



Gate Valves

Standard Features (Sizes 1-1/2" - 14")

- Straight-through flow with minimal pressure drop
- Unique sliding cylindrical plug design provides larger seating area than conventional gate valves
- Made of durable, corrosion resistant plastic
- No metal to media contact anywhere in valve
- Clean-out (drain) plug in bottom area of valve body
- Rated for full vacuum service
- Light weight for easier and economical installation
- Positive bubble-tight shut-off
- Visual position indicator

Options

- 2" square operating nut
- Stem extensions
- Locking handles
- Electric actuation, up to 3"
- FKM seals

Caution

- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.

Specifications

Sizes: 1-1/2" - 14"
Body: High Impact PVC
Models: Flanged (ANSI)

Types/Sizes: "P" Type: PP, 1-1/2" - 14"
Seals: EPDM, FKM(Optional)

**Sizes 1 1/2" - 14" PVC/PP/EPDM/FKM
NSF-61 Certified**

Type P Parts (Sizes 1-1/2" - 6")

| PARTS | | | |
|-------|-------------------|-------|---------------------|
| NO. | DESCRIPTION | PCS. | MATERIAL |
| 1 | Body | 1 | HI-PVC |
| 2 | Gate (Plug) | 1 | PP |
| 3 | Stem | 1 | HI-PVC |
| 4 | Bonnet (A) | 1 | HI-PVC |
| 5 | Bonnet (B)* | 1 | HI-PVC |
| 6 | Thrust Bearing | 1 Set | PP |
| 7 | Bolt, Nut, Washer | - | Stainless Steel 304 |
| 8 | Hand Wheel | 1 | PP |
| 9 | Indicating Cover | 1 | PC |
| 10 | Indicating Ring | 1 | PVC |
| 11 | Guide Pin | 1 | Stainless Steel 304 |
| 12 | Guide Pin Holder | 1 | PVC |
| 13 | Gasket | 1 | EPDM |
| 14 | O-Ring (A) | 1 | EPDM |
| 15 | Washer | 1 | PVC |
| 16 | Nut | 1 | Stainless Steel 304 |
| 17 | O-Ring (B) | 1 | EPDM, FKM |
| 18 | O-Ring (C) | 2 | EPDM, FKM |
| 23 | Sheet Gasket | 1 | EPDM, FKM |
| 24 | Plug | 1 | PVC |

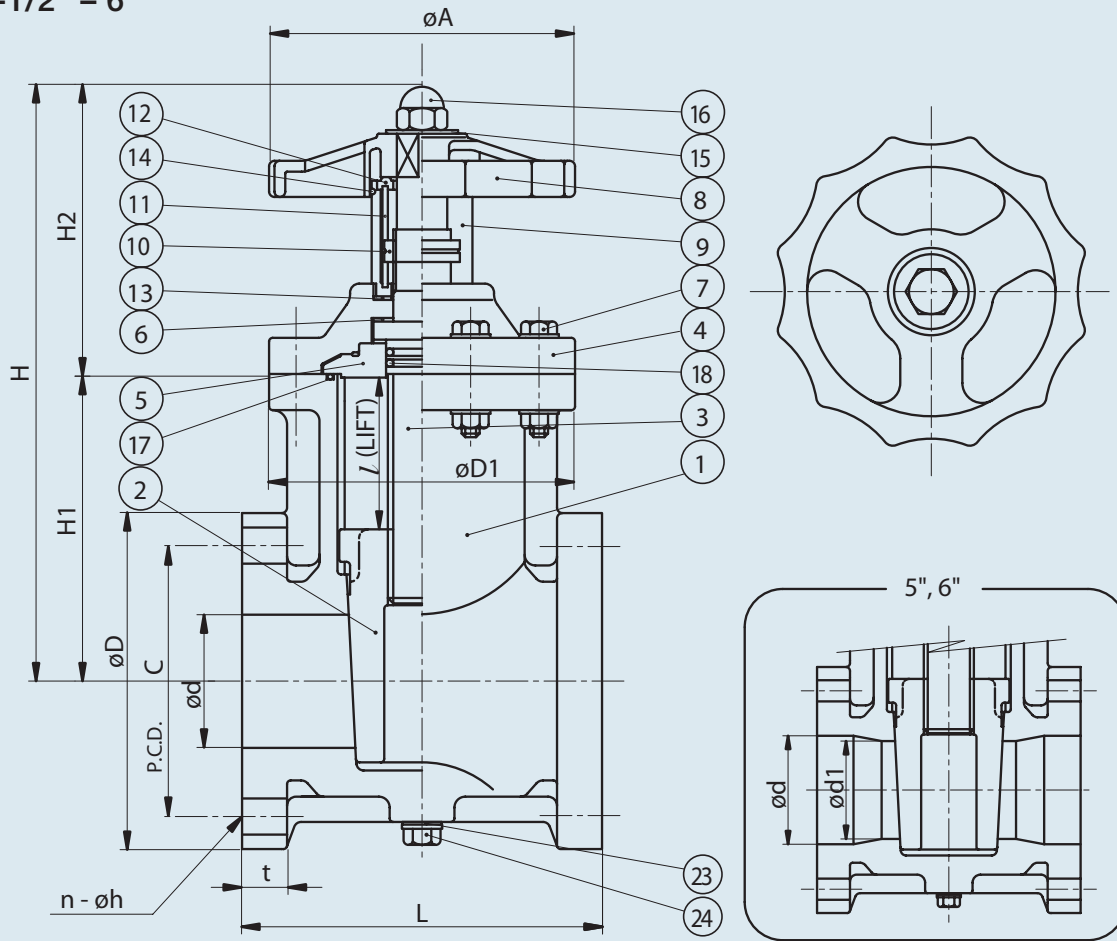
* Stem holder



Type P

Gate Valves

Sizes 1-1/2" - 6"



Troubleshooting

What if fluid still flows when fully closed?

1. Body or plug is worn or damaged. Replace.
2. Seat is worn or damaged. Replace.
3. Foreign material caught at the bottom of body. Needs cleaning.

What if handle does not engage with stem?

1. Stem damaged or broken. Change stem.

2. Engaging part of stem and/or plug damaged or broken. Need to replace stem and/or plug.

What if there are leaks between bonnet and body?

1. Bolts are not tightened properly. Tighten diagonally and evenly.
2. O-ring between body and bonnet damaged or worn. Change O-ring.

Dimensions (Sizes 1-1/2" - 6")

| NOMINAL SIZE | | ANSI CLASS 150 | | | | | | | | | | | | | |
|--------------|-----|----------------|------|-------|------|---|------|-------|------|-------|-------|------|-------|------|-------|
| INCHES | mm | d | d1 | D | C | n | h | L | t | D1 | A | l | H1 | H2 | H |
| 1 1/2 | 40 | 1.57 | - | 5.00 | 3.88 | 4 | 0.62 | 6.50 | 0.87 | 4.72 | 4.72 | 1.93 | 4.21 | 5.20 | 9.41 |
| 2 | 50 | 1.97 | - | 6.00 | 4.75 | 4 | 0.75 | 7.01 | 0.91 | 5.12 | 5.12 | 2.36 | 5.28 | 5.35 | 10.63 |
| 2 1/2 | 65 | 2.56 | - | 7.00 | 5.50 | 4 | 0.75 | 7.48 | 0.94 | 6.10 | 6.10 | 2.95 | 5.98 | 5.91 | 11.89 |
| 3 | 80 | 2.95 | - | 7.50 | 6.00 | 4 | 0.75 | 7.99 | 0.98 | 6.69 | 6.69 | 3.35 | 6.69 | 6.10 | 12.79 |
| 4 | 100 | 3.94 | - | 9.00 | 7.50 | 8 | 0.75 | 9.02 | 1.06 | 7.68 | 7.68 | 4.33 | 8.15 | 6.42 | 14.57 |
| 5 | 125 | 4.92 | 4.33 | 10.00 | 8.50 | 8 | 0.88 | 10.24 | 1.06 | 9.25 | 9.25 | 4.61 | 8.94 | 7.09 | 16.03 |
| 6 | 150 | 5.91 | 5.12 | 11.00 | 9.50 | 8 | 0.88 | 10.51 | 1.06 | 10.63 | 10.63 | 5.43 | 10.35 | 7.17 | 17.52 |

Pressure vs. Temp. (PSI, WATER, NON-SHOCK)

| NOMINAL SIZE | | 30° F 120° F |
|--------------|---------|-----------------|
| INCHES | mm | |
| 1 1/2 - 8 | 40-200 | 150 |
| 10 | 250 | 110 |
| 12-14 | 300-350 | 75 |

Gate Valves

Type P

Type P Parts (Sizes 8" – 14")

| PARTS | | | |
|-------|----------------------|-------|----------------------|
| NO. | DESCRIPTION | PCS. | MATERIAL |
| 1 | Body | 1 | HI-PVC |
| 2 | Gate (Plug) | 1 | PP |
| 3 | Stem | 1 | HI-PVC |
| 4 | Bonnet (A) | 1 | HI-PVC |
| 4a | Bush (A) | 1 | PP |
| 4b | Knock Pin (A) | 1 | PP |
| 5 | Bonnet (B)* | 1 | HI-PVC |
| 5a | Bush (B) | 1 | PP |
| 5b | Knock Pin (B) | 1 | PP |
| 6 | Thrust Bearing | 1 Set | High Carbon Chromium |
| 7 | Bolt, Nut, Washer | - | Stainless Steel 304 |
| 8 | Hand Wheel | 1 | PP |
| 9 | Indicating Cover | 1 | PC |
| 10 | Indicating Ring | 1 | PVC |
| 11 | Guide Pin | 1 | Stainless Steel 304 |
| 12 | Guide Pin Holder | 1 | PVC |
| 13 | Gasket | 1 | EPDM |
| 14 | O-Ring (A) | 1 | EPDM |
| 15 | Washer | 1 | PVC |
| 16 | Nut | 1 | Stainless Steel 304 |
| 17 | Screw | 1 | Stainless Steel 304 |
| 18 | O-Ring (B) | 1 | EPDM, FKM |
| 19 | O-Ring (C) | 3 | EPDM, FKM |
| 20 | O-Ring (D) | 1 | EPDM, FKM |
| 21 | O-Ring (E) | 1 | EPDM, FKM |
| 22 | O-Ring (F) | 1 | EPDM, FKM |
| 23 | Sheet Gasket | 1 | EPDM, FKM |
| 24 | Plug | 1 | PVC |
| 1a | Body Metal Inserts** | - | Copper Alloy |

* Stem holder

** B" and 12" sizes: 4 inserts; 14" size: 8 inserts

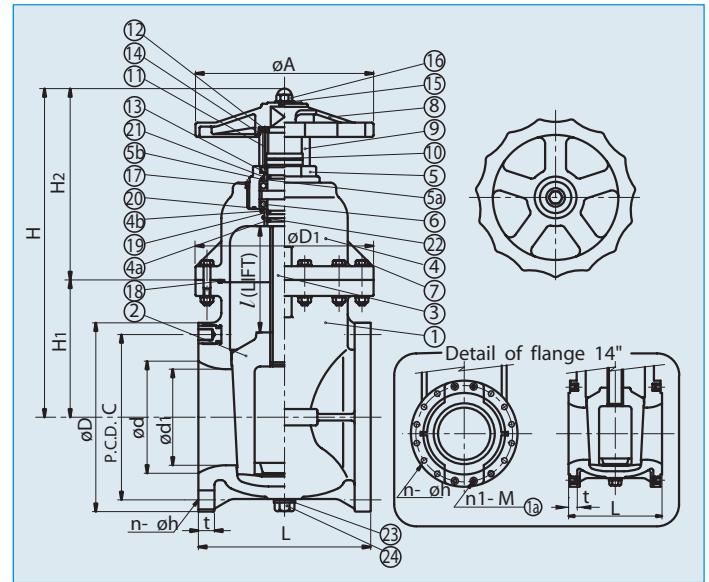
Sample Specification

All Gate Valves shall be constructed of High Impact PVC and have no metal-to-media contact. The gate shall be a tapered cylindrical plug design PVC shall conform to ASTM D1784 Cell Classification 12454-A, & PP to ASTM D4101 Cell Classification PPO210B67272. Valves shall have a pressure rating of 150 psi at 70 degrees F sizes 1-1/2" through 8", 110 psi at 70 degrees F size 10", and

Dimensions (Sizes: 8" – 14")

| NOMINAL SIZE | | ANSI CLASS 150 | | | | | | | | | | | | | | |
|--------------|-----|----------------|-------|-------|-------|----|------|-------------|-------|------|-------|-------|-------|-------|-------|-------|
| | | d | d1 | D | C | n | h | n1 – M | L | t | D1 | A | l | H1 | H2 | H |
| INCHES | mm | | | | | | | | | | | | | | | |
| 8 | 200 | 7.72 | 6.61 | 13.50 | 11.75 | 6 | 0.88 | 2 – 3/4 UNC | 11.50 | 1.10 | 12.20 | 12.20 | 7.09 | 9.45 | 13.27 | 22.72 |
| 10 | 250 | 9.72 | 8.27 | 16.00 | 14.25 | 12 | 0.98 | - | 14.96 | 1.18 | 14.17 | 14.17 | 8.90 | 10.63 | 16.54 | 27.17 |
| 12 | 300 | 11.73 | 10.04 | 19.00 | 17.00 | 10 | 0.98 | 2 – 7/8 UNC | 15.75 | 1.22 | 16.14 | 16.14 | 10.75 | 12.60 | 18.90 | 31.50 |
| 14 | 350 | 13.70 | 11.69 | 21.00 | 18.75 | 8 | 1.14 | 4 – 1 UNC | 16.93 | 1.26 | 17.32 | 17.91 | 12.56 | 12.20 | 23.62 | 35.83 |

Sizes: 8" – 14"



Cv Values

| NOMINAL SIZE | | Cv |
|--------------|-----|------|
| INCHES | mm | |
| 1 1/2 | 40 | 130 |
| 2 | 50 | 180 |
| 2 1/2 | 65 | 415 |
| 3 | 80 | 470 |
| 4 | 100 | 690 |
| 5 | 125 | 1000 |
| 6 | 150 | 1400 |
| 8 | 200 | 2900 |
| 10 | 250 | 3700 |
| 12 | 300 | 5200 |
| 14 | 350 | 7000 |

Weight (POUNDS)

| NOMINAL SIZE | | FLANGED |
|--------------|-----|---------|
| INCHES | mm | |
| 1 1/2 | 40 | 7.50 |
| 2 | 50 | 10.20 |
| 2 1/2 | 65 | 13.00 |
| 3 | 80 | 16.60 |
| 4 | 100 | 22.00 |
| 5 | 125 | 29.00 |
| 6 | 150 | 42.00 |
| 8 | 200 | 68.50 |
| 10 | 250 | 95.00 |
| 12 | 300 | 150.00 |
| 14 | 350 | 188.00 |

75 psi at 70 degrees F sizes 12" and 14". The valve shall have a non-rising stem, come standard with sealed position indicator, clean-out plug and EPDM or FKM seals as manufactured by Asahi/America Inc.