

CONTENTS

Contents.....	01
Forged Steel Gate Valve Series.....	02
Threaded & SW End Forged Steel Gate Valves.....	03-04
Pressure Sealed Forged Steel Gate Valves.....	05
Threaded & SW End Forged Steel Gate Valves.....	06-07
Flange End Forged Steel Gate Valves.....	08
Forged Steel Gate Valves for Special Applications.....	09
Forged Steel Globe Valve Series.....	10
Threaded & SW End Forged Steel Globe Valves.....	11-12
Pressure Sealed Forged Steel Globe Valves.....	13
Threaded & SW End Forged Steel Globe Valves.....	14-15
Threaded & SW End Y Pattern Forged Steel Globe Valves.....	16
Y Pattern Forged Steel Globe Valves.....	17-18
Flange & BW End Forged Steel Globe Valves.....	19
Optional Actuation Types.....	20
Forged Steel Check Valve Series.....	21
Threaded & SW End Forged Steel Check Valves.....	22-25
Forged Steel Check Valves.....	26
Threaded & SW End Y Type Forged Steel Check Valves.....	27
Y Type Pressure Sealed Forged Steel Check Valves.....	28
Y Type Forged Steel Check Valves.....	29-30
Flange & BW End Forged Steel Check Valves.....	31-32
Cryogenic Forged Steel Valve Series.....	33
Cryogenic Forged Steel Gate Valves.....	34-35
Cryogenic Forged Steel Globe Valves.....	36-37
Forged Steel Bellows Sealed Valve Series.....	38
Forged Steel Bellows Sealed Gate Valves.....	39-40
Short Pattern Bellows Sealed Globe Valves.....	41-42
Long Pattern Bellows Sealed Globe Valves.....	43-45
Forged Steel Strainer Series.....	46
Forged Steel Y-type Strainers.....	47-48
ASTM Materials' Chemical Analysis & Physical Properties.....	49
Materials Table.....	50
Temperature & Pressure Rate.....	51
Connection Standards.....	52
Flange Dimensions.....	53-54

Forged Steel Gate Valve Series

Application Standards

Design and manufacture: API 602, BS5352, ANSI B16.34

Socket welded dimension: ANSI B16.11, JB/T1751

Screw ends dimension: ANSI B1.20.1, JB/T7306

Butt-welded ends: ANSI B16.25, JB/T12224

Flanged ends: ANSI B16.5, JB79

Test and inspection: API 598, GB/T13927, JB/T9092

Main Features

Bolted bonnet, outside screw and yoke

Welded bonnet, outside screw and yoke

Materials conform to ANSI/ASTM

Temperature Pressure Rate of Carbon Steel

CL150-285 P.S.I @ 100°F

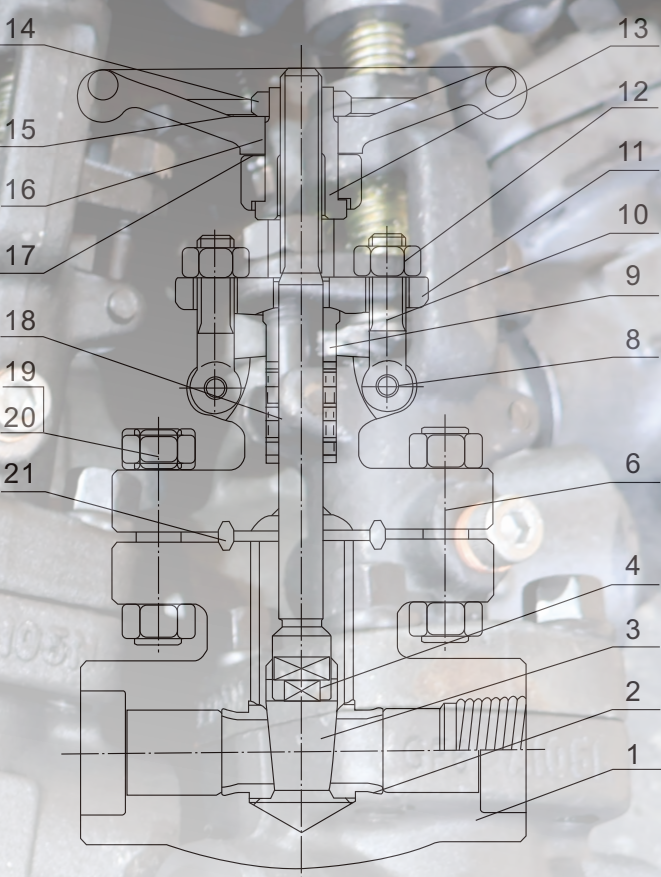
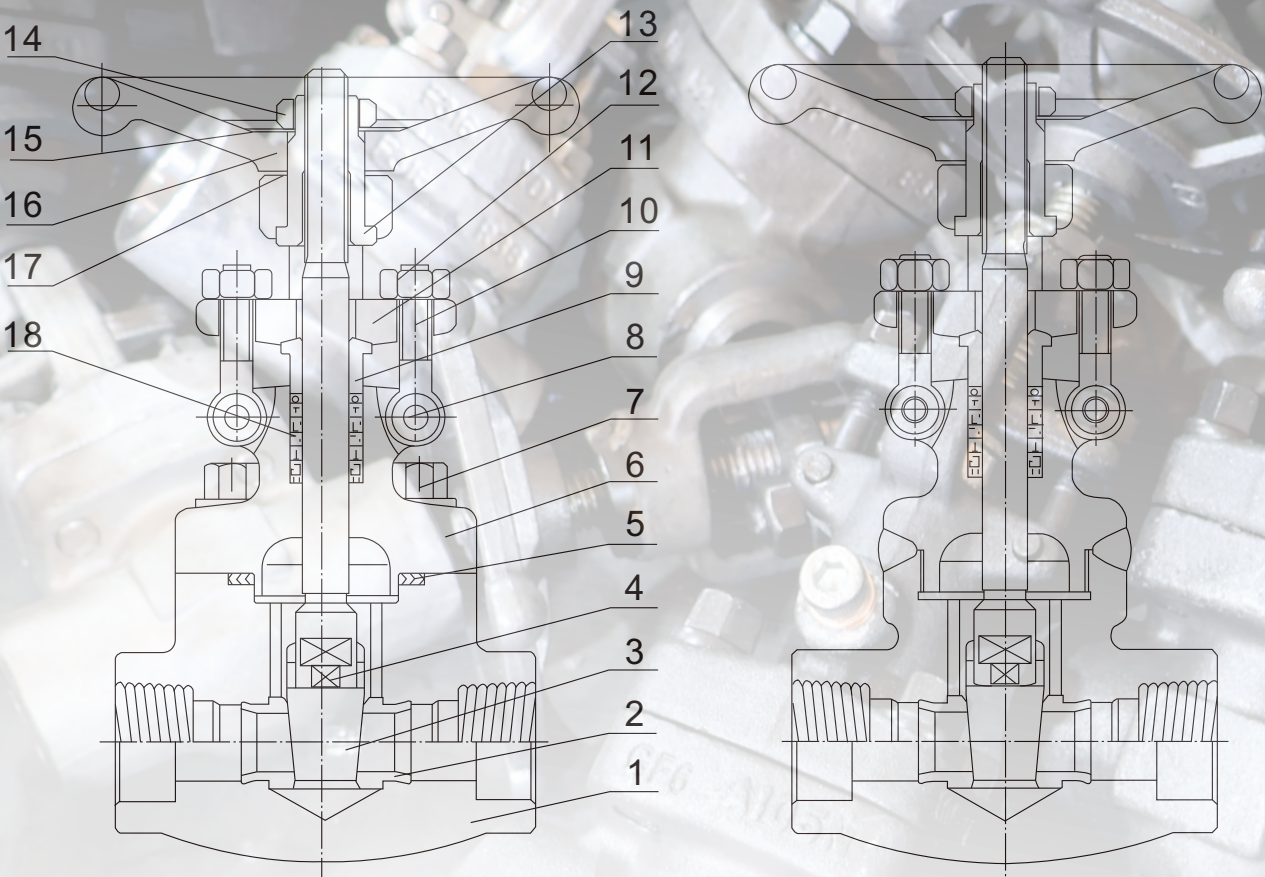
CL300-740 P.S.I @ 100°F

CL600-1480 P.S.I @ 100°F

CL800-1975 P.S.I @ 100°F

CL1500-3705 P.S.I @ 100°F





Materials List

NO.	Part Name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat	410	410HF	304	410HF	304(L)	316(L)	F51
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

Materials List

NO.	Part Name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat	410	410HF	304	410HF	304(L)	316(L)	F51
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
19	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
20	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
21	Metal ring	304	304	304	304	304(L)	316(L)	F51

Application Standards

Design and manufacture: API 602, BS5352, ANSI B16.34

Socket welded dimension: ANSI B16.11, JB/T1751

Screw ends dimension: ANSI B1.20.1, JB/T7306

Butt-welded ends: ANSI B16.25, JB/T12224

Flanged ends: ANSI B16.5, JB79

Test and inspection: API 598, GB/T13927, JB/T9092

Main Features

Threaded & pressure sealed bonnet

Materials conform to ANSI/ASTM

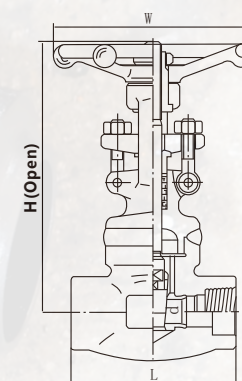
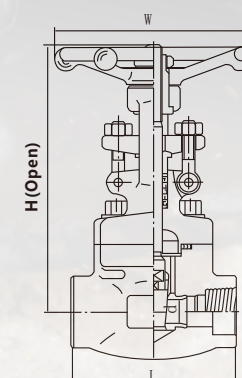
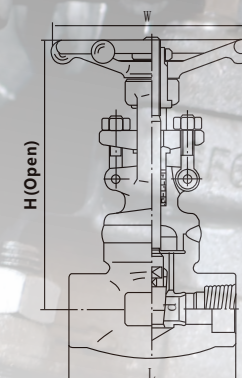
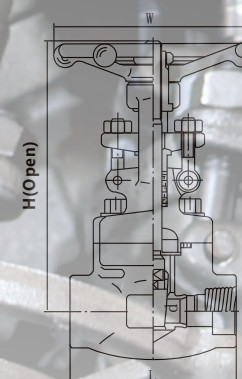
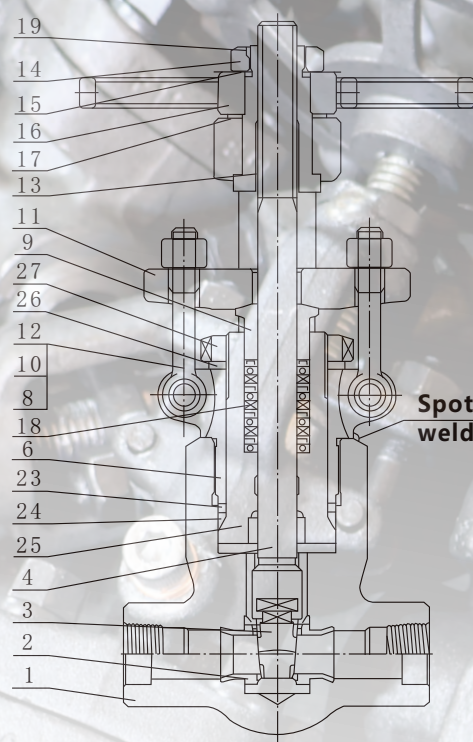
Temperature Pressure Rate of Carbon Steel

CL1500-3705 P.S.I @ 100°F

CL2500-6170 P.S.I @ 100°F

Materials List

NO.	Part Name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410HF
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F91
2	Seat	410	410HF	304	410HF	304(L)	316(L)	410HF
3	Wedge	F6a	F6a	F304	F3aHF	F304(L)	F316(L)	F6aHF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F91
8	Pin	410	410	410	410	304	304	410
9	Gland	410	410	304	410	304	316	410
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8
11	Gland flange	A105	A105	LF2	F11	F304	F304	F91
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A190
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
19	Stop nut	35	35	35	35	35	35	35
23	Seal gasket	420	420	304	304	304(L)	316(L)	420
24	P.S. ring	304	304	304	304	304	316	316
25	P.S. seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Packing nut	Cast steel	Cast steel	Cast steel	Cast steel	Stainless steel	Stainless steel	Cast steel



CL800

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	79	79	92	111	120	120	140	178	180
Handwheel Width (mm)	W	100	100	100	125	160	160	180	200	220
Height (mm)	H	161	161	163	196	223	251	290	333	370
Port Dimension(mm)	d	8	10.5	13.5	18	24	29	36.5	45	51
Weight(kg)		2.22	2.3	2.39	4.24	5.7	7.05	10.9	16.8	24

CL800

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	79	79	92	111	120	120	140	178	180
Handwheel Width (mm)	W	100	100	100	125	160	160	180	200	220
Height (mm)	H	161	161	163	196	223	251	290	333	370
Port Dimension(mm)	d	8	10.5	13.5	18	24	29	36.5	45	51
Weight(kg)		1.9	1.9	2.1	3.2	5.2	6.9	10.4	15.8	22

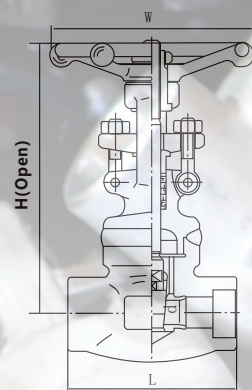
CL900-1500

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	92	92	111	120	120	140	178	180	-
Handwheel Width (mm)	W	100	100	125	160	160	180	200	220	-
Height (mm)	H	191	171	192	219	243	296	316	370	-
Port Dimension(mm)	d	8	10.5	13.5	18	24	29	36.5	45	-
Weight(kg)		2.4	2.4	4.4	6	7.2	11.4	16	23	-

CL900-1500

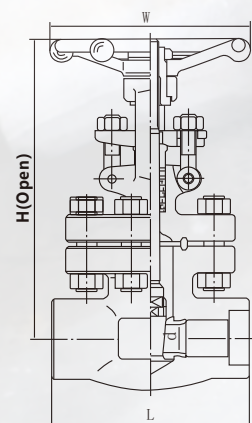
(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	92	92	111	120	120	140	178	180	-
Handwheel Width (mm)	W	100	100	125	160	160	160	200	220	-
Height (mm)	H	191	171	192	240	258	330	355	370	-
Port Dimension(mm)	d	8	10.5	13.5	18	24	29	36.5	45	-
Weight(kg)		2.4	2.4	4	4.8	7.1	11	16	22.8	-

CL2500



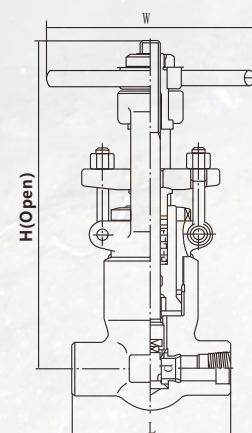
(NPS) Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	2
Face to face(mm)	L	-	111	111	120	120	140	-
Handwheel Width(mm)	W	-	125	125	160	180	220	-
Height (mm)	H	-	215	218	220	238	281	-
Port Dimension(mm)	d	-	14	14	14	19	25	-
Weight(kg)		-	7	7	8.7	11.7	17	-

CL1500-2500



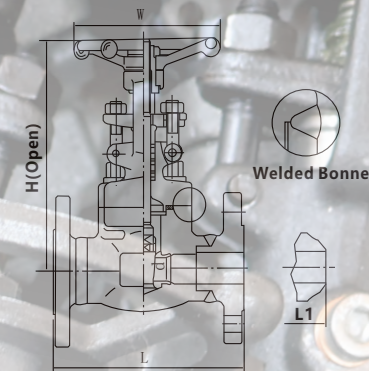
(NPS) Specification	F.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	CL1500	111	120	120	-	178	210	-
		CL2500	120	120	140	-	180	235	-
Handwheel Width (mm)	W	CL1500	110	130	130	-	180	250	-
		CL2500	130	130	250	-	300	300	-
Height (mm)	H	CL1500	277	300	390	-	400	435	-
		CL2500	293	300	390	-	435	435	-
Port Dimension(mm)	d	CL1500	14	17	22	-	35	37	-
		CL2500	14	14	14	-	25	30	-
Weight(kg)		CL1500	4.2	6.6	8.8	-	17.2	23.5	-
		CL2500	11	11.3	22.4	-	38	38	-

CL1500-2500



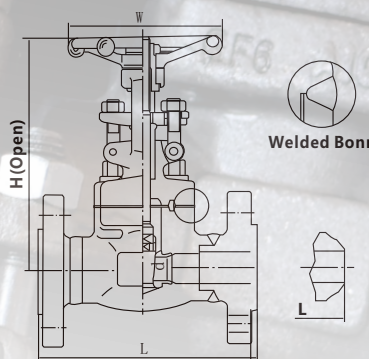
(NPS) Specification	F.P		3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face(mm)	L	CL900-1500	140	140	140	140	178	178	216
		CL2500	186	186	186	186	232	232	279
Handwheel Width (mm)	W	CL900-1500	200	200	200	200	280	280	300
		CL2500	200	200	200	200	280	280	300
Height (mm)	H	CL900-1500	318	318	318	322	467	468	540
		CL2500	325	325	325	327	467	468	540
Port Dimension(mm)	d	CL900-1500	14	14	14	19	25	30	36.5
		CL2500	14	14	14	19	25	30	36.5
Weight(kg)		CL900-1500	11.5	10.8	10.8	10.5	19.6	21.0	55.4
		CL2500	12.3	11.6	11.6	10.8	26.0	28.4	60.0

CL150-300-600



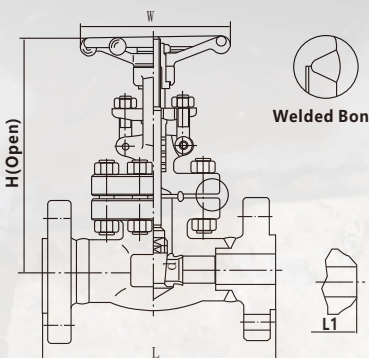
(NPS)Specification			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	CL150	L(RF) L1(BW)	-	-	108	117	127	140	165	178	190
	CL300		-	-	140	152	165	178	190	216	241
	CL600		-	-	165	190	216	229	241	292	330
Handwheel Diameter(mm)		W	-	-	100	100	125	160	160	180	200
Height/Open(mm)	CL150	H	-	-	176	184	217	226	250	290	357
	CL300, CL600		-	-	161	163	196	226	250	290	357
Flow Port Dimension(mm)		d	-	-	10	13.5	18	24	29	36.5	45
Weight(kg)	CL150	RF	-	-	3.4	3.98	6.12	7.2	10.4	15.5	24.5
		BW	-	-	2.8	3.3	5.4	6.5	8.2	12.5	20
	CL300	RF	-	-	3.77	4.89	7.23	9.6	12.64	18	26.2
		BW	-	-	3.5	4.4	6.8	8.1	9.2	15.4	22
	CL600	RF	-	-	4.2	5.8	8.8	12.1	15.6	19.5	32
		BW	-	-	4.5	5.1	8.2	10.5	12.4	20.1	28

CL900-1500



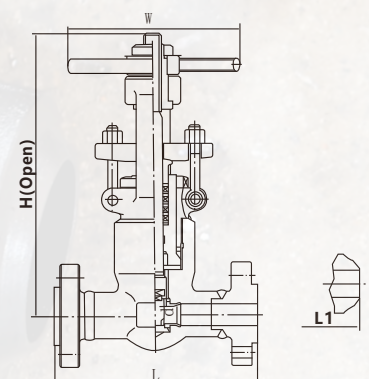
(NPS)Specification			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face (mm)	L(RF),L1(BW)	-	-	-	216	229	254	279	305	368
	L(RTJ)	-	-	-	216	229	254	279	305	371
Handwheel diameter (mm)	W	-	-	-	125	125	160	180	200	220
Height/Open (mm)	H	-	-	-	191	192	219	257	296	316
Flow Port Dimension(mm)	d	-	-	-	13.5	18	24	29	36.5	45
Weight (kg)		-	-	-	7.2	11.5	15.6	16.2	22.6	28.2

CL2500



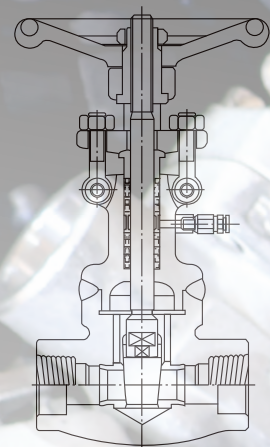
(NPS)Specification			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face (mm)	L(RF),L1(BW)	-	-	-	264	273	308	349	384	451
	L(RTJ)	-	-	-	264	273	308	352	387	454
Handwheel diameter (mm)	W	-	-	-	125	160	160	200	200	240
Height/open (mm)	H	-	-	-	207	240	258	352	355	370
Flow port dimension(mm)	d	-	-	-	13.5	13.5	19	24	30	36.5
Weight(kg)		-	-	-	19.5	21.5	42	42	65	95

CL2500



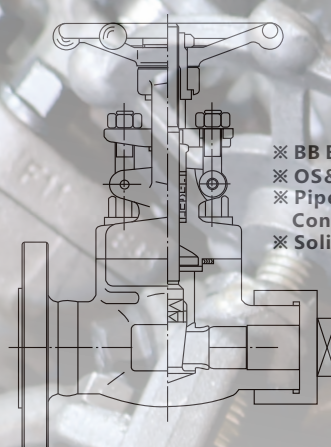
(NPS)Specification			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face(mm)	L(RF),L1(BW)	-	-	-	264	273	308	-	384	451
	L(RTJ)	-	-	-	264	273	308	-	387	454
Handwheel diameter(mm)	W	-	-	-	200	200	200	-	280	300
Height/Open (mm)	H	-	-	-	325	325	327	-	478	540
Flow Port Dimension(mm)	d	-	-	-	13.5	13.5	19	-	30	36.5
Weight(kg)		-	-	-	14.6	16.8	17.6	-	25	31.9

Please contact sales department for integral flanged forged steel gate valves



Vacuum Gate Valve

- ※ Welded bonnet
- ※ OS&Y
- ※ Double Packing
- ※ Distance ring
- ※ Injector sealing gum valves
- ※ Solid wedge



Empty Drain Valve

- ※ BB Bonnet
- ※ OS&Y
- ※ Pipe Cap Connection
- ※ Solid wedge

Forged Steel Globe Valve Series

Application Standards

Design and manufacture: MSS-SP118

Socket welded dimension: ANSI B16.11, JB/T1751

Screw ends dimension: ANSI B1.20.1, JB/T7306

Butt-welded ends: ANSI B16.25, JB/T12224

Flanged ends: ANSI B16.5, JB79

Test and inspection: API 598, GB/T13927, JB/T9092

Main Features

Bolted bonnet, outside screw and yoke

Welded bonnet, outside screw and yoke

Materials conform to ANSI/ASTM

Temperature Pressure Rate of Carbon Steel

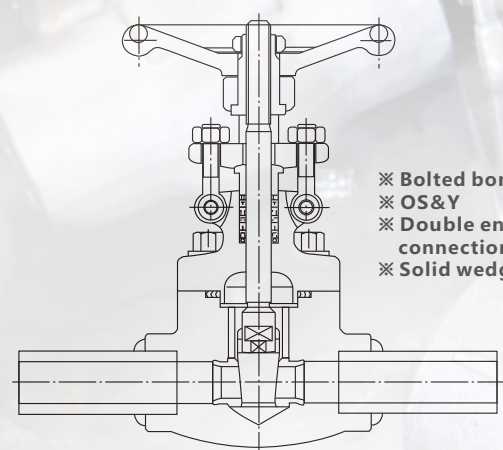
CL150-285 P.S.I @ 100°F

CL300-740 P.S.I @ 100°F

CL600-1480 P.S.I @ 100°F

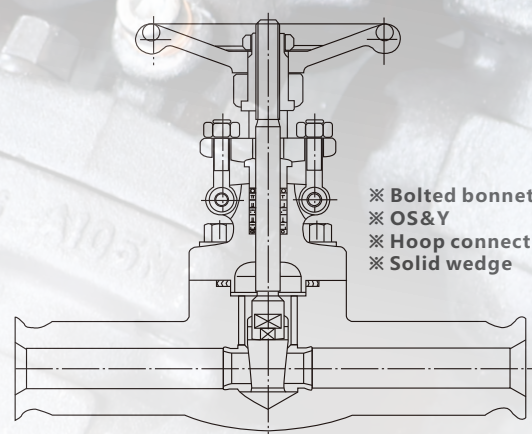
CL800-1975 P.S.I @ 100°F

CL1500-3705 P.S.I @ 100°F



Coupling Pipe Valves

- ※ Bolted bonnet
- ※ OS&Y
- ※ Double end pipe connection
- ※ Solid wedge



Hoop Gate Valve

- ※ Bolted bonnet
- ※ OS&Y
- ※ Hoop connection
- ※ Solid wedge

CLASS 800 API602-BS5352 Reduced port & full port	Temperature Pressure Rate	Materials		
		Body/Bonnet	Trim	Bolt
	1975 psi @ 100°F	Carbon Steel	13Cr	B7

