



Gate Valve

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
- Lightweight 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	1	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

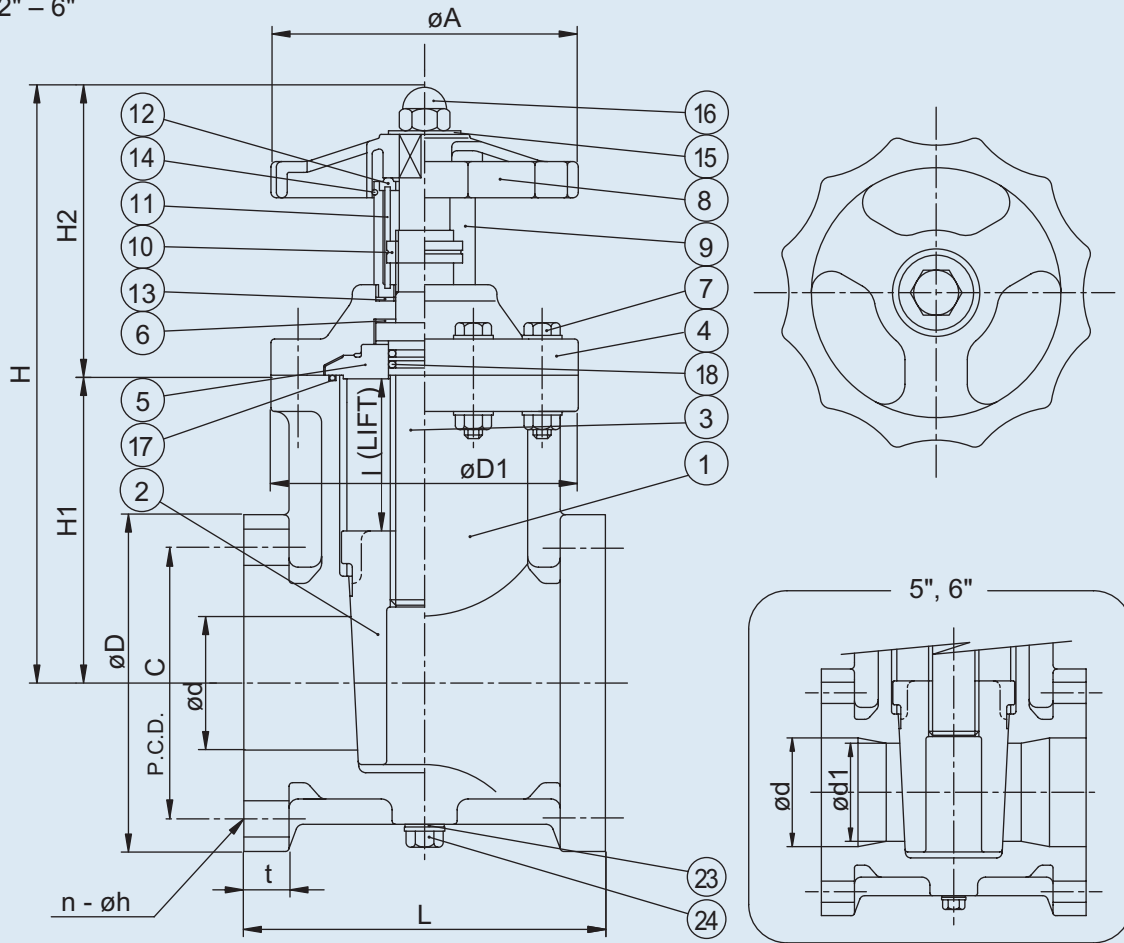
* Stem holder



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 valve.
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. Replace valve..

2. Engaging part of stem and/or plug damaged or broken. Replace valve.

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") (in.)

NOMINAL SIZE	ANSI CLASS 150														
	INCHES	mm	d	d1	D	C	n	h	L	t	D1	A	I	H1	H2
1-1/2	40	1.57	-	5.00	3.88	4	0.62	6.5	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

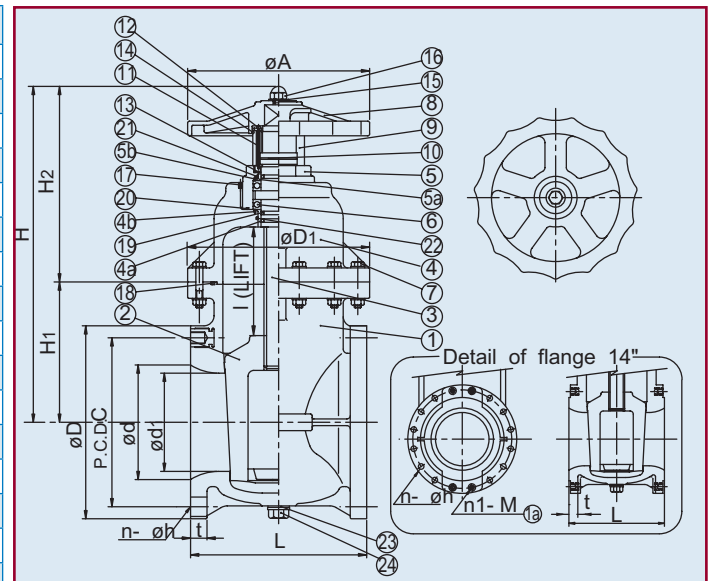
Gate Valves

Type P

Type P Parts (Sizes 8" – 14")

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	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	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
 ** 8" 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, and PP to ASTM D4101 Cell Classification

PPO210B67272. Valves shall have a pressure rating of 150psi at 70° F sizes 1-1/2" through 8", 110psi at 70° F size 10", and 75psi at 70° 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.

Dimensions (Sizes: 8" – 14") (in.)

NOMINAL SIZE		ANSI CLASS 150														
INCHES	mm	d	d1	D	C	n	h	n1-M	L	t	D1	A	I	H1	H2	H
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

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 (lbs.)

NOMINAL SIZE		WT (LBS.)
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

Gate Valves

1.0 Scope:

All requirements are for PVC Gate Valves and accessories.

2.0 Materials:

HI-PVC (Hi Impact) – Conforming to ASTM D1784 Cell Classification 12454A

IZOD Impact strength rating of 10 – 15 Kilojoule/M²

Polypropylene – Conforming to ASTM D4101 Cell Classification PP0210B67272

FKM – Viton® Fluorocarbon Rubber

EPDM – Ethylene Propylene Diene Terpolymer Rubber

3.0 Valves:

Gate Valves shall be PVC body with FKM or EPDM seals and PP tapered cylindrical plug. Valves shall be flat faced flanged end type conforming to ANSI B16.5 bolt pattern for 150 lb flanges. The valve shall have a non-rising stem, visual position indicator, handwheel for operation, and clean-out plug on bottom of valve body.

3.1 Approved Manufacturer

Valves shall be provided by Asahi/America, Inc. of Lawrence, MA with no approved equals. Manufacturer must be ISO-9001 certified.

3.2 Pressure vs. Temperature

Valves shall have a pressure rating of:

150 psi at 70° F sizes 1-1/2" – 8"
110 psi at 70° F size 10"
75 psi at 70° F sizes 12" & 14"

4.0 Accessories:

4.1 Stem extensions

Where required should be designed, built and provided by the Asahi/America, Inc., and be 1 of 2 styles:

Style GT-A Two piece extension with outer housing 100% sealed either free standing or supported design.

Style GT-B Single Piece extension either free standing or supported design

4.2 Actuation

Actuation where required should be designed, built and provided by the Asahi/America, Inc., and be Electric type Series 92 Multi-turn available for 1-1/2" – 3" only. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturers requirements.

4.3 Operating Nuts

Where required 2" square operating nuts can be installed on Gate valves in place of handwheel. Materials of construction – Anodized Aluminum.

5.0 Installation Procedures:

All valve joints shall be prepared using flanged connections. The bolt diameters and torque values shall be in accordance with all requirements put forth in the Gate Valve Operation & Maintenance manual. All accessories should be installed in accordance with the manufacturer's requirements as well as any facility requirements.

Gate Valves

1.0 Scope:

All requirements are for PVC Gate Valves and accessories, applicable to installations in Landfill Applications

2.0 Materials:

HI-PVC (Hi Impact) Conforming to ASTM D1784 Cell Classification 12454A

IZOD Impact strength rating of 10 – 15 Kilojoule/M²

Polypropylene Conforming to ASTM D4101 Cell Classification PP0210B67272

FKM – Viton® Fluorocarbon Rubber

EPDM – Ethylene Propylene Diene Terpolymer Rubber

3.0 Valves:

Gate Valves shall be PVC body with FKM or EPDM seals and PP tapered cylindrical plug. Valves shall be flat faced flanged end type conforming to ANSI B16.5 bolt pattern for 150 lb flanges. The valve shall have a non-rising stem, visual position indicator, handwheel for operation, and clean-out plug on bottom of valve body.

3.1 Approved Manufacturer

Valves shall be provided by Asahi/America, Inc. of Lawrence, MA with no approved equals. Manufacturer must be ISO-9001 certified.

3.2 Pressure vs. Temperature

Valves shall have a pressure rating of:

150 psi at 70° F sizes 1-1/2" – 8"

110 psi at 70° F size 10"

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