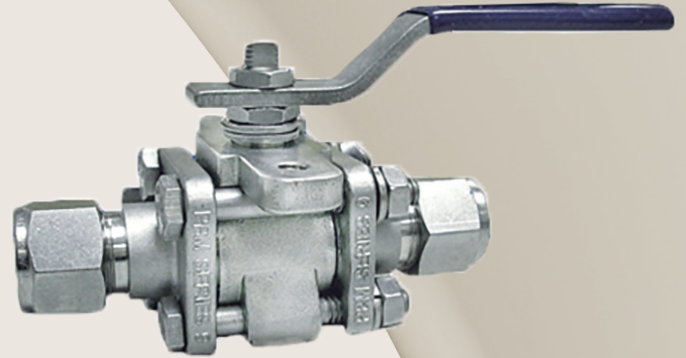




Breakthrough
engineering for
a better world

Process Automation

IMI PBM



SI Cast Series 9 Size 1/4" to 1"

Igenix® Compression End Ball Valves

Design Features

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

ID Surface Finish Ra Readings for Valves per ASME BPE		
Surface Finish	IMI PBM Polish Code	µ-in.
Mechanical Polish		
SF 1	A	20 Ra Max
SF 2	A	25 Ra Max
SF 3	-	30 Ra Max
Mechanical Polish & Electropolish		
SF 4	G	15 Ra Max
SF 5	F	20 Ra Max
SF6		

CV Values (gpm), Series 9	
Size	End Connections
	SM
1/4"	1.5
3/8"	6.12
1/2"	10.21
3/4"	39.85
1"	83.26

SPECIFICATIONS

Igenix® SI Series Sanitary 2-Way Compression End Ball Valves

Sizes	1/4" to 1" Series 9
Material	Low ferrite cast 316L material. Castings (Series 9) comply with A351, Alloy CF3M and/or A479, Alloy S31603, others available
End Connections	Compression Ends, 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 at right
Temperatures	-20°F to 450°F depending on seat and seal material
Finish	Standard internal finish of 30 Ra ID Series 9 (SF3), other finishes available

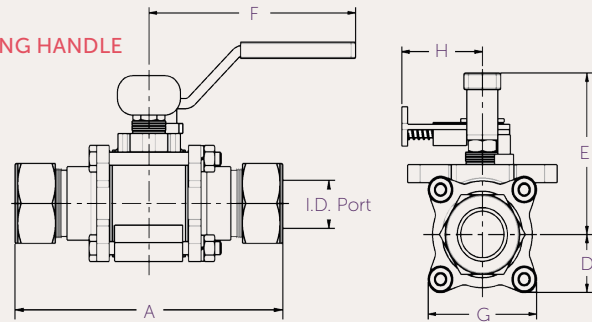
316L S/S Pressure Ratings at Ambient (PSIG)	
Size	Series 9
1/4"	900
3/8"	900
1/2"	900
3/4"	900
1"	900



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 / O-RING (9)		PURGE PORT BALL OPTIONS (10-11)		BALL / STEM OPTIONS (12)		OPERATOR (13- 14)		POLISH OPTIONS (15)			
CS	HF	F316L Forged Low Ferrite F316L / DIN 1.4404 (Series 8)	C	1/2"	8	F -	Ext. Butt weld for Tube	G	V-TEF™ Seats / Seals FKM O-Rings	--	No Purge Port or Ball Option	-	Standard Ball and Stem	--	W/ Standard Lever Handle	-	0.75 Ra ID (Std. Series 9)	
			D	3/4"	9	FX	Ext. Butt weld for Tube by Hygienic Clamp	J	V-TEF™ Seats / Seals / VTFE Cav Fill / FKM O-Rings	- 8	Self Flushing Ball	F	Internal / External Grounding	02	W/O Handle W/ Stem Actuator Prep	A	0.50 Ra ID (Std. Series 8)	
		HL	316L Cast CF3M Low Ferrite (Series 9)	E	1"		X-	Hygienic Clamp	Z	V-TEF™ Seats / Seals EPDM O-Rings	- V	Slotted V-Ball	G	17-4PH Stem	04	Locking Lever Handle	D	0.375 Ra ID
				G	1-1/2"				2	V-TEF™ Seats / Seals / VTFE Cav Fill / EPDM O-Rings	- W	30° V-Ball		08	Gear Operator (Req'd for 6")	E	0.25 Ra ID	
			H	2"						- X	45° V-Ball	16		Extended Stem w/Lockable Handle (1/4" - 4")	F	0.50 Ra ID after Electro Polish		
			J	2-1/2"						- Y	60° V-Ball	20		DA 80psig actuator	G	0.375 Ra ID after Electro Polish		
	K	3"						H	S-TEF™ Seats / Seals FKM O-Rings	Other Purge Port & Ball Options - Contact IMI PBM		27	DA 60psig actuator	G	0.375 Ra ID after Electro Polish			
	L	4"						0	S-TEF™ Seats / Seals EPDM O-Rings			34	SR 80psig actuator	H	0.25 Ra ID after Electro Polish			
	M	6"						9	V-TEF™ Seats / Seals FEP Encaps. FKM O-Rings	Other Seat/seal options available - Contact IMI PBM		41	SR 60psig actuator	H	0.25 Ra ID after Electro Polish			

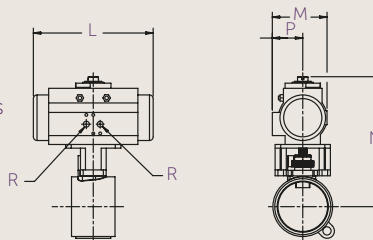
2-WAY VALVE W/LOCKING HANDLE



2-Way Sanitary Dimensioned Valves in Inches									Locking Handle		Extended Lockable Handle		
Valve Size	Size Code	I.D. Port	A	D	E	F	G	~Wt (lbs)	H	Hole Dia. for Lock	J	K	Hole Dia. for Lock
1/4"	A	0.18	4.00	0.75	2.05	4.00	1.50	1.1	1.55	0.28	5.09	4.00	0.31
3/8"	B	0.31	4.00	0.75	2.05	4.00	1.50	1.1	1.55	0.28	5.09	4.00	0.31
1/2"	C	0.37	4.00	0.75	2.05	4.00	1.50	1.1	1.55	0.28	5.09	4.00	0.31
3/4"	D	0.62	4.00	0.85	2.23	4.00	1.68	1.4	1.55	0.28	5.09	4.16	0.31
1"	E	0.87	5.38	1.09	3.03	4.15	2.18	2.7	1.62	0.25	5.09	5.44	0.31

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

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



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