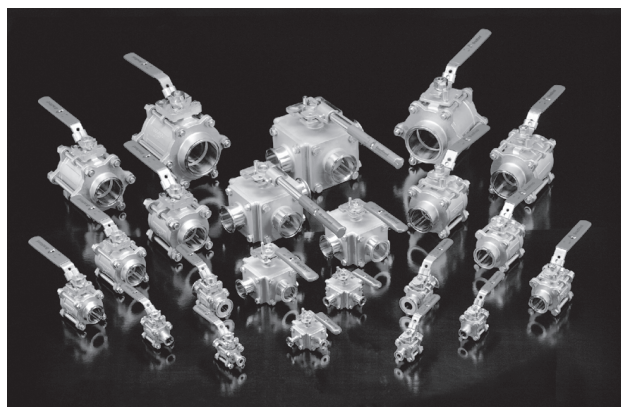


# For the right ball valve


Businesses from food and beverage to pharmaceutical and cosmetics have trusted Bradford™ sanitary ball valves for many years. The reason: Dixon Sanitary has the quality valves they need.







Bradford™ ball valves are available in ½" - 4" and in various end connections such as clamp, butt-weld, I-line, bevel seat, John Perry, and Q-line. Call for delivery as these ends are special order. Actuation is available in double acting, air-to-spring and electric. Please call for delivery as availability varies according to the requirements.

Dixon Sanitary's wide ball valve selection is available from our thirteen distribution centers - so we can ship the parts you need within twenty-four hours.

## Bradford™ quality: maintaining the standard

The  Sanitary Standard was created by the dairy industry as a voluntary benchmark for product performance and sanitary safety. The standard, developed in collaboration by a group of processors, suppliers, regulatory officials and sanitation specialists, is generally accepted by federal, state and local regulatory authorities.

Our products have earned the  symbol, which requires an annual assessment to make certain each product conforms in all respects to the published standard. Bradford™ ball valves carrying the  symbol conform to the  sanitary standards for valves for milk and milk products (#68-00).

Dixon Sanitary is proud to be a participant in the  program.



# get control with Bradford™

## Product Specifications

### Size range:

- ½" - 4" O.D. (050 - 400)

### Materials:

- (316) CF8M

### Type of ends available:

- Clamp
- Butt weld
- I-line
- Q-line
- Bevel Seat
- John Perry

Some items may not be in stock. Call for price and availability. If your part is not listed, call us; we may still be able to get it for you.

## Ordering Instructions

### 2- way valve part numbers

B	V	2	E	V	-	0	5	0	C	C	-	A	
1	2	3	4	5	6	7	8	9	10	11	12	13	14

1. B = ball
2. V = valve
3. 2 = 2-way
4. N = non-encapsulated  
C = encapsulated with elevated pad and live loaded packing
5. V = virgin PTFE  
G = 15% fiberglass filled  
C = 25% carbon  
S = stainless steel reinforced PTFE  
U = UHMW polyethylene  
P = PCTFE (KEL-F)
6. reserved
- 7, 8, 9. Size = [ie; 050=½"]
- 10, 11. End configuration; C=clamp, B=butt weld, F=female I-line, M=male I-line, T=threaded bevel, P= plain bevel, Q=Q-line, J=John Perry plain, H=John Perry threaded
12. Reserved
13. A = standard handle
- 13, 14. 2 digits = actuator possibilities (call factory)

### 3- way valve part numbers

B	V	3	S	V	T	F	0	5	0	C	-	A		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

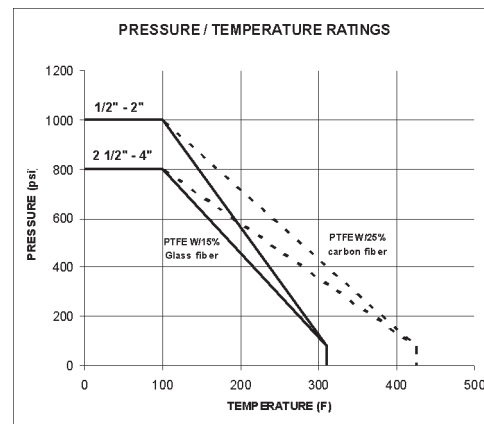
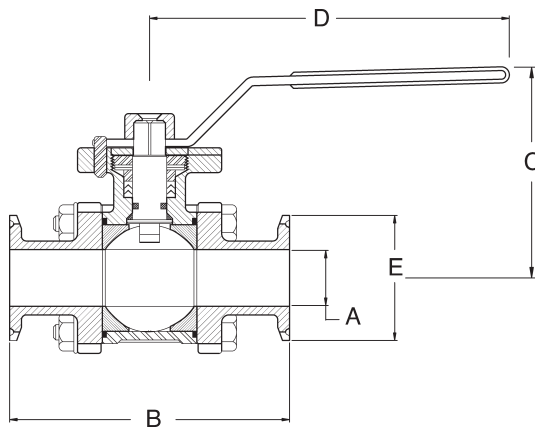
1. B = ball
2. V = valve
3. 3 = 3-way, 4 = 4-way
4. Entry: S = side
5. V = virgin PTFE
6. Ball configuration: T = T port  
L = L port
7. Port: F = full  
R = reduced (½" valve only available in full port, 4" valve only available in reduced port)
- 8, 9, 10. Size = [i.e.; 050=½"]
11. End configuration; C=clamp, B=butt weld, F=female I-line, M=male I-line, T=threaded bevel, P= plain bevel, Q=Q-line, J=John Perry plain, H=John Perry threaded
- 12, 13. - A = standard handle, 2 digits = actuator possibilities (call factory) [if actuated-continue below]
14. Flow plan (call factory)
15. Designation of initial ball position or position with extended spring A-D (call factory)

## 2-Way 3-piece Encapsulated Ball Valve



The Bradford™ ball valve is designed as a three piece construction with swing out center section for easy field repair and cleaning in place. Operating parts are stainless steel type CF8M (316) conforming to ASTM A351, solution annealed and passivated for corrosion resistance. All major parts are traceable for chemistry (**ask for MTRs**). The ball is fully encapsulated to eliminate cavities for bacteria to form. Live loaded stem packing provides a leak proof design which allows time for scheduled maintenance. The full port design creates less turbulence and is self draining. Elevated, integral ISO 5211 mounting pad is part of the valve design making actuation easy without any custom brackets. The handle makes this suitable for lock-out / tag-out applications.

- ID is polished to 3A or better
- Blow-out-proof stem design
- Various ends available: clamp, butt weld, I-line, Q-line, bevel seat and John Perry
- Direct mount actuation: double, air to spring, and electric
- Rated at **1,000 PSI** WOG (water, oil and gas), most applications
- Live loaded stem packing



Size	Dimensions (in.)					Width (in.)	Break torque (in-lbs.)	Weight (lbs.)
	A	B	C	D	E			
1/2"	0.370	3.640	3.030	4.900	0.992	1.95	105	1.590
3/4"	0.625	4.130	3.150	4.900	0.992	2.13	116	2.030
1"	0.870	4.490	3.780	5.510	1.984	2.40	336	2.970
1 1/2"	1.370	4.860	4.570	7.880	1.984	3.19	420	6.390
2"	1.870	5.710	4.880	7.880	2.516	3.98	473	10.130
2 1/2"	2.370	6.970	6.690	9.840	3.047	4.84	788	20.930
3"	2.870	7.600	7.130	9.840	3.579	5.59	1155	28.850
4"	3.840	9.290	7.870	11.420	4.682	7.87	1680	50.660

Note: drawing is for dimensional information only. Specifications and dimensions are subject to change without notice

## 2-Way 3-piece Encapsulated Ball Valve Cavity Filled Ball Valve - BV2C

Size	Part Number <i>Virgin PTFE valve</i>
1/2" <sup>1</sup>	BV2CV-050CC-A
3/4" <sup>1</sup>	BV2CV-075CC-A
1" <sup>1</sup>	BV2CV-100CC-A
1 1/2" <sup>1</sup>	BV2CV-150CC-A
2" <sup>1</sup>	BV2CV-200CC-A
2 1/2" <sup>2</sup>	BV2CV-250CC-A
3" <sup>2</sup>	BV2CV-300CC-A
4" <sup>3</sup>	BV2CV-400CC-A



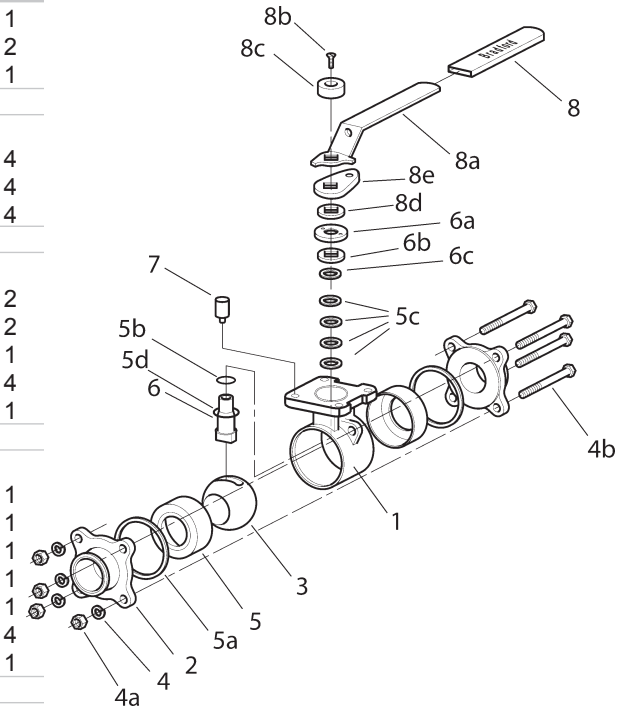
Note: replaced BV2E

Note: many other **end configurations** and **seat materials** available (see ordering instructions on page 153)

- <sup>1</sup> 1/2" - 2" valves have 4 bolts, nuts and washers
- <sup>2</sup> 2 1/2" and 3" valves have 4 bolts, 8 nuts and 8 washers
- <sup>3</sup> 4" valve has 6 bolts, 12 nuts and 12 washers

### Materials List for BV2C

Item	Part Name	Material	Qty
1	Body (BV-2C-VB*)	CF8M/316	1
2	Clamp end (BV-2C-CE*)	CF8M/316	2
3	Ball (BV-2C-BL*)	CF8M/316	1
<i>Bolt, Nut &amp; Washer Kit</i>			
(BV-2C-BN*)			
4	Washers	304	4
4a	Nuts	304	4
4b	Bolts	304	4
<i>Repair Kit</i>			
(BV-2C-VK *)			
5	Body Seal	PTFE	2
5a	Seat ring	PTFE	2
5b	Thrust washer	PTFE	1
5c	Stem packing	PTFE	4
5d	O-ring	Viton®	1
<i>Stem Kit</i>			
(BV-2C-SM *)			
6	Stem	316	1
6a	Gland nut	304	1
6b	Bevel washer-spring steel	304	1
6c	Gland ring	304	1
5b	Thrust washer	PTFE	1
5c	Stem packing	PTFE	4
5d	O-ring	Viton®	1
<i>Stop Kit</i>			
(BV-2C-SP *)			
7	Stopper	CF8	1
<i>Handle Assembly</i>			
(BV-2C-HA *)			
8	Handle cover	Polymer	1
8a	Handle	304	1
8b	Handle bolt	304	1
8c	Handle cap	304	1
8d	Washer	PTFE	1
8e	Lock plate	304	1



\* List size (050 - 400)

• Kit items are not sold individually

### Ordering Key

++ indicates seat material  
V = Virgin PTFE  
G = 15% glass PTFE  
C = 25% carbon PTFE  
S = stainless filled PTFE  
U = UHMW polyethylene  
P = PCTFE (KEL-F)

\* list size (050 - 400)

Kit items are not sold individually

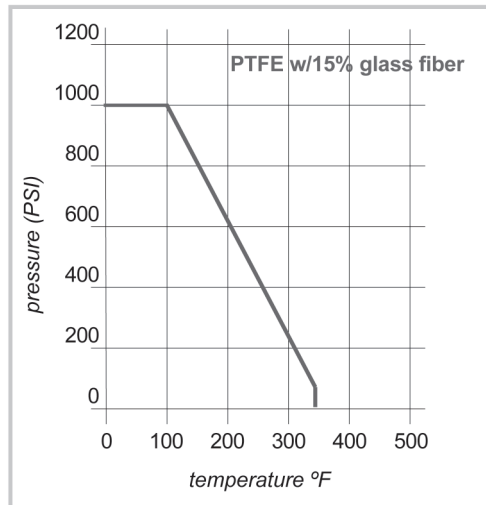
## 2-Way 3-piece Non-Encapsulated Ball Valve



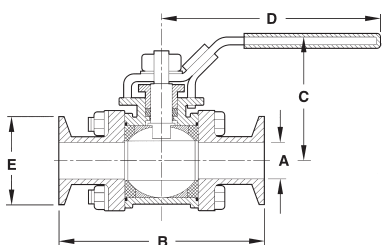
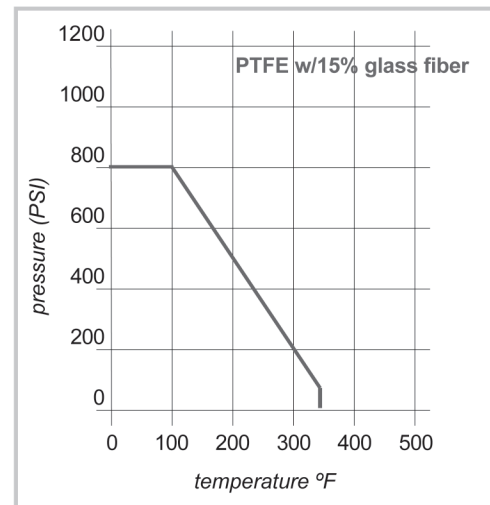
The Bradford™ ball valve is designed as a three piece construction with swing out center section for easy field repair and cleaning in place. Operating parts are stainless steel type CF8M (316) conforming to ASTM A351, solution annealed and passivated for corrosion resistance. All major parts are traceable for chemistry (**ask for MTRs**). Integral ISO 5211 mounting pad is part of the valve design making actuation easy without any custom brackets. The handle makes this suitable for lock-out / tag-out applications.

- ID is polished to 3A or better
- Blow-out-proof stem design
- Various ends available: Clamp, Butt weld, I-line, Q-line Bevel seat and John Perry
- Actuation available: double, air-to-spring, and electric
- Rated at **1,000 PSI** WOG (water, oil and gas), most applications

1/2" - 2"



2-1/2" - 4"

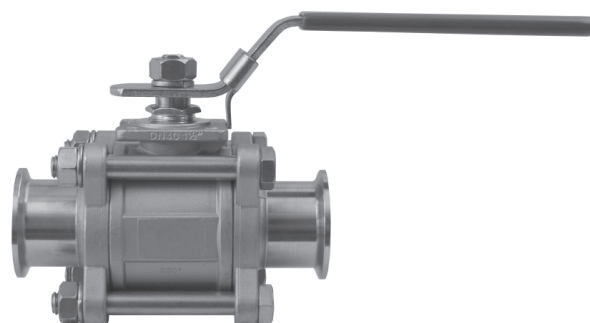


Size (in.)	Dimensions (in.)					Width (in.)	Break torque (in-lbs.)	Weight (lbs.)
	A	B	C	D	E			
1/2"	0.374	3.504	2.362	5.197	0.992	1.929	55	1.500
3/4"	0.625	3.976	2.559	5.197	0.992	2.126	71	1.900
1"	0.874	4.488	2.717	6.496	1.984	2.299	101	2.700
1 1/2"	1.378	5.512	3.504	7.638	1.984	3.173	221	4.800
2"	1.874	6.142	3.819	7.638	2.516	3.748	345	8.900
2 1/2"	2.374	7.756	5.000	9.921	3.051	4.882	683	18.700
3"	2.874	9.016	5.315	9.921	3.579	5.409	830	29.700
4"	3.835	9.567	6.260	13.110	4.681	7.913	1323	43.600

## 2-Way 3-piece Non-Encapsulated Ball Valve

### Non-cavity Filled Ball Valve - BV2N

Size	Part Number
	<i>Virgin PTFE seat valve with clamp ends</i>
1/2" <sup>1</sup>	BV2NV-050CC-A
3/4" <sup>1</sup>	BV2NV-075CC-A
1" <sup>1</sup>	BV2NV-100CC-A
1 1/2" <sup>1</sup>	BV2NV-150CC-A
2" <sup>1</sup>	BV2NV-200CC-A
2 1/2" <sup>2</sup>	BV2NV-250CC-A
3" <sup>2</sup>	BV2NV-300CC-A
4" <sup>3</sup>	BV2NV-400CC-A



Note: many other **end configurations** and **seat materials** available (see ordering instructions on page 155)

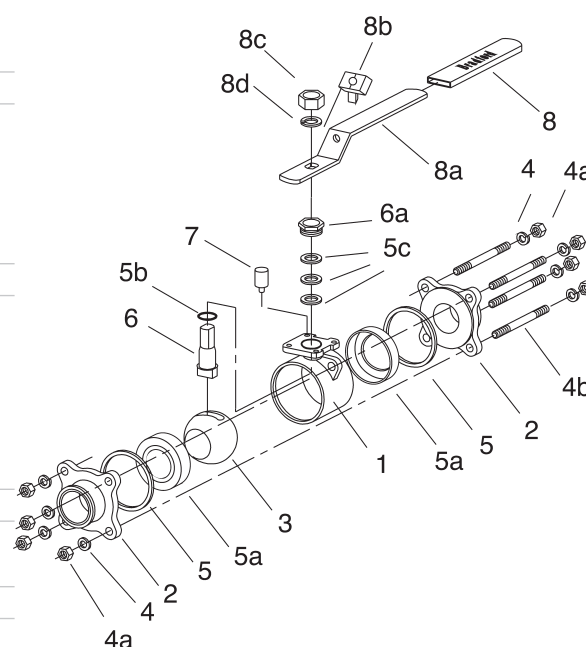
<sup>1</sup> 1/2" - 2" valves have 4 bolts, nuts and washers

<sup>2</sup> 2 1/2" and 3" valves have 4 bolts, 8 nuts and 8 washers

<sup>3</sup> 4" valve has 6 bolts, 12 nuts and 12 washers

### Materials List

Item	Part Name	Material	Qty
1	Body (BV-2N-VB *)	CF8M/316	1
2	Clamp end (BV-2N-CE *)	CF8M/316	2
3	Ball (BV-2N-BL *)	CF8M/316	1
<i>Bolt, Nut &amp; Washer Kit</i>			
4	BV-2N-BN *		
4	Washers	304	4
4a	Nuts	304	4
4b	Bolts	304	4
<i>Repair Kit</i>			
5	BV-2N-VK*		
5	Body Seal	PTFE	2
5a	Seat ring	PTFE	2
5b	Thrust washer	PTFE	1
5c	Stem packing	PTFE	*
<i>Stem Kit</i>			
6	BV-2N-SM *		
6	Stem	316	1
6a	Gland nut	304	1
6c	Gland ring	304	1
5b	Thrust washer	PTFE	3
5c	Stem packing	PTFE	*
<i>Stop Kit</i>			
7	BV-2N-SP *		
7	Stopper	CF8	1
<i>Handle Assembly</i>			
8	BV-2N-HA *		
8	Handle cover	Polymer	1
8a	Handle	304	1
8b	Lock plate	304	1
8c	Handle nut	304	1
8d	Washer	304	1



### Ordering Key

V = Virgin PTFE  
 G = 15% glass PTFE  
 C = 25% carbon PTFE  
 S = stainless filled PTFE  
 U = UHMW polyethylene  
 P = PCTFE (KEL-F)

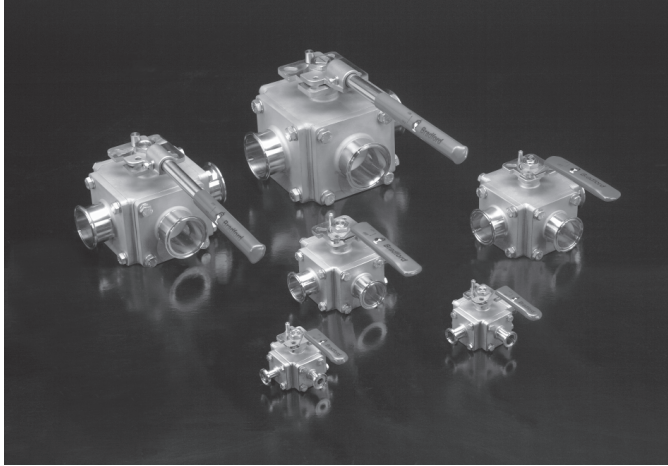
\* List size (050 - 400)

• Kit items are not sold individually

\* (2) for 1/2" - 2" valves

(3) for 2 1/2" - 4" valves

## 3-Way Encapsulated Ball Valve

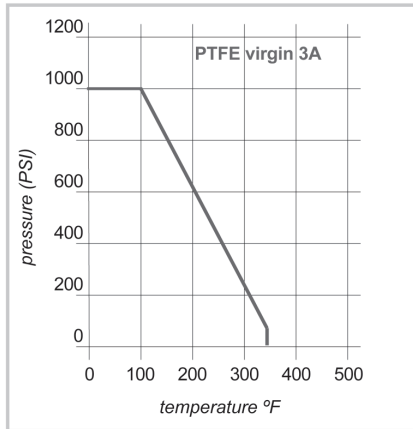


The Bradford™ 3-way ball valve is designed with a balanced four seat construction. Live loaded stem packing provides a leak-proof design allowing time to schedule maintenance. Operating parts are stainless steel type CF8M (316) conforming to ASTM A351, solution annealed and passivated for corrosion resistance. All major parts are traceable for chemistry (**ask for MTRs**). It is fully encapsulated to eliminate cavities for bacteria to form. Multiple flow patterns allow for more versatility in your processing applications. Integral ISO 5211 mounting pad is part of the valve design making actuation easy. The handle makes this suitable for lock-out / tag-out applications.

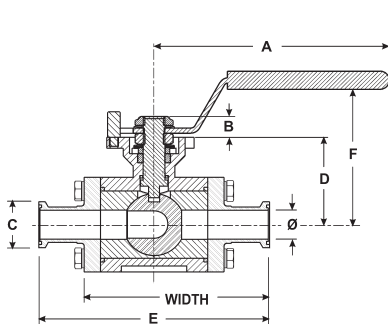
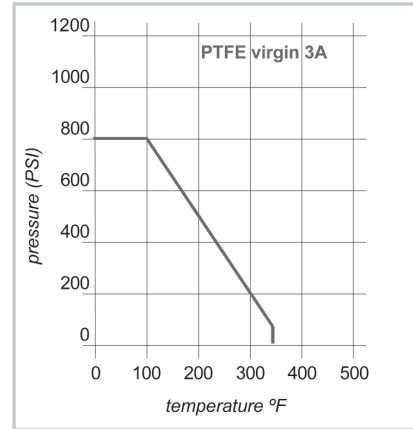
- ID is polished to 3A or better
- Blow-out-proof stem design
- Various ends available: Clamp, Butt weld, I-line, Q-line Bevel seat and John Perry
- Actuation available: double-acting, air-to-spring, electric

- Rated at **1,000 PSI** WOG (water, oil and gas) most applications
- Live loaded stem packing
- T and L flow patterns (side entry only)

1/2" - 2"



2-1/2" - 4"



Size (in.)	Dimensions (inches)							Width (in.)	Break torque (in-lbs.)	Weight (lbs.)
	A	B	C	D	E	F	Ø			
1/2"	4.750	.350	.992	1.750	4.640	3.000	0.370	3.900	83	3.6
3/4"	4.750	.350	.992	1.880	5.000	3.250	0.620	4.250	89	4.3
1"	5.400	.430	1.984	2.320	6.000	3.500	0.870	5.000	116	6.8
1 1/2"	7.200	.550	1.984	2.830	6.880	4.330	1.380	5.900	305	13.0
2"	7.200	.550	2.516	3.250	7.500	4.500	1.870	6.940	714	22.5
2 1/2"	14.500	.670	3.047	3.900	8.970	4.250	2.370	7.630	1351	25.5
3"	16.000	.930	3.579	5.000	10.250	5.750	2.870	8.750	1859	42.3
4"	16.000	.940	4.682	5.330	12.530	5.750	3.830	10.250	2137	55.8

## 3-Way Encapsulated Ball Valve Cavity Filled 3-way Ball Valve - BV3SV

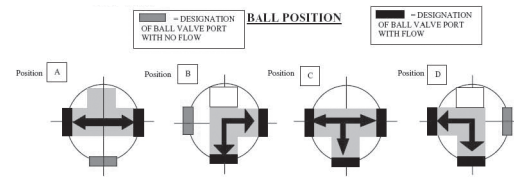
Size	Part Number <i>L port valve</i>	Part Number <i>T port valve</i>
1/2"	BV3SVLF050CC-A	BV3SVTF050C-A
3/4"	BV3SVLF075CC-A	BV3SVTF075C-A
1"	BV3SVLF100CC-A	BV3SVTF100C-A
1 1/2"	BV3SVLF150CC-A	BV3SVTF150C-A
2"	BV3SVLF200CC-A	BV3SVTF200C-A
2 1/2"	BV3SVLF250CC-A	BV3SVTF250C-A
3"	BV3SVLF300CC-A	BV3SVTF300C-A
4"	BV3SVLR400CC-A	BV3SVTR400C-A



Note: many other **end configurations** and **seat materials** available (see ordering instructions on page 153)

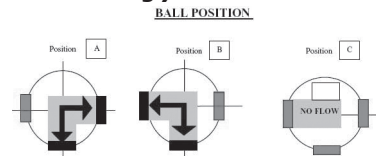
### T Pattern (top view, 3 way, side entry)

Number	Rotation	Flow Plan Options	Number	Rotation	Flow Plan Options
1	90°	A, B	5	180°	A, B, C
2	90°	B, C	6	180°	B, C, D
3	90°	C, D	7	180°	C, D, A
4	90°	D, A	8	180°	D, A, B



### L Pattern (top view, 3 way, side entry)

Number	Rotation	Flow Plan Options
1	90°	A, B
2	180°	A, B, C



4 way available, call for information

### Materials List for BV3SV

Item	Part Name	Material	Qty
1	body (BV-3SV#VB*)	CF8M/316	1
2	clamp end (BV-3SV#++*)	CF8M/316	3
3	cover plate (BV-3SV#CP*)	CF8M/316	1
4	ball (BV-3SV#†B*)	CF8M/316	1
5	bolts (BV-3SV#BN*)	304	16
8	stopper (BV-3SV#SP*)	316	1

**Repair Kit**

	BV-3SV#RK*		
6	encapsulated seat	PTFE	2
6a	body seat	PTFE	2
6b	O-ring gasket	PTFE	2
6c	stem packing	PTFE	**
7a	O-ring	Viton®	1
7b	thrust washer	PTFE	1

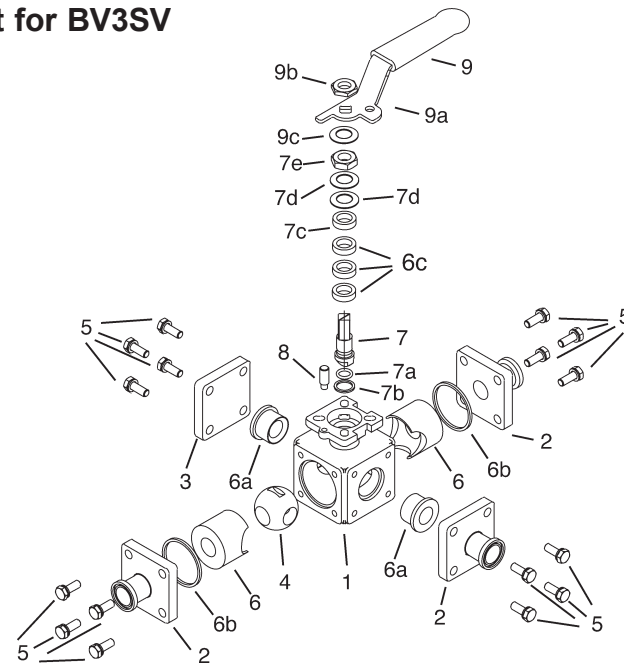
**Stem Kit**

	BV-3SV#SM*		
7	stem	316	1
7a	O-ring	Viton®	1
7b	thrust washer	PTFE	1
7c	stem washer	304	1
7d	spring washer	304	2
7e	gland nut	304	1
6c	stem packing	PTFE	**

**Handle Assembly**

	BV-3SV#HA*		
9	handle cover	Polymer	1
9a	handle	304	1
9b	handle nut	304	1
9c	washer	301	1

• Kit items are not sold individually



# F = Full Port  
R = Reduced Port  
\* Indicates size (050-400)  
% V = virgin PTFE  
G = 15% glass PTFE  
C = 25% carbon PTFE  
S = stainless filled PTFE  
U = UHMW polyethylene  
P = PCTFE (KEL-F)

† LB = L ball  
TB = T ball  
† (E) for 1/2"-2" valves  
(S) for 2 1/2"-4" valves  
(L) for 2 1/2"-4" valves