



Bolted Bonnet



Welded Bonnet



Pressure Seal Bonnet

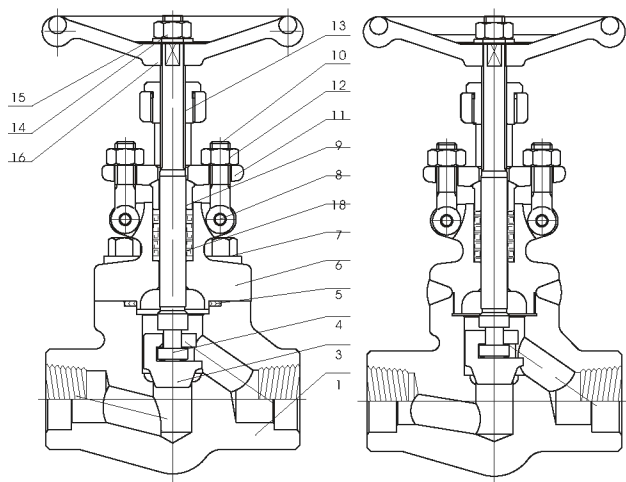
Globe valves are available in Three bonnet designs. The first design is the Bolted Bonnet, with male-Female joint, spiral wound gasket, made in F304L/graphite, Ring joint gasket are also available on request. The second design is the welded bonnet, with a threaded and seal welded joint. On request a full penetration strength welded joint is available. The third design is the pressure seal bonnet, with a threaded and pressure seal bonnet joint.

GLOBE Valve Design Construction and Specifications:

Globe valves conform to API 602, and ASME B 16.34
 Each are tested according to API 598, and marking is per MSS SP-25

Construction is as follows:

Full port or Conventional Port
 Outside Screw and Yoke (OS&Y)
 Two piece self-aligning packing gland
 Bolted bonnet with spiral wound gasket, threaded
 and seal welded bonnet or threaded and pressure seal bonnet
 Integral backseat
 Socket weld Ends to ASME B16.11
 Screwed Ends (NPT) to ANSI/ASME B1.20.1



Application standards

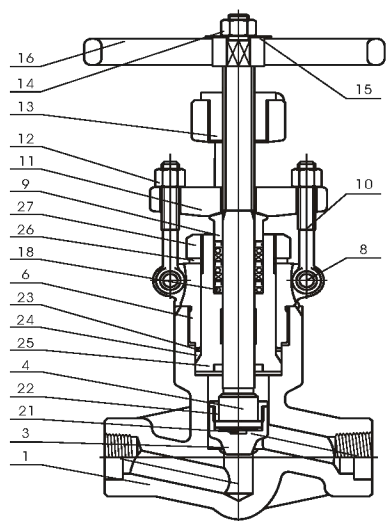
- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials: A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20 Alloy.

Carbon steel temperature-pressure rate

CL150-285 PS.I @ 100° F
 CL300-740 PS.I @ 100° F
 CL600-1480 PS.I @ 100° F
 CL800-1975 PS.I @ 100° F
 CL1500-3705 PS.I @ 100° F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHF	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	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	316+ Flexible graphite	316+ 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
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite



Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11;JB/T1751
 - Screw ends conform to ANSI B1.20.1;JB/T7306
 - Butt-welded ends conform to ANSI B16.25;JB/T12224
 - Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
A threaded and pressure seal bonnet; Y type and T type
- Materials conform to ANSI/ASTM.
- Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F91; Monel; 20 Alloy.

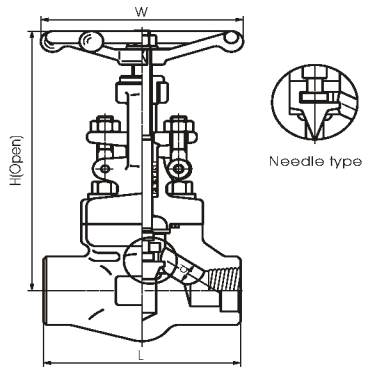
Carbon steel temperature-pressure rate

CL1500-3705 PS.I @ 100° F

CL2500-6170 PS.I @ 100° F

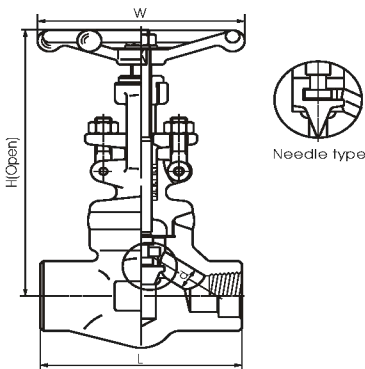
Main part materials list

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+HF	LF2	F11+HF	F304(L)	F316(L)	F91+HF
3	Disc	410	410	304	410	304(L)	316(L)	410+HF
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	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	420
22	Disc nut	410	410	410	410	304(L)	316(L)	410
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	316(L)
24	P.S. ring	304	304	304	304	304	316	304
25	P.S. seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Draw-in stud	Cart steel	Cart steel	Cart steel	Cart steel	Stainless steel	Stainless steel	Cart steel



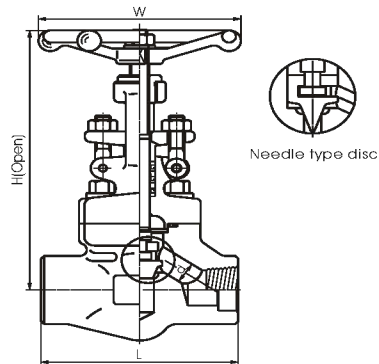
CL800 Bolted bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS 5352.

Specification (NPS)	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	L	79	79	92	111	120	152	172	200	
Handwheel diameter	W	100	100	100	125	160	160	180	200	
Height	H	164	164	164	203	224	260	300	355	
Height (angle dimension)	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.9	2.28	2.37	4.3	5.75	7.8	12.5	17.5	



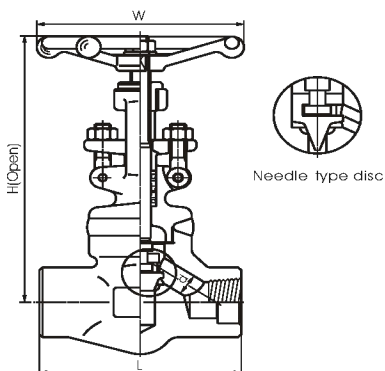
CL800 Welded bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS 5352

Specification (NPS)	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	L	79	79	92	111	120	152	172	200	
Handwheel diameter	W	100	100	100	125	160	160	180	200	
Height	H	164	164	164	203	224	260	300	355	
Height (angle dimension)	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.7	1.7	1.9	3.3	5.2	6.8	10.6	13.8	



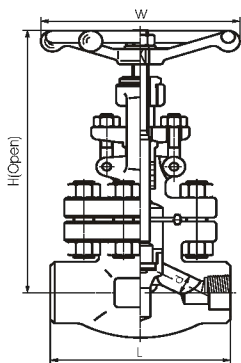
CL900-CL1500 Bolted bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS 5352

Specification (NPS)	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	L	92	111	111	120	152	172	200	220	-
Handwheel diameter	W	100	125	125	160	160	180	200	240	-
Height	H	171	207	207	240	258	330	355	370	-
Height (angle dimension)	d	7	12	15	20	28	32	40	45	-
Weight (Kg)		2.3	3.7	3.6	6.8	7.6	11.6	15	21.9	-



CL900-CL1500 Welded bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS 5352

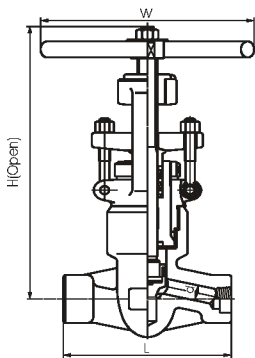
Specification (NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	92	111	111	120	152	172	200	220	-
Handwheel diameter	W	100	125	125	160	160	180	200	240	-
Height	H	171	207	207	240	258	330	355	370	-
Height (angle dimension)	d		12	15	20	28	32	40	45	-
Weight (Kg)		270	3.4	3.3	6.0	5.6	10.3	14.2	18.0	-



CL900-CL1500

Bolted bonnet, full port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

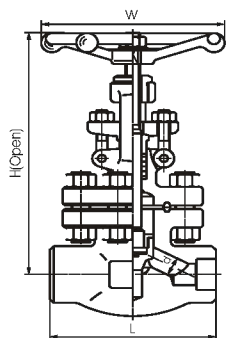
Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	110	110	150	150		210	235
Handwheel diameter	W	110	110	130	210		180	250
Height	H	227	227	300	307		40	448
Height(angle dimension)	d	9	12	15	20		32	40
Weight(Kg)		5	5	10	11.5		22	37



CL900-CL1500

Pressure seal bonnet, full port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	140	140	140	178	178	216	
Handwheel diameter	W	200	200	200	280	280	300	
Height	H	320	320	320	440	440	490	
Height(angle dimension)	d	12	15	20	28	32	40	
Weight(Kg)		11.5	10.8	10.5	19.6	21.1	55.4	

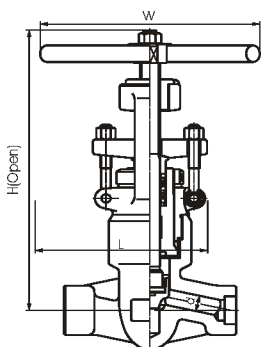


Welded bonnet

CL2500

Bolted bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

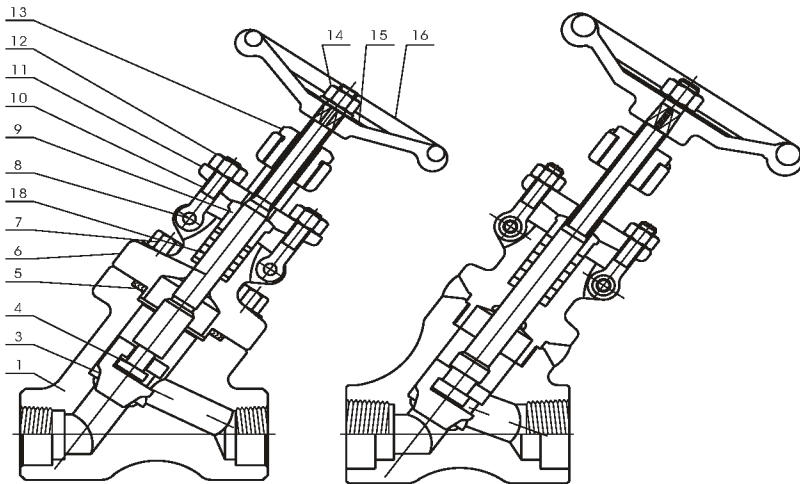
Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	150	150	210		235	235	
Handwheel diameter	W	130	130	250		300	300	
Height	H	293	300	390		435	435	
Height(angle dimension)	d	11	14	19		28	35	
Weight(Kg)		10	10.3	22.4		38	38	



CL2500

Pressure seal bonnet, full port outside screw and yoke(OS & Y)
Socket welded ends, design conform to ASME B16.34

Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	186	186	186	232	232	279	
Handwheel diameter	W	200	200	200	280	280	300	
Weight(Kg)		12.3	11.6	10.8	26.0	28.4	60	
Height	H	375	378	380	490	490	540	
Height(angle dimension)	d	11	14	19	25	28	35	



Application standards

- 1、Design and manufacture conform to BS5352 MSS SP-118;
- 2、Connection ends conform to:
 - 1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - 2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - 3)Butt-welded ends conform to ANSI B16.25;JB/T12224
 - 4)Flanged ends conform to ANSI B16.5;JB79
- 3、Test and inspection conform to: API 598; GB/T13927; JB/T9092
- 4、Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- 5、Materials conform to ANSI/ASTM.
- 6、Main materials:
 - A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20 Alloy; Hastelloy.

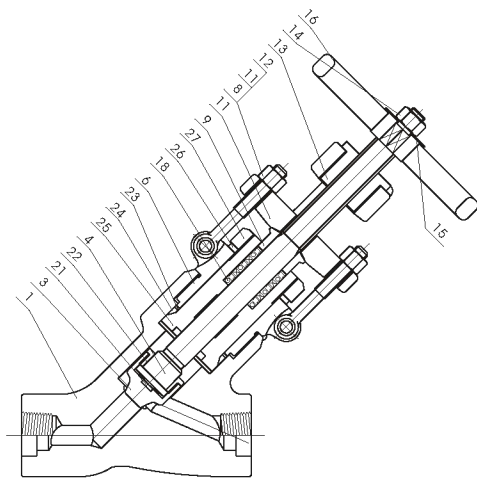
Carbon steel temperature-pressure rate

CL150-285 PS.I @ 100° F
 CL300-740 PS.I @ 100° F
 CL600-1480 PS.I @ 100° F
 CL800-1975 PS.I @ 100° F
 CL1500-3705 PS.I @ 100° F

Main part 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+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	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	316+ Flexible graphite	316+ 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
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

PRESSURE SEAL Y TYPE GLOBE VALVES



Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11;JB/T1751
 - Screw ends conform to ANSI B1.20.1;JB/T7306
 - Butt-welded ends conform to ANSI B16.25;JB/T12224
 - Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to:
API 598; GB/T13927; JB/T9092
- Structure features:
A threaded and pressure seal bonnet; Y type and T type
- Materials conform to ANSI/ASTM.
- Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L); F347;
F321; F51; Monel; 20 Alloy; Hastelloy.

Carbon steel temperature-pressure rate

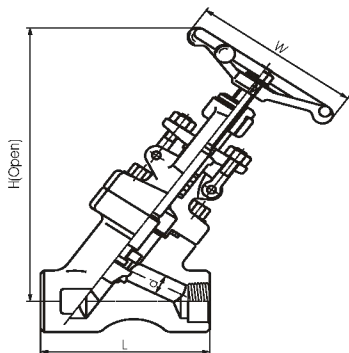
CL1500-3705 PS.I @ 100° F

CL2500-6170 PS.I @ 100° F

Main part materials list

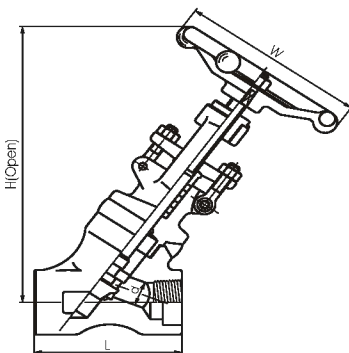
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410HF
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F91+HF
3	Disc	410	410	304	410	304(L)	316(L)	410+HF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F91
8	Pin	410	410	410	410	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	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	420
22	Disc nut	410	410	410	410	304(L)	316(L)	410
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	316(L)
24	P.S. ring	304	304	304	304	304	316	304
25	P.S. seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Draw-in stud	Cart steel	Cart steel	Cart steel	Cart steel	Stainless steel	Stainless steel	Cart steel

Y TYPE GLOBE VALVES



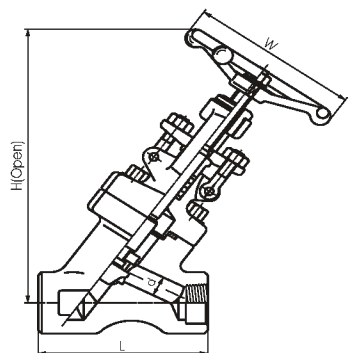
CL800 Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

Specification (NPS)	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	L	98	98	98	111	140	140	155	170	
Handwheel diameter	W	100	100	100	125	160	160	180	200	
Height	H	180	180	180	188	280	280	295	350	
Height(angle dimension)	d	7	9	13	17.5	23	30	35	46	
Weight(Kg)		2.6	2.6	3.8	4.6	9.3	9.3	14	19.6	



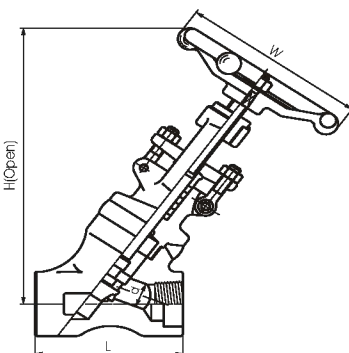
CL800 Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

Specification (NPS)	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	L	79	79	92	100	140	140	155	170	
Handwheel diameter	W	100	100	100	125	160	160	180	200	
Height	H	198	198	198	207	280	280	295	350	
Height(angle dimension)	d	7	9	13	17.5	23	30	35	46	
Weight(Kg)		1.8	1.8	2.0	3.5	8.0	8.0	12	16	



CL900-CL1500 Bolted bonnet, full port & outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

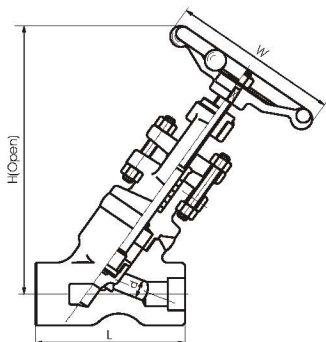
Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	98	111	111	140	140	155	170	
Handwheel diameter	W	100	125	125	160	160	180	200	
Height	H	175	175	215	215	254	305	305	
Height(angle dimension)	d	9	12	15	20	28	32	40	
Weight(Kg)		2.6	4.6	4.6	9.3	9.3	14	19.6	



CL900-CL1500 Welded bonnet, full port & outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

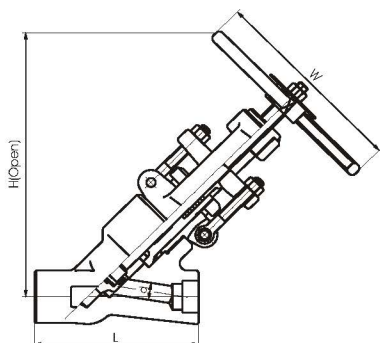
Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	92	100	100	140	140	155	170	
Handwheel diameter	W	100	125	125	160	160	180	200	
Height	H	175	207	207	280	280	295	350	
Height(angle dimension)	d	9	12	15	20	28	32	40	
Weight(Kg)		1.8	3.5	3.5	8.0	8.0	12	16	

Y TYPE GLOBE VALVES



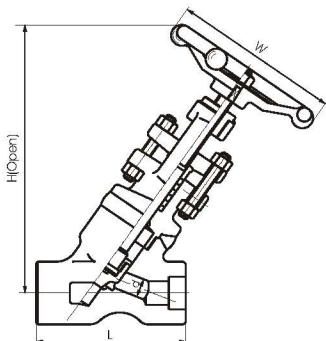
CL2500 Welded bonnet, full port outside screw and yoke(OS & Y)
Socket welded, design conform to ASME16.34

Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	186	186	186	186	232	232	310
Handwheel diameter	W	200	200	200	200	280	280	300
Height	H	329	329	329	329	350	350	383
Height (angle dimension)	d	9	11	14	19	25	28	35
Weight(Kg)		12.3	12.3	11.6	10.8	28.0	26.4	43.8



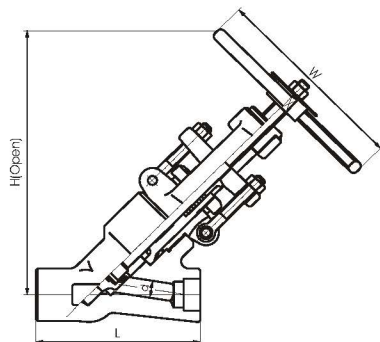
CL2500 Pressure seal bonnet, full port outside screw and yoke(OS & Y)
Socket welded, design conform to ASME16.34

Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	186	186	186	186	232	232	310
Handwheel diameter	W	200	200	200	200	280	280	300
Height	H	333	333	333	333	406	406	524
Height (angle dimension)	d	9	11	14	19	25	28	35
Weight(Kg)		12.3	12.3	11.6	10.8	28.0	26.4	43.8



CL4500 Welded seal bonnet full port outside screw and yoke(OS & Y)
Socket welded, design conform to ASME16.34

Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	155	155	155	155		225	225
Handwheel diameter	W	180	180	180	180		400	400
Height	H	350	350	350	380		453	453
Height (angle dimension)	d	9	11	11	15		26	28
Weight(Kg)		9.6	9.6	9.4	10.5		34	36



CL4500 Pressure seal bonnet, full port outside screw and yoke(OS & Y)
Socket welded, design conform to ASME16.34

Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	200	200	200	200	250	250	330
Handwheel diameter	W	280	280	280	280	300	300	320
Height	H	400	400	400	400	460	460	540
Height (angle dimension)	d	9	11	11	15	20	26	28
Weight(Kg)		30	30	30	30	30	36	58