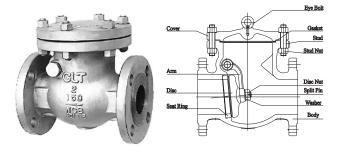
GLT CHECK VALVE

Check Valve Application

Swing check valves are designed to close quickly and automatically with positive shut off in either horizontal or vertical (flow up) pipe runs. Inherently, swing check valves have a low pressure drop and are best suitable for velocity applications. Our closure design allows our swing check valve to close completely even and remain closed with no flow when installed in a horizontal pipe run.

Manufacturing Standards

| | API 600 (Swing Check Valves) | | | |
|---------------------|-------------------------------|--|--|--|
| General Design | API 594 (Wafer Check Valves) | | | |
| | API 602 (Forged Steel Valves) | | | |
| Pressure Rating | ASME / ANSI B16.34 | | | |
| Face to Face | ASME/ANSIB16.10 | | | |
| Flange Dimensions | ASME / ANSI B16.5 | | | |
| Butt-weld End | ASME / ANSI B16.25 | | | |
| Inspection and Test | API 6D / API 598 | | | |



Body and Cover Connection

Standard body-bonnet joints of gate valves are connected by studs and nuts and are machined as follows:

| PRESSURE CLASS | JOINT DESIGN | GASKET TYPE |
|----------------|-----------------------------|----------------------------------|
| 150 & 300 | Male-female | Spiral wound metal with Graphite |
| 600 | Male-female/Ring type joint | Spiral wound/Ring joint metal |
| 900 & Above | Ring type joint | Ring joint metal |

Disc

Each disc's seating surface is precision ground and mated to the seat ring for insurance of a positive shut off. The disc is secured to the hinge arm with the disc nut and pinned to prevent disengagement during service.

Seat Ring

Seat rings are designed to greatly reduce and/or prevent any turbulence and avoid damages due to the corrosion. Seat rings for gate valves are typically made from forged steel.

End Connections

Our standard end connection produce valves with:

- Flange end type with Raised Face (RF), Flat Face (FF) or Ring Type Joint (RTJ) that conform to ANSI B16.5.
- Butt-welding ends (BW) that conform to ANSI B16.25.
- Threaded ends (NPT) that conform to ANSI B1.20.1 socket weld ends that conform to ANSI B16.11
- All face-to-face/end-to-end dimensions conform to ANSI B16.10.

Other special end connections are supplied according to customer's requirements.

Standard Parts & Material

| PART NAME | WCB Series | 304 Series | 316 Series | Cr-Mo(V) Series | LCB, LCC Series | | | |
|--------------------------|--|-------------------------|-------------------------|--------------------------------|-------------------------------------|--|--|--|
| Body & Cover Disc Arm | A216-WCB | A351-CF8 A351-CF3 | A351-CF8M A351-CF3M | A217-WC5 A217-C9 A217-C5 | A352-LCB A352-LCC | | | |
| Seat Ring | A105/A182-F6a | A182-F304 A182-F304L | A182-F316 A182-F316L | A182-F6a | A182-F6a | | | |
| Sealing Material | Cr13 / Cr13 304 / 304 HF / 304 HF / HF 316 / 316 HF / 316 HF / Monel | 304 / 304 HF / 304 | 316 / 316 HF / 316 | HF / Cr13 HF / HF | 316 / 316 HF / Monel HF / 316 | | | |
| Backseat | A182-F6a | A182-F304 A182-F304L | A182-F316 A182-F316L | A182-F6a | A182-F6a | | | |
| Stud | A193-B7 | A320-B8 | A193-B8 | A193-B7 | A193-B7 | | | |
| Nut | A194-2H | A194-8 | A194-8M | A194-2H | A194-2H | | | |
| Gasket | Spiral Wound + Graphite / Ring Joint Metal | | | | | | | |

NOTE: Other valve material composition are available on special request

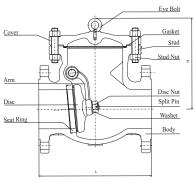
GLT CAST STEEL SWING CHECK VALVE

CLASS 600 SWING CHECK VALVE

Designed to API 600 1

Cast Steel Swing Check Valves, Bolted cover, Horizontal or vertical lines.





Standard Parts & Material - Fig. 3A1C6

| PARTS | MATERIALS |
|------------|-------------------|
| Body | A216 WCB |
| Cover | A216 WCB |
| Disc | A216 WCB + Cr13 |
| Seat Ring | A105 + Cr13 / STL |
| Hinge Arm | A216 WCB |
| Hinge Pin | A182-F6a |
| Disc Nut | A194-2H |
| Gasket | Ring Joint Metal |
| Cover Bolt | A193-B7 |
| Cover Nut | A194-2H |

NOTE: Other valve material composition are available

Dimensions

| Valve Size | | | 2" 50mm | 2½" 65mm | 3" 80mm | 4" 100mm | 5" 125mm | 6" 150mm | 8" 200mm | 10" 250mm | 12" 300mm | 14" 350mm | 16" 400mm |
|------------------|---------|----|------------|-------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| | RF | mm | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 | 991 |
| Face to Face (L) | RTJ | mm | 295 | 333 | 359 | 435 | 511 | 562 | 663 | 790 | 841 | 892 | 994 |
| BW | | mm | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 | 991 |
| Valve Center to | Гор (Н) | mm | 180 | 195 | 220 | 255 | 280 | 315 | 355 | 415 | 450 | 555 | 600 |
| Approximate We | eight | kg | 32 | 42 | 58 | 110 | 178 | 215 | 380 | 610 | 870 | 940 | 1350 |

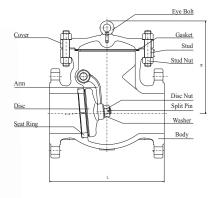
Working Pressure: Carbon Steel - 1480 p.s.i. @ 100°F / 38°C

CLASS 900 SWING CHECK VALVE

Designed to API 600 P

Cast steel swing check valve, Bolted cover, Horizontal or vertical lines.





Standard Parts & Material - Fig. 3A1C9

| PARTS | MATERIALS | | | | |
|------------|-------------------|--|--|--|--|
| Body | A216 WCB | | | | |
| Cover | A216 WCB | | | | |
| Disc | A216 WCB + Cr13 | | | | |
| Seat Ring | A105 + Cr13 / STL | | | | |
| Hinge Arm | A216 WCB | | | | |
| Hinge Pin | A182-F6a | | | | |
| Disc Nut | A194-2H | | | | |
| Gasket | Ring Joint Metal | | | | |
| Cover Bolt | A193-B7 | | | | |
| Cover Nut | A194-2H | | | | |

NOTE: Other valve material composition are available

Dimensions

| Valve Size | | | 2" 50mm | 3" 80mm | 4" 100mm | 6" 150mm | 8" 200mm | 10" 250mm |
|------------------|---------|----|------------|------------|-------------|-------------|-------------|--------------|
| | RF | mm | 368 | 381 | 457 | 610 | 737 | 838 |
| Face to Face (L) | RTJ | mm | 371 | 384 | 460 | 613 | 740 | 841 |
| | BW | mm | 368 | 381 | 457 | 610 | 737 | 838 |
| Valve Center to | Гор (Н) | mm | 260 | 290 | 340 | 440 | 520 | 620 |
| Approximate We | eight | kg | 60 | 82 | 140 | 265 | 470 | 720 |

Working Pressure: Carbon Steel - 2220 p.s.i. @ 100°F / 38°C