

## Features

- Pressure rated 232 PSI (16 Bar) at 73°F (23°C)
- Full Port design for unrestricted flow
- Energized PTFE ball seats for extended life and lower torque
- Leak free dual stem seal design
- Union nut locking device prevents back-off
- Micro-adjustable ball seat carrier
- Fully machined ball and stem connection
- Actuator ready with optional mounting kit
- Certified per NSF372 and NSF61 for potable/drinking water

## Applications

Industrial quality full port PVC ball valves are typically used for control of water and other media compatible with the materials of construction (not suitable for compressed air or gas). Ideal for industrial applications and where NSF approved construction is required for potable drinking water. Valves can be manually operated or mounted to air or electric actuators using optional ISO5211 mounting kit.

## Operation

Turning the valve handle one quarter-turn (90°) rotates the ball from closed to the full open position. Easy mounting and maintenance with true union pipe connections. For plumbing convenience, 1/2 to 2 inch sizes include both IPS glue socket and female NPT end connectors. Larger sizes include IPS glue socket end connectors.

## Construction

<b>Valve Body</b>	PVC cell class 12454 per ASTM D1784 (dark gray)
<b>Ball and Stem</b>	PVC cell class 12454 per ASTM D1784
<b>Handle</b>	PVC cell class 12454 per ASTM D1784
<b>Ball Seats</b>	PTFE (Teflon) energized with EPDM or FPM (Viton) seals
<b>Stem Seals</b>	Dual EPDM or FPM (Viton) seals
<b>End Connectors and Lock Nuts</b>	PVC cell class 12454 per ASTM D1784
<b>Union Nut Locking Device</b>	POM



## Description

Industrial grade PVC ball valves offer a variety of advanced features in a wide range of 1/2 through 4 inch pipe sizes. Energized PTFE ball seats are used to extended cycle life, compensate for wear and lower the operating torque. Union locking device prevents nuts from backing off due to vibration or thermal cycling. Dual stem seals and adjustable ball seat carrier contribute to a leak free design. Machined ball and stem connection after molding provides a precise fit.

## Approvals

- NSF International certified to:
  - NSF/ANSI 372 Drinking Water
  - NSF/ANSI 61 G
- ANSI B1.20.1
- ASTM D1784, cell class 12454



## Options

- Electric actuators
- Air Actuators
- Wall/Base Mounting Kits
- Actuator Mounting Kits

**Construction Features**

Leak free dual stem seal design

Fully machined ball and stem connection

1/2 to 2 inch sizes include both IPS glue socket and female NPT end connectors.

Full port design for unrestricted flow

Energized PTFE ball seats for reduced torque and extended cycle life



Durable handle

Actuator ready with optional ISO5211 mounting kit

Union nut locking device prevents back-off from vibration or thermal cycling

1/2 to 2 inch Sizes



Certified per NSF372 and NSF61 G for potable / drinking water

**Pressure/Temperature**

Pressure Rating\*: 232 PSI (16 Bar) at 73°F (23°C)

Vacuum service to 29inHg at 73°F (23°C)

Temperature Rating: 32 to 140°F (0 to 60°C)

\*See P/T chart



2-1/2, 3 and 4 inch Sizes

**Pressure/Temperature Chart**

P/T Chart (PSI/°F)							
<b>PSI</b>	232	232	232	180	150	100	35
<b>°F</b>	32	50	70	90	110	120	140

P/T Chart (BAR/°C)							
<b>Bar</b>	16	16	16	12	10	7	2.4
<b>°C</b>	0	10	21	32	43	49	60

**Specifications (English units)**

Stock Number	Pipe Size* (inches)	Cv	Orifice Size	Pressure (PSI)**	Body Material	Seal Materials	Torque (inch lbs)
<b>PVC BALL VALVE, EPDM/ PTFE SEALS</b>							
551008	1/2	14	Full Port	232	PVC	PTFE/ EPDM	27
551012	3/4	27	Full Port	232	PVC	PTFE/ EPDM	36
551016	1	54	Full Port	232	PVC	PTFE/ EPDM	53
551020	1-1/4	77	Full Port	232	PVC	PTFE/ EPDM	62
551024	1-1/2	123	Full Port	232	PVC	PTFE/ EPDM	124
551032	2	238	Full Port	232	PVC	PTFE/ EPDM	160
551040	2-1/2	368	Full Port	232	PVC	PTFE/ EPDM	266
551048	3	497	Full Port	232	PVC	PTFE/ EPDM	399
551064	4	665	Full Port	232	PVC	PTFE/ EPDM	576
<b>PVC BALL VALVE, FPM (VITON) / PTFE SEALS</b>							
551066	1/2	14	Full Port	232	PVC	PTFE/ FPM	27
551067	3/4	27	Full Port	232	PVC	PTFE/ FPM	36
551068	1	54	Full Port	232	PVC	PTFE/ FPM	53
551069	1-1/4	77	Full Port	232	PVC	PTFE/ FPM	62
551070	1-1/2	123	Full Port	232	PVC	PTFE/ FPM	124
551071	2	238	Full Port	232	PVC	PTFE/ FPM	160

\* 1/2 to 2 inch valves include both IPS glue socket and female NPT end connectors, 2-1/2 to 4 inch include IPS glue connectors only

\*\* Pressure at 32 to 73° F (reduced pressure at higher temperatures—see P/T chart)

Cv= The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

Torque values at 0 PSI and 73°F

**Specifications (Metric units)**

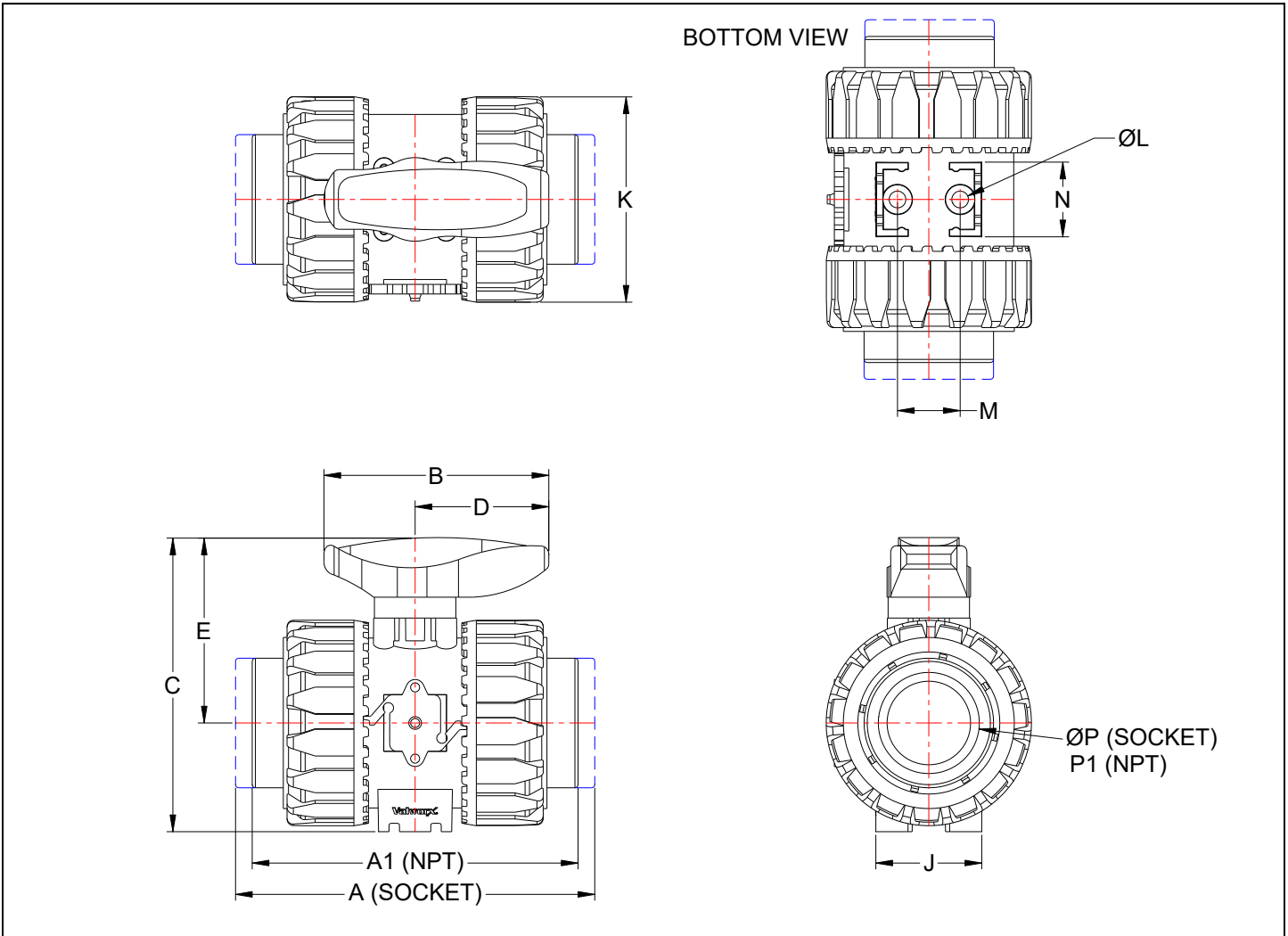
Stock Num-	Pipe Size*	Kv	Orifice Size	Pressure (Bar)**	Body Material	Seal Materials	Torque
<b>PVC BALL VALVE, EPDM/ PTFE SEATS</b>							
551008	1/2	12	Full Port	16	PVC	PTFE/EPDM	3.1
551012	3/4	23	Full Port	16	PVC	PTFE/EPDM	4.1
551016	1	46	Full Port	16	PVC	PTFE/EPDM	6
551020	1-1/4	66	Full Port	16	PVC	PTFE/EPDM	7
551024	1-1/2	106	Full Port	16	PVC	PTFE/EPDM	14
551032	2	205	Full Port	16	PVC	PTFE/EPDM	18
551040	2-1/2	317	Full Port	16	PVC	PTFE/EPDM	30
551048	3	427	Full Port	16	PVC	PTFE/EPDM	45
551064	4	572	Full Port	16	PVC	PTFE/EPDM	65
<b>PVC BALL VALVE, FPM (VITON) / PTFE SEATS</b>							
551066	1/2	12	Full Port	16	PVC	PTFE/ FPM	3.1
551067	3/4	23	Full Port	16	PVC	PTFE/ FPM	4.1
551068	1	46	Full Port	16	PVC	PTFE/ FPM	6
551069	1-1/4	66	Full Port	16	PVC	PTFE/ FPM	7
551070	1-1/2	106	Full Port	16	PVC	PTFE/ FPM	14
551071	2	205	Full Port	16	PVC	PTFE/ FPM	18

\* Valve pipe sizes 1/2 to 2 inch include both IPS glue socket and female NPT end connectors, 2-1/2 to 4 inch include IPS glue connectors only

\*\* Pressure at 0 to 23° C (reduced pressure at higher temperatures—see P/T chart)

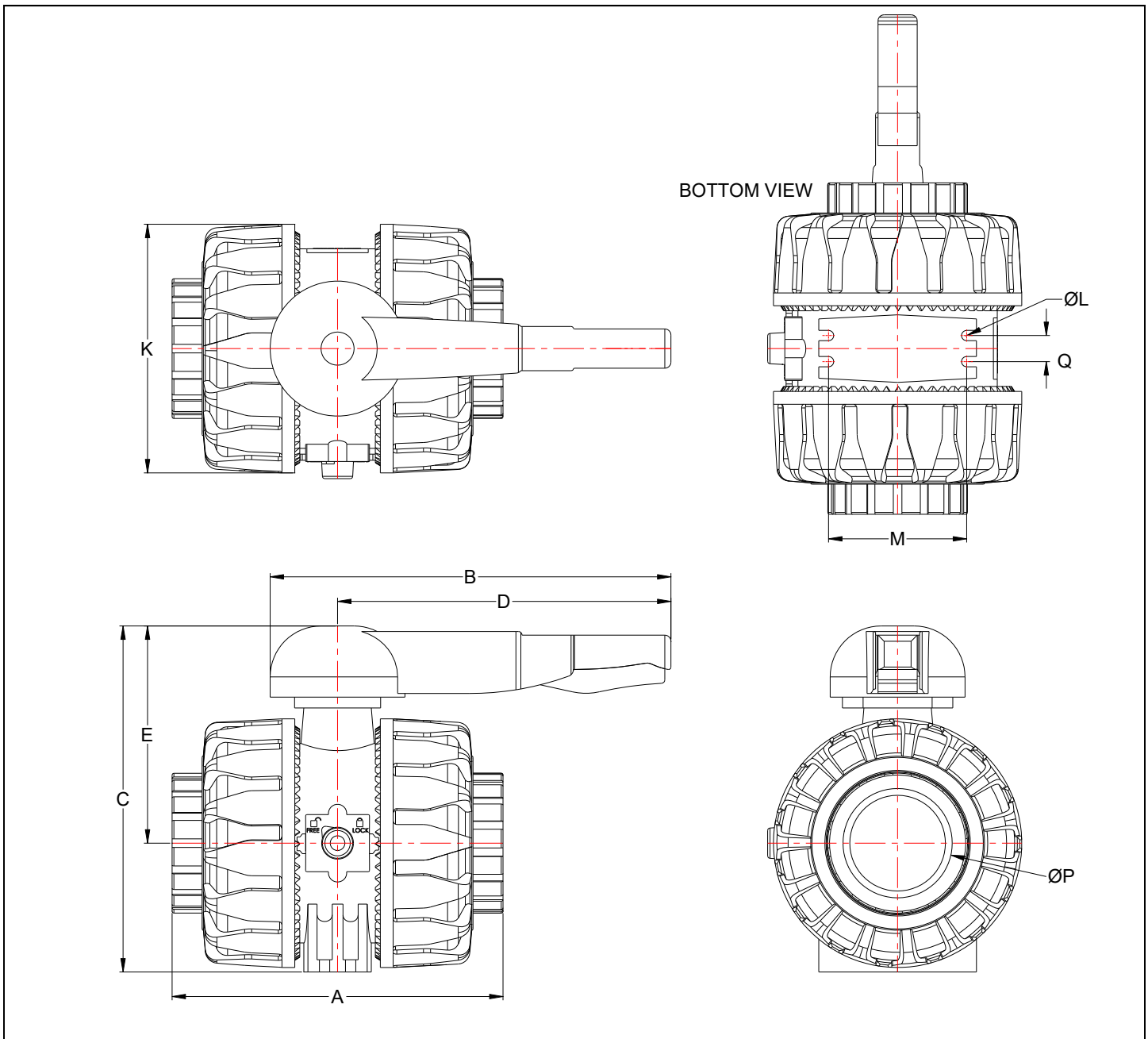
Torque values at 0 Bar and 23°C

**Dimensions: 1/2 to 2 inch Sizes**



Pipe Size		A	A1	B	C	D	E	J	K	L	M	N	P	P1	Weight
1/2	inch	4.61	4.37	2.64	3.27	1.57	2.13	1.24	2.13	—	0.79	1.06	0.84	1/2	0.47 lb
	mm	117	111	67	83	40	54	31.5	54	6	20	27	—	—	0.21 kg
3/4	inch	5.08	4.61	3.35	3.92	1.93	2.56	1.57	2.56	—	0.79	1.18	1.05	3/4	0.76 lb
	mm	129	117	85	100	49	65	40	65	6	20	30	—	—	0.35 kg
1	inch	5.59	5.31	3.35	4.28	1.93	2.74	1.57	2.87	—	0.79	1.18	1.32	1	1 lb
	mm	142	135	85	109	49	70	40	73	6	20	30	—	—	0.45 kg
1-1/4	inch	6.38	6.02	4.25	5.06	2.52	3.25	1.97	3.39	—	1.18	1.38	1.66	1-1/4	1.6 lb
	mm	162	153	108	129	64	83	50	86	8	30	35	—	—	0.82 kg
1-1/2	inch	6.77	6.14	4.25	5.55	2.52	3.50	1.97	3.86	—	1.18	1.38	1.90	1-1/2	2.15 lb
	mm	172	156	108	141	64	89	50	98	8	30	35	—	—	0.98 kg
2	inch	7.83	7.32	5.28	6.69	2.99	4.25	2.36	4.80	—	1.18	1.57	2.38	2	3.77 lb
	mm	199	186	134	170	76	108	60	122	8	30	40	—	—	1.7 kg

**Dimensions: 2-1/2 to 4 inch Sizes**



Pipe Size		A	B	C	D	E	K	L	M	P	Q	Weight
2-1/2	inch	9.25	8.86	9.89	6.89	6.46	6.46	—	3.54	2.88	0.69	9.7 lb
	mm	235	225	251	175	164	164	6.5	90	—	17.5	4.4 kg
3	inch	10.63	12.87	11.1	10.71	6.97	7.99	—	4.43	3.50	0.83	16 lb
	mm	270	327	282	272	177	203	8	112.5	—	21	7.3 kg
4	inch	12.13	15.16	12.76	12.99	7.68	9.37	—	5.39	4.50	0.83	24.4 lb
	mm	308	385	324	330	195	238	8	137	—	21	11 kg