

STANDARD MATERIALS
(Other materials available)

| PART | MATERIALS |
|----------------------|----------------|
| Body | A351 Gr. CF3M |
| Cap | A351 Gr. CF8M |
| Disc | A276 316 |
| Gasket | PTFE |
| Carrier | A351 Gr. CF8M |
| Carrier Pin | A276 316 |
| Disc Nut | SST 316 |
| Body / Cap Stud | A193 Gr. B8 |
| Body / Cap Nut | A194 Gr.8 |
| Locating Pin | SST |
| Identification Plate | Series 300 SST |

| Class | Figure Number |
|-------|---------------|
| 200 | 2341 |
| 300 | 2346 (1) |
| 600 | 2350 (1) |

1) See pages 22-24 for flanged and butt weld designs.

DESIGN FEATURES:

- **Integral Seats**
- **Wall thickness** per API 603 requirements.
- **Swivel disc** for improved seat alignment and longer life.
- **Each valve** is shell and seat pressure tested per industry standard API 598.
- **Check valves** are suitable for service in horizontal line with cap vertical or in a vertical line with flow upward.
- **Carrier Pin** is confined within the body wall and is not accessible from the exterior. This eliminates potential leak path with side plug design.
- **Disc** suspended from valve cap and without side plugs.
- **Cap** has a male and female joint.

- **Each valve** has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test, inspection result and certificate of conformance.
- **Other** available options as follows:
 - Alternate valve materials
 - Alternate trim materials
 - NACE service
 - Special cleaning for applications such as oxygen or chlorine

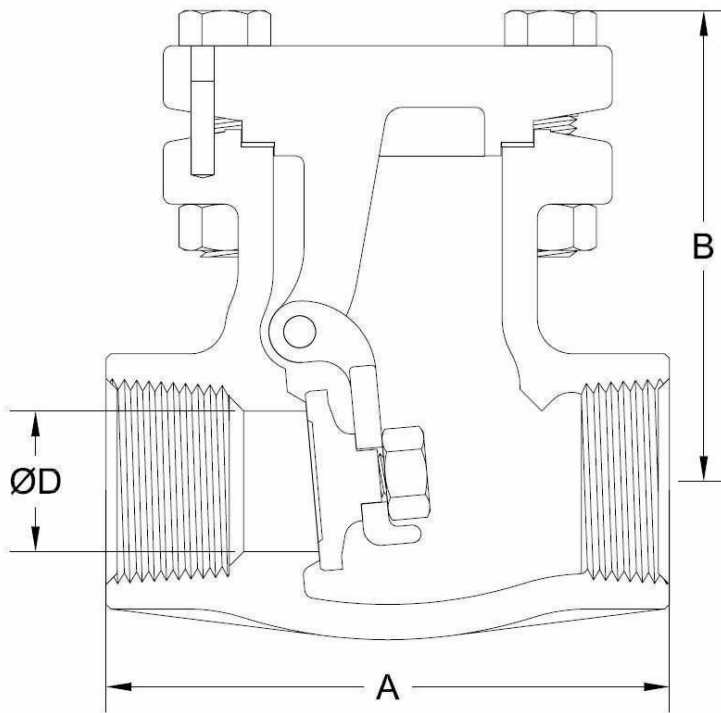
NOTE: Powell reserves the right to convert threaded ends to socket weld, which will result in thread remnants as pipe stop.

Design Specifications

| Item | Applicable Specification |
|--------------------------------|--------------------------|
| Wall thickness | API 603 & B16.34 |
| Pressure - temperature ratings | ASME B16.34 |
| General valve design | ASME B16.34 |
| End Threads-NPT | ASME B1.20.1 |
| Socket Weld Ends | ASME B16.11 |
| Materials | ASTM |

SWING CHECK VALVE DIMENSIONS (CLASS 200-600)

| SIZE | ASME 200 | | | | | ASME 300 | | | | | | | | | |
|------|----------|-----|------|------|-----|----------------|-----|------|------|-----|------|----------------|------|------|-----|
| | A | B | D | WT | lb | C _v | A | B | D | WT | lb | C _v | | | |
| | | | | | kg | | | | | | kg | | | | |
| in | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | | | |
| ¼ | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 |
| 6 | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | |
| ¾ | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 |
| 10 | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | |
| ½ | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 | 2.75 | 2.2 | 0.44 | 2.1 | 3.0 |
| 13 | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | | 70 | 55 | 11 | 1.0 | |
| ¾ | 3.75 | 3.0 | 0.75 | 3.3 | 9.2 | 3.75 | 3.0 | 0.75 | 4.4 | 9.2 | 3.75 | 3.0 | 0.75 | 4.4 | 9.2 |
| 19 | 95 | 76 | 19 | 1.5 | | 95 | 76 | 19 | 2.0 | | 95 | 76 | 19 | 2.0 | |
| 1 | 4.00 | 3.4 | 1.00 | 4.9 | 17 | 4.00 | 3.4 | 1.00 | 6.1 | 17 | 4.00 | 3.4 | 1.00 | 6.1 | 17 |
| 25 | 102 | 86 | 25 | 2.2 | | 102 | 86 | 25 | 2.8 | | 102 | 86 | 25 | 2.8 | |
| 1¼ | 4.75 | 3.4 | 1.25 | 7.3 | 27 | 4.75 | 3.4 | 1.25 | 8.5 | 27 | 4.75 | 3.4 | 1.25 | 8.5 | 27 |
| 32 | 121 | 86 | 32 | 3.3 | | 121 | 86 | 32 | 3.9 | | 121 | 86 | 32 | 3.9 | |
| 1½ | 5.50 | 4.1 | 1.50 | 10.6 | 40 | 5.50 | 4.1 | 1.50 | 10.6 | 40 | 5.50 | 4.1 | 1.50 | 10.6 | 40 |
| 38 | 140 | 103 | 38 | 4.8 | | 140 | 103 | 38 | 4.8 | | 140 | 103 | 38 | 4.8 | |
| 2 | 6.00 | 4.6 | 2.00 | 15.5 | 75 | 6.00 | 4.6 | 2.00 | 15.5 | 75 | 6.00 | 4.6 | 2.00 | 15.5 | 75 |
| 50 | 152 | 116 | 51 | 7.0 | | 152 | 116 | 51 | 7.0 | | 152 | 116 | 51 | 7.0 | |



B = Center to top

WT = Weight

C_v = Flow coefficient

| SIZE | ASME 600 | | | | | | | | | |
|------|----------|-----|------|------|-----|----------------|-----|------|------|-----|
| | A | B | D | WT | lb | C _v | | | | |
| | | | | | kg | | | | | |
| in | mm | mm | mm | mm | mm | mm | | | | |
| ¼ | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 |
| 6 | 70 | 58 | 11 | 3.2 | | 70 | 58 | 11 | 3.2 | |
| ¾ | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 |
| 10 | 70 | 58 | 11 | 3.2 | | 70 | 58 | 11 | 3.2 | |
| ½ | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 | 2.75 | 2.3 | 0.44 | 7.0 | 3.0 |
| 13 | 70 | 58 | 11 | 3.2 | | 70 | 58 | 11 | 3.2 | |
| ¾ | 3.75 | 3.1 | 0.75 | 8.5 | 9.2 | 3.75 | 3.1 | 0.75 | 8.5 | 9.2 |
| 19 | 95 | 79 | 19 | 3.9 | | 95 | 79 | 19 | 3.9 | |
| 1 | 4.00 | 3.5 | 1.00 | 11.0 | 17 | 4.00 | 3.5 | 1.00 | 11.0 | 17 |
| 25 | 102 | 90 | 25 | 5.0 | | 102 | 90 | 25 | 5.0 | |
| 1¼ | 4.75 | 3.5 | 1.25 | 13.2 | 27 | 4.75 | 3.5 | 1.25 | 13.2 | 27 |
| 32 | 121 | 90 | 32 | 6.0 | | 121 | 90 | 32 | 6.0 | |
| 1½ | 5.63 | 4.3 | 1.50 | 14.6 | 40 | 5.63 | 4.3 | 1.50 | 14.6 | 40 |
| 38 | 143 | 108 | 38 | 6.6 | | 143 | 108 | 38 | 6.6 | |
| 2 | 6.25 | 5.4 | 2.00 | 35.0 | 75 | 6.25 | 5.4 | 2.00 | 35.0 | 75 |
| 50 | 159 | 138 | 51 | 15.9 | | 159 | 138 | 51 | 15.9 | |