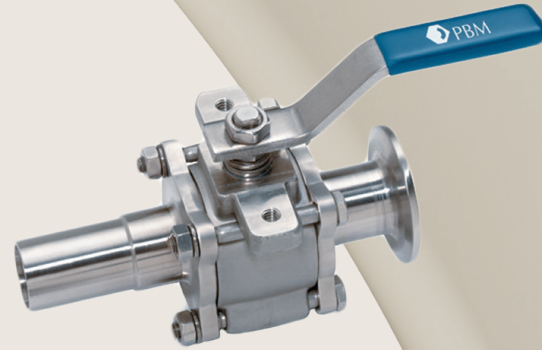




Breakthrough
engineering for
a better world

Process Automation

IMI PBM



SI Cast Series 9 SI Forged Series 8 Size 1/4" to 6"

Igenix® 2-Way Ball Valves

Design Features

- Unique Adjust-O-Seal® feature allows in-line seat adjustment to compensate for normal wear
- Valve are three-piece "swing out" body design with different sanitary end connections
- Upstream/downstream bubble-tight sealing capability allows valve body cleaning, purging and draining
- SI Series valves do not have O-Rings
- Valves are rated for full vacuum
- Valves have blowout proof stem
- Standard Live Loaded Stem Packing
- Stem assembly accommodates IMI PBM Direct Mount Actuation for accurate alignment and increased cycling life
- Forged and Cast Valves are low controlled ferrite
- True Bore® (valve bore same as connecting tubing) (except 1/4" & 3/8" sizes)
- ASME BPE compliant (except when supplied with cavity fillers)
- Optional purge ports, milled ball flats or drain holes in ball allow inline CIP to prevent clogging and plug formation
- Self-Flushing Ball and V-Ball options available
- Valves are designed assembled and tested at our factory in the U.S.
- V-TEF and S-TEF seats and seals are FDA Compliant and USP Class VI
- Material Test Report (MTRs) provided for wetted components
- Surface finishes achieved without the use of Animal Derived Ingredients (ADI)
 - ADI free

316L S/S Pressure Ratings at Ambient (PSIG)

Size	Series 8	Series 9
1/4"	600	900
3/8"	600	900
1/2"	600	900
3/4"	600	900
1"	600	900
1-1/2"	600	900
2"	600	720
2-1/2"	600	720
3"	600	720
4"	600	720
*6"	N/A	375

CV Values (gpm), Series 8/Series 9

Size	End Connections	
	F-	X-
1/4"	1.5	1.9
3/8"	4.4	5.4
1/2"	6.5	8
3/4"	23	28
1"	55	65
1-1/2"	160	193
2"	365	420
2-1/2"	700	800
3"	900	1,040
4"	1,800	2,080
*6"	4,200	5,000

ID Surface Finish Ra Readings for Valves per ASME BPE

Surface Finish	IMI PBM Polish Code	μ-in.
Mechanical Polish		
SF 1	A	20
SF 2	A	25
SF 3	-	30
Mechanical Polish & Electropolish		
SF 4	G	15
SF 5	F	20
SF 6	F	25

*6" is Series 9 Only

SPECIFICATIONS

Igenix® SI Series 8 & 9 Sanitary 2-Way Ball Valves

Sizes	1/4" to 6" Series 9 - 1/4" to 4" Series 8
Material	Low ferrite cast and forged 316L material. Castings (Series 9) comply with A351, Alloy CF3M and/or A479, Alloy S31603. Forgings (Series 8) comply with A182, Alloy F316L/1.4404 and/or A479, Alloy S31603, others available
End Connections	Extended BW for tube, hygienic clamp for compression ends (Compression Ends Product Bulletin), others available
Seats, Seals & Stem Packings	V-TEF™ and S-TEF® - others available
Body Bolts & Nuts	18-8 Stainless Steel standard, special bolting optional
Maximum Working Pressure	See table above
Temperatures	-20°F to 450°F depending on seat and seal material
Finish	Standard internal finish of 20 Ra ID Series 8 (SF1), 30 Ra ID Series 9 (SF3), other finishes available



How To Order:
pbmvalve.com/build-a-part-number

PRODUCT (1-2) MATERIAL (3-4)		SIZE (5) SERIES (6)			END CONNECTION (7-8)		SEAT/SEAL/CAVITY FILLER (9)		PURGE PORT BALL OPTIONS (10-11)		BALL / STEM OPTIONS (12)		OPERATOR (13- 14)		POLISH OPTIONS (15)	
SI	HL Forged (Series 8) 316L S/S	A	1/4"	8	F-	Ext. Butt weld for Tube	G	V-TEF™ Seats / Seals	--	No Purge Port or Ball Option	-	Standard Ball and Stem	--	W/ Standard Lever Handle	-	30 Ra ID (Std. Series 9)
HL	Cast (Series 9) 316L S/S	B	3/8"	9	FX	Ext. Butt weld for Tube by Hygienic Clamp	J	V-TEF™ Seats / Seals VTFE Cavity Fillers	-8	Self Flushing Ball	F	Internal / External Grounding	02	W/O Handle W/ Stem Actuator Prep	A	20 Ra ID (Std. Series 8)
	Other material options available - Contact IMI PBM	C	1/2"		X-	Hygienic Clamp	H	S-TEF™ Seats / Seals	-V	Slotted V-Ball	G	17-4PH Stem	04	Locking Lever Handle	D	15 Ra ID
		D	3/4"		G-	Female Cherry Burrell	I	S-TEF™ Seats / Seals VTFE Cavity Fillers	-W	30° V-Ball			08	Gear Operator (Req'd for 6")	E	10 Ra ID
		E	1"		H-	Male Cherry Burrell	K	UHMWPE Seats / Seals	-X	45° V-Ball			16	Extended Stem w/Lockable Handle (1/4" to 4")	F	20 Ra ID after Electro Polish
		G	1-1/2"				L	UHMWPE Seats / Seals VTFE Cavity Fillers	-Y	60° V-Ball			20	DA 80psig actuator	G	15 Ra ID after Electro Polish
		H	2"										27	DA 60psig actuator		
		J	2-1/2"										34	SR 80psig actuator	H	10 Ra ID after Electro Polish
		K	3"										41	SR 60psig actuator		
		L	4"													
		M*	6"													

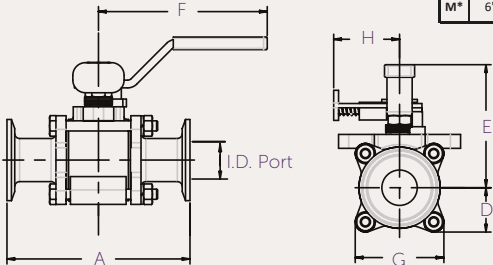
* Not available in forged.

Other seat/seal options available - Contact IMI PBM

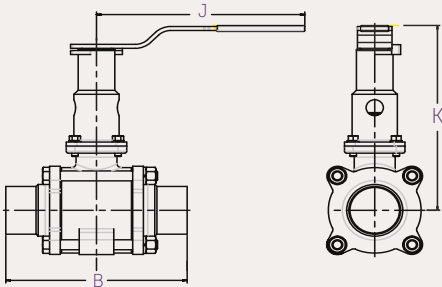
Other purge port & ball options - Contact IMI PBM

Other operator options available - Contact IMI PBM

More polish available - Contact IMI PBM



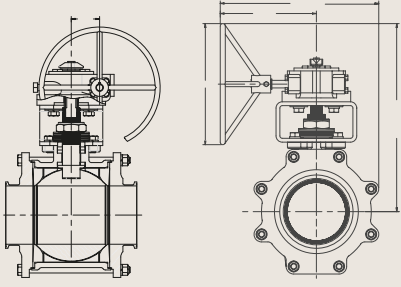
2-WAY VALVE W/LOCKING HANDLE



2-WAY VALVE W/EXT STEM W/LOCKABLE HANDLE

2-Way Sanitary Dimensioned Valves in Inches										Locking Handle		Extended Lockable Handle		
Valve Size	Size Code	I.D. Port	A	B	D	E	F	G	~Wt (lbs)	H	Hole Dia. for Lock	J	K	Hole Dia. for Lock
1/4"	A	0.18	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
3/8"	B	0.31	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
1/2"	C	0.37	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
3/4"	D	0.62	4.00	6.00	0.85	2.23	4.00	1.68	1.40	1.55	0.28	5.09	4.14	0.31
1"	E	0.87	4.50	6.50	1.09	3.01	4.15	2.18	2.70	1.62	0.25	5.09	5.44	0.31
1-1/2"	G	1.37	5.50	7.50	1.68	5.02	8.81	3.31	8.90	2.57	0.38	8.00	7.46	0.31
2"	H	1.87	6.25	8.00	2.15	4.47	8.03	4.30	15.0	2.57	0.38	8.00	7.74	0.31
2-1/2"	J	2.37	8.00	11.50	2.79	6.51	12.06	5.58	36.0	3.47	0.38	12.06	9.36	0.31
3"	K	2.87	8.00	10.50	2.78	6.77	12.06	5.58	33.0	3.47	0.38	12.06	9.61	0.38
4"	L	3.83	10.00	13.00	3.66	7.53	12.06	7.33	67.0	3.47	0.38	12.06	10.38	0.38
6"	M	5.78	13.00	17.00	6.18	N/A	N/A	12.37	164.0	N/A	N/A	N/A	N/A	N/A

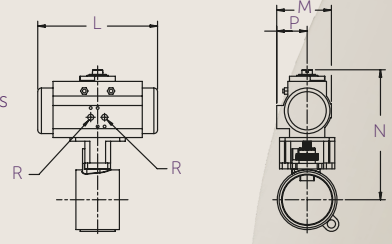
*6" is Series 9 Only



2-WAY VALVE W/GEAR OPERATOR [6" ONLY]

ACTUATED DIMENSIONS
Unit of measure = inches

Dimensions based on actuators used with V-TEF® seats



Find out more
pbmvalve.com

Size	80 PSI Spring Return					60 PSI Spring Return					60, 80 PSI Double Acting				
	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
1/4"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
3/8"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
1/2"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
3/4"	5.55	2.80	5.59	1.61	1/8 NPT	6.46	3.17	6.04	1.77	1/8 NPT	5.55	2.80	5.59	1.61	1/8 NPT
1"	6.46	3.17	6.51	1.77	1/8 NPT	8.27	3.72	7.22	2.07	1/8 NPT	5.55	2.80	6.06	1.61	1/8 NPT
1-1/2"	9.47	4.17	9.65	2.30	1/8 NPT	10.83	4.85	10.16	2.68	1/4 NPT	8.27	3.72	9.10	2.07	1/8 NPT
2"	10.83	4.84	10.45	2.68	1/4 NPT	13.11	5.39	11.80	2.87	1/4 NPT	8.27	3.72	9.39	2.07	1/8 NPT
2-1/2"	13.11	5.39	13.48	2.87	1/4 NPT	14.65	5.83	13.96	3.15	1/4 NPT	13.11	5.39	13.48	2.87	1/4 NPT
3"	14.65	5.83	14.21	3.15	1/4 NPT	16.85	6.46	15.10	3.44	1/4 NPT	13.11	5.39	13.73	2.87	1/4 NPT
4"	16.85	6.46	15.86	3.44	1/4 NPT	19.69	7.36	16.80	3.94	1/4 NPT	13.11	5.39	14.51	2.87	1/4 NPT
6"	22.78	8.54	23.02	4.29	1/4 NPT	22.46	11.42	27.74	5.71	1/4 NPT	22.78	8.54	23.02	4.29	1/4 NPT

Manual Valves with Tube Ends (when used with insulation)		
Tube OD	Insulation Max with No Extension	Insulation Max with Extension
0.50	0.76	2.68
0.75	0.79	2.72
1.00	1.45	3.88
1.50	3.10	5.57
2.00	2.31	5.60
2.50	4.00	8.88
3.00	4.08	8.88
4.00	4.35	9.12

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