

Newco®

Cast Steel Bolted Cover Swing Check Valves

Manufactured by Newmans™

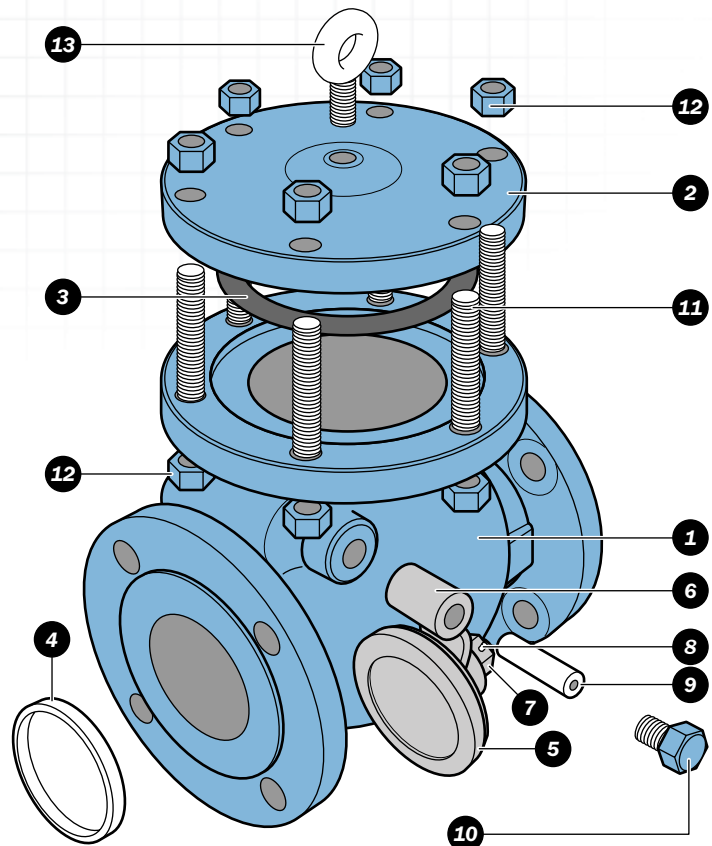
Sizes: 2" thru 24" • Pressure Class: 150 thru 1500



Typical Newco Cast Steel Bolted Cover Swing Check Valve Expanded View

Note: Classes 150 & 300 uses external hinge pin

- 1. Body:** Newco cast steel bodies provide low resistance flow and optimum strength and performance.
- 2. Cover:** The cover allows access to internal components.
- 3. Cover Gasket:** The cover gasket creates a leakproof seal between the bonnet and body.
- 4. Seat Ring:** To ensure a stable shutoff, the seat ring is aligned and seal-welded into the valve, then precision ground for optimal seating.
- 5. Disc:** The disc allows uni-directional flow and restricts back flow with trouble free shutoff.
- 6. Swing Arm:** The swing arm allows the disc to open and close.
- 7. & 8. Disc Nut & Pin:** The disc nut and pin secures the disc to the swing arm.
- 9. Hinge Pin:** The hinge pin provides a stable mechanism for the swing arm to operate.
- 10. Plug:** The plug secures the arm pin inside the valve.
- 11. Plug Gasket:** The plug gasket creates a leak-proof seal between the plug and body.
- 12. & 13. Cover Studs & Nuts:** The cover studs and nuts secure the bonnet to the body.
- 14. Eyebolt:** The eyebolt is use to aid in lifting the valve.



Cast Steel Bolted Cover Swing Checks

Styles: CB2, CB3, & CB4/2

Class: 150 - Sizes: 2" thru 24"

Pressure Class Range: 150 thru 1500

Design and Manufacturing Standards

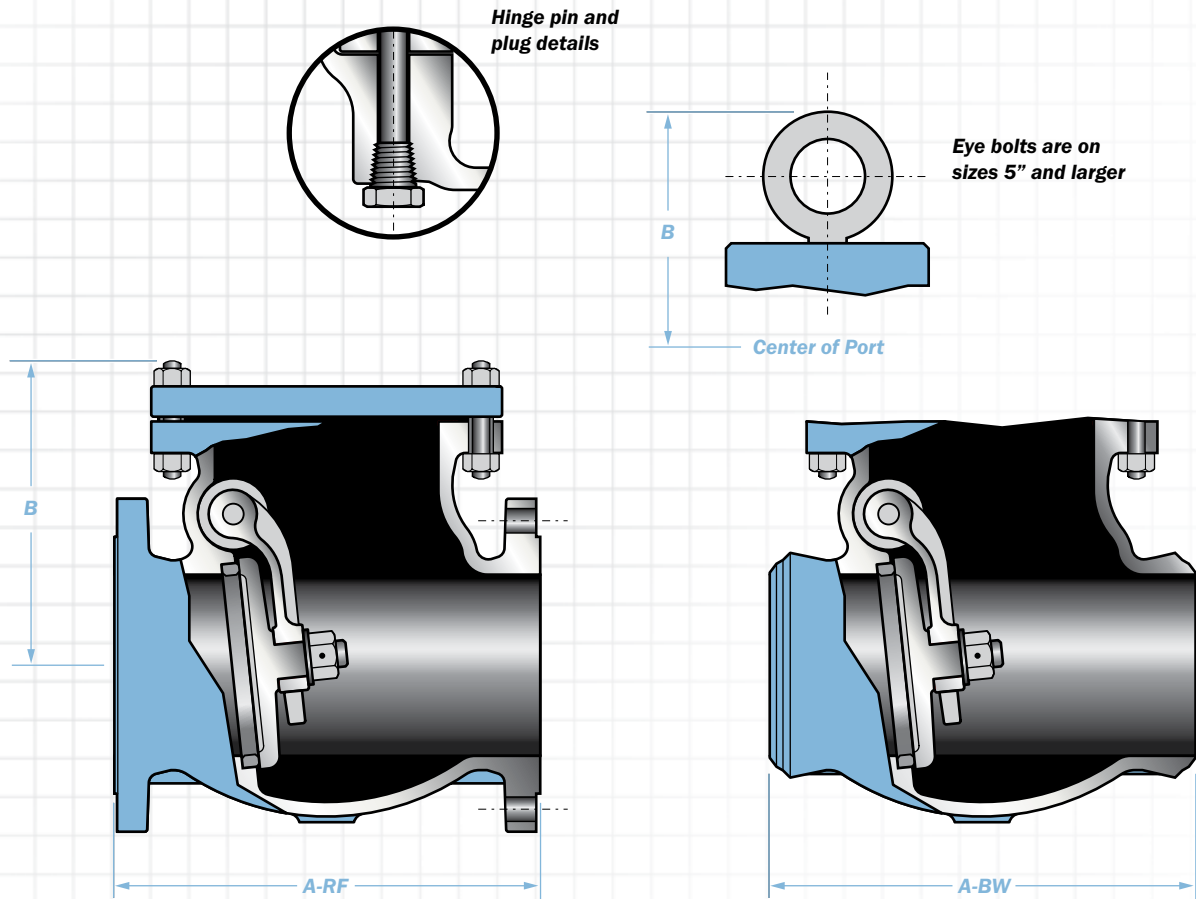
Valve Design: ASME B16.34/API 600

Flange Dimensions: ASME B16.5, B16.47 (Series A)

Face-to-Face Dimensions: ASME B16.10

Tested in Accordance with: API 598

Recommended Spare Parts*



Typical Bill of Materials (See page 5 for available materials.)

| Component | CB2 | CB3 | CB4/2 | Component | CB2 | CB3 | CB4/2 |
|--------------------|---|-------------------|--------------------------|----------------------|---------------------|---------------|-------|
| Body | ASTM A216-WCB | | | Name Plate | 304 Stainless Steel | | |
| Cover | ASTM A105N | | | Plug Gasket | Stainless Steel | | |
| Disc 2" thru 5" | ASTM A182-F6a | ASTM A182-F6a /HF | ASTM A182-F316 | Cover Bolt | ASTM A193-B7 | ASTM A193-B7M | |
| Disc 6" and larger | ASTM A216-WCB /13% Chrome | ASTM A216-WCB/ HF | ASTM A216-WCB/ 316 Faced | Cover Nut | AISI 1020 | | |
| Swing Arm | ASTM A216-WCB | | | Plug | ASTM A276-410 | ASTM A276-316 | |
| Seat Ring | ASTM A105/HF | | | Disc Pin | ASTM A276-316 | | |
| *Cover Gasket | Spiral Wound 316 Stainless Steel/Graphite | | | Disc Nut | A194-8 | | |
| Hinge Pin | ASTM A276-410 | | ASTM A276-316 | Eye Bolt 5" thru 24" | Carbon Steel | | |

Class 150

| Size | nps | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
|---------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| A-RF | in | 8.0 | 8.5 | 9.5 | 11.5 | 13.0 | 14.0 | 19.5 | 24.5 | 27.5 | 31.0 | 34.0 | 38.5 | 38.5 | 51.0 |
| | mm | 203 | 216 | 241 | 292 | 330 | 356 | 495 | 622 | 699 | 787 | 864 | 978 | 978 | 1295 |
| A-BW | in | 8.0 | 8.5 | 9.5 | 11.5 | 13.0 | 14.0 | 19.5 | 24.5 | 27.5 | 31.0 | 34.0 | 38.5 | 38.5 | 51.0 |
| | mm | 203 | 216 | 241 | 292 | 330 | 356 | 495 | 622 | 699 | 787 | 864 | 978 | 978 | 1295 |
| B | in | 6.8 | 7.4 | 7.7 | 8.5 | 12.3 | 12.8 | 14.3 | 17.2 | 17.9 | 19.6 | 21.2 | 24.2 | 27.4 | 30.0 |
| | mm | 173 | 188 | 196 | 216 | 315 | 325 | 363 | 437 | 455 | 498 | 538 | 615 | 696 | 762 |
| RF Wt. | lbs | 36 | 51 | 64 | 98 | 135 | 181 | 298 | 463 | 688 | 898 | 1147 | 1367 | 1808 | 2866 |
| | kg | 16 | 23 | 29 | 45 | 61 | 398 | 135 | 210 | 313 | 408 | 521 | 621 | 822 | 1308 |
| BW Wt. | lbs | 29 | 38 | 49 | 73 | 110 | 146 | 243 | 421 | 591 | 766 | 979 | 1190 | 1585 | 2250 |
| | kg | 13 | 17 | 22 | 33 | 50 | 66 | 110 | 191 | 269 | 348 | 445 | 541 | 720 | 1123 |

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.

Cast Steel Bolted Cover Swing Checks

Styles: CB2, CB3, & CB4/2

Class: 300 - Sizes: 2" thru 24"

Pressure Class Range: 150 thru 1500

Design and Manufacturing Standards

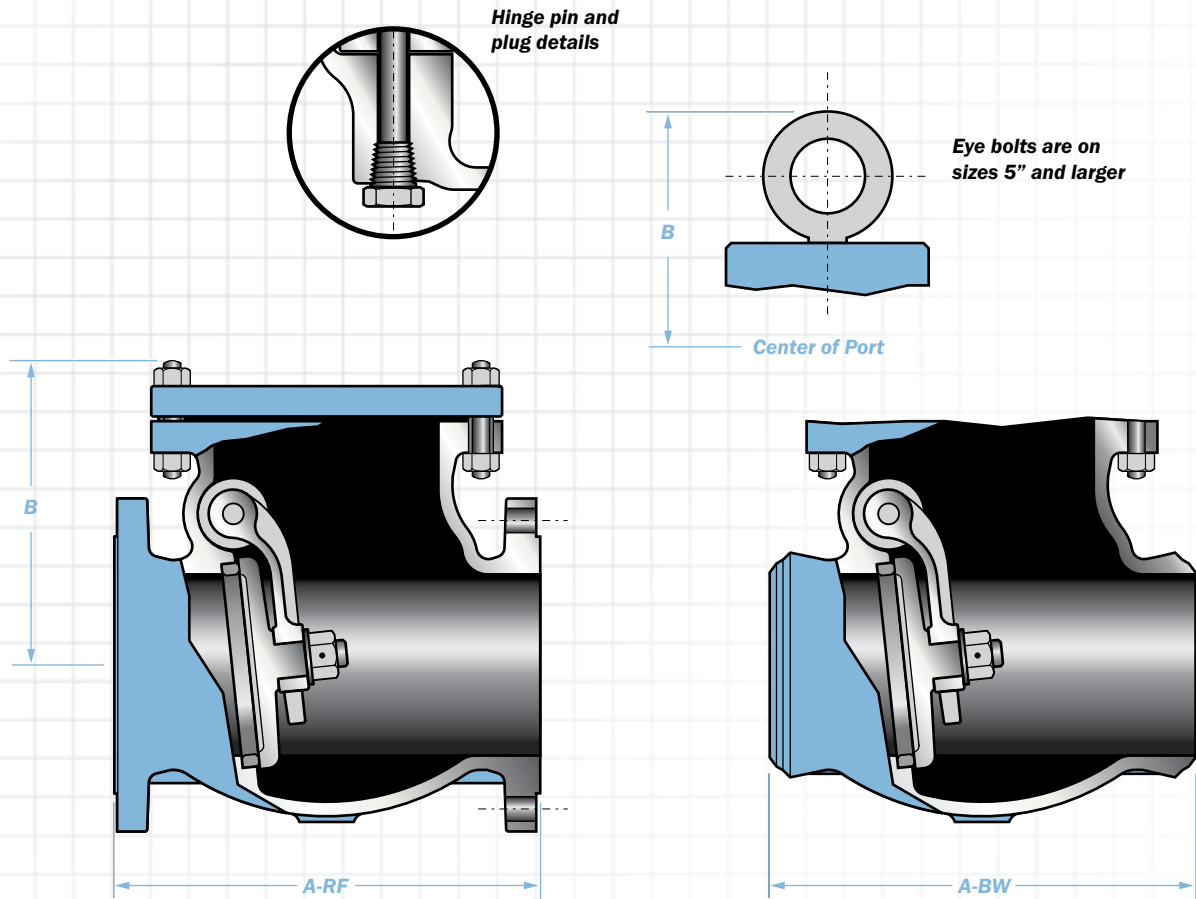
Valve Design: ASME B16.34/API 600

Flange Dimensions: ASME B16.5, B16.47 (Series A)

Face-to-Face Dimensions: ASME B16.10

Tested in Accordance with: API 598

Recommended Spare Parts*



Typical Bill of Materials (See page 5 for available materials.)

| Component | CB2 | CB3 | CB4/2 | Component | CB2 | CB3 | CB4/2 |
|--------------------|---|-------------------|--------------------------|----------------------|---------------------|---------------|-------|
| Body | ASTM A216-WCB | | | Name Plate | 304 Stainless Steel | | |
| Cover | ASTM A105N | | | Plug Gasket | Stainless Steel | | |
| Disc 2" thru 5" | ASTM A182-F6a | ASTM A182-F6a /HF | ASTM A182-F316 | Cover Bolt | ASTM A193-B7 | ASTM A193-B7M | |
| Disc 6" and larger | ASTM A216-WCB /13% Chrome | ASTM A216-WCB/ HF | ASTM A216-WCB/ 316 Faced | Cover Nut | ASTM A276-410 | ASTM A276-316 | |
| Swing Arm | ASTM A216-WCB | | | Plug | AISI 1020 | | |
| Seat Ring | ASTM A105/HF | | | Disc Pin | ASTM A276-316 | | |
| *Cover Gasket | Spiral Wound 316 Stainless Steel/Graphite | | | Disc Nut | A194-8 | | |
| Hinge Pin | ASTM A276-410 | | ASTM A276-316 | Eye Bolt 5" thru 24" | Carbon Steel | | |

Class 300

| Size | nps | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
|------|-----|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|
| A-RF | in | 10.5 | 11.5 | 12.5 | 14.0 | 15.75 | 17.5 | 21.0 | 24.5 | 28.0 | 33.0 | 34.0 | 38.5 | 40.0 | 53.0 |
| | mm | 267 | 292 | 318 | 356 | 400 | 445 | 533 | 622 | 711 | 838 | 864 | 978 | 1016 | 1346 |
| A-BW | in | 10.5 | 11.5 | 12.5 | 14.0 | 15.75 | 17.5 | 21.0 | 24.5 | 28.0 | 33.0 | 34.0 | 38.5 | 40.0 | 53.0 |
| | mm | 267 | 292 | 318 | 356 | 400 | 445 | 533 | 622 | 711 | 838 | 864 | 978 | 1016 | 1346 |
| B | in | 7.6 | 8.3 | 8.9 | 9.8 | 13.3 | 14.0 | 15.9 | 18.7 | 21.9 | 23.1 | 25.2 | 28.6 | 30.2 | 33.6 |
| | mm | 193 | 211 | 226 | 249 | 338 | 356 | 404 | 475 | 556 | 587 | 640 | 726 | 767 | 853 |
| RF | lbs | 58 | 86 | 95 | 144 | 232 | 283 | 433 | 694 | 1003 | 1345 | 1720 | 2271 | 2888 | 4718 |
| Wt. | kg | 26 | 39 | 43 | 65 | 105 | 129 | 197 | 315 | 456 | 611 | 782 | 1032 | 1313 | 2145 |
| BW | lbs | 44 | 55 | 78 | 103 | 185 | 214 | 341 | 562 | 815 | 1087 | 1397 | 1873 | 2400 | 3995 |
| | kg | 20 | 25 | 35 | 47 | 84 | 97 | 155 | 255 | 370 | 494 | 635 | 851 | 1091 | 1816 |

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.

Cast Steel Bolted Cover Swing Checks

Styles: CB2, CB3, & CB4/2

Class: 600 - Sizes: 2" thru 14"

Pressure Class Range: 150 thru 1500

Design and Manufacturing Standards

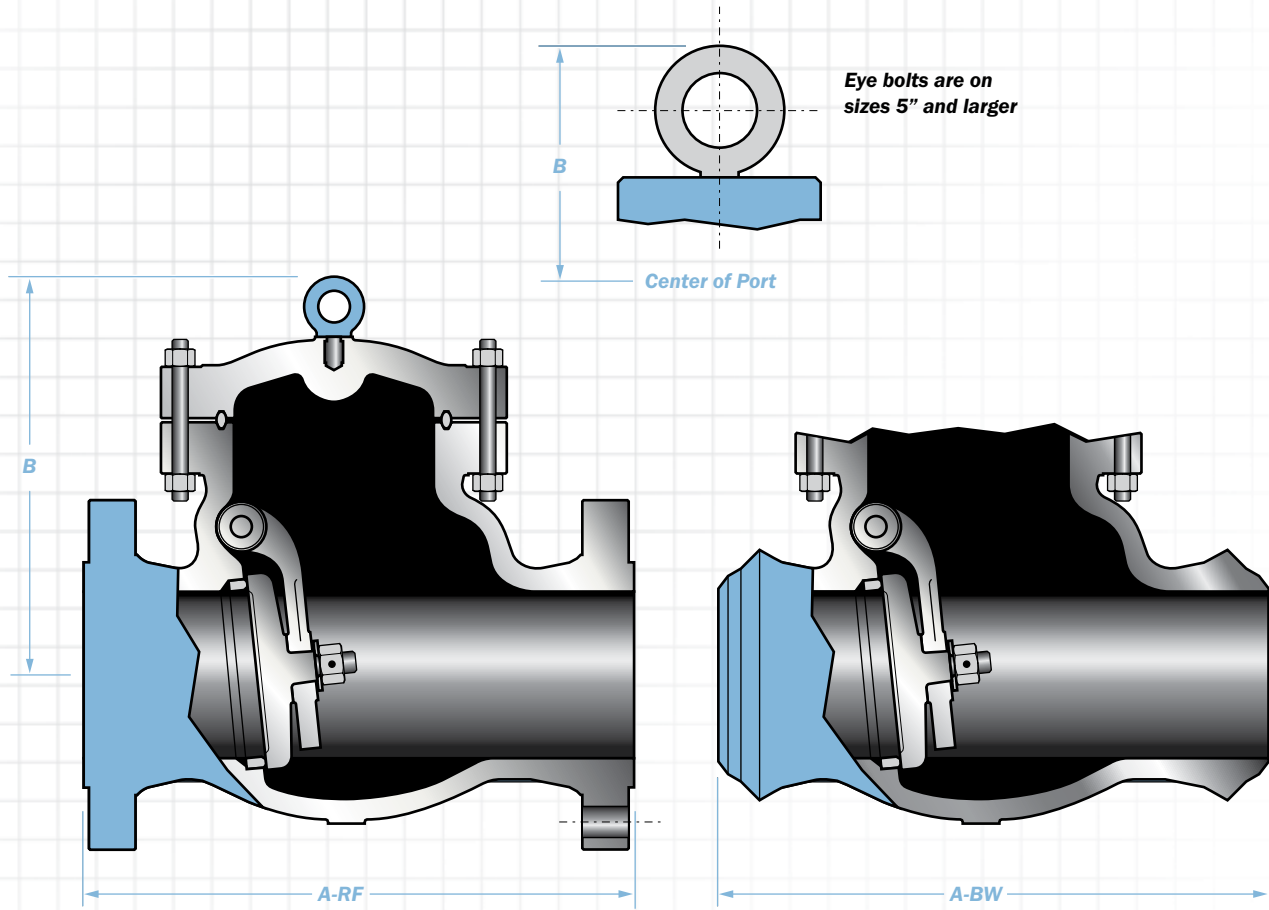
Valve Design: ASME B16.34/API 600

Flange Dimensions: ASME B16.5, B16.47 (Series A)

Face-to-Face Dimensions: ASME B16.10

Tested in Accordance with: API 598

Recommended Spare Parts*



Typical Bill of Materials (See page 5 for available materials.)

| Component | CB2 | CB3 | CB4/2 | Component | CB2 | CB3 | CB4/2 |
|--------------------|---------------------------|-------------------|--------------------------|----------------------|---------------------|---------------|-------|
| Body | ASTM A216-WCB | | | Name Plate | 304 Stainless Steel | | |
| Cover | ASTM A105N | | | Washer | Stainless Steel | | |
| Disc 2" thru 5" | ASTM A182-F6a | ASTM A182-F6a /HF | ASTM A182-F316 | Cover Bolt | ASTM A193-B7 | ASTM A193-B7M | |
| Disc 6" and larger | ASTM A216-WCB /13% Chrome | ASTM A216-WCB/ HF | ASTM A216-WCB/ 316 Faced | Cover Nut | ASTM A276-410 | ASTM A276-316 | |
| Swing Arm | ASTM A216-WCB | | | Plug | AISI 1020 | | |
| Seat Ring | ASTM A105/HF | | | Pin | ASTM A276-316 | | |
| *Cover Gasket | Soft Steel Ring Joint | | | Hex Nut | A194-8 | | |
| Hinge Pin | ASTM A276-410 | | ASTM A276-316 | Eye Bolt 5" thru 24" | Carbon Steel | | |

Class 600

| Size | nps | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 |
|---------------|-----|------|------|------|------|------|------|------|------|------|------|
| A-RF | in | 11.5 | 13.0 | 14.0 | 17.0 | 20.0 | 22.0 | 26.0 | 31.0 | 33.0 | 35.0 |
| | mm | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 |
| A-BW | in | 11.5 | 13.0 | 14.0 | 17.0 | 20.0 | 22.0 | 26.0 | 31.0 | 33.0 | 35.0 |
| | mm | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 |
| B | in | 7.8 | 8.8 | 9.7 | 13.3 | 15.5 | 16.8 | 19.4 | 22.6 | 25.4 | 26.4 |
| | mm | 198 | 224 | 246 | 338 | 394 | 427 | 493 | 574 | 645 | 671 |
| RF Wt. | lbs | 65 | 90 | 115 | 215 | 348 | 481 | 926 | 1279 | 1722 | 2009 |
| | kg | 30 | 41 | 52 | 98 | 159 | 219 | 421 | 581 | 783 | 913 |
| BW Wt. | lbs | 51 | 68 | 91 | 161 | 255 | 349 | 762 | 1021 | 1411 | 1650 |
| | kg | 23 | 31 | 41 | 73 | 116 | 159 | 346 | 483 | 641 | 750 |

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.

Cast Steel Bolted Cover Swing Checks

Styles: CB2, CB3, & CB4/2

Class: 900 - Sizes: 2" thru 8"

Pressure Class Range: 150 thru 1500

Design and Manufacturing Standards

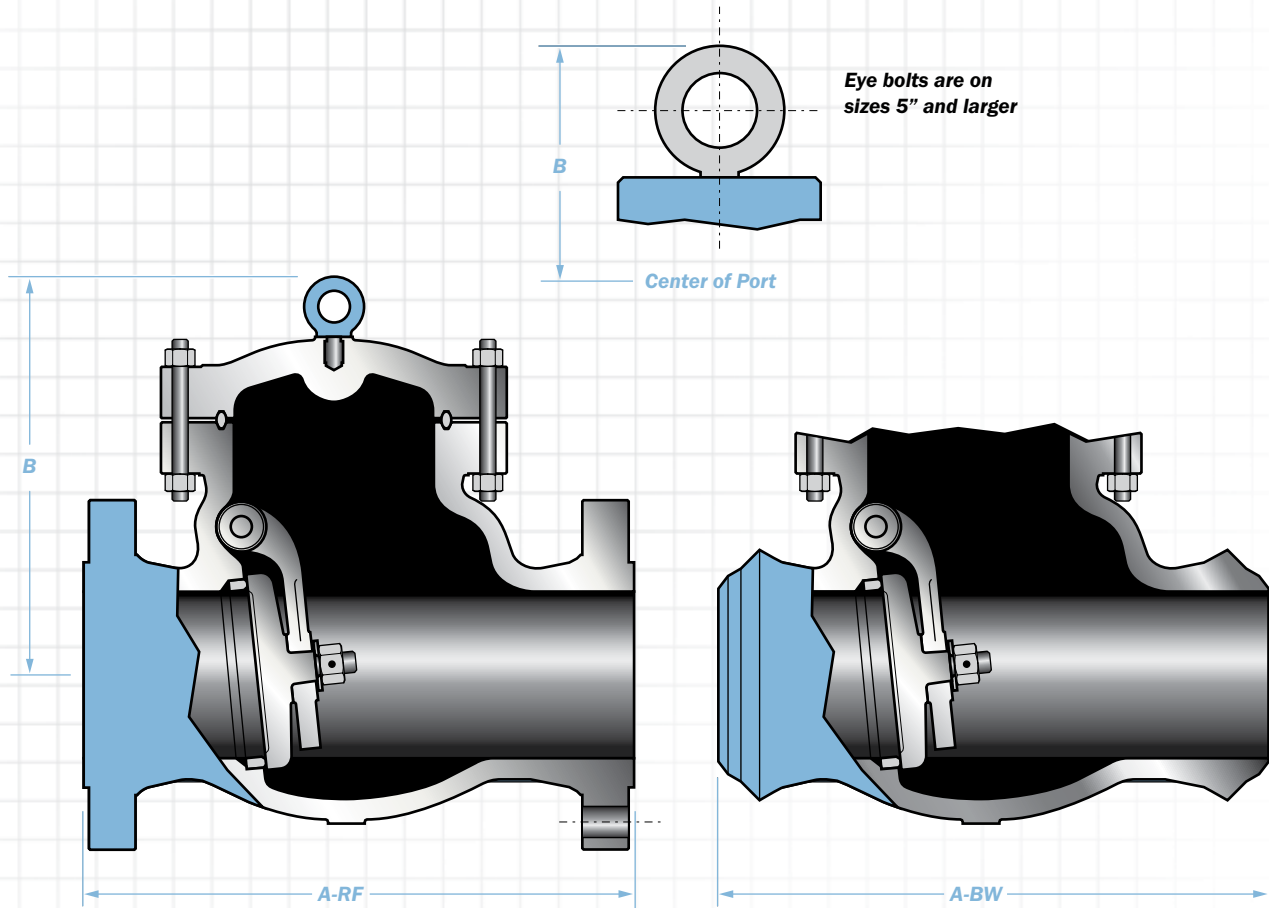
Valve Design: ASME B16.34/API 600

Flange Dimensions: ASME B16.5, B16.47 (Series A)

Face-to-Face Dimensions: ASME B16.10

Tested in Accordance with: API 598

Recommended Spare Parts*



Typical Bill of Materials (See page 5 for available materials.)

| Component | CB2 | CB3 | CB4/2 | Component | CB2 | CB3 | CB4/2 |
|--------------------|---------------------------|-------------------|--------------------------|----------------------|---------------------|---------------|-------|
| Body | ASTM A216-WCB | | | Name Plate | 304 Stainless Steel | | |
| Cover | ASTM A105N | | | Washer | Stainless Steel | | |
| Disc 2" thru 5" | ASTM A182-F6a | ASTM A182-F6a /HF | ASTM A182-F316 | Cover Bolt | ASTM A193-B7 | ASTM A193-B7M | |
| Disc 6" and larger | ASTM A216-WCB /13% Chrome | ASTM A216-WCB/ HF | ASTM A216-WCB/ 316 Faced | Cover Nut | ASTM A276-410 | ASTM A276-316 | |
| Swing Arm | ASTM A216-WCB | | | Plug | AISI 1020 | | |
| Seat Ring | ASTM A105/HF | | | Pin | ASTM A276-316 | | |
| *Cover Gasket | Soft Steel Ring Joint | | | Hex Nut | A194-8 | | |
| Hinge Pin | ASTM A276-410 | | ASTM A276-316 | Eye Bolt 5" thru 24" | Carbon Steel | | |

Class 900

| Size | nps | 2 | 3 | 4 | 6 | 8 |
|--------|-----|------|------|------|------|------|
| | dn | 50 | 75 | 100 | 150 | 200 |
| A-RF | in | 14.5 | 15.0 | 18.0 | 24.0 | 29.0 |
| | mm | 368 | 381 | 457 | 610 | 737 |
| A-BW | in | 14.5 | 15.0 | 18.0 | 24.0 | 29.0 |
| | mm | 368 | 381 | 457 | 610 | 737 |
| B | in | 13.1 | 14.8 | 14.5 | 18.8 | 23.6 |
| | mm | 329 | 329 | 368 | 478 | 599 |
| RF Wt. | lbs | 104 | 184 | 344 | 770 | 1482 |
| | kg | 47 | 84 | 156 | 350 | 674 |
| BW Wt. | lbs | 78 | 138 | 258 | 578 | 1112 |
| | kg | 35 | 63 | 129 | 263 | 505 |

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.

Cast Steel Bolted Cover Swing Checks

Styles: CB2, CB3, & CB4/2

Class: 1500 - Sizes: 2" thru 8"

Pressure Class Range: 150 thru 1500

Design and Manufacturing Standards

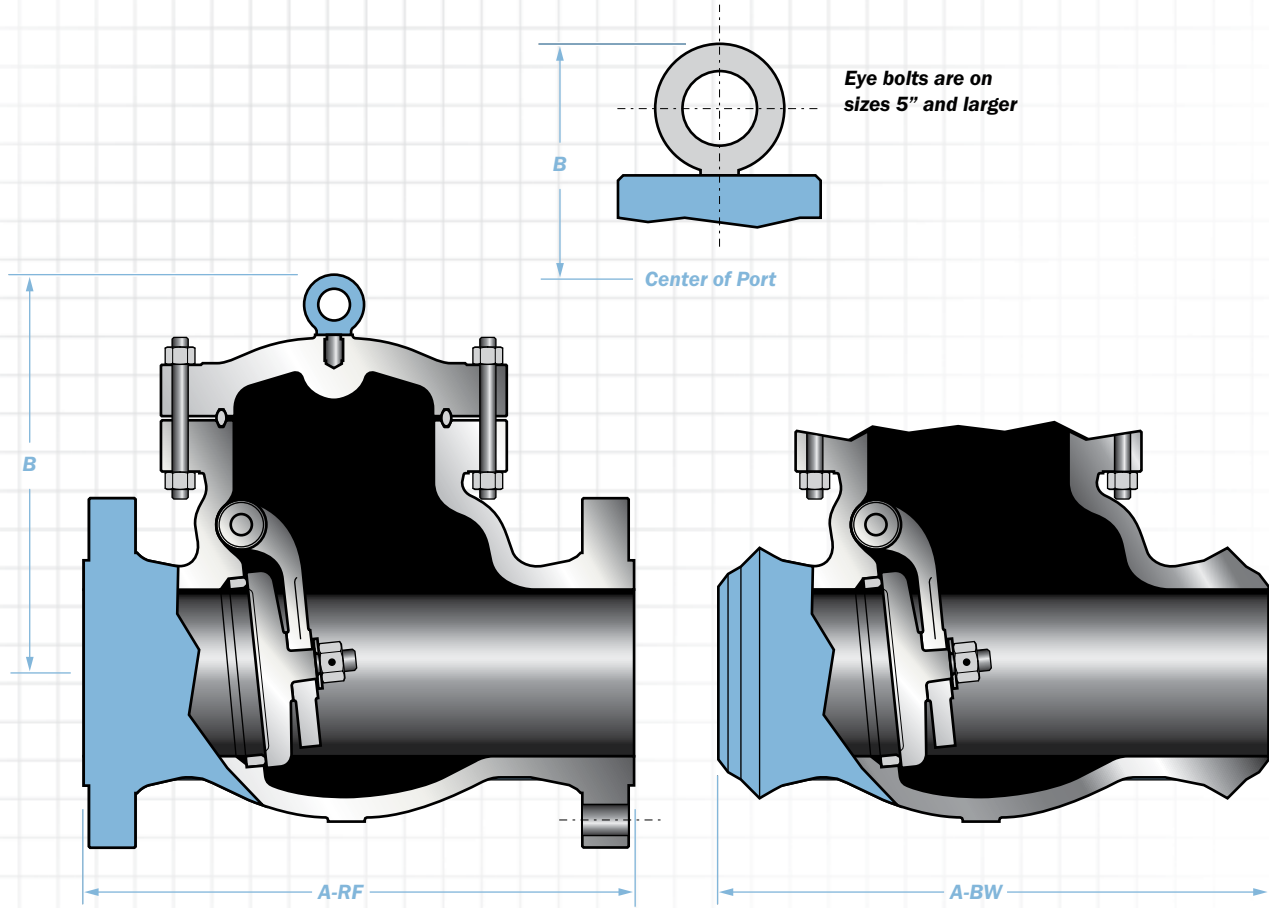
Valve Design: ASME B16.34/API 600

Flange Dimensions: ASME B16.5, B16.47 (Series A)

Face-to-Face Dimensions: ASME B16.10

Tested in Accordance with: API 598

Recommended Spare Parts*



Typical Bill of Materials (See page 5 for available materials.)

| Component | CB2 | CB3 | CB4/2 | Component | CB2 | CB3 | CB4/2 |
|--------------------|---------------------------|-------------------|-------------------------|----------------------|---------------------|---------------|-------|
| Body | ASTM A216-WCB | | | Name Plate | 304 Stainless Steel | | |
| Cover | ASTM A105N | | | Washer | Stainless Steel | | |
| Disc 2" thru 5" | ASTM A182-F6a | ASTM A182-F6a /HF | ASTM A182-F316 | Cover Bolt | ASTM A193-B7 | ASTM A193-B7M | |
| Disc 6" and larger | ASTM A216-WCB /13% Chrome | ASTM A216-WCB/HF | ASTM A216-WCB/316 Faced | Cover Nut | ASTM A276-410 | ASTM A276-316 | |
| Swing Arm | ASTM A216-WCB | | | Plug | AISI 1020 | | |
| Seat Ring | ASTM A105/HF | | | Pin | ASTM A276-316 | | |
| *Cover Gasket | Soft Steel Ring Joint | | | Hex Nut | A194-8 | | |
| Hinge Pin | ASTM A276-410 | | ASTM A276-316 | Eye Bolt 5" thru 24" | Carbon Steel | | |

Class 1500

| Size | nps | 2 | 2.5 | 3 | 4 | 6 | 8 |
|--------|-----|------|------|------|------|------|------|
| | dn | 50 | 75 | 100 | 150 | 200 | 203 |
| A-RF | in | 14.5 | 16.5 | 18.5 | 21.5 | 27.8 | 32.8 |
| | mm | 368 | 419 | 470 | 546 | 706 | 833 |
| A-BW | in | 14.5 | 16.5 | 18.5 | 21.5 | 27.8 | 32.8 |
| | mm | 368 | 419 | 470 | 546 | 706 | 833 |
| B | in | 13.1 | 13.7 | 14.8 | 15.2 | 19.2 | 27.0 |
| | mm | 333 | 348 | 376 | 386 | 488 | 686 |
| RF Wt. | lbs | 165 | 243 | 284 | 462 | 940 | 1030 |
| | kg | 75 | 110 | 129 | 269 | 427 | 468 |
| BW Wt. | lbs | 153 | 223 | 256 | 425 | 895 | 985 |
| | kg | 70 | 101 | 116 | 193 | 407 | 448 |

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.