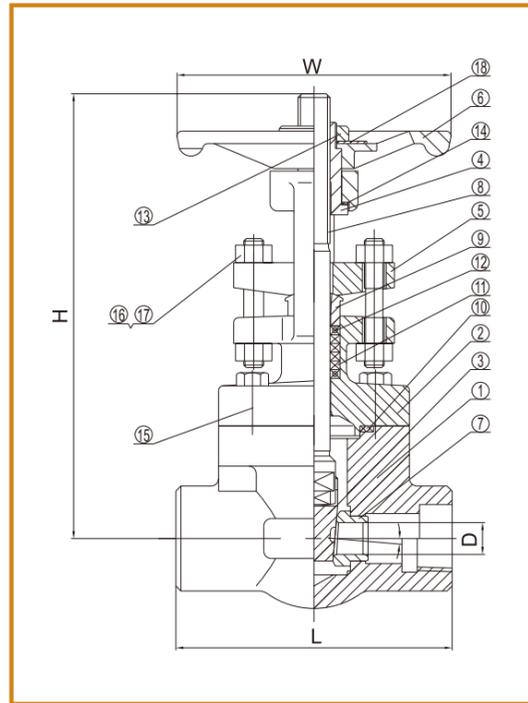


API 591

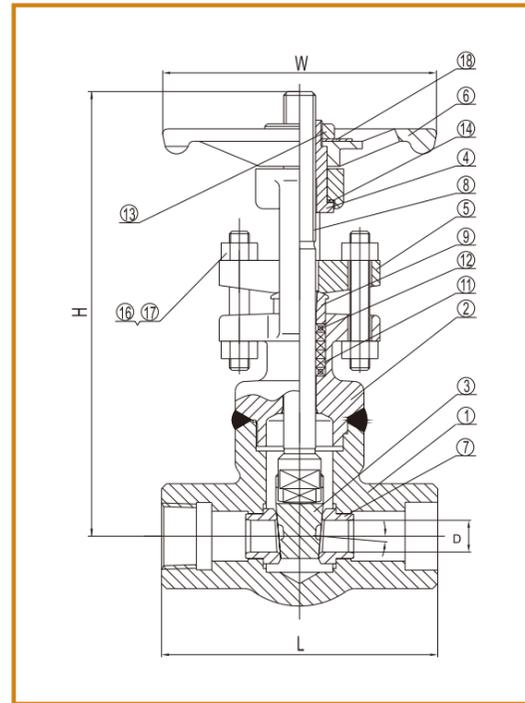


Fire Safe Test Certificate

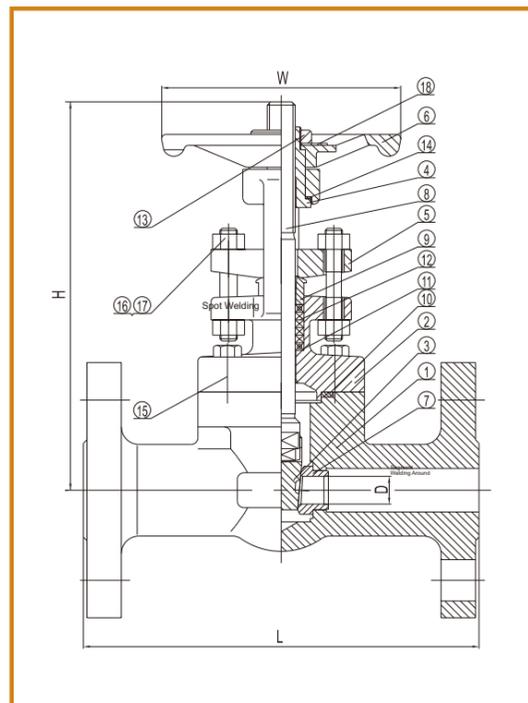
Neway recognizes the importance of valve quality for the safety and protection of personnel health and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price, designed, manufactured, inspected and tested in accordance with our customers CE/PED specifications and complying with all international standards. Current industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environments in which they operate. Therefore we request that our customers communicate with our engineering department. Our valve optimization program continuously strives to provide valves that withstand deterioration in service, and ensure safety over the valves expected lifetime.



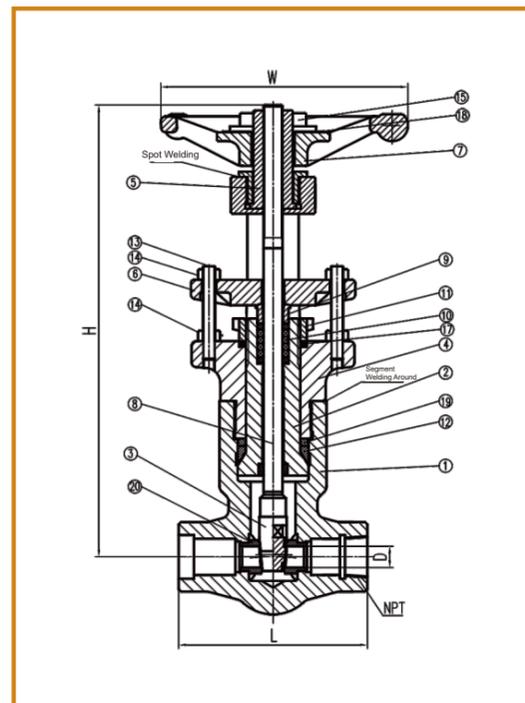
Bolted Bonnet



Welded Bonnet



Integral Flanged Ends



Pressure Seal Bonnet Connection

Material List

NO.	Description of Parts	Material		
		Standard	High Temperature	Stainless Steel
1	BODY	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316
2	BONNET	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316
3	WEDGE	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316
4	STEM NUT	ASTM A276-420	ASTM A276-420	ASTM A276-420
5	GLAND FLANGE	ASTM A216-WCB	ASTM A216-WCB	ASTM A351-CF8
6	HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	SEAT RING	ASTM A276-410/STL.OVERLAY	ASTM A276-410/STL.OVERLAY	ASTM A182-F304/F316/STL.6 OVERLAY
8	STEM	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316
9	GLAND	ASTM A276-420	ASTM A276-420	ASTM A276-304/316
10	GASKET	304SS/SPIRAL WOUND GRAPHITE	304SS/SPIRAL WOUND GRAPHITE	304/316SS/SPIRAL WOUND GRAPHITE
11	PACKING	GRAPHITE	GRAPHITE	GRAPHITE
12	PACKING	CARBON YARN	CARBON YARN	CARBON YARN
13	HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	ASTM A276-304
14	WASHER	ASTM A276-304	ASTM A276-304	ASTM A276-304
15	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8
16	BOLT	ASTM A193-B8	ASTM A193-B8	ASTM A193-B8
17	NUT	ASTM A194-8	ASTM A194-8	ASTM A194-8
18	NAME PLATE	ASTM A276-304	ASTM A276-304	ASTM A276-304

Class 800 Bolted Bonnet or Welded Bonnet

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
		mm	in	mm	in										
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	76	2.99	76	2.99	86	3.39	102	4.02	118	4.65	118	4.65	132	5.20
Bore Diameter	D	9.5	0.37	9.5	0.37	12.7	0.50	17.5	0.69	23.8	0.94	28.6	1.13	36.5	1.44
Center to Top (Open)	H	Bolted Bonnet		Welded Bonnet		Bolted Bonnet		Welded Bonnet		Bolted Bonnet		Welded Bonnet		Bolted Bonnet	
Handwheel	W	90	3.54	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	150	5.91
Approx. Weight	Kg/Lb	1.5	3.31	1.5	3.31	2.0	4.41	3.0	6.61	4.0	8.82	5.5	12.13	7.5	16.53

Class 900/1500 Bolted Bonnet or Welded Bonnet

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	90	3.54	90	3.54	104	4.09	120	4.72	130	5.12	130	5.12	150	5.91
Bore Diameter	D	6.5	0.26	9.5	0.37	12.7	0.50	16	0.63	22.5	0.89	27	1.06	35	1.38
Center to Top (Open)	H	Bolted Bonnet		Welded Bonnet		Bolted Bonnet		Welded Bonnet		Bolted Bonnet		Welded Bonnet		Bolted Bonnet	
Handwheel	W	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	150	5.91	180	7.09
Approx. Weight	Kg/Lb	2.5	5.51	2.5	5.51	3.5	7.72	5.5	12.13	8.0	17.64	8.5	18.74	14.5	31.97

Forged Steel Gate Valve

Dimensions

Class 900/1500 Pressure Seal Bonnet

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
						120	4.72	120	4.72	140	5.51	178	7.01	178	7.01
Bore Diameter	D	-	-	9.5	0.37	12.7	0.50	16	0.63	27	1.06	27	1.06	35	1.38
Center to Top (Open)	H	-	-	230	9.06	294	11.57	337.5	13.29	396.5	15.61	396.5	15.61	449	17.68
Handwheel	W	-	-	110	4.33	110	4.33	150	5.91	150	5.91	150	5.91	180	7.09
Approx. Weight	Kg/Lb	-	-	3.8	8.38	5.3	11.68	8.3	18.30	12.8	28.22	12.8	28.22	21.8	48.06

Class 2500 Welded Bonnet

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
				-	-	178	7.01	178	7.01	186	7.32	232	9.13	232	9.13
Bore Diameter	D	-	-	9.0	0.35	12.0	0.47	15	0.59	27	1.06	27	1.06	35	1.38
Center to Top (Open)	H	-	-	295	11.61	295	11.61	345	13.58	410	16.14	410	16.14	460	18.11
Handwheel	W	-	-	150	5.91	150	5.91	180	7.09	250	9.84	250	9.84	350	13.78
Approx. Weight	Kg/Lb	-	-	8.0	17.64	8.0	17.64	11	24.25	20	44.09	20	44.09	25	55.12

Class 2500 Pressure Seal Bonnet

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
				-	-	178	7.01	178	7.01	186	7.32	232	9.13	232	9.13
Bore Diameter	D	-	-	9.0	0.35	12.0	0.47	15	0.59	27	1.06	27	1.06	35	1.38
Center to Top (Open)	H	-	-	383	15.08	383	15.08	406.5	16.00	454.5	17.89	454.5	17.89	540	21.26
Handwheel	W	-	-	150	5.91	150	5.91	180	7.09	250	9.84	250	9.84	350	13.78
Approx. Weight	Kg/Lb	-	-	10.0	22.05	10.0	22.05	13	28.66	21.8	48.06	21.8	48.06	28	61.73

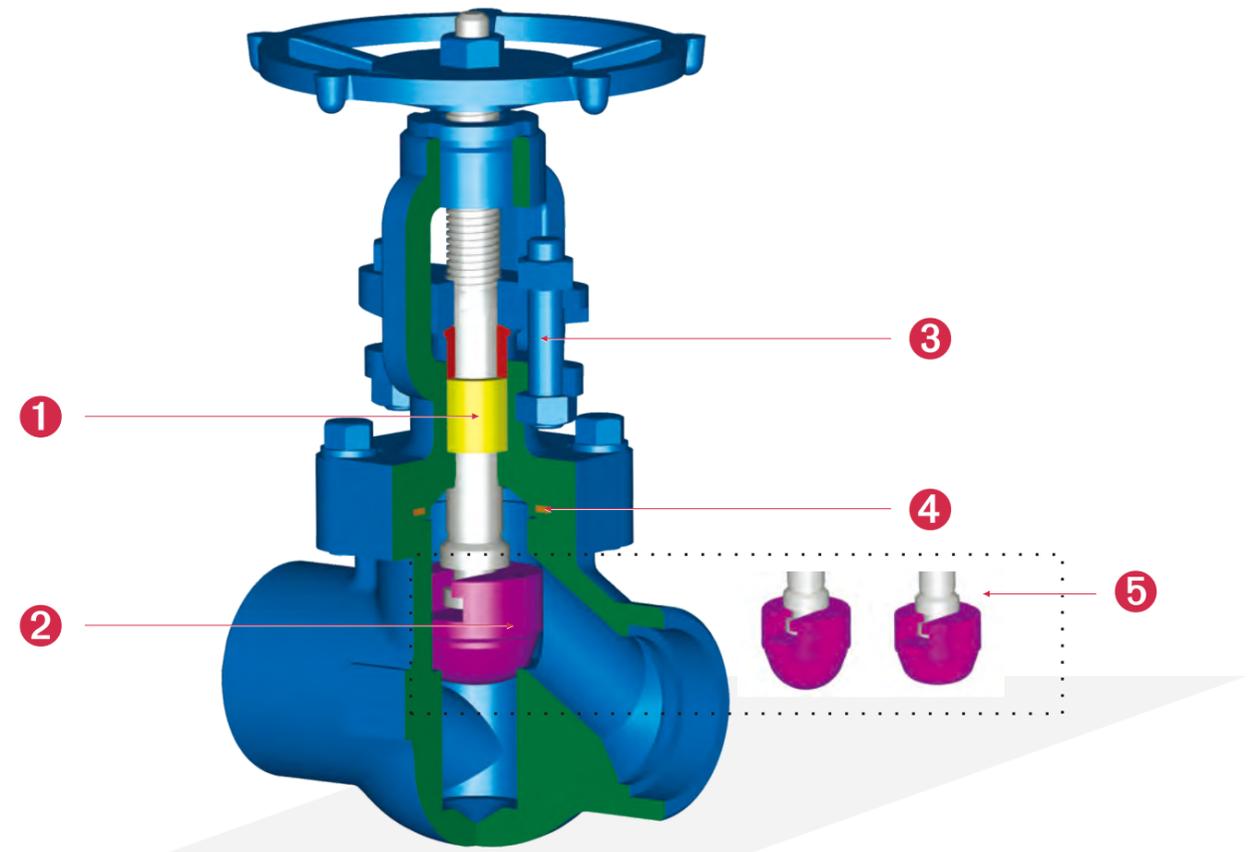
Class 150-300-600 Overall-end Flange, Bolted Bonnet, Structure Length-ASME B16.10

Regular Port - API 602. Outside Yoke & Overall-end Flange - ASME B16.5

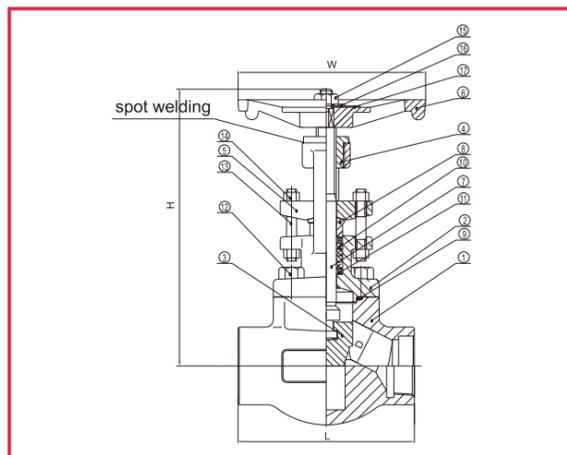
Regular Port	Size	1/2		3/4		1		1-1/2		2		
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	
		Class 150	108	4.25	117	4.61	127	5	165	6.50	178	7.01
Class 300	140	5.51	152	5.98	165	6.50	190	7.48	216	8.50		
Class 600	165	6.50	190	7.48	216	8.50	241	9.49	292	11.50		
Bore Diameter	D	9.50	0.37	12.7	0.50	17.5	0.69	28.6	1.13	36.5	1.44	
Center to Top (Open)	H	45.5	5.73	151.8	5.98	179.7	7.07	247	9.72	268.7	10.58	
Handwheel	W	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	
Approx. Weight	Class 150	Kg/Lb	3	6.61	3.8	8.38	4.8	10.58	10	22.05	15	33.07
	Class 300		3.4	7.50	4.5	9.92	5.7	12.57	11.5	25.35	17	37.48
	Class 600		4	8.82	5.2	11.46	6.6	14.55	12.7	28.00	18	39.68

Forged Steel Globe Valve

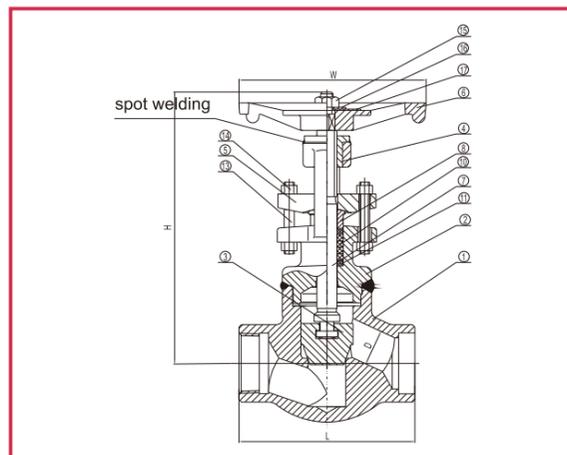
Design Features



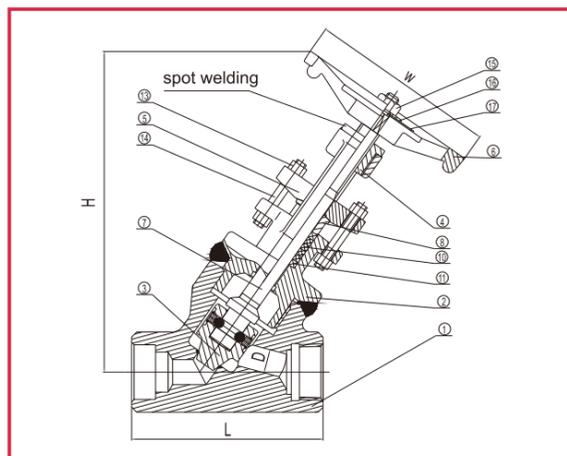
- 1 A positive backseat, high quality packing material and improved stuffing box design ensure tighter stem seal.
- 2 Fully guided solid disc ensures perfect alignment of disc and seat and reduces wear on seating surfaces.
- 3 Stud and bolt arrangement facilitates packing maintenance.
- 4 Recessed Body-Bonnet Joint design captures the stainless steel spiral wound gasket ensuring body/bonnet sealing integrity.
- 5 Plug style discs are standard; others are available upon request.



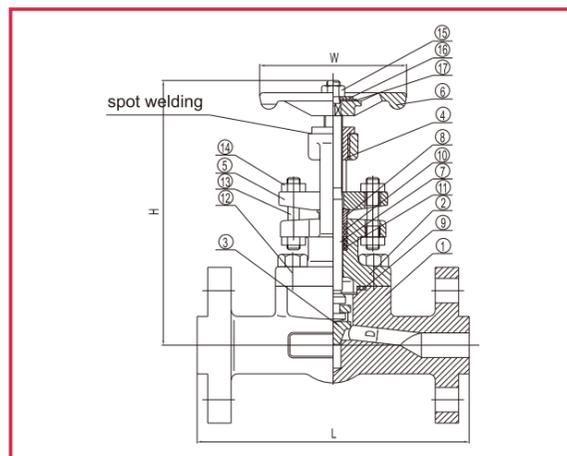
Bolted Bonnet



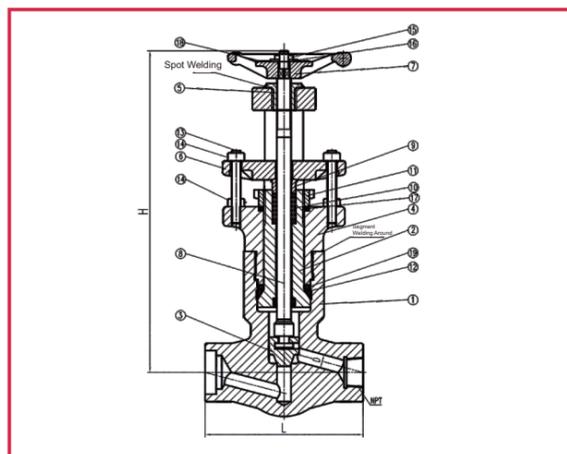
Welded Bonnet



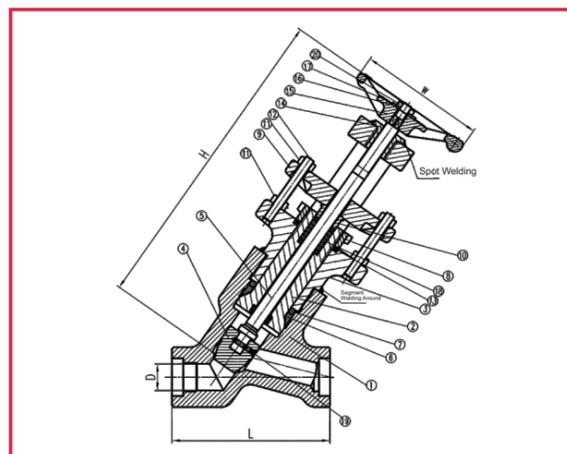
Y Pattern Welded Bonnet



Integral Flanged Ends



Pressure Seal Bonnet



Y-Pattern, Pressure Seal Bonnet

Material List

NO.	Description of Parts	Material		
		Standard	High Temperature	Stainless Steel
1	BODY	ASTM A105/STL OVERLAY	ASTM A182-F11/F22/STL OVERLAY	ASTM A182-F304/F316/STL OVERLAY
2	BONNET	ASTM A105	ASTM A182-F11/F22	ASTM A182-F304/F316
3	DISC	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316
4	STEM NUT	ASTM A276-420	ASTM A276-420	ASTM A276-420
5	GLAND FLANGE	ASTM A216-WCB	ASTM A216-WCB	ASTM A351-CF8
6	HAND WHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	STEM	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316
8	GLAND	ASTM A276-420	ASTM A276-420	ASTM A276-304/316L
9	GASKET	304SS/SPIRAL WOUND GRAPHITE	304SS/SPIRAL WOUND GRAPHITE	304/316SS/SPIRAL WOUND GRAPHITE
10	PACKING	GRAPHITE	GRAPHITE	GRAPHITE
11	PACKING	CARBON YARN	CARBON YARN	CARBON YARN
12	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8
13	BOLT	ASTM A193-B8	ASTM A193-B8	ASTM A193-B8
14	NUT	ASTM A194-8	ASTM A194-8	ASTM A194-8
15	HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	ASTM A276-304
16	HANDWHEEL WASHER	CARBON STEEL	CARBON STEEL	ASTM A276-304
17	NAME PLATE	ASTM A276-304	ASTM A276-304	ASTM A240-304

Class 800 Bolted Bonnet or Welded Bonnet

Regular and Full Port - API602 . Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
		mm	in	mm	in	mm	in								
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	76	2.99	76	2.99	86	3.39	102	4.02	140	5.51	140	5.51	170	6.69
Bore Diameter	D	6.5	0.26	9.5	0.37	12.7	0.50	17.5	0.69	23.0	0.91	28.6	1.13	36.5	1.44
Center to Top (Open)	H	147.3	5.80	147.3	5.80	153.3	6.04	183.3	7.22	229.1	9.02	229.3	9.03	267.3	10.52
Handwheel	W	90	3.54	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	150	5.91
Approx. Weight	Kg/Lb	2.0	4.41	2.0	4.41	2.5	5.51	3.5	7.72	7.0	15.43	7.0	15.43	10.5	23.15

Class 900/1500 Bolted Bonnet or Welded Bonnet

Regular and Full Port - API602 . Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	90	3.54	90	3.54	104	4.09	120	4.72	150	5.91	150	5.91	180	7.09
Bore Diameter	D	8.0	0.31	9.0	0.35	12.0	0.47	15	0.59	21	0.83	27	1.06	32	1.26
Center to Top (Open)	H	165.7	6.52	165.7	6.52	191.8	7.55	226.8	8.93	278.3	10.96	280.3	11.04	312.3	12.30
Handwheel	W	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	180	7.09	180	7.09
Approx. Weight	Kg/Lb	2.5	5.51	2.5	5.51	3.0	6.61	5.5	12.13	8.5	18.74	8.5	18.74	14.5	31.97

Forged Steel Globe Valve

Dimensions

Class 900/1500 Pressure Seal Bonnet

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in												
		120	4.72	120	4.72	120	4.72	140	5.51	165	6.50	178	7.01	216	8.50
Bore Diameter	D	8.0	0.31	9.0	0.35	12.0	0.47	15	0.59	21	0.83	27	1.06	30	1.18
Center to Top (Open)	H	285.3	11.23	285.3	11.23	285.3	11.23	340.3	13.40	395.8	15.58	395.8	15.58	446.8	17.59
Handwheel	W	150	5.91	150	5.91	150	5.91	180	7.09	200	7.87	200	7.87	250	9.84
Approx. Weight	Kg/Lb	7.5	16.53	7.5	16.53	7.5	16.53	12.0	26.46	18.5	40.79	19.0	41.89	28.5	62.83

Class 2500 Welded Bonnet

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		120	4.72	120	4.72	140	5.51	186	7.32	232	9.13	232	9.13	279	10.98
Bore Diameter	D	8.0	0.31	9.0	0.35	12.0	0.47	15	0.59	19	0.75	27	1.06	27	1.06
Center to Top (Open)	H	205	8.07	205	8.07	260	10.24	302	11.89	340	13.39	340	13.39	390	15.35
Handwheel	W	150	5.91	150	5.91	180	7.09	200	7.87	250	9.84	250	9.84	350	13.78
Approx. Weight	Kg/Lb	7.0	15.43	7.0	15.43	9.0	19.84	15.5	34.17	26	57.32	26	57.32	36	79.37

Class 2500 Pressure Seal Bonnet

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in												
		120	4.72	120	4.72	140	5.51	186	7.32	232	9.13	232	9.13	279	10.98
Bore Diameter	D	8.0	0.31	9.0	0.35	12.0	0.47	15	0.59	19	0.75	27	1.06	27	1.06
Center to Top (Open)	H	295.3	11.63	295.3	11.63	346.3	13.63	389.3	15.33	430.4	16.94	430.4	16.94	478.8	18.85
Handwheel	W	150	5.91	150	5.91	180	7.09	200	7.87	250	9.84	250	9.84	350	13.78
Approx. Weight	Kg/Lb	7.5	16.53	7.5	16.53	12.0	26.46	19.5	42.99	28	61.73	28	61.73	40	88.18

Class 150-300-600 Overall-end Flange, Bolted Bonnet, Structure Length-ASME B16.10

Regular Port - API 602. Outside Yoke & Overall-end Flange - ASME B16.5

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2		
End to End	Class 150	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
	Class 300	L	152	5.98	178	7.01	203	7.99	-	-	229	9.02	267	10.51
	Class 600	L	165	6.50	190	7.48	216	8.50	-	-	241	9.49	292	11.50
Bore Diameter	D	9.50	0.37	12.7	0.50	17.5	0.69	23	0.91	28.6	1.13	36.5	1.44	
Center to Top (Open)	H	147.3	5.80	153.3	6.04	183.3	7.22	229.1	9.02	229.3	9.03	267.3	10.52	
Handwheel	W	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	150	5.91	
Approx. Weight	Class 150	Kg/Lb	3.5	7.72	4.3	9.48	5.3	11.68	10	22.05	12	26.46	16	35.27
	Class 300	4.0	8.82	4.8	10.58	6.2	13.67	-	-	13.5	29.76	18	39.68	
	Class 600	4.5	9.92	5.5	12.13	7.0	15.43	-	-	15	33.07	20	44.09	

Class 900/1500 Overall-end Flange, Bolted Bonnet, Structure Length-ASME B16.10

Regular Port - API 602. Outside Yoke & Overall-end Flange - ASME B16.5

Regular Port	Size	1/2		3/4		1		1-1/2		2	
End to End	L	mm	in								
		216	8.50	229	9.02	254	10.00	305	12.01	368	14.49
Bore Diameter	D	9.0	0.35	12.0	0.47	15.0	0.59	27.0	1.06	32.0	1.26
Center to Top (Open)	H	165.7	6.52	191.8	7.55	226.8	8.93	280.3	11.04	312.3	12.30
Handwheel	W	90	3.54	110	4.33	150	5.91	180	7.09	180	7.09
Approx. Weight	Kg/Lb	7.0	15.43	9.0	19.84	14.5	31.97	22	48.50	40	88.18

Forged Steel Globe Valve

Dimensions

Class 800 Y Pattern Welded Bonnet

Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		80	3.15	80	3.15	90	3.54	110	4.33	125	4.92	155	6.10	180	7.09
Bore Diameter	D	9.5	0.37	12	0.47	17	0.67	23	0.91	28	1.10	36	1.42	44	1.73
Center to Top (Open)	H	170	6.69	170	6.69	200	7.87	242	9.53	276	10.87	295	11.61	327	12.87
Handwheel	W	90	3.54	90	3.54	110	4.33	150	5.91	150	5.91	150	5.91	180	7.09
Approx. Weight	Kg/Lb	2.0	4.41	2.5	5.51	3.5	7.72	5.0	11.02	6.5	14.33	8.0	17.64	12.5	27.56

Class 900-1500 Y Pattern Welded Bonnet

Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		80	3.15	90	3.54	110	4.33	125	4.92	155	6.10	180	7.09	200	7.87
Bore Diameter	D	9.5	0.37	12	0.47	15	0.59	21	0.83	27	1.06	32	1.26	38	1.50
Center to Top (Open)	H	170	6.69	200	7.87	238	9.37	272	10.71	308	12.13	326	12.83	376	14.80
Handwheel	W	90	3.54	110	4.33	150	5.91	150	5.91	180	7.09	180	7.09	200	7.87
Approx. Weight	Kg/Lb	2.8	6.17	4.0	8.82	5.0	11.02	7.5	16.53	9.0	19.84	13	28.66	18	39.68

Class 2500 Y Pattern Welded Bonnet

Full Port-ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		-	-	110	4.33	125	4.92	180	7.09	200	7.87	230	9.06	230	9.06
Bore Diameter	D	-	-	12	0.47	15	0.59	21	0.83	28	1.10	35	1.38	35	1.38
Center to Top (Open)	H	-	-	239.6	9.43	274.1	10.79	325.5	12.81	372.9	14.68	446.2	17.57	446.2	17.57
Handwheel	W	-	-	150	5.91	150	5.91	180	7.09	200	7.87	300	11.81	300	11.81
Approx. Weight	Kg/Lb	-	-	5.5	12.13	7.5	16.53	13.5	29.76	18.5	40.79	25	55.12	25	55.12

Class 900-1500 Y Pattern Pressure Seal Bonnet

Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	1/2		3/4		1		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in
		140	5.51	140	5.51	140	5.51	178	7.01	216	8.50
Bore Diameter	D	10	0.39	15	0.59	21	0.83	32	1.26	38	1.50
Center to Top (Open)	H	350	13.78	350	13.78	350	13.78	450	17.72	450	17.72
Handwheel	W	200	7.87	200	7.87	200	7.87	250	9.84	300	11.81
Approx. Weight	Kg/Lb	9.0	19.84	9.5	20.94	11.5	25.35	16.5	36.38	30	66.14

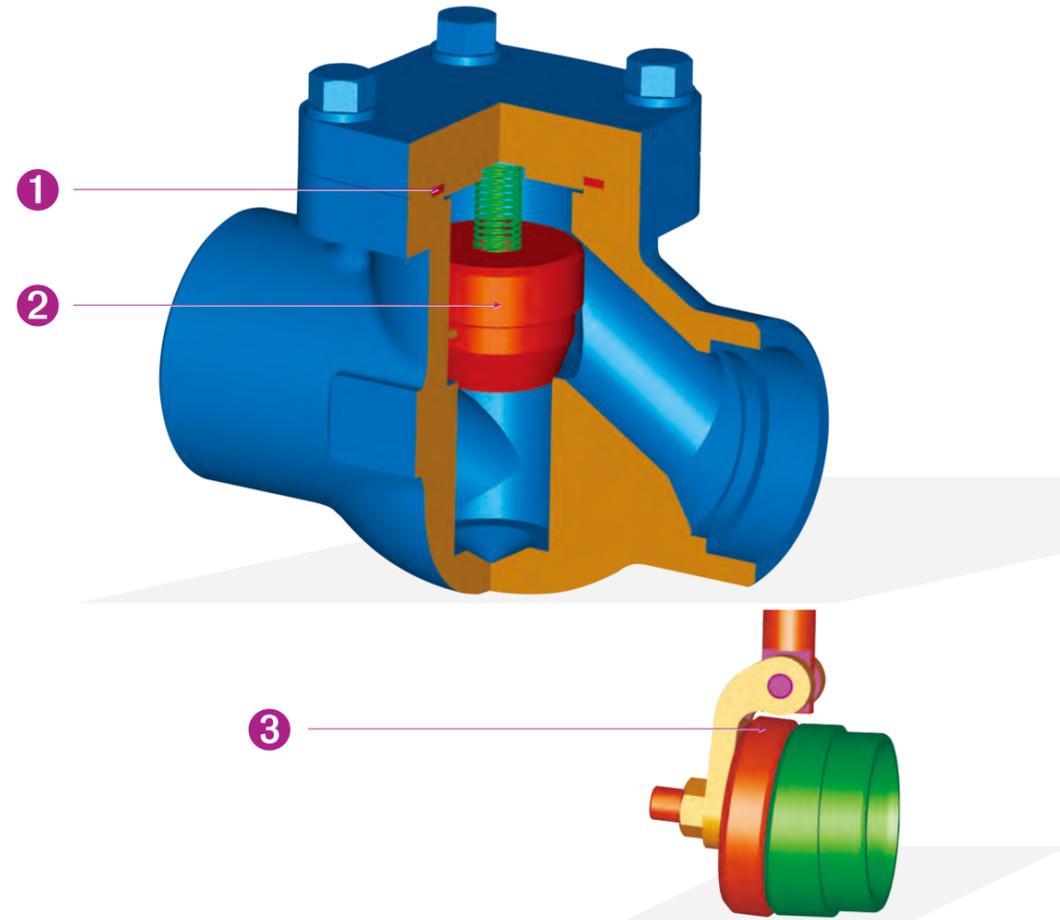
Class 2500 Y Pattern Pressure Seal Bonnet

Full Port-ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	1/2		3/4		1		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in
		140	5.51	178	7.01	216	8.50	216	8.50	279	10.98
Bore Diameter	D	12	0.47	15	0.59	21	0.83	28	1.10	38	1.50
Center to Top (Open)	H	380	14.96	405	15.94	430	16.93	480	18.90	520	20.47
Handwheel	W	180	7.09	200	7.87	250	9.84	350	13.78	350	13.78
Approx. Weight	Kg/Lb	10	22.05	13	28.66	15	33.07	25	55.12	42.5	93.70

Forged Steel Check Valve

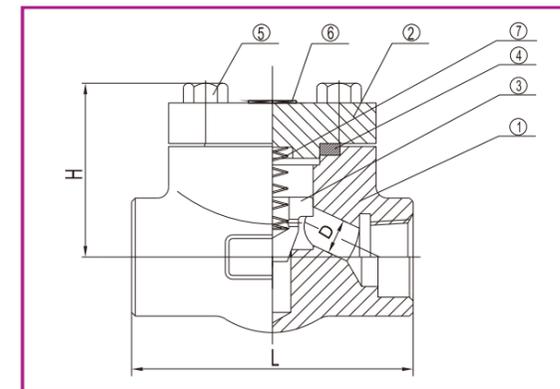
Design Features



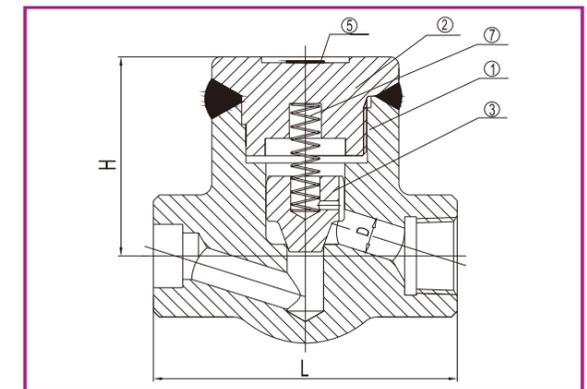
- 1 Recessed Body-Bonnet Joint design captures the stainless steel spiral wound gasket ensuring body/bonnet sealing integrity.
- 2 Body guided disc to ensure perfect alignment of disc and seat even under large flow conditions and high velocity.
- 3 Piston type are standard, swing disc style available are available upon request.

Forged Steel Lifting Check Valve

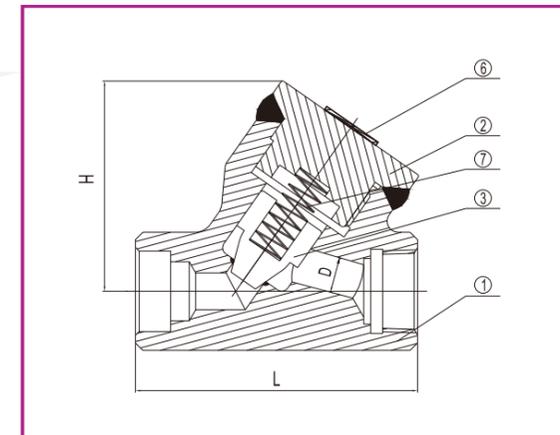
G.A. Drawing of Piston Valve



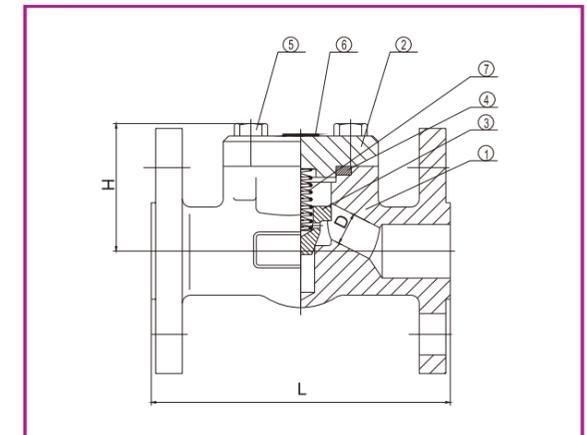
Bolted Cover



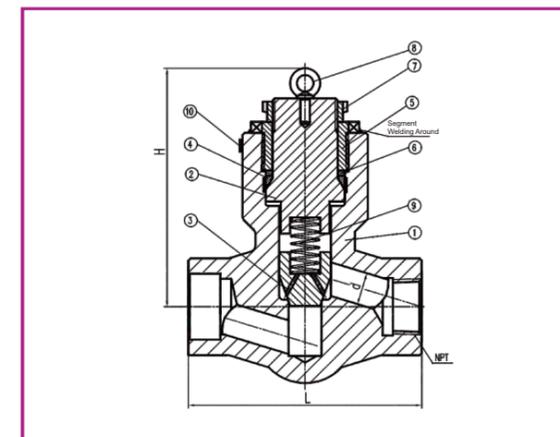
Welded Cover



Y Pattern Welded Cover



Integral Flanged Ends



Pressure Seal Bonnet Connection

Forged Steel Lifting Check Valve

Dimensions of Piston Valve

Material List

NO.	Description of Parts	Material		
		Standard	High Temperature	Stainless Steel
1	BODY	ASTM A105/STL OVERLAY	ASTM A182-F11/F22/STL OVERLAY	ASTM A182-F304/F316/STL OVERLAY
2	BONNET	ASTM A105	ASTM A182-F11/F22	ASTM A182-F304/F316
3	DISC	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316
4	GASKET	304 SPIRAL WOUND GRAPHITE	304 SPIRAL WOUND GRAPHITE	304/316 SPIRAL WOUND GRAPHITE
5	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8
6	NAME PLATE	ASTM A276 304	ASTM A276 304	ASTM A276 304
7	SPRING	ASTM A276 316	ASTM A276-316	ASTM A276-316

Class 800 Bolted Cover or Welded Cover

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2		
Full Port	Size	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2		
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
		76	2.99	76	2.99	86	3.39	102	4.02	140	5.51	140	5.51	170	6.69	
Bore Diameter	D	6.5	0.26	9.5	0.37	12.7	0.50	17.5	0.69	23	0.91	28.6	1.13	36.5	1.44	
Center to Top (Open)	H	Bolted Bonnet	48	1.89	48	1.89	53	2.09	64	2.52	80	3.15	80	3.15	100	3.94
		Welded Bonnet	49	1.93	49	1.93	58	2.28	70	2.76	96	3.78	90	3.54	125	4.92
Approx. Weight	Kg/Lb	1	2.20	1	2.20	1.5	3.31	2	4.41	4.5	9.92	6	13.23	7.5	16.53	

Class 900-1500 Bolted Cover or Welded Cover

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2		
Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
		90	3.54	104	4.09	120	4.72	150	5.91	150	5.91	180	7.09	180
Bore Diameter	D	9	0.35	12	0.47	15	0.59	21	0.83	27	1.06	32	1.26	
Center to Top (Open)	H	Bolted Bonnet	56	2.20	62	2.44	72	2.83	92.5	3.64	92.5	3.64	111	4.37
		Welded Bonnet	61.5	2.42	68.5	2.70	72.5	2.85	83.5	3.29	83.5	3.29	100.5	3.96
Approx. Weight	Kg/Lb	1.5	3.31	2.5	5.51	4	8.82	6	13.23	8.5	18.74	14.5	31.97	

Class 900-1500 Pressure Seal Bonnet

Regular and Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		120	4.72	120	4.72	140	5.51	165	6.50	186	7.32	232	9.13
Bore Diameter	D	9	0.35	12	0.47	15	0.59	21	0.83	27	1.06	30	1.18
Center to Top (Open)	H	188	7.40	188	7.40	196	7.72	220	8.66	220	8.66	238	9.37
Approx. Weight	Kg/Lb	5	11.02	6.5	14.33	8	17.64	13.5	29.76	15	33.07	25	55.12

Class 2500 Welded Cover

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		120	4.72	140	5.51	186	7.32	-	-	232	9.13	279	10.98
Bore Diameter	D	9	0.35	12	0.47	15	0.59	-	-	27	1.06	27	1.06
Center to Top (Open)	H	90	3.54	100	3.94	115	4.53	-	-	140	5.51	160	6.30
Approx. Weight	Kg/Lb	3.5	7.72	5.5	12.13	10.5	23.15	-	-	18.5	40.79	25	55.12

Forged Steel Lifting Check Valve

Dimensions of Piston Valve

Class 2500 Pressure Seal Bonnet

Regular and Full Port - ASME B16.34. Outside Screw & Yoke - Threaded and Socket Weld Ends

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2	
Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		120	4.72	140	5.51	186	7.32	-	-	232	9.13	279	10.98
Bore Diameter	D	9	0.35	12	0.47	15	0.59	-	-	27	1.06	27	1.06
Center to Top (Open)	H	172	6.77	195	7.68	214	8.43	-	-	241	9.49	260	10.24
Approx. Weight	Kg/Lb	3.5	7.72	5.5	12.13	10.5	23.15	-	-	18.5	40.79	25	55.12

Class 800 Y Pattern Welded Bonnet

Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		80	3.15	80	3.15	90	3.54	110	4.33	125	4.92	155	6.10	180	7.09
Bore Diameter	D	9.5	0.37	12	0.47	17	0.67	23	0.91	28	1.10	36	1.42	44	1.73
Center to Top (Open)	H	68.5	2.70	68.5	2.70	78.5	3.09	89.5	3.52	105.5	4.15	123.5	4.86	147.5	5.81
Approx. Weight	Kg/Lb	1	2.20	1.5	3.31	2	4.41	4.5	9.92	8	17.64	8	17.64	11	24.25

Class 900-1500 Y Pattern Welded Bonnet

Full Port - API602. Outside Screw & Yoke - Threaded and Socket Weld Ends

Full Port	Size	3/8		1/2		3/4		1		1-1/4		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
		80	3.15	90	3.54	110	4.33	125	4.92	155	6.10	180	7.09	200	7.87
Bore Diameter	D	9.5	0.37	12	0.47	15	0.59	21	0.83	27	1.06	32	1.26	38	1.50
Center to Top (Open)	H	71.8	2.83	82.5	3.25	84.2	3.31	104.7	4.12	121.7	4.79	143.3	5.64	155.2	6.11
Approx. Weight	Kg/Lb	2	4.41	3	6.61	4.2	9.26	5.2	11.46	9.5	20.94	11	24.25	15	33.07

Class 150-300-600 Overall-end Flange, Bolted Bonnet, Structure Length-ASME B16.10

Regular Port - API 602. Overall-end Flange - ASME B16.5

Regular Port	Size	1/2		3/4		1		1-1/4		1-1/2		2		
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
		Class 150	108	4.25	117	4.61	127	5	140	5.51	165	6.50	203	7.99
		Class 300	152	5.98	178	7.01	203	7.99	-	-	229	9.02	267	10.51
Bore Diameter	D	9.50	0.37	12.7	0.50	17.5	0.69	23	0.91	28.6	1.13	36.5	1.44	
		Center to Top (Open)	H	50	1.97	54	2.13	68	2.68	78	3.07	78	3.07	96
Approx. Weight	Kg/Lb	Class 150	2.5	5.51	3.3	7.28	4.3	9.48	6.5	14.33	9	19.84	13	28.66
		Class 300	3.0	6.61	3.8	8.38	5.2	11.46	-	-	10.5	23.15	15	33.07
		Class 600	3.5	7.72	4.5	9.92	6.0	13.23	-	-	12	26.46	17	37.48

Class 900-1500 Overall-end Flange, Bolted Bonnet, Structure Length-ASME B16.10

Regular Port - API 602. Overall-end Flange - ASME B16.5

Regular Port	Size	1/2		3/4		1		1-1/2		2	
End to End	L	mm	in	mm	in	mm	in	mm	in	mm	in
		216	8.50	229	9.02	254	10	305	12.01	368	14.49
Bore Diameter	D	9	0.35	12	0.47	15	0.59	27	1.06	32	1.26
Center to Top (Open)	H	53	2.09	60	2.36	70	2.76	86	3.39	105	4.13
Approx. Weight	Kg/Lb	6	13.23	7.5	16.53	12	26.46	21	46.30	32.5	71.65