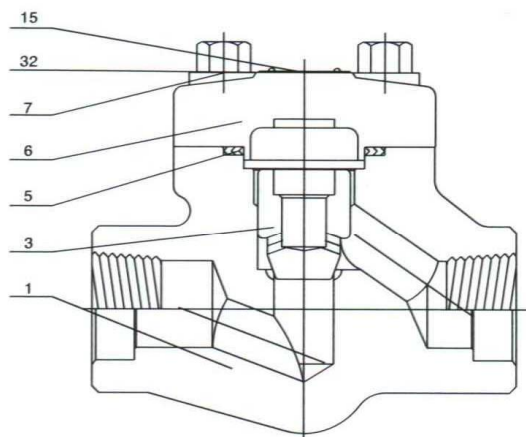
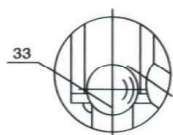


## FORGED CHECK VALVE

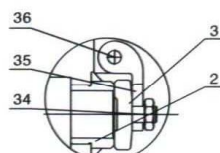




Please mark in you offer if you need load spring



Ball type



Swing type

## Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection end conform to:
  - Socket welded 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
- Materials conform to ANSI/ASTM.
- Main materials:
 

A105;LF2;F5;F11;F22;304(L);316(L);F347;  
F321;F51;Monel;20 Alloy.

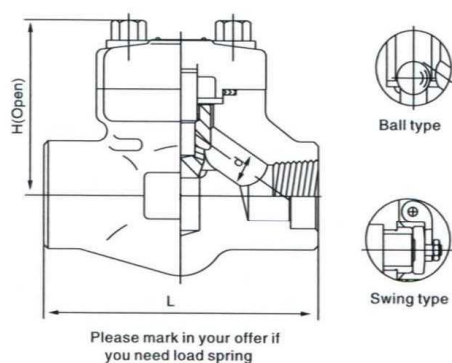
## Carbon steel temperature–pressure rate

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+<br>Flexible graphite | 304+<br>Flexible graphite | 304+<br>Flexible graphite | 304+<br>Flexible graphite | 304+<br>Flexible graphite | 316+<br>Flexible graphite | 316+<br>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                       |





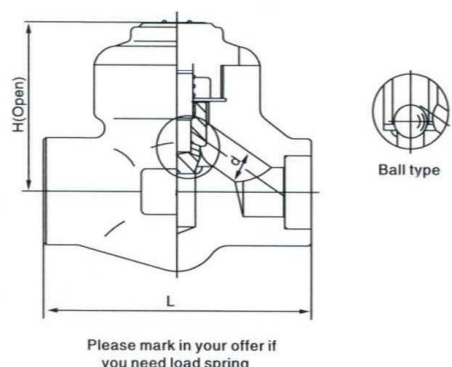
## CL800 Bolted bonnet, full port and reducing port

Threaded butt-welded or socket welded ends conform to Bs5352

| Specification (NPS)      | R.P |       | 1/2 | 3/4  | 1    | 1¼   | 1½  | 2   | 2½   |
|--------------------------|-----|-------|-----|------|------|------|-----|-----|------|
|                          | F.P |       | 1/4 | 3/8  | 1/2  | 3/4  | 1   | 1¼  | 1½   |
| Face to face             | L   | Lift  | 79  | 79   | 92   | 111  | 120 | 152 | 172  |
|                          |     | Swing | 79  | 79   | 92   | 111  | 120 | 120 | 140  |
| Height                   | H   | Lift  | 61  | 61   | 61   | 78   | 84  | 84  | 118  |
|                          |     | Swing | 61  | 61   | 61   | 78   | 84  | 84  | 120  |
| Height (angle dimension) | d   | Lift  | 7   | 9    | 13   | 17.5 | 23  | 30  | 35   |
|                          |     | Swing | 8   | 10.5 | 13.5 | 18   | 24  | 29  | 36.5 |
| Weight(Kg)               |     | Lift  | 1.2 | 1.5  | 1.7  | 3.3  | 4.2 | 4.2 | 10.5 |
|                          |     | Swing | 1.4 | 1.5  | 1.7  | 3.3  | 4.2 | 4.2 | 8.5  |

## CL800 Welded bonnet, full port and reducing port

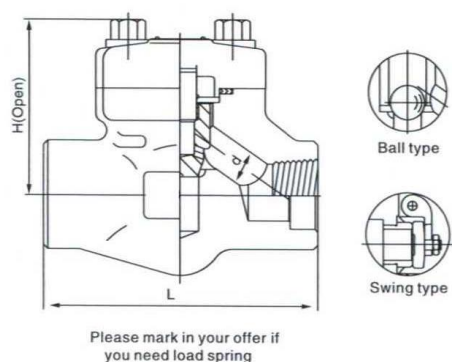
Threaded, butt-welded or socket welded ends; design to BS5352



| Specification (NPS)      | R.P |  | 1/2 | 3/4 | 1   | 1¼   | 1½  | 2   | 2½  |
|--------------------------|-----|--|-----|-----|-----|------|-----|-----|-----|
|                          | F.P |  | 1/4 | 3/8 | 1/2 | 3/4  | 1   | 1¼  | 1½  |
| Face to face             | L   |  | 79  | 79  | 92  | 111  | 120 | 152 | 172 |
| Height                   | H   |  | 61  | 61  | 61  | 78   | 84  | 103 | 118 |
| Height (angle dimension) | d   |  | 7   | 9   | 13  | 17.5 | 23  | 30  | 35  |
| Weight(Kg)               |     |  | 1.2 | 1.3 | 1.5 | 3.0  | 3.9 | 6.0 | 10  |

## CL900-CL1500 Bolted bonnet, full port and reducing port

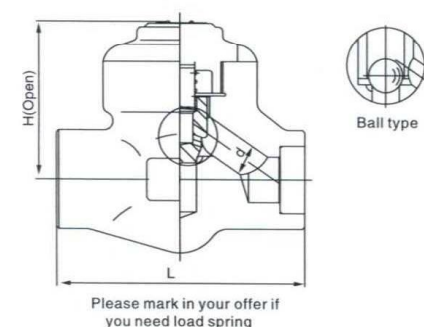
Threaded, butt-welded or socket welded ends; design to BS5352



| Specification (NPS)      | R.P |       | 1/2 | 3/4  | 1    | 1¼  | 1½  | 2    | 2½   |
|--------------------------|-----|-------|-----|------|------|-----|-----|------|------|
|                          | F.P |       | 1/4 | 3/8  | 1/2  | 3/4 | 1   | 1¼   | 1½   |
|                          | 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 |

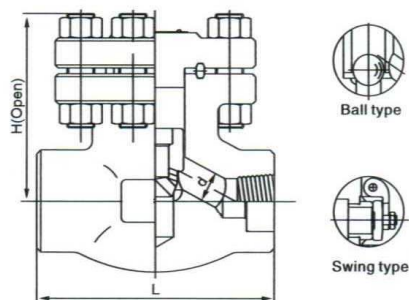
## CL900-CL1500 Welded bonnet, full port and reducing port

Threaded, butt-welded or socket welded ends; design to BS5352



| Specification (NPS)      | R.P |  | 1/2 | 3/4 | 1   | 1¼  | 1½  | 2    | 2½   |
|--------------------------|-----|--|-----|-----|-----|-----|-----|------|------|
|                          | F.P |  | 1/4 | 3/8 | 1/2 | 3/4 | 1   | 1¼   | 1½   |
| 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 |





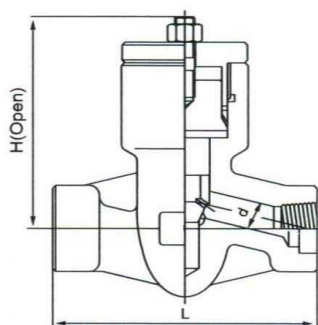
## CL900-CL1500 Bolted bonnet, full port and reducing port

Threaded, butt-welded or socket welded ends conform 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) | Lift  | 9   | 10   | 12   | 15   | 20   | 28    | 32    | 40   |
|                          | Swing | 8   | 10.5 | 13.5 | 18   | 24   | 29    | 36.5  | 45   |
| 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  | 14.6 |

## CL900-CL1500 Pressure seal bonnet, full port and reducing port

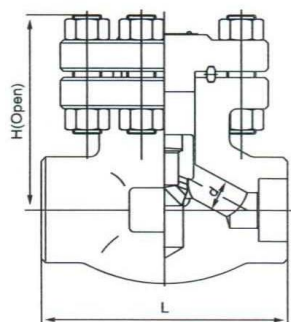
Threaded, butt-welded or socket welded ends; design to BS5352



| 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

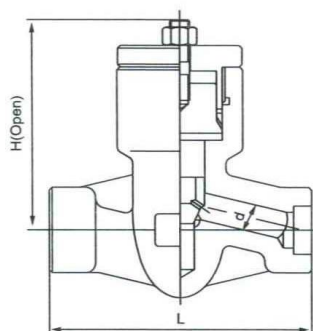
Threaded, butt-welded or socket welded ends; design to ASME B16.34



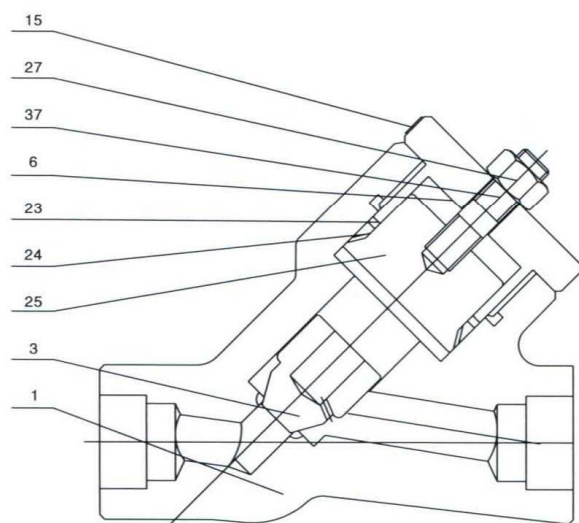
| Specification (NPS)      | F.P | 1/4 | 3/8  | 1/2 | 3/4 | 1   | 1 1/4 | 1 1/2 | 2   |
|--------------------------|-----|-----|------|-----|-----|-----|-------|-------|-----|
| Face to face             | L   | 150 | 150  | 150 | 150 | 210 | 235   | 235   | 235 |
| Height                   | H   | 166 | 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  |



## Application standards

- 1、Design and manufacture conform to ASME B16.34MSS 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  
A threaded and pressure seal bonnet; Y type and T type.
- 5、Materials conform to ANSI/ASTM.
- 6、Main materials:  
A105;LF2;F5;F11;F22;304(L);316(L);F347;  
F321;F51;Monel;20 Alloy.

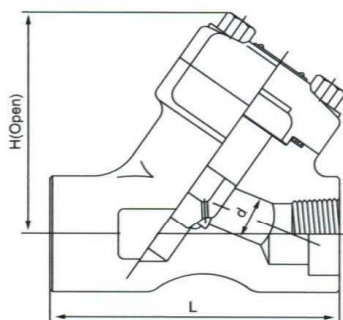
## Carbon steel temperature–pressure rate

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

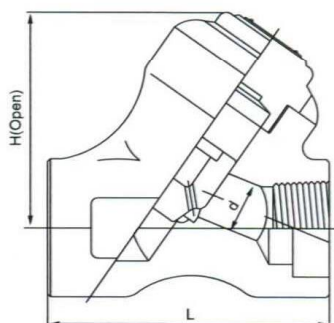




## CL800 Bolted bonnet, full port and reducing port

Threaded, butt-welded or socket welded ends; design to BS5352

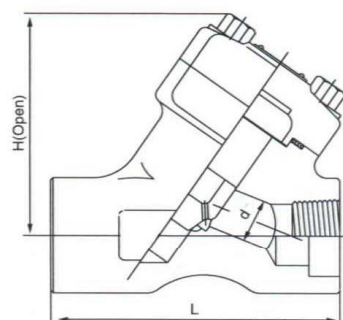
| Specification (NPS)     | R.P |     | 1/2 | 3/4 | 1    | 1 1/4 | 1 1/2 | 2     | 1 1/2 | 3     |
|-------------------------|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|
|                         | F.P | 1/4 | 3/8 | 1/2 | 3/4  | 1     | 1 1/4 | 1 1/2 | 2     | 2 1/2 |
| Face to face            | L   | 98  | 98  | 98  | 111  | 140   | 140   | 155   | 170   |       |
| Height                  | H   | 70  | 70  | 70  | 100  | 110   | 120   | 120   | 150   |       |
| Height(angle dimension) | 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

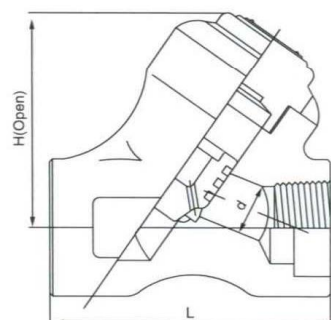
| Specification (NPS)     | R.P |     | 1/2 | 3/4 | 1    | 1 1/4 | 1 1/2 | 2     | 1 1/2 | 3     |
|-------------------------|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|
|                         | F.P | 1/4 | 3/8 | 1/2 | 3/4  | 1     | 1 1/4 | 1 1/2 | 2     | 2 1/2 |
| Face to face            | L   | 79  | 79  | 92  | 100  | 140   | 140   | 155   | 170   |       |
| Height                  | H   | 65  | 65  | 65  | 95   | 105   | 110   | 110   | 140   |       |
| Height(angle dimension) | 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  |  |

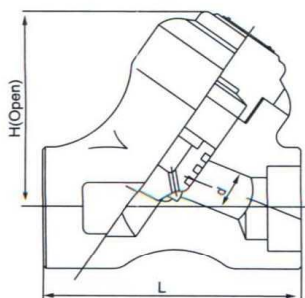


## CL900-CL1500 Welded bonnet, full port

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  |  |



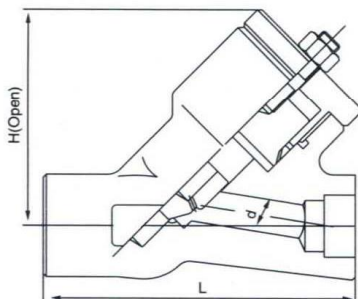


## CL2500

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    | 1¼  | 1½  | 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  |

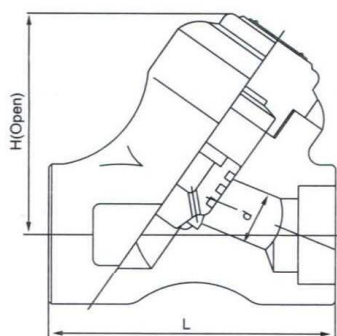


## CL2500

Pressure seal, bolted 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    | 1¼  | 1½  | 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  |

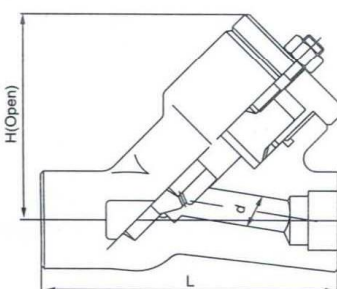


## CL4500

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   | 1¼ | 1½   | 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  |



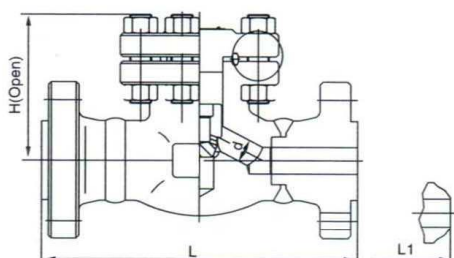
## CL4500

Pressure seal, bolted 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   | 1¼  | 1½  | 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  |





Ball type



Swing type



Welded bonnet

## CL900-CL1500

Bolted bonnet, full port

Flange-welded or butt-welded ends; design to BS5352

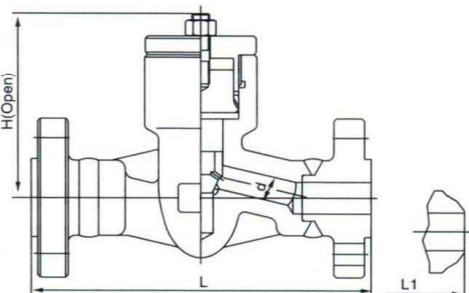
| Specification(NPS)          | F. P            | 1/2   | 3/4  | 1   | 1 1/4 | 1 1/2 | 2    |    |
|-----------------------------|-----------------|-------|------|-----|-------|-------|------|----|
| Face to face                | L(RJ)<br>L1(BW) | 216   | 229  | 254 | 280   | 305   | 371  |    |
| Height                      | H               | 81    | 93   | 95  | 101   | 118   | 130  |    |
| Height<br>(angle dimension) | d               | Lift  | 12   | 15  | 20    | 28    | 32   | 40 |
|                             |                 | Swing | 13.5 | 18  | 24    | 29    | 36.5 | 45 |
| Weight(Kg)                  | Lift            |       | 5.2  | 6.8 | 10.5  | 28    | 18   | 24 |
|                             |                 | Swing | 5.0  | 6.1 | 10.8  | 29    | 17.6 | 27 |

## 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<br>(Angle dimension) | D             |     | 12   | 15   | 20   | 28    | 32    | 40   |
| Weight(Kg)                  |               |     | 10.5 | 11.9 | 13.9 | 19.9  | 26.9  | 32.5 |

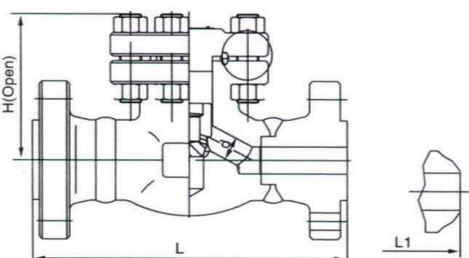


## CI2500

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<br>(angle dimension) | D             | Lift  | 12   | 15   | 20    | 28    | 32   | 40   |
|                             |               | Swing | 10.5 | 13.5 | 18    | 24    | 29   | 36.5 |
| Weight(Kg)                  | Lift          |       | 17   | 21   | 28    | 14.5  | 58   | 85   |
|                             |               | Swing | 5.0  | 6.1  | 10.8  | 11.2  | 17.6 | 27   |



Ball type



Swing type



Welded bonnet

## CI2500

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<br>(Angle dimension) | d             |     | 12   | 15   | 20   | 32    | 28    | 40  |
| Weight(Kg)                  |               |     | 12.6 | 14.9 | 16.5 | 24.8  | 30    | 35  |

