

BV-SS Series Stainless Steel Ball Valves – Submittal/Technical Data

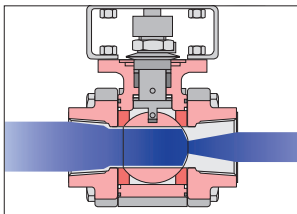
2-Way – 1/2" to 4"

Technical Specifications - BV-SS Series Threaded Stainless Steel Valve Body			
Stainless Steel Body		V-Port	Full-Port
Service	Chilled/Hot Water, 50/50 Glycol Solutions and Saturated Steam		
Size Range	2-Way	1/2" to 4" Threaded Valves	
Maximum Fluid Temperature	Water	-20° to 500°F @ 300 PSI (-28° to 260°C @ 2068 kPa)	
	Steam	100 PSI (689 kPa)	
Valve Body Pressure Rating	1000 PSI (6895 kPa)		
Maximum Close-Off Pressure	300 PSI (2,068 kPa) For higher Close-Off's contact Bray.		
Maximum Recommended Operating Pressure Drop	Water	80 PSI (551 kPa)	
	Steam	50 PSI (344 kPa)	
Flow Characteristic	V15 Port	Linear	N/A
	V30 Port	Modified Equal Percentage	N/A
	V60 & Full Port	Equal Percentage	N/A
Rangeability	200:1		
Leakage	Bubble Tight per API 598		
End Connections	Threaded NPT		
Ambient Operating Temperature Range	See Actuator Rating (Optional high temperature mounting kit may be required)		
Materials	Body	CF8M Stainless Steel	
	Ball & Stem	316 Stainless Steel	
	Seat	Tek-Fil	RPTFE
	Stem Seal/ Packing	RPTFE	
	Body Seal	TFM	
	Body Bolts	SS304	
Warranty	3 Years limited from time of shipment.		

Disclaimer - The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications consult the local Bray office. Bray, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

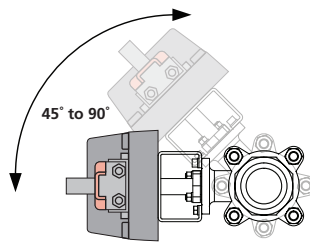
BV - Piping Diagram

- V-Port valves- Note the arrow engraved on the ends which show the flow going from the bolt head to the nut so that the V-ball is downstream.
- Full Port valves are bi-directional.



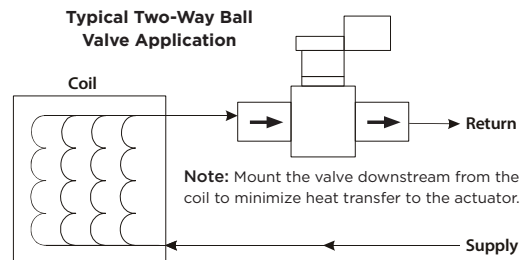
Media Flow entering valve from left. Installing the V downstream is preferred.

BV - For Steam Applications

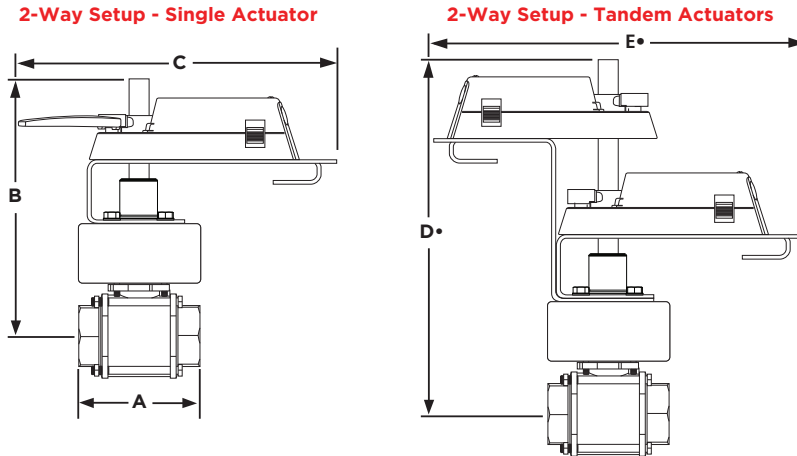


Install valve with stem at 45° to 90° from vertical.

BV - Mode of Actuation



BV-SS Series - 2-Way - Threaded Ball Valve/Commercial Actuator Dimensions

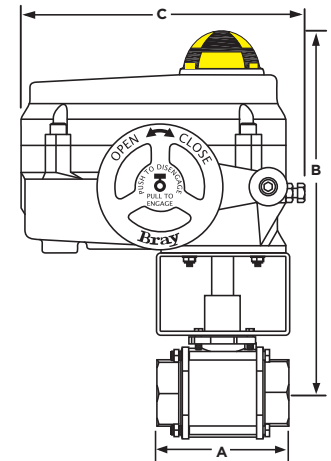


BV-SS Series - 2-Way - Threaded Ball Valve/Commercial Actuator Dimensions in. (mm)												
Model Number	Valve Size		V-Cut	Flow Coefficient		Single Mount Actuators			Tandem Mount Actuators		Weight ¹	
	In.	mm		Cv	Kv	A	B	C	D•	E•	lbs.	kg.
BV05-SS3-04	0.5	15	15°	3.6	3.1	2.8 (71)	9.7 (246)	14.5 (368)	-	-	1.8	.82
BV05-SS3-05			30°	4.7	4.0							
BV05-SS3-09			60°	9.4	8.1							
BV05-SS3-12			90°	11.6	10.0							
BV05-SS3-32			Full Port	32.0	27.6							
BV75-SS3-05	.75	20	15°	4.8	4.1	3.4 (86)	9.8 (249)	14.5 (368)	-	-	2.3	1.04
BV75-SS3-06			30°	6.1	5.3							
BV75-SS3-12			60°	12.4	10.7							
BV75-SS3-15			90°	15.3	13.2							
BV75-SS3-54			Full Port	54.0	46.5							
BV1-SS3-09	1	25	15°	8.5	7.3	3.6 (91)	10.2 (259)	14.5 (368)	-	-	3.4	1.50
BV1-SS3-13			30°	12.8	11.1							
BV1-SS3-23			60°	23.2	20.0							
BV1-SS3-31			90°	31.4	27.1							
BV1-SS3-105			Full Port	105.0	90.5							
BV125-SS3-11	1.25	32	15°	10.8	9.3	4.3 (109)	10.4 (264)	14.5 (368)	17.5 (445)	18.0 (457)	4.9	2.20
BV125-SS3-15			30°	14.9	12.8							
BV125-SS3-33			60°	33.4	28.8							
BV125-SS3-52			90°	51.8	44.6							
BV125-SS3-200			Full Port	200.0	172.4							
BV150-SS3-15	1.5	40	15°	14.9	12.8	4.8 (122)	-	-	17.9 (455)	18.0 (457)	7.6	3.40
BV150-SS3-20			30°	20.4	17.6							
BV150-SS3-46			60°	45.9	39.5							
BV150-SS3-71			90°	71.2	61.3							
BV150-SS3-275			Full Port	275.0	237.1							

¹ - Weights are for valve bodies only.
 • Indicates tandem mounted actuators are required.
 - Largest Actuator dimension shown.
 For steam applications, install valve with stem at 45° to 9° from vertical.

BV-SS Series - 2-Way - Threaded Ball Valve/Industrial Actuator Dimensions

2-Way Setup - Industrial Actuator



BV-SS Series - 2-Way - Threaded Ball Valve/Industrial Actuator Dimensions in. (mm)

Model Number	Valve Size		V-Cut	Flow Coefficient		Single Mount Actuators			Weight ¹	
	In.	mm		Cv	Kv	A	B	C	lbs.	kg.
BV05-SS3-04	0.5	15	15°	3.6	3.1	2.8 (71)	9.8 (249)	7.5 (191)	1.8	.82
BV05-SS3-05			30°	4.7	4.0					
BV05-SS3-09			60°	9.4	8.1					
BV05-SS3-12			90°	11.6	10.0					
BV05-SS3-32			Full Port	32.0	27.6					
BV75-SS3-05	.75	20	15°	4.8	4.1	3.4 (86)	9.9 (252)	7.5 (191)	2.3	1.04
BV75-SS3-06			30°	6.1	5.3					
BV75-SS3-12			60°	12.4	10.7					
BV75-SS3-15			90°	15.3	13.2					
BV75-SS3-54			Full Port	54.0	46.5					
BV1-SS3-09	1	25	15°	8.5	7.3	3.6 (91)	10.3 (262)	7.5 (191)	3.4	1.50
BV1-SS3-13			30°	12.8	11.1					
BV1-SS3-23			60°	23.2	20.0					
BV1-SS3-31			90°	31.4	27.1					
BV1-SS3-105			Full Port	105.0	90.5					
BV125-SS3-11	1.25	32	15°	10.8	9.3	4.3 (109)	10.5 (267)	7.5 (191)	4.9	2.20
BV125-SS3-15			30°	14.9	12.8					
BV125-SS3-33			60°	33.4	28.8					
BV125-SS3-52			90°	51.8	44.6					
BV125-SS3-200			Full Port	200.0	172.4					
BV150-SS3-15	1.5	40	15°	14.9	12.8	4.8 (122)	11.2 (285)	7.5 (191)	7.6	3.40
BV150-SS3-20			30°	20.4	17.6					
BV150-SS3-46			60°	45.9	39.5					
BV150-SS3-71			90°	71.2	61.3					
BV150-SS3-275			Full Port	275.0	237.1					
BV2-SS3-29	2	50	15°	28.8	24.8	5.6 (142)	11.5 (292)	7.5 (191)	11.4	5.20
BV2-SS3-48			30°	48.1	41.5					
BV2-SS3-104			60°	104.2	89.8					
BV2-SS3-130			90°	129.8	111.8					
BV2-SS3-500			Full Port	500.0	431.0					
BV250-SS3-27	2.5	65	15°	27.2	23.5	7.3 (231)	13.4 (340)	10.1 (257)	21.8	9.90
BV250-SS3-56			30°	56.3	48.5					
BV250-SS3-114			60°	113.7	98.0					
BV250-SS3-177			90°	177.3	152.8					
BV250-SS3-780			Full Port	780.0	672.4					
BV3-SS3-32	3	80	15°	31.8	27.4	8.0 (257)	15.8 (401)	10.1 (257)	34.6	15.7
BV3-SS3-70			30°	69.8	60.1					
BV3-SS3-150			60°	149.9	129.2					
BV3-SS3-237			90°	237.3	204.6					
BV3-SS3-1150			Full Port	1150.0	991.3					
BV4-SS3-76	4	100	15°	75.5	65.1	9.1 (353)	17.2 (437)	12.1 (308)	54.7	24.8
BV4-SS3-159			30°	158.5	136.7					
BV4-SS3-330			60°	329.5	284.0					
BV4-SS3-547			90°	546.6	471.2					
BV4-SS3-2100			Full Port	2100.0	1810.2					

¹ - Weights are for valve bodies only.
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