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Process Automation

IMI PBM

DD Series 5 Size 1/2" to 4"

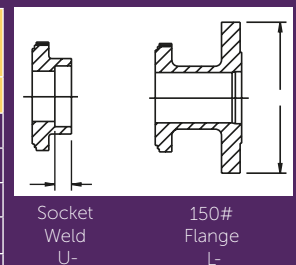
Diverter Steam Valves

Design Features

- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear on valve seats
- DD Series Valves have O-Rings
- Integral side-entry or bottom entry common port. Seats shall provide both upstream and downstream bubble-tight seal and be adjustable for inline wear
- A single Diverter Valve can replace two or three 2-Way Valves to reduce cost and space
- Full-port diameters minimize pressure drops (1/2 - 4")
- Stem assembly accommodates IMI PBM Direct Mount Actuation for accurate alignment and increased cycling life
- A Diverter Port Ball Valve can be an economical alternative to a 3-Way Multi-Port Valve depending on the sealing requirements
- Valves are rated to full vacuum
- Specify IMI PBM flow pattern
- Using a welded connection on the common port of a DD Valve may complicate maintenance. Provisions must be made to allow removal of end fittings and body from the line. IMI PBM recommends Female NPT (Q-) or flanged end fittings for common port connection for ease of valve maintenance

CV Values (gpm)			
Size	L-Port	T-Port	
		Straight	Branch
1/2"	6.6	7.4	5.2
3/4"	17	20	13
1"	33	39	24
1-1/2"	79	93	58
2"	149	180	110
3"	350	415	250
4"	640	770	465

Socket Weld Depth or Flange Diameter		
Size	U-	L-
1/2"	0.41	3.50
3/4"	0.53	3.88
1"	0.53	4.25
1-1/2"	0.53	5.00
2"	0.66	6.00
3"	0.69	7.50
4"	0.81	9.00



SPECIFICATIONS

	3-Way Diverter Steam Valves
Sizes	1/2" to 4" - Series 5
Material	316/316L, Hastelloy™ C726, Carbon Steel, others available
Temperatures	Ambient for V-TEF™ to 400°F, S-TEF to 450°F
End Connections	Flange, NPT, socket weld
O-Rings	EPDM O-Ring Energizer (Viton V1274-75/80, EPDM E3608-70, others available)
Seats, Seals and Stem Packings	V-TEF™ or S-TEF®
Body Bolts & Nuts	18-8 Stainless Steel
Maximum Working Pressure	Up to 900 psig CWP depending on valve series, size and temperature



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 (9)		FLOW PATTERN OPTIONS (10-11)		BALL / STEM OPTIONS (12)		OPERATOR (13- 14)		POLISH OPTIONS (15)	
DD	H-	Cast 316/316L S/S	C	1/2"	5	L-	150# Flange	G	V-TEF™ Seats / Seals FKM O-Rings	03	3-Way Side Entry T-Port Ball 90°	-	Standard Ball and Stem	--	W/ Standard Lever Handle	-	125 Ra ID Standard
HL		Cast 316L S/S	D	3/4"		Q-	Female NPT	J	V-TEF™ Seats / Seals / VTFE Cav Fill / FKM O-Rings	04	3-Way Side Entry T-Port Ball 90°	F	Internal / External Grounding	02	W/O Handle W/ Stem Actuator Prep	A	20 Ra ID
C-		Hastelloy C-276	E	1"		U-	Socket Weld	Z	V-TEF™ Seats / Seals EPDM O-Ring	06	3-Way Side Entry T-Port Ball 180°	G	17-4PH Stem	04	Locking Lever Handle (1/2" thru 2")	C	20 Ra ID / 32 Ra OD
Y-		Hastelloy C-22	H	2"				Z	V-TEF™ Seats / Seals / VTFE Cav Fill / EPR O-Rings	10	3-Way Side Entry L-Port Ball 90°			08	Gear Operator (Req'd for 4")	F	20 Ra ID after Electro Polish
P-		AL6XN	K	3"				H	S-TEF™ Seats / Seals FKM O-Rings	15	3-Way Btm. Entry L-Port Ball 180°			20	DA 80psig actuator		
			L	4"				0	S-TEF™ Seats / Seals EPDM O-Rings	18	3-Way Btm. Entry LL-Port Ball 90°			27	DA 60psig actuator		
								9	V-TEF™ Seats / Seals FEP Encaps. FKM O-Rings					34	SR 80psig actuator - Fail Position must be specified		More polish available - Contact IMI PBM
														41	SR 60psig actuator - Fail Position must be specified		

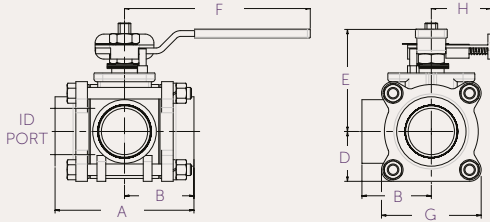
Other material options available - Contact IMI PBM

Other Flow Pattern Options available - Contact IMI PBM

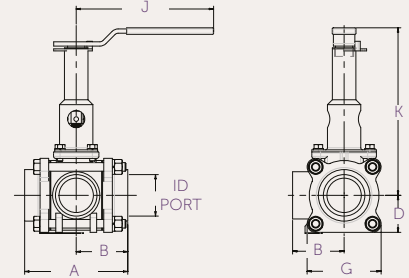
Other Seal/Seal options available - Contact IMI PBM

Other operator options available - Contact IMI PBM

DIVERTER PORT WITH LOCKABLE HANDLE



DIVERTER PORT WITH BUTTWELDED ENDS

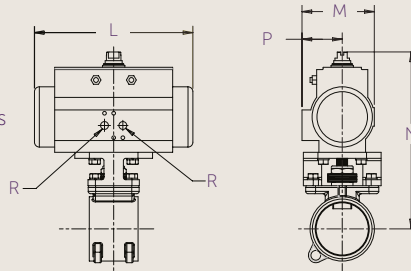


3-Way Diverter Port Dimensioned Valves in Inches													Lockable Handle		Extended Lockable		
Valve Size	Size Code	Port Dia.	A		B		D	E	F	G	~Wt (lbs.)		H	Hole Dia. for Lock	J	K	Hole Dia. for Lock
			Q-, U-	L-	Q-, U-	L-					Q-, U-	L-					
1/2"	C	0.50	3.12	5.50	1.56	2.75	.92	2.63	4.15	1.84	2	5.2	1.55	.28	5.09	7.18	0.31
3/4"	D	0.75	3.44	5.75	1.72	2.88	1.0	2.78	4.15	2.00	2.5	7	1.55	.28	5.09	7.34	0.31
1"	E	1.00	4.25	6.50	2.13	3.25	1.33	3.03	5.09	2.66	5.0	11	1.62	.25	5.09	7.62	0.31
1 1/2"	G	1.50	5.50	8.00	2.75	4.00	1.78	4.10	8.68	3.56	11.5	21.5	2.57	.38	8.00	9.45	0.38
2"	H	2.00	6.00	9.75	3.00	4.88	2.15	4.41	8.68	4.38	16.5	33	2.57	.38	8.00	9.76	0.38
3"	K	3.00	9.00	12.75	4.50	6.38	3.14	6.78	12.44	6.28	50.0	80.0	3.47	.38	12.06	11.69	0.44
4"	L	4.00	12.00	15.00	6.00	7.50	4.91	7.34	24.40	9.82	123	155	3.47	.38	24.06	13.97	0.44

ACTUATED DIMENSIONS

Unit of measure = inches

Dimensions based on actuators used with V-TEF® seats



Find out more
pbmvalve.com

Size	80 PSI Double Acting					60 PSI Double Acting					80 PSI Spring Return					60 PSI Spring Return				
	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
1/2"	5.55	2.79	5.84	1.61	1/8	6.46	3.17	6.29	1.77	1/8	5.55	2.79	5.84	1.61	1/8	5.55	2.79	5.84	1.61	1/8
3/4"	6.46	3.17	6.44	1.77	1/8	6.46	3.17	6.44	1.77	1/8	5.55	2.79	5.99	1.61	1/8	5.55	2.79	5.99	1.61	1/8
1"	8.27	3.72	7.80	2.07	1/8	8.27	3.72	7.80	2.07	1/8	5.55	2.79	6.64	1.61	1/8	5.55	2.79	6.64	1.61	1/8
1 1/2"	10.83	4.85	10.16	2.68	1/4	10.83	4.85	10.16	2.68	1/4	6.46	3.17	8.39	1.77	1/8	8.27	3.72	9.10	2.07	1/8
2"	10.83	4.85	10.47	2.68	1/4	13.12	5.39	11.82	2.87	1/4	8.27	3.72	9.42	2.07	1/8	8.27	3.72	9.42	2.07	1/8
2 1/2"	13.12	5.39	13.48	2.87	1/4	14.65	5.83	13.96	3.15	1/4	13.12	5.39	13.48	2.87	1/4	13.12	5.39	13.48	2.87	1/4
3"	14.65	5.83	14.29	3.15	1/4	17.13	6.46	15.16	3.44	1/4	13.12	5.39	13.81	2.87	1/4	13.12	5.39	13.81	2.87	1/4
4"	17.15	6.46	17.34	3.44	1/4	17.15	6.46	17.34	3.44	1/4	19.69	7.36	18.28	4.29	1/4	19.69	7.36	18.28	4.29	1/4

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