

Your Professional Valve Solution



www.tipvalve.com

Forged steel check valve



Tipvalve is specialized in industrial valves' production, research and development, sales and service.

Offer the valve solution in rigorous working condition for customers, especially in atrocious working condition, sea water and other corrosive media.

Tipvalve is widespread recognized relying on rich experiences and technical support.

TIPVALVE INDUSTRIAL GROUP LTD.



FORGED STEEL CHECK VALVES ,1/4-2" (8-50mm)
THREADED, SOCKET WELD, & FLANGED
ASME CLASS 800, 1500, 2500
FLANGED ASME CLASSES 150, 300, 600, 1500



Bolted Bonnet



Welded Bonnet



Pressure Seal Bonnet

TIPVALVE is 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. The check valves are also available in three different design configurations. These are piston check, ball check, or swing check designs.

Check Valve Design Construction and Specifications:

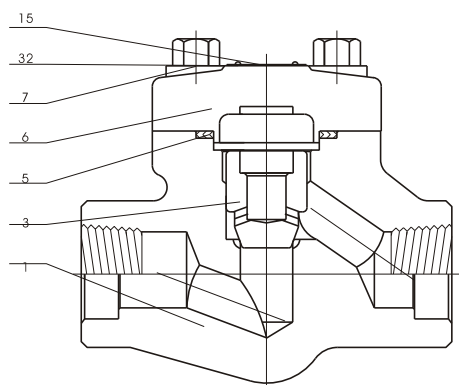
TIPVALVE check valves conform to API 602, and ASME B 16.34
Each are tested according to API 598, and marking is per MSS SP-25

Construction is as follows:

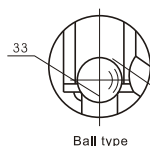
Full port or Conventional Port
Outside Screw and Yoke (OS&Y)
Two piece self-aligning packing gland
Bolted bonnet with spiral wound gasket, threaded
and seal welded bonnet or threaded and pressure seal bonnet
Integral backseat
Socket weld Ends to ASME B16.11
Screwed Ends (NPT) to ANSI/ASME B1.20.1



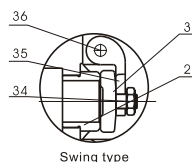
Female threaded and socket welded check valves



Please mark in you offer if you need load spring



Ball type



Swing type

Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection end conform to :
 - Socket welded end 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
- 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

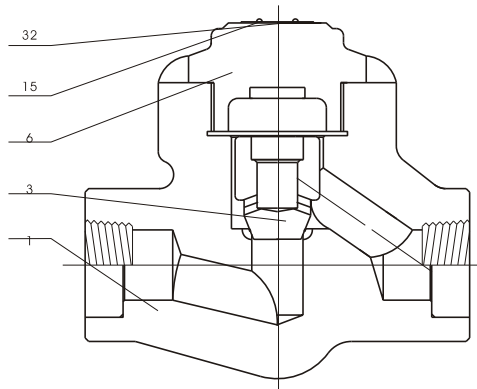
CL150-285 P.S.I @ 100 ° F
CL300-740 P.S.I @ 100 ° F
CL600-1480 P.S.I @ 100 ° F
CL800-1975 P.S.I @ 100 ° F
CL1500-3705 P.S.I @ 100 ° F

Main part materials list

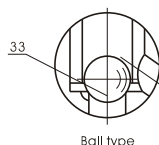
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat ring	410	410HF	304	410HF	304(L)	316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible 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
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL
34	Disc nut	2H	2H	8	8	8(M)	8(M)	8M
35	Hinge	410	410	304	410	316(L)	316(L)	F51
36	Pin	410	410	304	410	304(L)	316(L)	F51



Female threaded and socket welded check valves



Please mark in you offer if you need loadspring



Ball type

Application standards

- 1、Design and manufacture conform to BS5352 MSS SP-118;
- 2、Connection end conform to :
 - 1)Socket welded end 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:
Welded bonnet
- 5、Materials conform to ANSI/ASTM.
- 6、Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L); F347;
F321; F51; Monel; 20 Alloy.

Carbon steel temperature-pressure rate

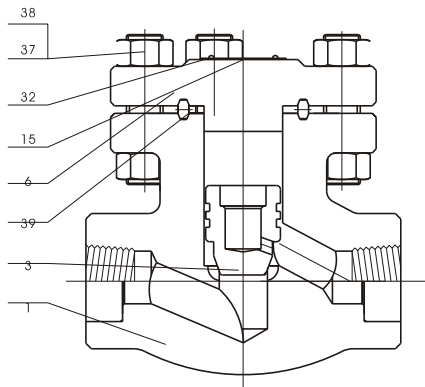
CL150-285 P.S.I @ 100° F
CL300-740 P.S.I @ 100° F
CL600-1480 P.S.I @ 100° F
CL800-1975 P.S.I @ 100° F
CL1500-3705 P.S.I @ 100° F
CL2500-6170 P.S.I @ 100° F

Main part materials list

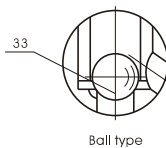
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	304	304	304	304	304(L)	316(L)	F51



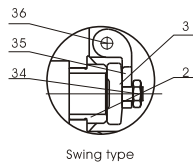
Female threaded and socket welded check valves



Please mark in you offer if you need load spring



Ball type



Swing type

Application standards

- Design and manufacture conform to BS5352MSS SP-118;
- Connection end conform to :
 - Socket welded end 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:
Gasket for bonnet connect adopt metal ring ,
Bolted bonnet, Welded bonnet
- 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 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
CL2500-6170 P.S.I @ 100 ° F

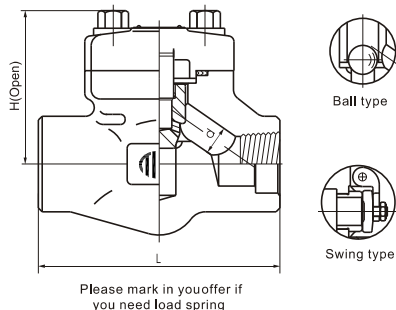
Main part materials list

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	LF2	F11	F304(L)	F316(L)	F51
2	Seat ring	410	410HF	304	410HF	304(L)	316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL
34	Disc nut	2H	2H	8	8	8(M)	8(M)	8M
35	Hinge	410	410	304	410	316(L)	316(L)	F51
36	Pin	410	410	304	410	304(L)	316(L)	F51
37	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
38	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
39	Metal ring	304	304	304	304	304(L)	316(L)	F51



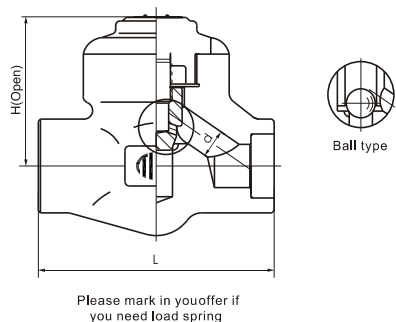
Female threaded and socket welded check valves

CL800 Bolted bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



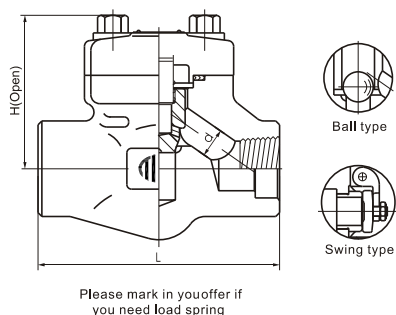
Specification (NPS)	R.P F.P	1/2		3/4		1		1 1/4		1 1/2		2	
		1/4	3/8	1/2	3/4	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2
Face to face	L	Lift	79	79	92	111	120	152	172	200			
		Swing	79	79	92	111	120	120	140	178			
Height	H	Lift	61	61	61	78	84	84	118	132			
		Swing	61	61	61	78	84	84	120	133			
Height (angle dimension)	d	Lift	7	9	13	17.5	23	30	35	46			
		Swing	8	10.5	13.5	18	24	29	36.5	45			
Weight(Kg)		Lift	1.2	1.5	1.7	3.3	4.2	4.2	10.5	12.5			
		Swing	1.4	1.5	1.7	3.3	4.2	4.2	8.5	10.9			

CL800 Welded bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



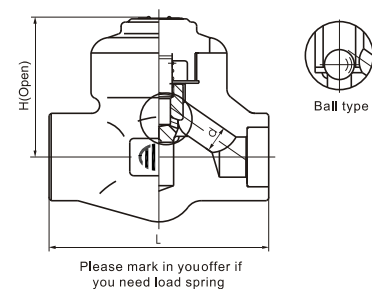
Specification (NPS)	R.P F.P	1/2		3/4		1		1 1/4		1 1/2		2		2 1/2	
		1/4	3/8	1/2	3/4	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2	2
Face to face	L	79	79	92	111	120	152	172	200						
Height	H	61	61	61	78	84	103	118	132						
Height (angle dimension)	d	7	9	13	17.5	23	30	35	46						
Weight(Kg)		1.2	1.3	1.5	3.0	3.9	6.0	10	12						

CL900-CL1500 Bolted bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



Specification (NPS)	R.P F.P	1/2		3/4		1		1 1/4		1 1/2		2	
		1/4	3/8	1/2	3/4	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2
Face to face	L	Lift	92	111	111	120	152	172	200				
		Swing	92	111	111	120	120	140	178				
Height	H	Lift	61	78	78	84	103	118	132				
		Swing	61	78	78	84	101	120	133				
Height (angle dimension)	d	Lift	7	12	15	20	28	32	40				
		Swing	8	10.5	13.5	18	24	29	45				
Weight(Kg)		Lift	1.5	3.4	3.3	4.2	6.3	10.5	12.5				
		Swing	1.5	3.4	3.3	4.2	5.0	8.5	10.9				

CL900-CL1500 Welded bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



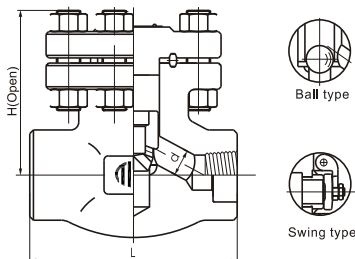
Specification (NPS)	R.P F.P	1/2		3/4		1		1 1/4		1 1/2		2	
		1/4	3/8	1/2	3/4	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2
Face to face	L	92	111	111	120	152	172	200					
Height	H	61	78	78	84	103	118	132					
Height (angle dimension)	d	7	12	15	20	28	32	40					
Weight(Kg)		1.3	3.1	3.1	3.9	5.8	10.0	11.5					



Female threaded and socket welded check valves

CL900-CL1500

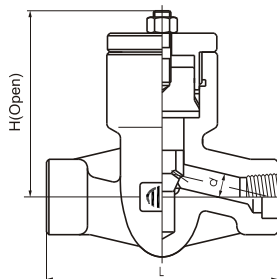
Bolted bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352



Specification (NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	110	110	110	110	150	150	210	235
Height	H	166	166	171	207	240	258	330	355
Height (angle dimension)	d	Lift	9	10	12	15	20	28	32
		Swing	8	10.5	13.5	18	24	29	36.5
Weight(Kg)	Lift	2	2.1	1.9	4	5.1	7.2	12.1	14
		Swing	1.9	2.3	2.3	4.35	5.25	7.8	12.5

CL900-CL1500

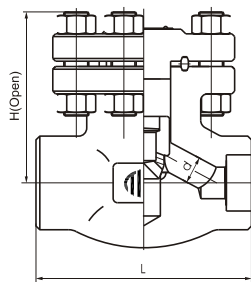
Pressure seal bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352



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	140	140	140	178	216	216			
Height	H	117	117	117	152	195	195			
Height (angle dimension)	d	12	15	20	28	32	40			
Weight(Kg)		7.5	7.0	6.8	18.5	20.3	22			

CL2500

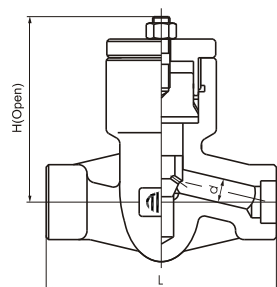
Bolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



Specification (NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	150	150	150	150	210	235	235	235
Height	H	166	166	171	207	240	258	330	355
Height (angle dimension)	d	7.5	10.5	11	14	19	25	28	35
Weight(Kg)		1.9	2.3	17	46	62	73	58	85

CL2500

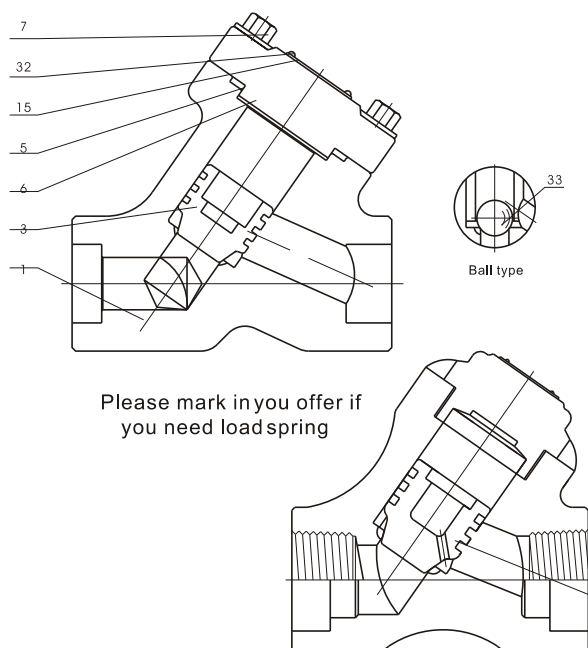
Pressure seal bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



Specification (NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L			186	186	186	232	232	279
Height	H			117	117	117	152	152	195
Height (angle dimension)	d			11	14	19	25	28	35
Weight(Kg)				11.8	11	10.5	23	26.4	39



Female threaded and socket welded check valves



Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection end conform to :
 - Socket welded end 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, Welded bonnet
- 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

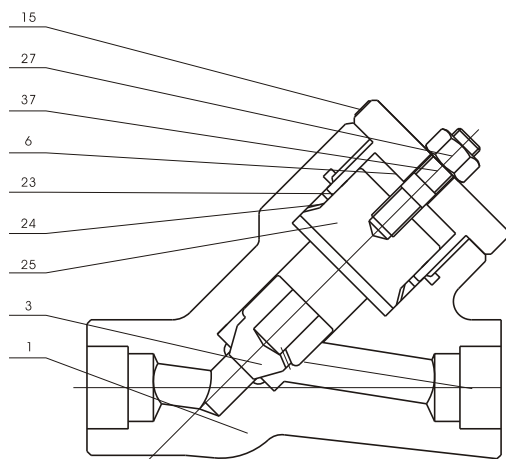
CL1500-3705 P.S.I @ 100° F
CL2500-6170 P.S.I @ 100° F
CL4500-1111 P.S.I @ 100° F

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	LF2	F11	F304(L)	F316(L)	F51
3	Disc	410	410HF	304	410HF	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
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL



Y type pressure sealed check valves



Application standards

- Design and manufacture conform to ASME B16.34MSS SP-118 ;
- Connection end conform to :
 - Socket welded end 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.

Carbon steel temperature-pressure rate

CL1500-3705 P.S.I @ 100° F

CL2500-6170 P.S.I @ 100° F

CL4500-1111 P.S.I @ 100° F

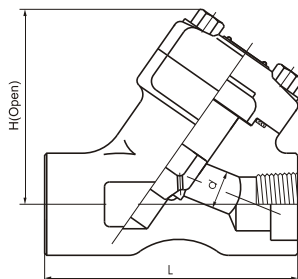
Main part materials list

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
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	410
24	P.S.ring	304	304	304	304	316L	316L	316L
25	P.S.seat	F410	F410	F304	F410	F304	F316	F51
27	Lift nut	2H	2H	8	8	8(M)	8(M)	8M
37	Lift stud	B7	B7	L7	B16	B8(M)	B8(M)	B8M



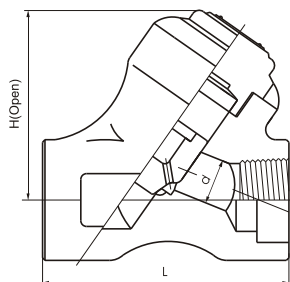
Y type check valves

CL800 Bolted bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



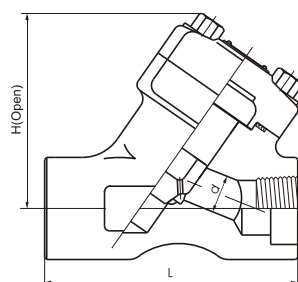
Specification (NPS)	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	98	98	98	111	140	140	155	170	
Height	H	70	70	70	100	110	120	120	150	
Height(angle dinmension)	d	7	10	13	17.5	23	30	35	46	
Weight(Kg)		2.2	2.2	2.1	4.2	9	8.9	10	18.6	

CL800 Welded bonnet, full port and reducing port Threaded, butt-welded or socket welded ends; design to BS5352



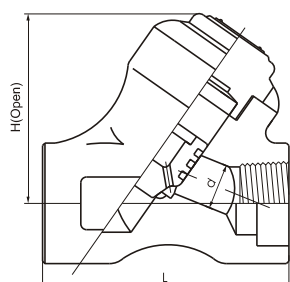
Specification (NPS)	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	79	79	92	100	140	140	155	170	
Height	H	65	65	65	95	105	110	110	140	
Height(angle dinmension)	d	7	10	13	17.5	23	30	35	46	
Weight(Kg)		1.8	1.8	2.0	3.5	8.0	8.0	12	16	

CL900-CL1500 Bolted bonnet, full port 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
Face to face	L	98	111	111	140	140	155	170
Height	H	70	70	100	110	110	120	150
Height(angle dimension)	d	9	12	15	20	28	32	40
Weight(Kg)		2.1	4.2	9	8.9	10	18.6	20

CL900-CL1500 Welded bonnet, full port Threaded, butt-welded or socket welded ends; design to BS5352



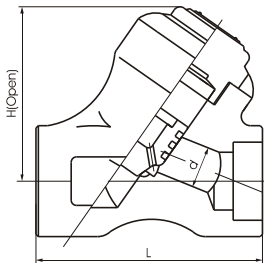
Specification (NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	92	100	100	140	140	155	170
Height	H	65	65	65	105	110	110	140
Height(angle dimension)	d	9	12	15	20	32	28	40
Weight(Kg)		2.0	3.5	3.5	8.0	12	12	18



Y type check valves

CL2500

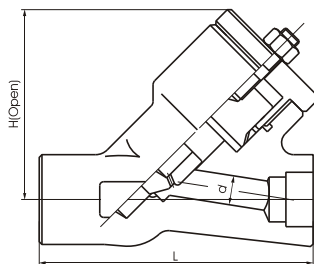
Welded bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



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
Height	H	115	115	120	150	150	150	160
Height(angle dimension)	d	9	11	14	19	25	28	35
Weight(Kg)		11.2	11.5	10.6	10.8	25	22	39

CL2500

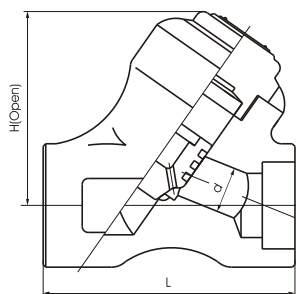
Pressure sealbolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



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
Height	H	233	233	233	233	256	256	330
Height(angle dimension)	d	9	11	14	19	25	28	35
Weight(Kg)		11.2	11.5	10.6	10.8	25	22	39

CL4500

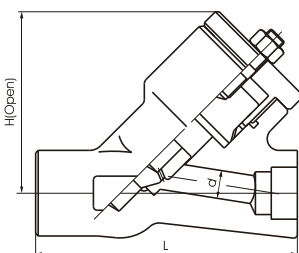
Welded bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



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
Height	H	120	120	120	145		160	160
Height(angle dimension)	d	9	11	11	15		26	28
Weight(Kg)		8.7	8.7	8.7	8		16.5	16

CL4500

Pressure sealbolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34



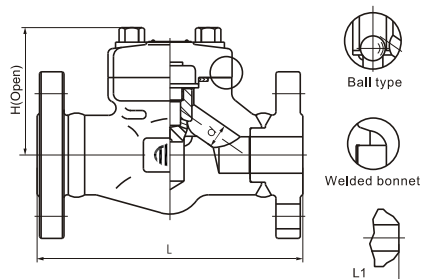
Specification (NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	200	200	200	200	250	250	330
Height	H	140	140	140	140	160	160	180
Height(angle dimension)	d	9	11	11	15	20	26	28
Weight(Kg)		20	20	20	20	28	28	45



Flange and butt-welded check valves

CL150-300-600

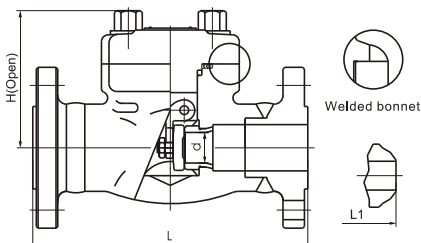
Bolted bonnet, full port
Flange-welded or butt-welded ends; design to BS5352



Specification(NPS)		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150	L(RF) L1(BW)	-	-	108	118	127	140	165	203
	CL300		-	-	153	178	203	216	229	267
	CL600		-	-	165	191	216	229	241	292
Height	CL150	H	-	-	77	81	93	95	103	118
	CL300/600		-	-	61	78	84	101	120	133
Height(angle dinmension)		d	-	-	10	13	17.5	23	30	35
Weight (Kg)	CL150	RF	-	-	3.6	4.6	8.5	9.2	12.5	14.8
		BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300	RF	-	-	3.7	4.8	8.8	9.6	13.7	17.8
		BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600	RF	-	-	4.0	5.8	9.5	10.4	15.6	24.5
		BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5

CL150-300-600

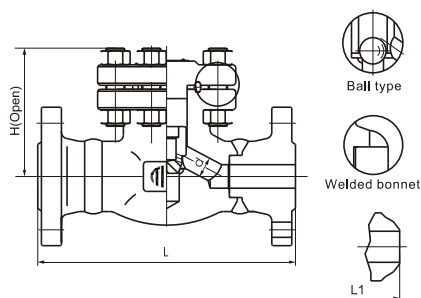
Bolted bonnet, full port
Flange-welded or butt-welded ends; design to BS5352



Specification(NPS)		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150	L(RF) L1(BW)	-	-	108	118	127	140	165	203
	CL300		-	-	153	178	203	216	229	267
	CL600		-	-	165	191	216	229	241	292
Height	CL150	H	-	-	77	81	93	95	103	118
	CL300/600		-	-	61	78	84	101	120	133
Height(angle dinmension)		d	-	-	10.5	13.5	18	24	29	36.5
Weight (Kg)	CL150	RF	-	-	3.6	4.6	8.5	9.2	12.5	14.8
		BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300	RF	-	-	3.7	4.8	8.8	9.6	13.7	17.8
		BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600	RF	-	-	4.0	5.8	9.5	10.4	15.6	24.5
		BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5

CL150-300-600

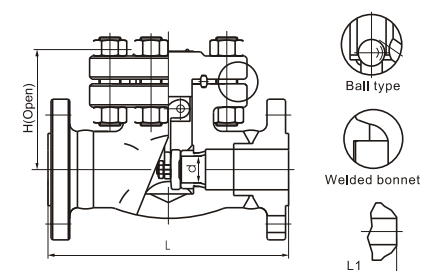
Bolted bonnet, reducing port
Flange-welded or butt-welded ends; design to BS5352



Specification(NPS)		R.P	1/4	3/8	1/2	3/4	1	1¼	1½	2
Face to face	CL150	L(RF) L1(BW)	-	-	108	118	127	140	165	203
	CL300		-	-	153	178	203	216	229	267
	CL600		-	-	165	191	216	229	241	292
Height	CL150	H	-	-	77	81	93	95	103	118
	CL300/600		-	-	61	78	84	101	120	133
Height(angle dinmension)		d	-	-	10	13	17.5	23	30	35
Weight (Kg)	CL150	RF	-	-	3.2	3.5	4.6	5.2	7.0	16
		BW	-	-	2.8	3.0	4.0	4.6	6.3	15
	CL300	RF	-	-	4.6	6.1	9.1	12	16	21
		BW	-	-	4.1	5.7	8.4	11.2	14.5	19.5
	CL600	RF	-	-	4.8	6.3	9.3	13	16.5	22
		BW	-	-	4.4	5.9	8.7	12.1	15.8	20.8

CL150-300-600

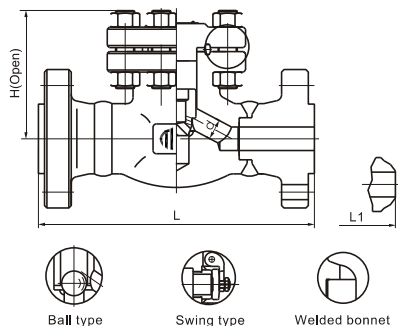
Bolted bonnet, reducing port
Flange-welded or butt-welded ends; design to BS5352



Specification(NPS)		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150	L(RF) L1(BW)	-	-	108	118	127	140	165	203
	CL300		-	-	153	178	203	216	229	267
	CL600		-	-	165	191	216	229	241	292
Height	CL150	H	-	-	77	81	93	95	103	118
	CL300/600		-	-	61	78	84	101	120	133
Height(angle dinmension)		d	-	-	10.5	13.5	18	24	29	36.5
Weight (Kg)	CL150	RF	-	-	3.6	4.6	8.5	9.2	12.5	14.8
		BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300	RF	-	-	3.7	4.8	8.8	9.6	13.7	17.8
		BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600	RF	-	-	4.0	5.8	9.5	10.4	15.6	24.5
		BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5



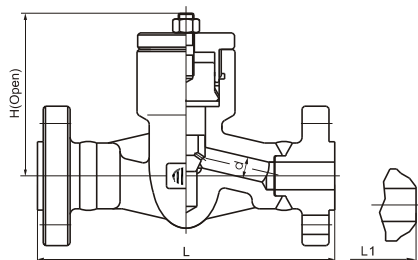
Flange and butt-welded check valves



CL900-CL1500

Bolted bonnet, full port
Flange -welded or butt-welded ends; design to BS5352

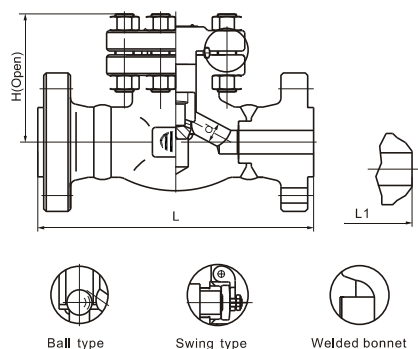
Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L(RJ) L1(BW)	216	229	254	280	305	371
Height	H	81	93	95	101	118	130
Height (angle dimension)	d	Lift	12	15	20	28	32
		Swing	13.5	18	24	29	36.5
Weight(Kg)	Swing	Lift	5.2	6.8	10.5	28	18
		Swing	5.0	6.1	10.8	29	17.6



CL900-CL1500

Pressure seal, bolted bonnet, full port and reducing port
Flange-welded or butt-welded ends; design to BS5352

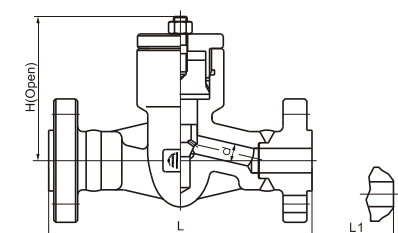
Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L(RF), L1(BW)	216	229	254	280	305	268	
	L(RTJ)	216	229	254	280	305	371	
Height	H	117	117	117	152	152	195	
Height (angle dimension)	d	12	15	20	28	32	40	
Weight(Kg)		10.5	11.9	13.9	19.9	26.9	32.5	



CL2500

Bolted bonnet, full port
Flange-welded or butt-welded ends; design to ASME B16.34

Specification(NPS)	F.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L(RF), L1(BW)	264	273	308	349	384	450
	L(RTJ)	264	273	308	352	387	454
Height	H	81	93	95	101	118	130
Height (angle dimension)	d	Lift	12	15	20	28	32
		Swing	10.5	13.5	18	24	29
Weight(Kg)	Swing	Lift	17	21	28	14.5	58
		Swing	5.0	6.1	10.8	11.2	17.6



CL2500

pressure seal, bolted bonnet, full port
Flange-welded or butt-welded ends; design to ASME B16.34

Specification(NPS)	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L(RF), L1(BW)	264	273	308	349	384	450	
	L(RTJ)	264	273	308	352	387	454	
Height	H	117	117	117	152	152	195	
Height (angle dimension)	d	12	15	20	32	28	40	
Weight(Kg)		12.6	14.9	16.5	24.8	30	35	