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BV2-Series Ball Valve

Used in sanitary processes when you need a valve for isolation or control of the flow of a product. The 3-piece design allows for seat and/or ball replacement without removing the valve from the process line.

They are found in the food processing, beverage, winery, brewery, pet product, and industrial markets.

Sizes

- 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"

Features

- Live-loaded stem packing
- Precision stainless steel balls reduce torque and friction losses while extending seat life
- Integral ISO 5211 mounting pad
- Lockable handle can prevent accidental actuation
- Standard internal entry blow-out proof stem design
- Full port design matches ball and seat ports to tube I.D. for lower pressure drop and less turbulent flow
- Compact design for areas with tight space restrictions
- Fully encapsulated construction produces bubble tight seal
- Identification tagging available
- Balanced encapsulated construction minimizes cold flow
- V-port encapsulated

Materials

- Product contact metal components: CF8M stainless steel
- Non-product contact metal components: CF8M, 316, 304 stainless steel
- Product contact seals: virgin PTFE (standard), 15% glass reinforced PTFE, 25% carbon reinforced PTFE (not food grade), 50% stainless steel reinforced PTFE, and ultra-high molecular weight polyethylene

Specifications

- Standard connections: clamp (other options available, see part number key)
- Valve data
 - Maximum pressure
 - 1/2" - 2": **1000 PSI WOG**
 - 2-1/2" - 4": **800 PSI WOG**
 - Operating temperature: **-20°F to 450°F (-29°C to 232°C)**
- Surface finish
 - Product contact metal components: ≤ 32 Ra
 - Non-product contact metal components: as cast or $Ra \leq 63$
- Seat lubricant: BESSIL F-100
- Stem lubricant: G.A. BESSIL 25



1/2" to 2"



2-1/2" to 4"

BV2-Series Ball Valve - Part Number Key

BV2-Series Sanitary Ball Valve Part Number Key Example: BV2CV-050CC-A		Series	Seat	Seat Material	Valve Size	Connection End 1	Connection End 2	Handle	Surface Finish
		BV2	C	V	- 050	C	C	- A	
Series	Code								
BV2	BV2								
Seat Type	Code								
Encapsulated	C								
Non-encapsulated	N								
60° V-Port	L								
30° V-Port	M								
Seat Material	Code								
Virgin PTFE (standard)	V								
15% glass reinforced PTFE	G								
25% carbon reinforced PTFE	C								
50% stainless steel reinforced PTFE	S								
Ultra high molecular weight polyethylene	U								
Valve Size	Code								
1/2"	050								
3/4"	075								
1"	100								
1-1/2"	150								
2"	200								
2-1/2"	250								
3"	300								
4"	400								
Connection End 1	Code								
Clamp (standard)	C								
Weld	B								
Female I-line	F								
Male I-line	M								
Threaded bevel	T								
Plain bevel with nut	P								
Q-line	Q								
DIN male	D								
DIN liner with nut	L								
Connection End 2	Code								
Clamp (standard)	C								
Weld	B								
Female I-line	F								
Male I-line	M								
Threaded bevel	T								
Plain bevel with nut	P								
Q-line	Q								
DIN male	D								
DIN liner with nut	L								
Surface Finish	Code								
32 Ra (mechanical polish)	blank								
25 Ra (mechanical polish)	-2								
20 Ra (mechanical polish)	-1								
20 Ra (electro polish)	-5								
15 Ra (electro polish)	-4								
10 Ra (electro polish)	-7								
32 Ra (mechanical polish) with K22 kolsterising treatment	F								

BV2-Series Ball Valve - Part Number Key (Actuated)

Sanitary 2-Way Actuated Ball Valve Part Number Key Example: 2CV50CA1XX00XX1		Series	Seat Material	Size	Connections	Surface Finish
		2C	V	50	C	A
Series	Code					
Encapsulated	2C					
Non-encapsulated	2N					
Encapsulated 30° V Port	2M					
Encapsulated 60° V Port	2L					
Seat Material	Code					
Virgin PTFE	V					
RTFE (15% glass reinforced PTFE)	G					
25% carbon reinforced PTFE	C					
50% stainless steel reinforced PTFE	S					
UHMW (encapsulated only)	U					
Size	Code					
1/2"	50					
3/4"	75					
1"	10					
1-1/2"	15					
2"	20					
2-1/2"	25					
3"	30					
4"	40					
Connections	Code					
Clamp	C					
Weld	B					
Female I-line	F					
Male I-line	M					
Threaded bevel	T					
Plain bevel with nut	P					
Q-line	Q					
Female NPT	1					
Flange	K					
Clamp x weld	D					
Male x female I-line	X					
Surface Finish	Code					
32 Ra	A					
25 Ra	B					
20 Ra	C					
15 Ra	D					
10 Ra	E					

Continue number selection by following column 1 (pneumatic actuators) or 2 (electric actuators) on page 5.

BV2-Series Ball Valve - Part Number Key (Actuated)

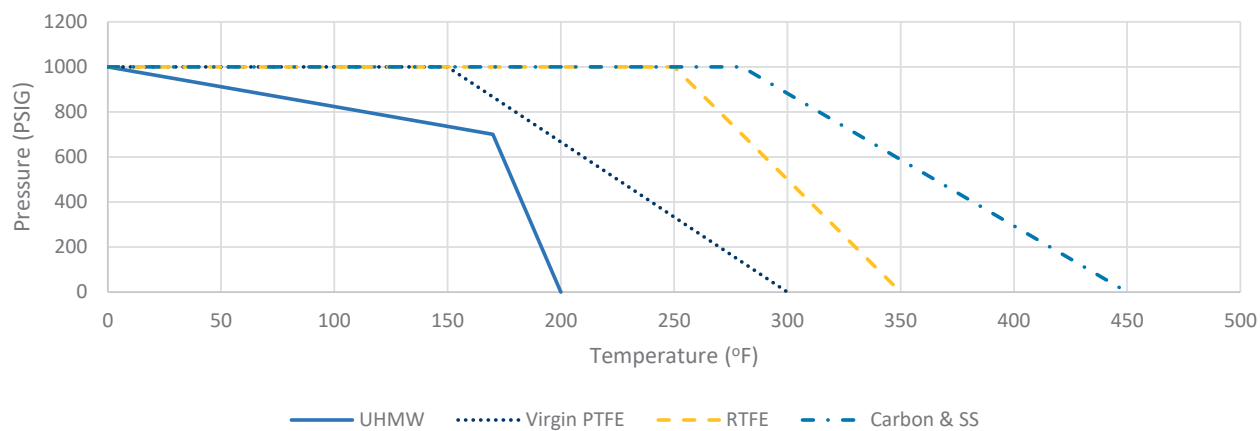
1. Pneumatic Actuator, Spring Return Manual Handle, or Manual Handle with Feedback					2. Electric Actuator			
Actuator	Actuator Options	Feedback	Control	Valve Operation	Actuator	Voltage	Option 1	Option 2
1	XX	00	XX	1	E	B	1	1
Actuator				Code	Actuator			Code
Aluminum spring return pneumatic rack and pinion				1	Electric			E
Aluminum double acting pneumatic rack and pinion				2	Oversized (1-UP) electric			F
Stainless steel spring return pneumatic rack and pinion				3	Nema 7 electric			G
Stainless steel double acting pneumatic rack and pinion				4	Electric with riser kit			H
Manual handle				5	Voltage			Code
Dead man spring return handle				6	115VAC			B
Technopolymer spring return pneumatic rack and pinion				7	12VDC			C
Actuator Options				Code	24VAC			D
None				XX	24VDC			E
Oversized (1-UP)				AA	220VAC			F
Actuator mounted perpendicular to flow				AB	12VAC			G
High temp FKM elastomers				AC	Option 1			Code
Extended travel stops				AD	None			1
Riser kit				AE	Torque switches			2
Feedback				Code	4-20mA Input/Output modulating controller			3
None				00	Current position transmitter			4
Limit switch box, OPEN/CLOSE beacon, (2) SPDT mech. switches				11	Potentiometer			5
Limit switch box, OPEN/CLOSE beacon, (2) switches, magnetic reed SPDT, hermetically sealed, up to SIL3, Exia ready, cULusClass 1/2 div 2, NEMA 4 and 4X				12	Local control unit			6
Limit switch box, OPEN/CLOSE beacon, AS-I				13	Two extra travel cams and switches			7
Limit switch box, OPEN/CLOSE beacon, (2) proximity SPDT switches, aluminum Exd IIB certified enclosure				14	Three position cam set			8
Limit switch box, OPEN/CLOSE beacon, (2) DPDT mech. switches				15	Local control unit with lock			9
Limit switch box, OPEN/CLOSE beacon, (2) switches, electro mec. SPDT, silver contacts, up to SIL3, cULus Class 1/2 Div 1				16	1-5V Input/2-10V output modulating controller			A
Limit switch box, OPEN/CLOSE beacon, inductive proximity P+F NBB2-V3-E2, 3 wire PNP NO				17	2-10V Input/Output modulating controller			B
Limit switch box, OPEN/CLOSE beacon, 4-20ma analog position transmitter				18	75% duty cycle			C
Limit switch box, OPEN/CLOSE beacon, SPDT proximity, 0.25A@120VAC, 0.416A@48VDC, resistive				19	Relay			D
Limit switch box, OPEN/CLOSE beacon, 4-20ma analog position transmitter + 2 SPDT mechanical switches				20	Four position cam set			E
Stainless steel limit switch box, OPEN/CLOSE beacon, (2) proximity SPDT switches				21	25% duty cycle (actuator code G only)			F
Stainless steel limit switch box, OPEN/CLOSE beacon, (2) inductive NUMAR Exia ready switches				22	75% duty cycle (actuator code G only)			G

BV2-Series Ball Valve - Part Number Key (Actuated)

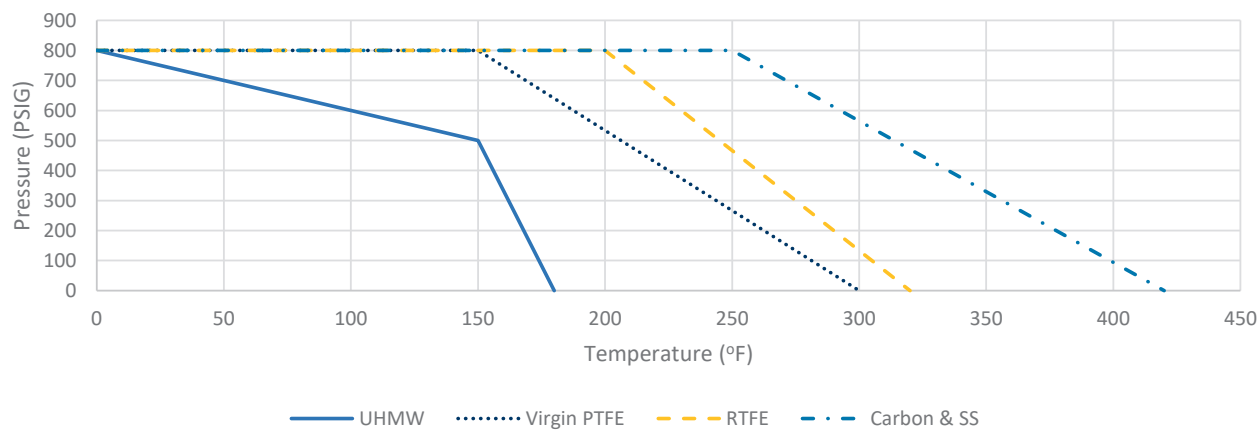
Control	Code	Option 2	Code
None	XX	None	1
Single coil solenoid, 120VAC	AA	Torque switches	2
Single coil solenoid, 24VDC	AB	4-20mA input/output modulating controller	3
Single coil solenoid, 12VDC	AC	Current position transmitter	4
Single coil solenoid, 220VAC	AD	Potentiometer	5
Dual coil solenoid, 120VAC	AE	Local control unit	6
Dual coil solenoid, 24VDC	AF	Two extra travel cams and switches	7
Dual coil solenoid, 220VAC	AG	Three position cam set	8
Pneumatic positioner 3-15psi input, no feedback	AH	Local control unit with lock	9
Pneumatic positioner 3-15psi input, (2) SPDT mech. switches for feedback	AI	1-5V input/2-10V output modulating controller	A
Pneumatic positioner 3-15psi input, 4-20mA for feedback	AJ	2-10V input/output modulating controller	B
Electropneumatic positioner 4-20mA input, no feedback	AK	75% duty cycle	C
Electropneumatic positioner 4-20mA input, (2) SPDT mech. switches for feedback	AL	Relay	D
Electropneumatic positioner 4-20mA input, 4-20mA for feedback	AM	Four position cam set	E
Electropneumatic positioner 0-10v input, no feedback	AN	25% duty cycle (actuator code G only)	F
Electropneumatic positioner 0-10v input, (2) SPDT mech. switches for feedback	AO	75% duty cycle (actuator code G only)	G
Electropneumatic positioner 0-10v input, 4-20mA for feedback	AP		
V200 rotary electropneumatic positioner 4-20mA input, 4-20mA feedback	AQ		
Electropneumatic positioner 4-20mA input, no feedback, class 1, div II explosion proof	AR		
Single coil solenoid, 24VDC and 24V banjo solenoid valve with form B plug	AS		
Single coil solenoid, 24VDC, AS-I, 2.5W low power	AT		
Single coil solenoid, 24VDC, intrinsically safe	AU		
Single coil solenoid, 120VAC, exp. proof, class H coil	AV		
Single coil solenoid, 24VDC, exp. proof, class H coil	AW		
Single coil solenoid, 24VAC	AX		
V200 rotary electropneumatic positioner 4-20mA input, 4-20mA feedback, class 1, div II explosion proof	AY		
Single coil solenoid, 24VDC, molded LED, ind. form, 2M leads	AZ		
TUFRAM COATED electropneumatic positioner 4-20mA input, no feedback	BA		
V200 rotary pneumatic positioner, (2) REED SWITCH feedback	BB		
Single coil solenoid, 24VDC, pre-wired to limit switch WITH CORDSET (Dual Keyway, 1/2"-20 UNF mating thread, single ended, straight female connector, 22 AWG PVC, auto color code 2P to 6P cable, 12' length)	BC		
Single coil solenoid, 24VDC, pre-wired to limit switch, 6P MALE CONNECTOR	BD		
Single coil solenoid, stainless steel, 24VDC	BE		
Valve Operation	Code		
Normally closed (spring return)	1		
Normally open (spring return)	2		
Fail in place (actuator code 2, 4, or 5)	3		

BV2-Series Ball Valve - Pressure Temperature Chart

0.50 in - 2.00 in



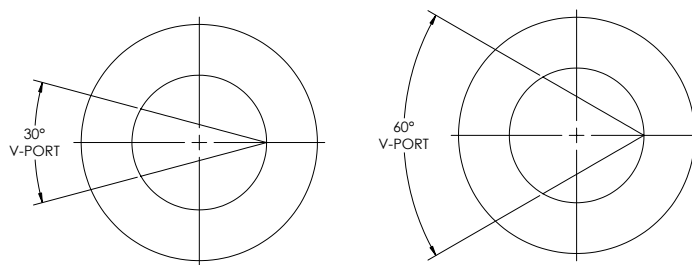
2.50 in - 4.00 in



BV2-Series Ball Valve - Break Torque, Weight, Cv, and Vacuum Testing Chart

Part #	Size	Break Torque					Weight (lbs)	Flow Coefficient (Cv)	Vacuum Testing	
		V (virgin PTFE)	G (15% glass reinforced RTFE)	C (25% carbon reinforced PTFE)	S (50% stainless steel reinforced PTFE)	U (UHMW)			Body Leakage (atm-cc/sec)	Helium Leak Rate Test (Torr)
BV2_-050_	1/2"	38	38	67	67	34	1.5	8	1 x 10 ⁻⁹	1 x 10 ⁻⁵
BV2_-075_	3/4"	40	40	70	70	36	1.9	29		
BV2_-100_	1"	109	109	191	191	98	2.7	66		
BV2_-150_	1-1/2"	387	387	677	677	348	4.8	192		
BV2_-200_	2"	432	432	756	756	389	8.9	434	1 x 10 ⁻⁷	1 x 10 ⁻⁴
BV2_-250_	2-1/2"	738	738	1292	1292	664	18.7	723		
BV2_-300_	3"	810	810	1418	1418	729	29.7	1124		
BV2_-400_	4"	895	1790	1566	1566	806	43.6	2100		

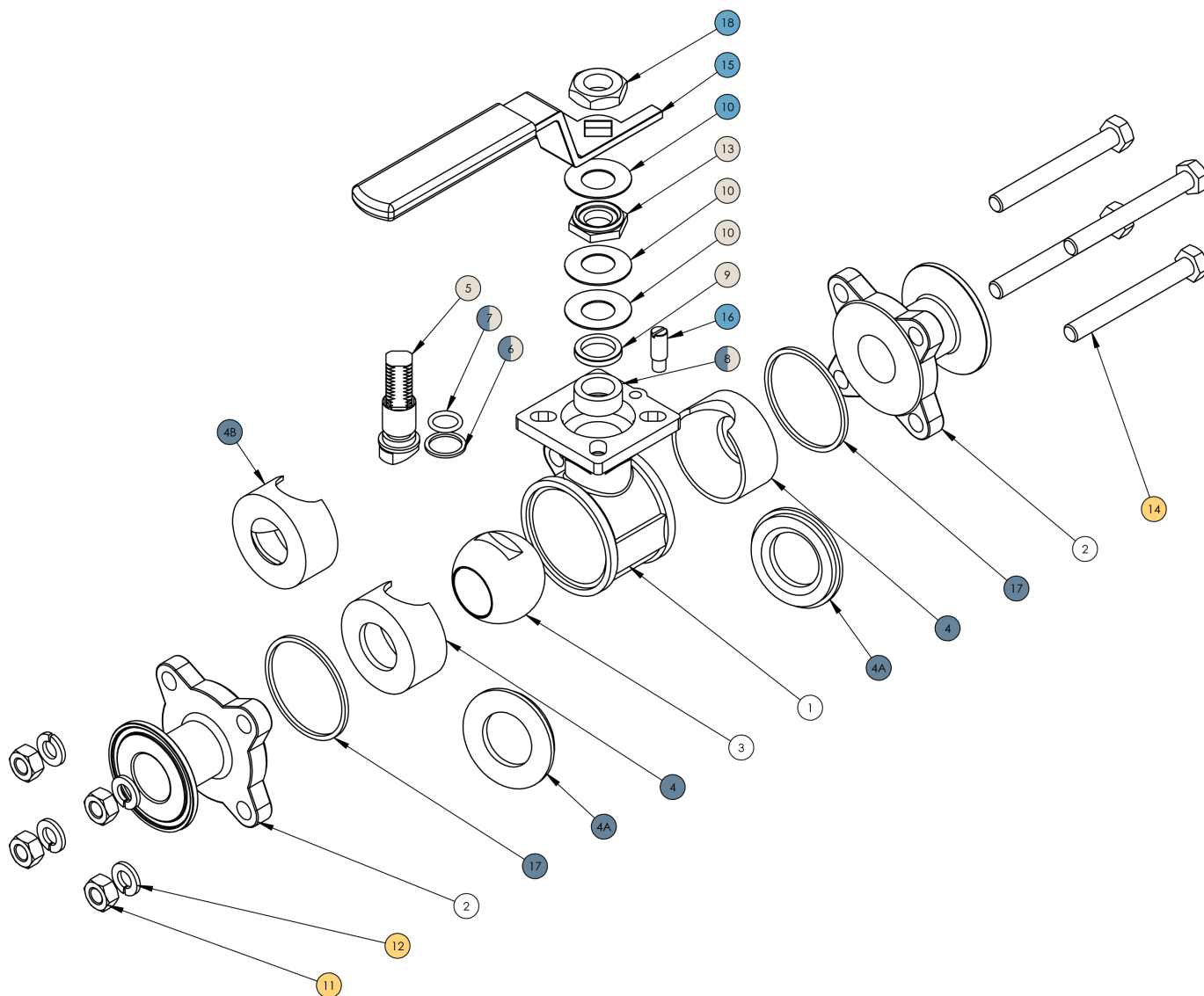
BV2-Series Ball Valve - V-Port Seat Flow Coefficient (Cv)



Size	V-Port Angle	Percentage of Valve Opening										
		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	30°	0	.04	.23	.47	.77	1.19	1.83	2.47	3.43	4.65	5.55
	60°	0	.04	.28	.73	1.11	1.83	2.92	4.29	7.00	9.43	12.78
3/4"	30°	0	.07	.30	.61	.99	1.57	2.42	3.25	4.52	6.12	7.30
	60°	0	.07	.35	.93	1.46	2.42	3.85	5.64	9.21	12.41	16.25
1"	30°	0	.08	.45	1.25	2.06	3.54	5.30	7.70	10.49	12.84	15.48
	60°	0	.09	.68	1.74	2.78	5.13	8.00	11.88	18.71	23.22	32.81
1-1/2"	30°	0	.07	.65	1.88	3.39	5.66	8.36	12.12	16.17	20.44	23.88
	60°	0	.09	.92	2.81	4.69	8.89	14.85	21.16	30.73	45.88	59.74
2"	30°	0	.09	1.18	3.79	7.53	12.26	17.83	26.44	36.45	48.09	55.85
	60°	0	.11	1.51	5.80	10.39	20.60	33.98	48.75	69.04	104.23	135.75
2-1/2"	30°	0	.09	1.15	4.42	7.91	13.39	20.05	30.43	41.92	56.30	76.95
	60°	0	.13	1.46	5.91	11.90	23.24	37.92	59.31	83.29	113.65	162.50
3"	30°	0	.12	1.20	4.15	9.49	15.96	26.78	38.91	53.31	69.77	85.91
	60°	0	.15	2.89	6.70	15.82	29.36	46.32	73.60	106.74	149.88	193.20
4"	30°	0	.16	1.75	7.84	18.59	35.21	58.60	87.89	124.21	158.53	196.35
	60°	0	.26	2.20	12.44	33.67	62.98	106.26	160.49	233.96	329.50	437.29

BV2-Series Ball Valve - Bill of Materials

1/2" to 1"



BV2-Series Ball Valve - Bill of Materials

1/2" to 1"

Item #	BV2 Size	Part #	Description	Materials	Qty
1	1/2"	BV-2C-1-050	body	CF8M	1
	3/4"	BV-2C-1-075	body	CF8M	1
	1"	BV-2C-1-100	body	CF8M	1
2	1/2"	BV-2X-CE050	tri-clamp end	CF8M	2
	3/4"	BV-2X-CE075	tri-clamp end	CF8M	2
	1"	BV-2X-CE100	tri-clamp end	CF8M	2
3	1/2"	BV-2X-BL050	ball	CF8M	1
	3/4"	BV-2X-BL075	ball	CF8M	1
	1"	BV-2X-BL100	ball	CF8M	1
4	all		encapsulated seat	see repair kits	2
4A	all		non-encapsulated seat	see repair kits	2
4B	all		v-port encapsulated seat	see repair kits	1
5	all		stem	316 SS	1
6	all	 	thrust washer	see repair kits	1
7	all	 	stem O-ring	FKM	1
8	all	 	stem packing	see repair kits	3
9	all		gland ring	316 SS	1
10	all	 	bevel washer	301 SS	3
11	all		hex nut	304 SS	4
12	all		lock washer	304 SS	4
13	all		stem lock nut	304 SS	1
14	all		body bolt	304 SS	4
15	all		handle	304 SS / Vinyl	1
16	all		stop pin	316 SS	1
17	all		body seal	see repair kits	2
18	all		handle nut	304 SS	1



Included in seat kit (page 22-23)



Included in handle kit (page 23)



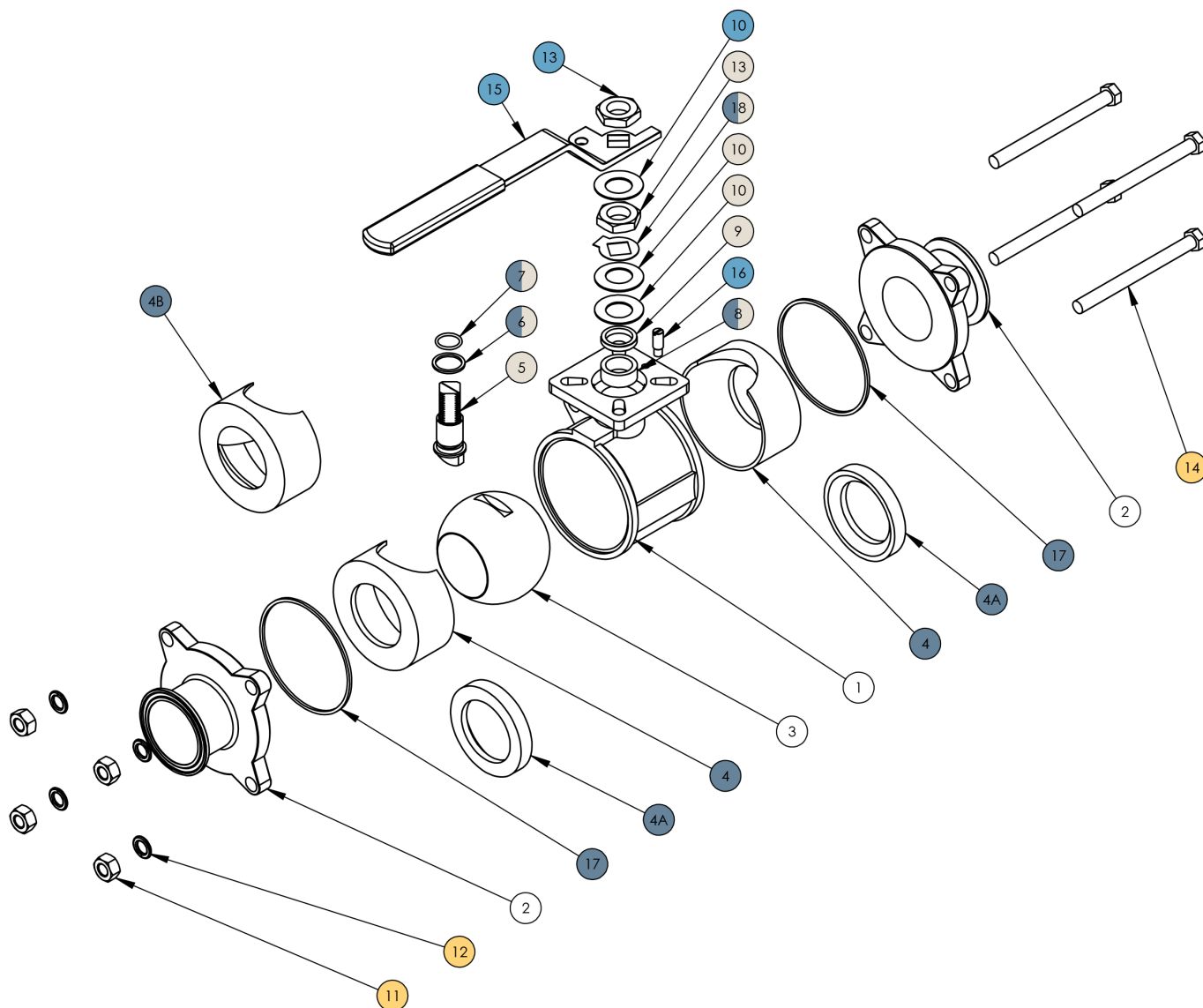
Included in stem kit (page 23)



Included in bolt and nut kit (page 23)

BV2-Series Ball Valve - Bill of Materials

1-1/2" to 2"



BV2-Series Ball Valve - Bill of Materials

1-1/2" to 2"

Item #	BV2 Size	Part #	Description	Materials	Qty
1	1-1/2"	BV-2C-1-150	body	CF8M	1
	2"	BV-2C-1-200	body	CF8M	1
2	1-1/2"	BV-2X-CE150	tri-clamp end	CF8M	2
	2"	BV-2X-CE200	tri-clamp end	CF8M	2
3	1-1/2"	BV-2X-BL150	ball	CF8M	1
	2"	BV-2X-BL200	ball	CF8M	1
4	all		encapsulated seat	see repair kits	2
4A	all		non-encapsulated seat	see repair kits	2
4B	all		v-port encapsulated seat	see repair kits	1
5	all		stem	316 SS	1
6	all	 	thrust washer	see repair kits	1
7	all	 	stem O-ring	FKM	1
8	all	 	stem packing	see repair kits	3
9	all		gland ring	316 SS	1
10	all	 	bevel washer	301 SS	3
11	all		hex nut	304 SS	4
12	all		lock washer	304 SS	4
13	all	 	stem nut	304 SS	2
14	all		body bolt	304 SS	4
15	all		handle	304 SS / Vinyl	1
16	all		stop pin	316 SS	1
17	all		body seal	see repair kits	2
18	all	 	tab washer	304 SS	1



Included in seat kit (page 22-23)



Included in handle kit (page 23)



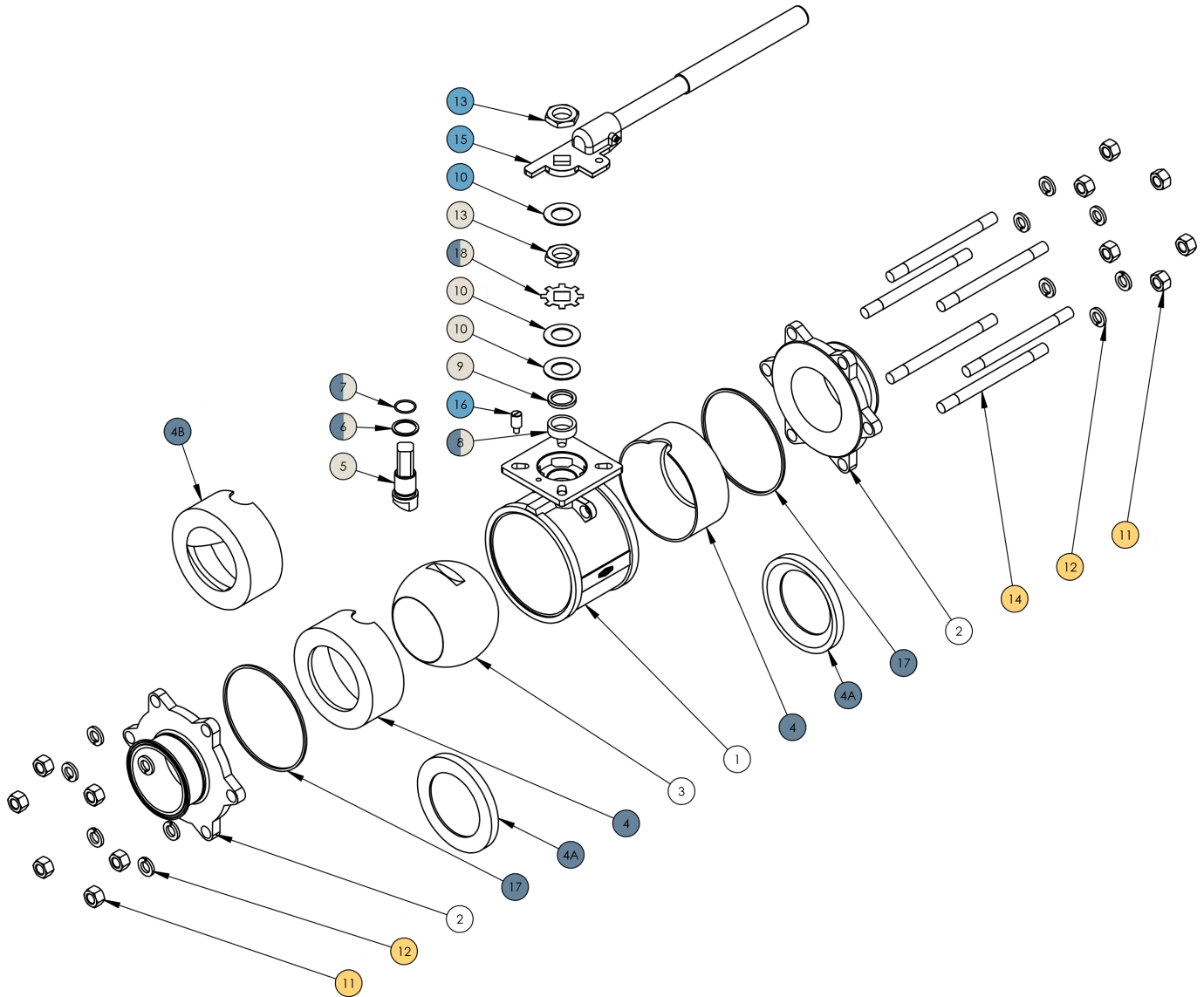
Included in stem kit (page 23)



Included in bolt and nut kit (page 23)

BV2-Series Ball Valve - Bill of Materials

2-1/2" to 4"



BV2-Series Ball Valve - Bill of Materials

2-1/2" to 4"

Item #	BV2 Size	Part #	Description	Materials	Qty		
					2-1/2"	3"	4"
1	2-1/2"	BV-2C-1-250	body	CF8M	1	1	1
	3"	BV-2C-1-300	body	CF8M	1	1	1
	4"	BV-2C-1-400	body	CF8M	1	1	1
2A	2-1/2"	BV-2X-CE250	tri-clamp end	CF8M	2	2	2
	3"	BV-2X-CE300	tri-clamp end	CF8M	2	2	2
	4"	BV-2X-CE400	tri-clamp end	CF8M	2	2	2
3	2-1/2"	BV-2X-BL250	ball	CF8M	1	1	1
	3"	BV-2X-BL300	ball	CF8M	1	1	1
	4"	BV-2X-BL400	ball	CF8M	1	1	1
4	all		encapsulated seat	see repair kit	2	2	2
4A	all		non-encapsulated seat	see repair kit	2	2	2
4B	all		v-port encapsulated seat	see repair kit	1*		
5	all		stem	316 SS	1	1	1
6	all	 	thrust washer	see repair kit	1	1	1
7	all	 	stem O-ring	FKM	1	1	1
8	all	 	stem packing	see repair kit	3	3	3
9	all		gland ring	316 SS	1	1	1
10	all	 	bevel washer	301 SS	3	3	3
11	all		hex nut	304 SS	4	8	12
12	all		lock washer	304 SS	4	8	12
13	all	 	stem nut	304 SS	2	2	2
14	all		body bolt	304 SS	4	4	6
15	all		handle	304 SS/vinyl	1	1	1
16	all		stop pin	316 SS	1	1	1
17	all		body seal	see repair kit	2	2	2
18	all	 	tab washer	304 SS	1	1	1



Included in seat kit (page 22-23)



Included in handle kit (page 23)



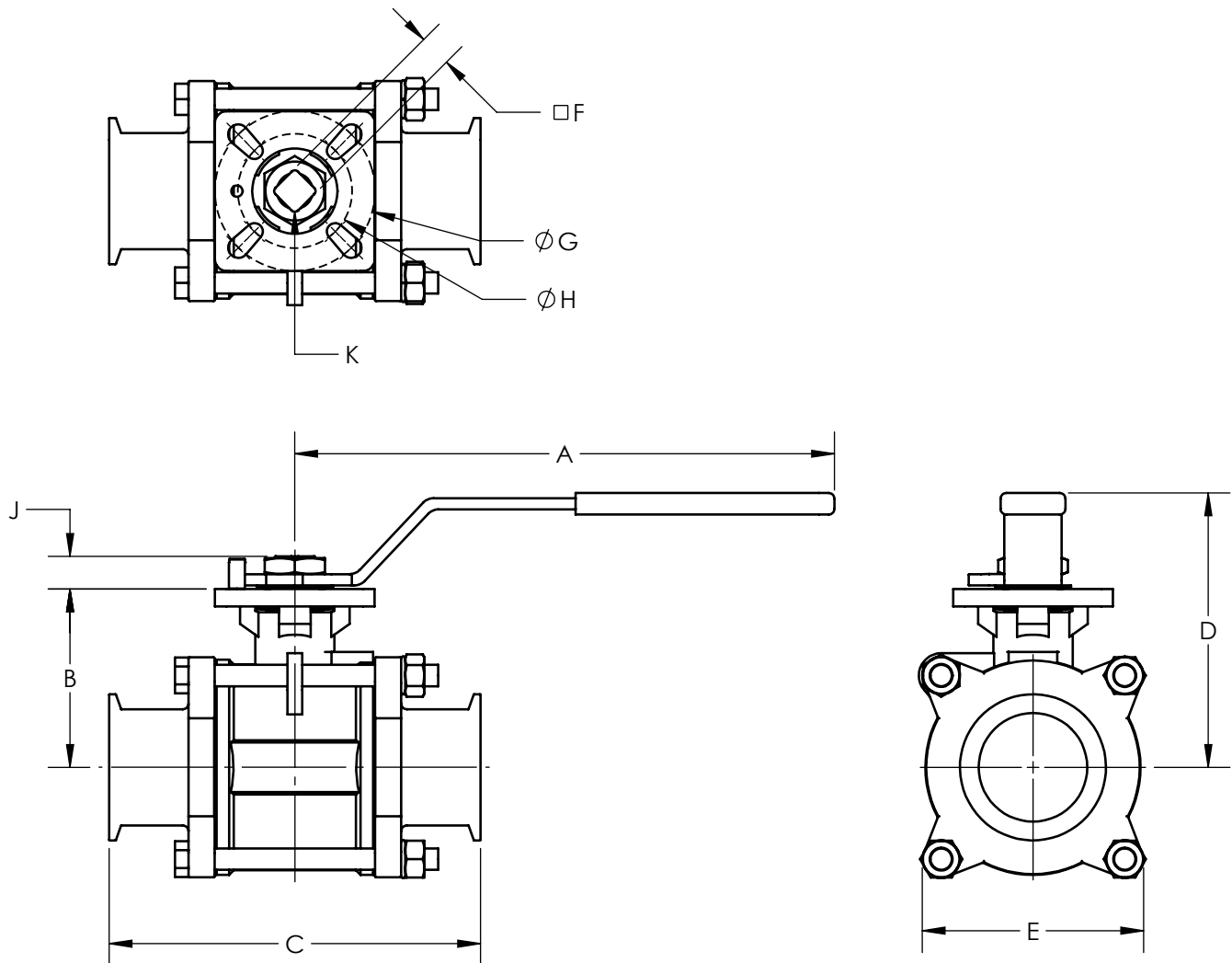
Included in stem kit (page 23)



Included in bolt and nut kit (page 23)

BV2-Series Ball Valve - Dimensions

1/2" to 2"

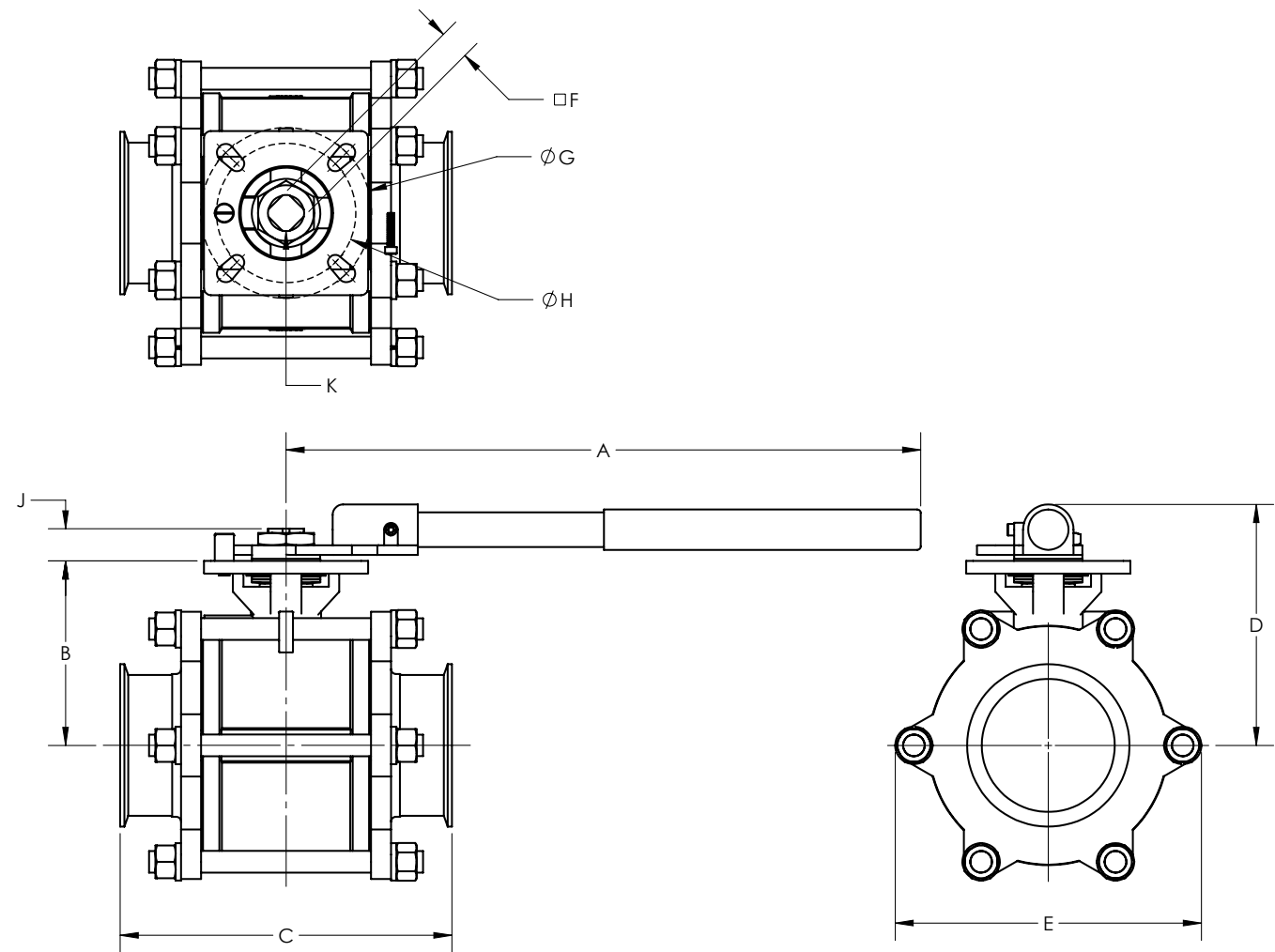


Size	A (in)	B (in)	C (in) ¹	D (in)	E (in)	F (mm)	G (ISO 5211)	H (ISO 5211)	J (mm)	K (threads)
1/2"	4.9	1.5	4.3	3.1	2.0	9	F04	F03	9	M12 x 1.75
3/4"	4.9	1.8	4.7	3.4	2.2	9	F04	F03	11	M12 x 1.75
1"	5.5	2.1	4.9	3.6	2.4	11	F05	F04	11	M14 x 2
1-1/2"	9.3	2.7	5.6	4.4	3.1	14	F07	F05	14	M18 x 2.5
2"	9.5	3.1	6.4	4.7	3.7	14	F07	F05	14	M18 x 2.5

¹Clamp and weld dimensions are the same.

BV2-Series Ball Valve - Dimensions

2-1/2" to 4"

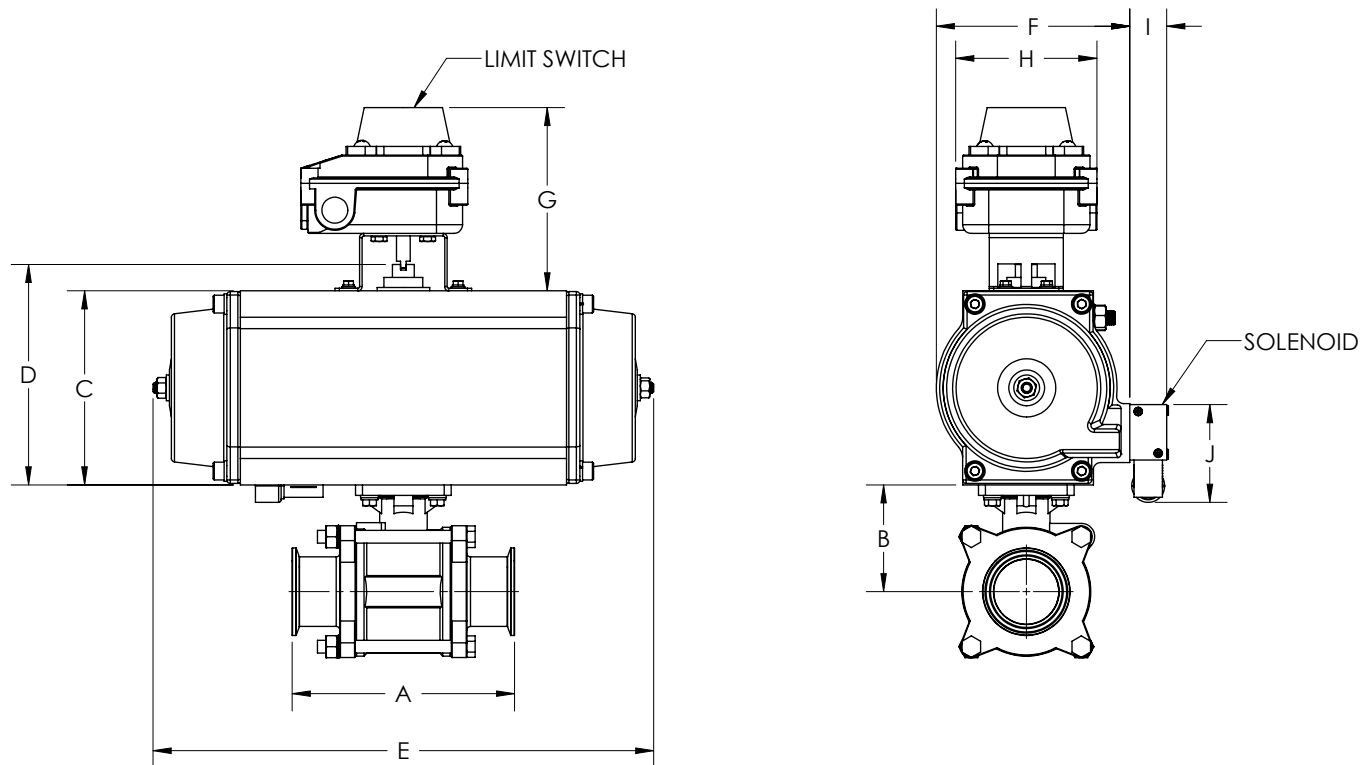


Size	A (in)	B (in)	C (in) ¹	D (in)	E (in)	F (mm)	G (ISO 5211)	H (ISO 5211)	J (mm)	K (threads)
2-1/2"	18.0	3.8	7.8	5.2	4.9	17	F10	F07	17	M22 x 2.5
3"	18.0	4.2	9.0	5.7	5.4	17	F12	F10	17	M22 x 2.5
4"	18.0	5.3	9.6	6.9	8.8	22	F12	F10	24	1-1/8" x 12 UNF

¹Clamp and weld dimensions are the same.

BV2-Series Ball Valve - Dimensions

Spring Return

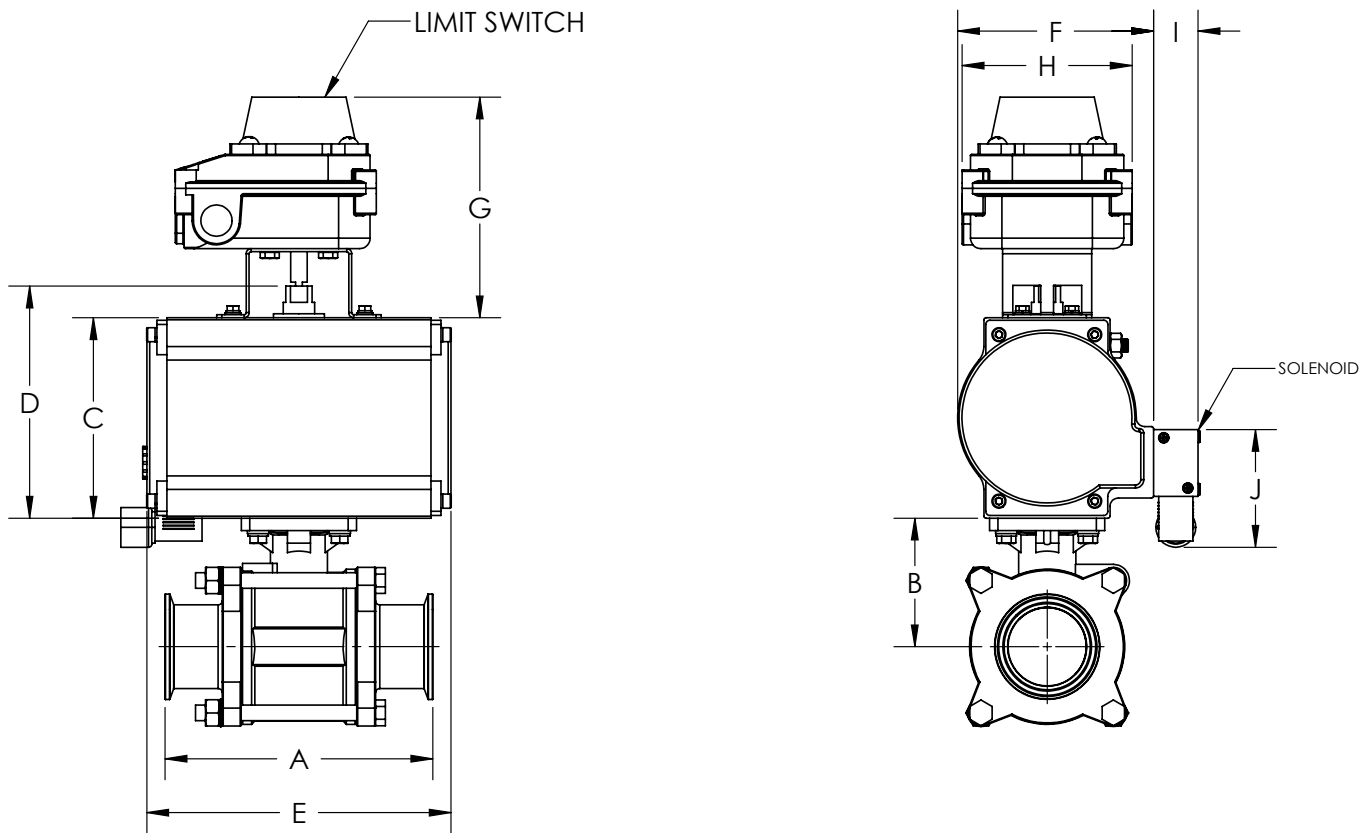


Size	A (in) ¹	B (in)	RP-BA Series Actuator	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)
								XLS-B4-series	X-series		
1/2"	4.3	1.5	RP-BA-025-SR	3.1	3.83	7.66	3.20	5.27	4.06	1.07	2.81
3/4"	4.7	1.8									
1"	4.9	2.1	RP-BA-025-SR05	3.1	3.83	7.66	3.20				
1-1/2"	5.6	2.7	RP-BA-045-SR	3.86	4.63	8.09	3.72				
2"	6.4	3.1	RP-BA-101-SR	4.79	5.54	9.84	4.68				
2-1/2"	7.8	3.8	RP-BA-225-SR	5.58	6.34	13.98	5.56				
3"	9.0	4.2	RP-BA-365-SR	6.94	7.72	16.61	7.25				
4"	9.6	5.3	RP-BA-500-SR	7.73	8.50	19.17	8.05				

¹Clamp and weld dimensions are the same.

BV2-Series Ball Valve - Dimensions

Double Acting

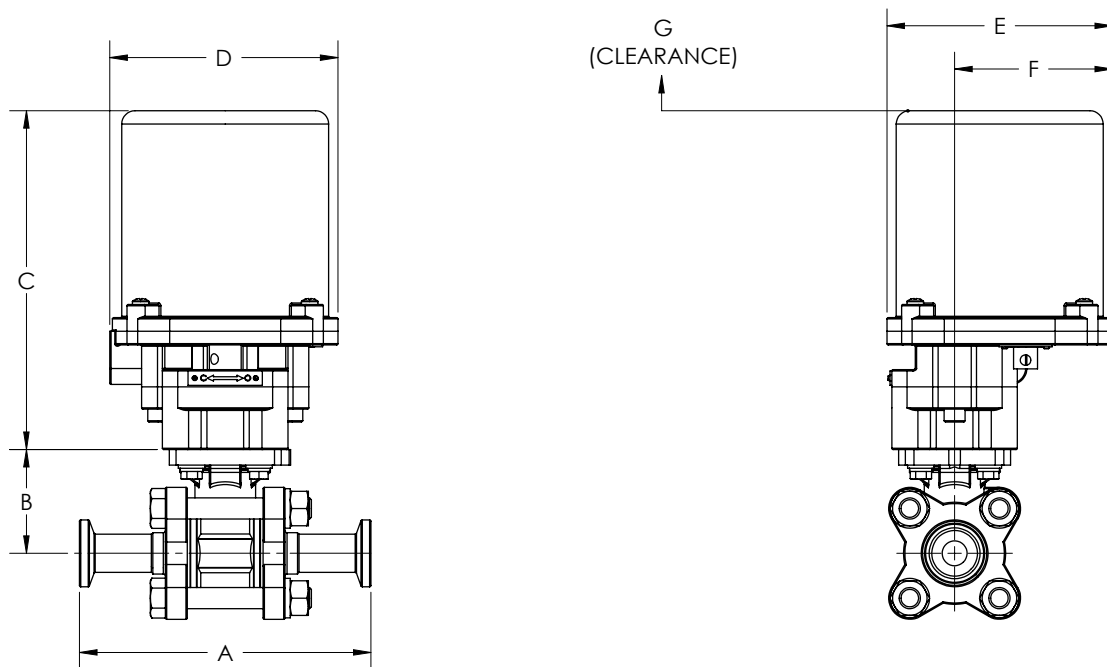


Size	A (in) ¹	B (in)	RP-BA Series Actuator	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)
								XLS-B4 series		X series	
1/2"	4.3	1.5	RP-BA-012-DA	2.60	3.39	4.72	2.93	5.27	4.06	1.07	2.81
3/4"	4.7	1.8									
1"	4.9	2.1	RP-BA-025-DA05	3.10	3.87	5.68	3.20				
1-1/2"	5.6	2.7	RP-BA-045-DA	3.86	4.63	5.87	3.72				
2"	6.4	3.1									
2-1/2"	7.8	3.8	RP-BA-101-DA	4.79	5.54	7.20	4.77				
3"	9.0	4.2	RP-BA-225-DA	5.58	6.34	10.22	5.56				
4"	9.6	5.3									

¹Clamp and weld dimensions are the same.

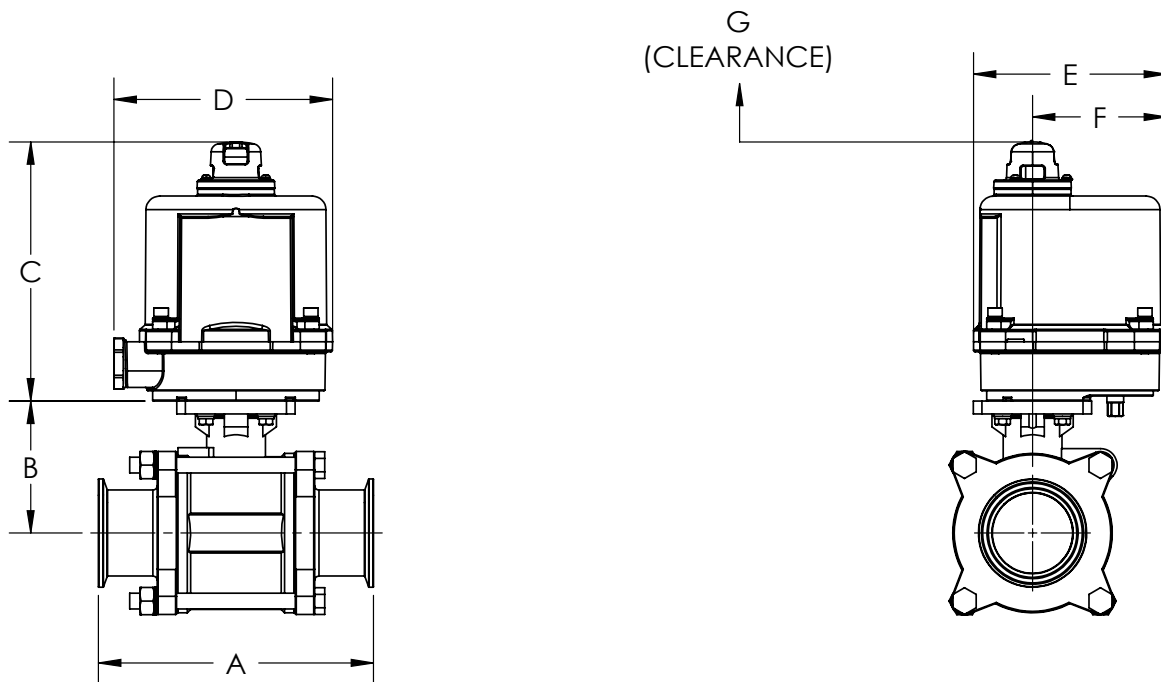
BV2-Series Ball Valve - Dimensions

Electric Actuator - BM-T



NOTE: The electric actuator shown is a BM-T model. For more information on actuation accessories see relevant EPRG for electric actuators.

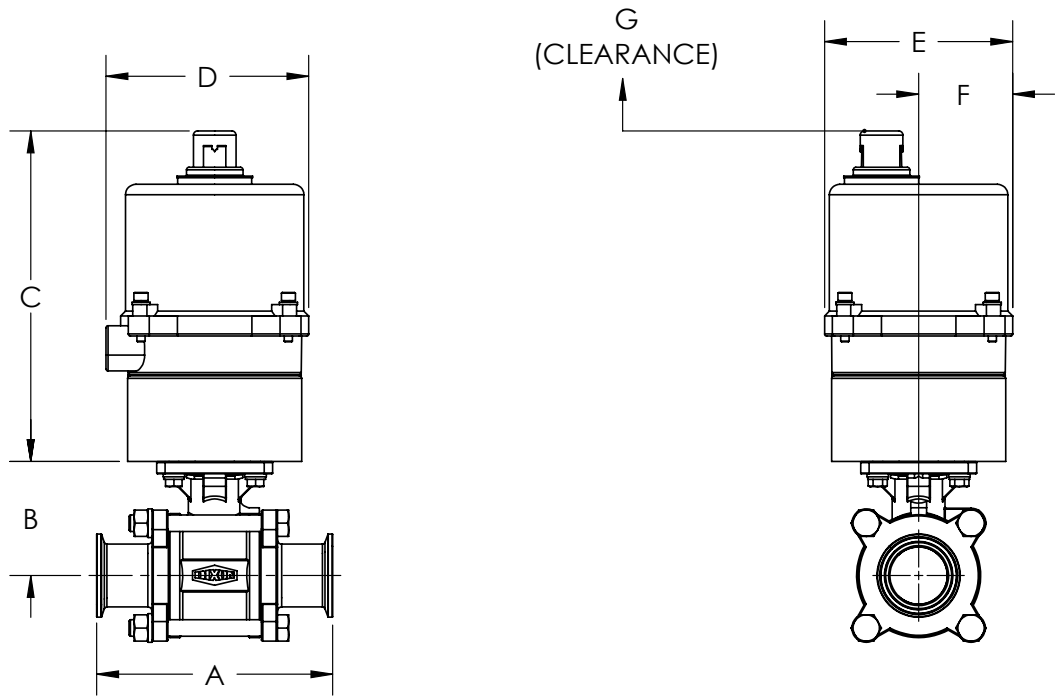
Electric Actuator - OM-1



NOTE: The electric actuator shown is a BEOM-1 model. For more information on actuation accessories, see relevant EPRG for electric actuators.

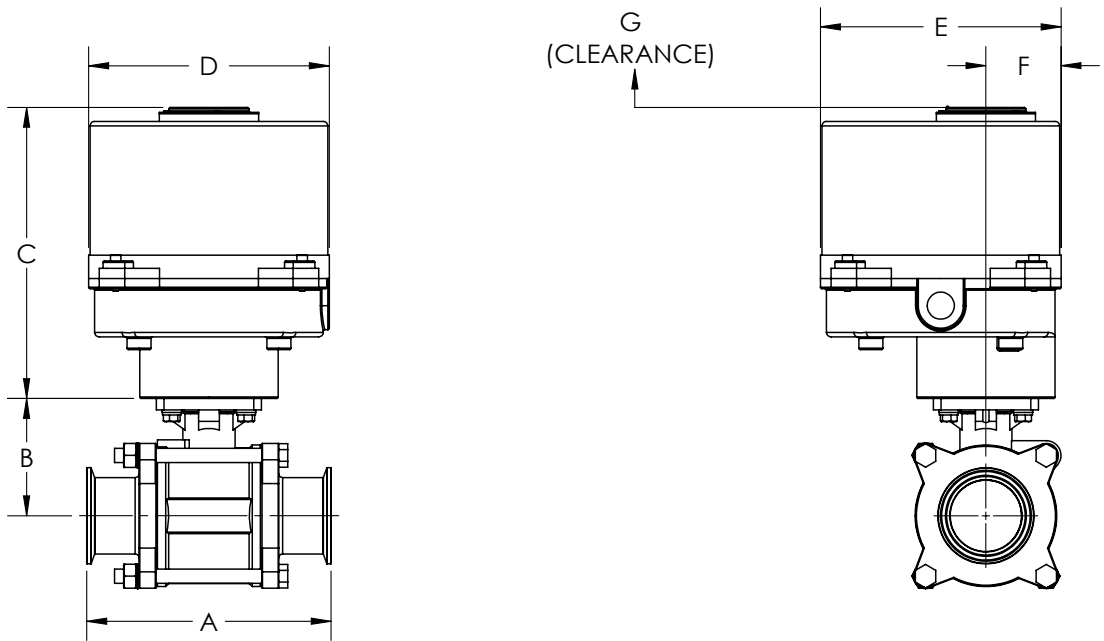
BV2-Series Ball Valve - Dimensions

Electric Actuator - OM-A



NOTE: The electric actuator shown is a BEOM-A model. For more information on actuation accessories see relevant EPRG for electric actuators.

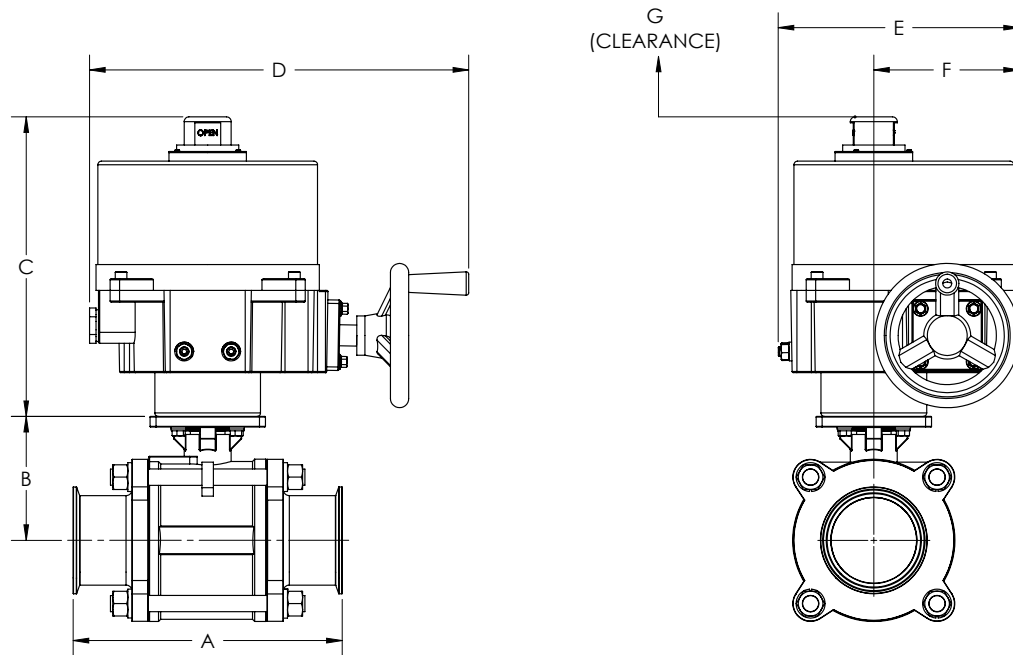
Electric Actuator - BM-2



NOTE: The electric actuator shown is a BM-2 model. For more information on actuation accessories, see relevant EPRG for electric actuators.

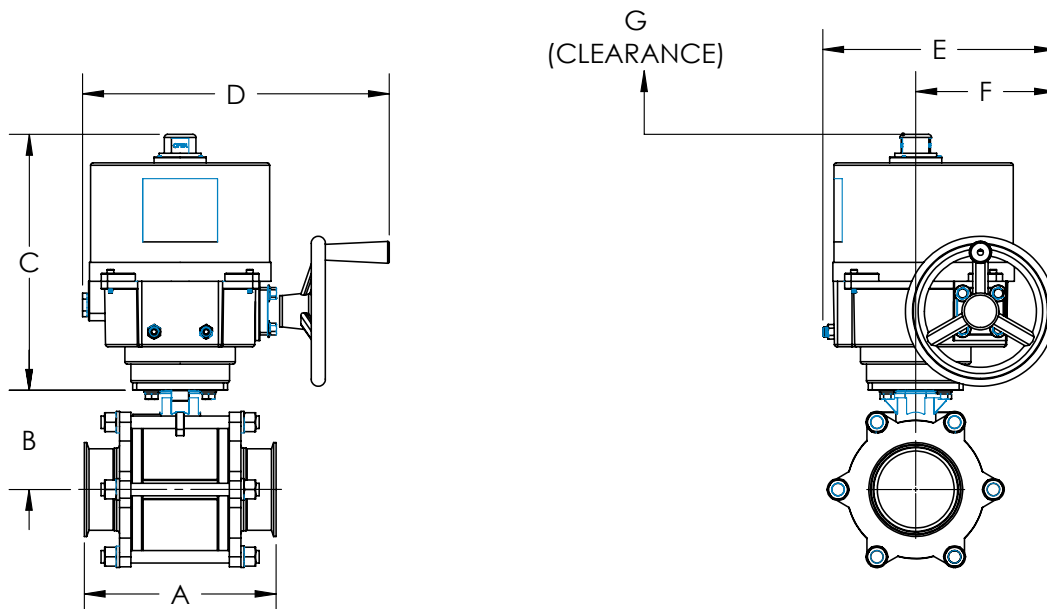
BV2-Series Ball Valve - Dimensions

Electric Actuator - OM-3



NOTE: The electric actuator shown is an OM-3 model. For more information on actuation accessories see relevant EPRG for electric actuators.

Electric Actuator - OM-4



NOTE: The electric actuator shown is an OM-4 model. For more information on actuation accessories, see relevant EPRG for electric actuators.

BV2-Series Ball Valve - Dimensions

Size	A (in) ¹	B (in)	Electric Actuator Series	C (in)	D (in)	E (in)	F (in)	G (in) ²
1/2"	4.3	1.5	BM-T	4.96	3.43	3.35	2.34	3.35
3/4"	4.7	1.8						
1"	4.9	2.1	OM-1	6.02	4.80	4.49	3.11	4.72
1-1/2"	5.6	2.7	OM-A	7.83	4.80	4.49	2.24	4.72
2"	6.4	3.1	BM-2	7.68	6.34	6.30	4.33	4.72
2-1/2"	7.8	3.8	OM-3	10.55	12.84	7.13	4.84	6.50
3"	9.0	4.2						
4"	9.6	5.3	OM-4	12.99	15.43	11.58	7.24	8.07

¹Clamp and weld dimensions are the same.²Space needed to remove cover.

Repair Kit Part Numbers



Encapsulated Seat Kit

Size	Material				
	Virgin PTFE	RTFE	25% Carbon PTFE	50% Stainless Steel PTFE	UHMW
1/2"	BV-2C-VK050	BV-2C-GK050	BV-2C-CK050	BV-2C-SK050	BV-2C-UK050
3/4"	BV-2C-VK075	BV-2C-GK075	BV-2C-CK075	BV-2C-SK075	BV-2C-UK075
1"	BV-2C-VK100	BV-2C-GK100	BV-2C-CK100	BV-2C-SK100	BV-2C-UK100
1-1/2"	BV-2C-VK150	BV-2C-GK150	BV-2C-CK150	BV-2C-SK150	BV-2C-UK150
2"	BV-2C-VK200	BV-2C-GK200	BV-2C-CK200	BV-2C-SK200	BV-2C-UK200
2-1/2"	BV-2C-VK250	BV-2C-GK250	BV-2C-CK250	BV-2C-SK250	BV-2C-UK250
3"	BV-2C-VK300	BV-2C-GK300	BV-2C-CK300	BV-2C-SK300	BV-2C-UK300
4"	BV-2C-VK400	BV-2C-GK400	BV-2C-CK400	BV-2C-SK400	BV-2C-UK400



Non-Encapsulated Seat Kit

Size	Material				
	Virgin PTFE	RTFE	25% Carbon PTFE	50% Stainless Steel PTFE	UHMW
1/2"	BV-2N-VK050	BV-2N-GK050	BV-2N-CK050	BV-2N-SK050	BV-2N-UK050
3/4"	BV-2N-VK075	BV-2N-GK075	BV-2N-CK075	BV-2N-SK075	BV-2N-UK075
1"	BV-2N-VK100	BV-2N-GK100	BV-2N-CK100	BV-2N-SK100	BV-2N-UK100
1-1/2"	BV-2N-VK150	BV-2N-GK150	BV-2N-CK150	BV-2N-SK150	BV-2N-UK150
2"	BV-2N-VK200	BV-2N-GK200	BV-2N-CK200	BV-2N-SK200	BV-2N-UK200
2-1/2"	BV-2N-VK250	BV-2N-GK250	BV-2N-CK250	BV-2N-SK250	BV-2N-UK250
3"	BV-2N-VK300	BV-2N-GK300	BV-2N-CK300	BV-2N-SK300	BV-2N-UK300
4"	BV-2N-VK400	BV-2N-GK400	BV-2N-CK400	BV-2N-SK400	BV-2N-UK400

Repair Kit Part Numbers

Encapsulated 60° V-Port Seat Kit

Size	Material				
	Virgin PTFE	RTFE	25% Carbon PTFE	50% Stainless Steel PTFE	UHMW
1/2"	BV-2L-VK050	BV-2L-GK050	BV-2L-CK050	BV-2L-SK050	BV-2L-UK050
3/4"	BV-2L-VK075	BV-2L-GK075	BV-2L-CK075	BV-2L-SK075	BV-2L-UK075
1"	BV-2L-VK100	BV-2L-GK100	BV-2L-CK100	BV-2L-SK100	BV-2L-UK100
1-1/2"	BV-2L-VK150	BV-2L-GK150	BV-2L-CK150	BV-2L-SK150	BV-2L-UK150
2"	BV-2L-VK200	BV-2L-GK200	BV-2L-CK200	BV-2L-SK200	BV-2L-UK200
2-1/2"	BV-2L-VK250	BV-2L-GK250	BV-2L-CK250	BV-2L-SK250	BV-2L-UK250
3"	BV-2L-VK300	BV-2L-GK300	BV-2L-CK300	BV-2L-SK300	BV-2L-UK300
4"	BV-2L-VK400	BV-2L-GK400	BV-2L-CK400	BV-2L-SK400	BV-2L-UK400

Encapsulated 30° V-Port Seat Kit

Size	Material				
	Virgin PTFE	RTFE	25% Carbon PTFE	50% Stainless Steel PTFE	UHMW
1/2"	BV-2M-VK050	BV-2M-GK050	BV-2M-CK050	BV-2M-SK050	BV-2M-UK050
3/4"	BV-2M-VK075	BV-2M-GK075	BV-2M-CK075	BV-2M-SK075	BV-2M-UK075
1"	BV-2M-VK100	BV-2M-GK100	BV-2M-CK100	BV-2M-SK100	BV-2M-UK100
1-1/2"	BV-2M-VK150	BV-2M-GK150	BV-2M-CK150	BV-2M-SK150	BV-2M-UK150
2"	BV-2M-VK200	BV-2M-GK200	BV-2M-CK200	BV-2M-SK200	BV-2M-UK200
2-1/2"	BV-2M-VK250	BV-2M-GK250	BV-2M-CK250	BV-2M-SK250	BV-2M-UK250
3"	BV-2M-VK300	BV-2M-GK300	BV-2M-CK300	BV-2M-SK300	BV-2M-UK300
4"	BV-2M-VK400	BV-2M-GK400	BV-2M-CK400	BV-2M-SK400	BV-2M-UK400

Handle Kits

Size	Part #
1/2"	BV-23-HA050-075
3/4"	
1"	BV-23-HA100
1-1/2"	BV-23-HA150-200
2"	
2-1/2"	BV-23-HA-17
3"	
4"	BV-23-HA-22

Stem Kits (Virgin PTFE)

Size	Part #
1/2"	BV-2X-SM050
3/4"	BV-2X-SM075
1"	BV-2X-SM100
1-1/2"	BV-2X-SM150
2"	BV-2X-SM200
2-1/2"	BV-2X-SM250
3"	BV-2X-SM300
4"	BV-2X-SM400

Bolt and Nut Kits

Size	Part #
1/2"	BV-2X-BN050
3/4"	BV-2X-BN075
1"	BV-2X-BN100
1-1/2"	BV-2X-BN150
2"	BV-2X-BN200
2-1/2"	BV-2X-BN250
3"	BV-2X-BN300
4"	BV-2X-BN400

Notes

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