

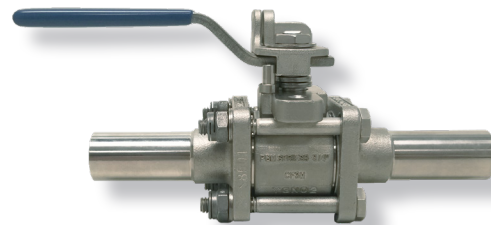
IMI PBM IGENIX® TWO-WAY BALL VALVES

SP Cast Series 9/Forged Series 8, ISO 1127, DN8 - DN50



DESIGN FEATURES:

- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear on valve seats
- **SP 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
- Forged and cast valves are low-controlled ferrite.
- True-Bore® (valve bore same as connecting tubing) – no puddling (Except DN8 & DN10)
- 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	DN8 - DN150 Series 9, DN15 - DN100 Series 8 (DN8 & DN10 in Series 8 is Ext. tube only)
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. Also available are Hastelloy™, AL6XN™, others available
End Connections	Extended tube, hygenic clamp, please refer to PB-CE89 for compression ends, others available
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 232.2°C depending on seat and seal material
Finish	Standard internal polish of 0.5 µ-m Ra ID Series 8, 0.75 µ-m Ra ID Series 9, other finishes avail.

CV Values (liters/minute), Series 8/Series 9	
Size	End Connections
	F-
DN 8	30
DN 10	69
DN 15	139
DN 20	279
DN 25	442
DN 32	736
DN 40	1,210
DN 50	2,325

Polish Options - Standard 0.75µ-m Ra ID, Series 9, 0.5 µ-m Ra ID, Series 8	
A* (Cast only)	0.5 µ-m Ra ID
D	0.375 µ-m Ra ID
E	0.25 µ-m Ra ID
F	0.50 µ-m Ra ID after EP
G	0.375 µ-m Ra ID after EP
H	0.25 µ-m Ra ID after EP
M	Electropolish

316L S/S Pressure Ratings at Ambient (BARG)		
SIZE	SERIES 8	SERIES 9
DN 8	41.37	62.05
DN 10	41.37	62.05
DN 15	41.37	62.05
DN 20	41.37	49.64
DN 25	41.37	49.64
DN 40	41.37	49.64
DN 50	41.37	49.64

ISO 1127 Tube Weld End Dimensions		
DN8 = 13.5mm OD x 1.6mm Wall	DN10 = 17.2mm OD x 1.6mm Wall	DN15 = 21.3mm OD x 1.6mm Wall
DN20 = 26.9mm OD x 1.6mm Wall	DN25 = 33.7mm OD x 2mm Wall	DN32 = 42.4mm OD x 2mm Wall
DN40 = 48.3mm OD x 2mm Wall	DN50 = 60.3mm OD x 2mm Wall	

How To Order:

PRODUCT (1-2)		MATERIAL (3-4)		SIZE (5) SERIES (6)			END CONNECTIONS (7-8)		SEAT & SEAL (9)		PURGES (10-11)		BALL & STEM (12)		OPERATOR (13-14)		POLISH (15-16)											
SP	HF	F316L Forged Low Ferrite F316L / DIN 1.4404	1	8	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	-	0.75 µm ID (Std. Series 9)											
			2	10	9													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	0.50 µm ID (Std. Series 8)	
35		316L Cast Body, 1.4435 Weld Ends, Low Ferrite	3	15		I	S-TEF® Seats / Seals VTFE Cavity Fillers	-	V	-	X	-	-	-	-	-	-	-										
			4	20															H	S-TEF® Seats / Seals	- V	Slotted V-Ball	G	17-4PH Stem	04	Locking Lever Handle	D	0.375 µm ID
			5	25																	- W	30° V-Ball			08	Gear Operator	E	0.25 µm ID
			6	32																	- X	45° V-Ball			18	Extended Handle (DN50)	F	0.50 µm ID after Electro Polish
			7	40																	- Y	60° V-Ball			71	Extended Handle (DN8 thru DN40)		
			8	50																					20	DA 80psig actuator	G	0.375 µm ID after Electro Polish
										27	DA 60psig actuator																	
										34	SR 80psig actuator																	
										41	SR 60psig actuator																	

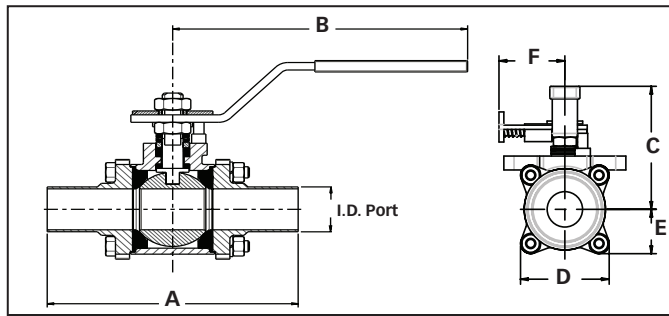
Other seat/seal options available - Contact PBM.

Other operator options available - Contact PBM.

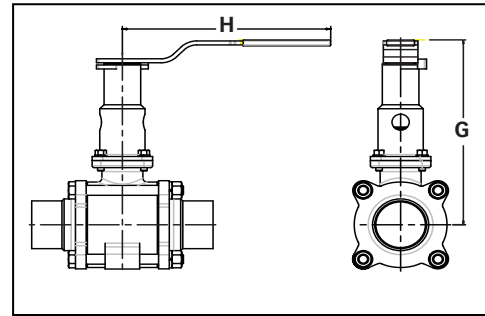
More polish available - Contact PBM.

IMI PBM Igenix® Cast Series 9/Forged Series 8 Manual

2-Way Valve with Locking Handle



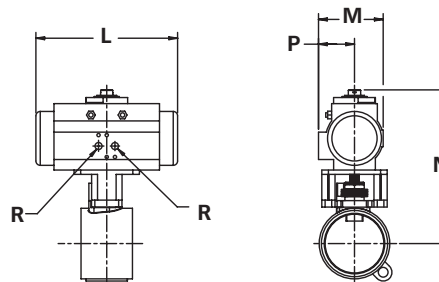
2-Way Valve with Extended Lockable Handle



Clean Steam Sanitary Dimensioned valves in mm									Locking Handle		Ext. Locking Handle		
Valve Size	Size Code	I.D. Port	A	B	C	D	E	Approx. Wgt (kg)	F	Hole Dia. for Lock	G	H	Hole Dia. for Lock
DN 8	1	10.3	139.7	101.6	52.1	38.1	19.1	0.5	39.4	7.1	101.6	129.3	7.9
DN 10	2	14.0	152.4	101.6	56.4	42.9	21.6	0.6	39.4	7.1	105.7	129.3	7.9
DN 15	3	18.1	165.1	105.4	76.2	55.4	27.7	1.3	41.1	6.4	138.2	129.3	7.9
DN 20	4	23.7	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 25	5	29.7	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 32	6	38.4	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 40	7	44.3	203.2	204.0	118.6	109.2	54.6	7.1	65.3	9.7	196.6	203.2	9.7
DN 50	8	56.3	292.1	306.3	165.5	141.7	70.9	16.9	88.1	9.7	288.5	306.3	9.7

ACTUATED DIMENSIONS

Unit of Measure = mm
Dimensions based on actuators used with V-TEF™ seats.



80 PSI Spring Return						60 PSI Spring Return					60, 80 PSI Double Acting				
Size	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
DN 8	141.0	70.9	138.4	40.9	1/8" NPT	141.0	70.9	138.4	40.9	1/8" NPT	141.0	70.9	138.4	40.9	1/8" NPT
DN 10	141.0	70.9	142.0	40.9	1/8" NPT	164.1	80.5	153.4	45.0	1/8" NPT	141.0	70.9	142.0	40.9	1/8" NPT
DN 15	164.1	80.5	165.4	45.0	1/8" NPT	210.1	94.5	183.4	52.6	1/8" NPT	141.0	70.9	153.9	40.9	1/8" NPT
DN 20	240.8	105.9	245.1	58.4	1/8" NPT	275.1	122.9	257.9	68.1	1/4" NPT	210.1	94.5	231.1	52.6	1/8" NPT
DN 25	240.8	105.9	245.1	58.4	1/8" NPT	275.1	122.9	257.9	68.1	1/4" NPT	210.1	94.5	231.1	52.6	1/8" NPT
DN 32	240.8	105.9	245.1	58.4	1/8" NPT	275.1	122.9	257.9	68.1	1/4" NPT	210.1	94.5	231.1	52.6	1/8" NPT
DN 40	275.1	122.9	265.4	68.1	1/4" NPT	333.0	136.9	299.7	72.9	1/4" NPT	210.1	94.5	238.5	52.6	1/8" NPT
DN 50	333.0	136.9	342.4	72.9	1/4" NPT	372.1	148.1	354.6	80.0	1/4" NPT	333.0	136.9	342.4	72.9	1/4" NPT

Manual Valves with Tube Ends when used with insulation		
Tube OD	Insulation max with no extension	Insulation max with extension
12.7	19.3	68.1
19.1	20.1	69.1
25.4	36.8	98.6
38.1	78.7	141.5
50.8	58.7	142.2
63.5	101.6	225.6
76.2	103.6	225.6
101.6	110.5	231.6