

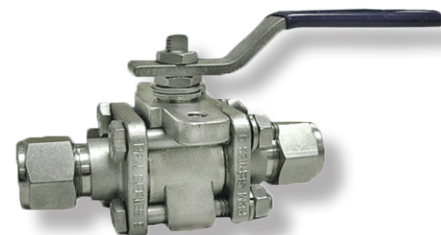
IMI PBM IGENIX® Compression End Valves

SI Cast Series 9, 1/4" - 1"



DESIGN FEATURES:

- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear on valve seats
- **SI SERIES VALVES DO NOT HAVE O-RINGS**
- Valves are a three-piece "swing-out" body design
- Upstream and 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
- Cast valves are low-controlled ferrite
- True-Bore® (valve bore same as connecting tubing) – no puddling (except 1/4" & 3/8")
- ASME BPE compliant
- USP Class VI elastomers and FDA compliant materials
- Valves are rated to full vacuum
- Material Test Report (MTRs) provided for wetted components
- Surface finishes are achieved without the use of ADIs (Animal Derived Ingredients)



SPECIFICATIONS	2-Way Valves
Sizes	1/4" - 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 (1/4" - 1")
Seats & Seals	White V-TEF™ standard, others available
Stem Packing Material	V-TEF™ and S-TEF®, others available
Body Bolts & Nuts	18-8 Stainless Steel standard, special bolting optional
Maximum Working Pressure	See table below
Temperatures	Up to 450°F depending on seat and seal material
Finish	Standard internal finish of 30 Ra ID Series 9 (SF3), other finishes available

CV Values (gpm), Series 9	
Size	End Connections
	SM
1/4"	1.50
3/8"	6.12
1/2"	10.21
3/4"	39.85
1"	83.26

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 and Electropolish		
SF 4	G	15 Ra max
SF 5	F	20 Ra max

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

Foreign regulatory agencies may also limit the pressure ratings above.

How To Order:

PRODUCT (1-2) MATERIAL (3-4)			SIZE (5) SERIES (6)		END CONNECTIONS (7-8)		SEAT & SEAL (9)		PURGE PORT BALL OPTIONS (10-11)		BALL & STEM (12)		OPERATOR (13-14)		POLISH OPTIONS (15)		
SI	HL	Cast (Ser. 9) 316L S/S	A	1/4"	9	SM	Compression	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)
Other material options available - Contact PBM.			B	3/8"				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
			C	1/2"				H	S-TEF® Seats / Seals	- V	Slotted V-Ball	G	17-4PH Stem	04	Locking Lever Handle	D	15 Ra ID
			D	3/4"				I	S-TEF® Seats / Seals VTFE Cavity Fillers	- X	45° V-Ball			20	DA 80psig actuator	F	20 Ra ID after Electro Polish
			E	1"				K	UHMWPE Seats / Seals	- Y	60° V-Ball			27	DA 60psig actuator		
			L	UHMWPE Seats / Seals VTFE Cavity Fillers				- 9	Vent Hole Upstream	34	SR 80psig actuator			41	SR 60psig actuator		

<http://pbmvalve.com/build-a-part-number>

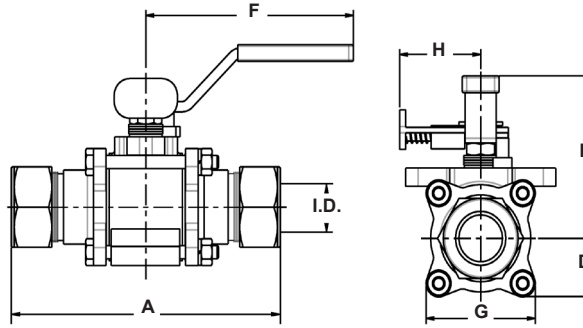
Other seat/seal options available - Contact PBM.

Other Purge Port & Ball Options - Contact PBM.

More polish available - Contact PBM.

IMI PBM Igenix® Cast Series 9 Manual

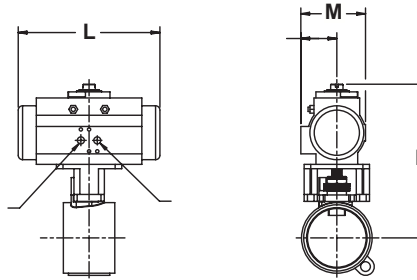
2-Way Valve with Locking Handle



2-Way Sanitary Dimensioned valves in inches									Locking Handle		Ext. Lockable Handle		
Valve Size	Size Code	I.D. Port	A	D	E	F	G	Approx. Wgt (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.



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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