

PBM Igenix® Radial Diaphragm Tank Outlet Valves

clean. reliable. simple. versatile.

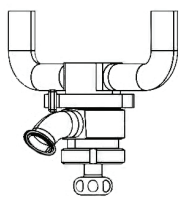


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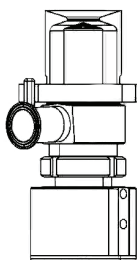
As an ISO 9001:2015 manufacturer, PBM produces standard and custom sanitary valve products for services required to minimize contamination, facilitate CIP/SIP and reduce downtime. PBM Radial Diaphragm Valves comply with ASME BPE guidelines and offer valve certifications. Our absolute mission is to provide time lasting designs which help our users produce high quality biologicals and pharmaceuticals.

- Smooth sloping design for complete drainage
- ½" through 3", DIN 15 through DIN 80
- 45° and 2° sloped outlet
- Pressure rating 175 psi/12 bar
- Machined by PBM from wrought material
- Standard finish 15 Ra with EP (BPE SF4)
- Optional purge port and tank connections available
- Body materials - 316L, Hastelloy® C-22®, AL6XN™, & others; Weld pads - any material
- Platinum cured Silicone or V-TEF™ diaphragms
- Full material traceability and documentation package
- Exceeds performance requirements of ASME-BPE testing
- Optional position switch options including AS-Interface, DeviceNet, Foundation Fieldbus and Modbus
- Approved CRN

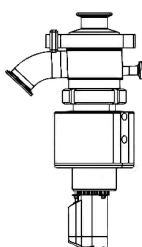
RDV CONFIGURATIONS



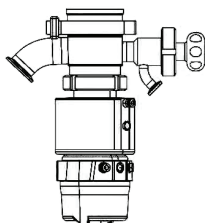
Point of use



Extended Weld Pad



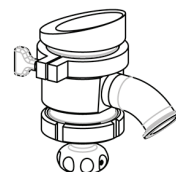
Clamp on with purge port



Standard Weld Pad with satellite valve

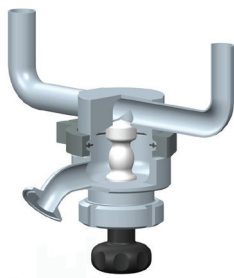


Tangential



Point of Use Valve - Zero Dead Leg

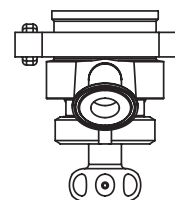
PBM's Igenix® Radial Diaphragm Zero Static Valves eliminate dead-leg on critical process systems including WFI, clean steam and process media. PBM's Radial Diaphragm Zero Static Valves have an advantage over traditional weir type diaphragm valves due to a detachable body connection, using a standard hygienic clamp, that can be capped during system passivation.



Valve Size	Header Size Selection						
	1/2" DIN15	3/4" DIN20	1" DIN25	1-1/2" DN40	2" DN50	3" DN80	4" DN100
1/2", DIN15	*	*	*	*	*	*	
3/4", DIN20		*	*	*	*	*	
1", DIN25			*	*	*	*	
1-1/2", DN40				*	*	*	
2", DN50					*	*	*
3", DN80						*	*

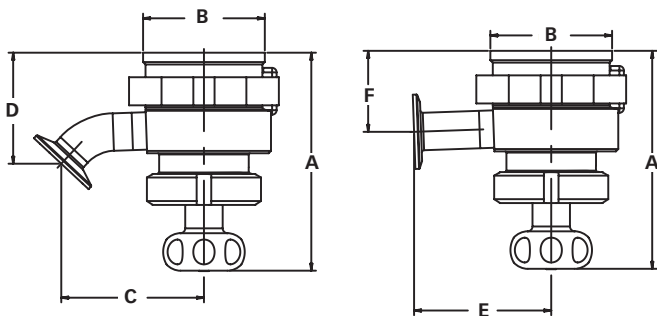
Additional RDV Configurations - Satellite Valve

PBM's Igenix® Satellite Valve offers seating against the body of our Radial Diaphragm Valve eliminating dead leg and allowing the introduction of CIP / SIP into the valve.



PBM Radial Diaphragm Manual Valves

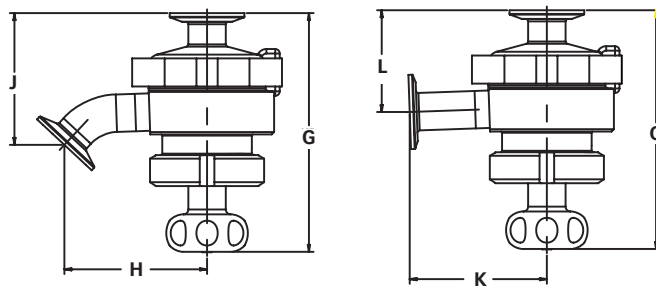
Flush Mounted Radial Diaphragm Valve



Size	Port	A	B	C	D	E	F
1/2"	0.37	5.07	2.25	3.11	2.64	3.18	1.93
3/4"	0.62	5.07	2.25	3.11	2.50	3.18	1.80
1"	0.87	5.82	3.25	3.81	2.95	3.66	2.15
1-1/2"	1.37	6.36	3.25	4.32	3.44	3.66	2.40
2"	1.87	7.14	4.25	5.34	4.05	4.65	2.79
3"	2.87	9.26	6.25	7.34	5.72	5.59	3.98

Dimension tables are in inches. For metric multiply by 25.4.

Clamp Mounted Radial Diaphragm Valve

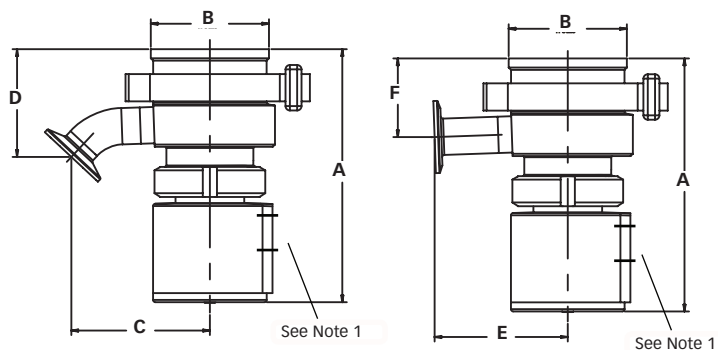


Size	Port	G	H	J	K	L
1/2"	0.37	5.82	3.11	3.39	3.18	2.68
3/4"	0.62	5.82	3.11	3.25	3.18	2.55
1"	0.87	6.37	3.81	3.51	3.66	2.61
1-1/2"	1.37	6.91	4.32	3.99	3.66	2.86
2"	1.87	7.69	5.34	4.60	4.65	3.34
3"	2.87	9.39	7.34	5.85	5.59	4.11



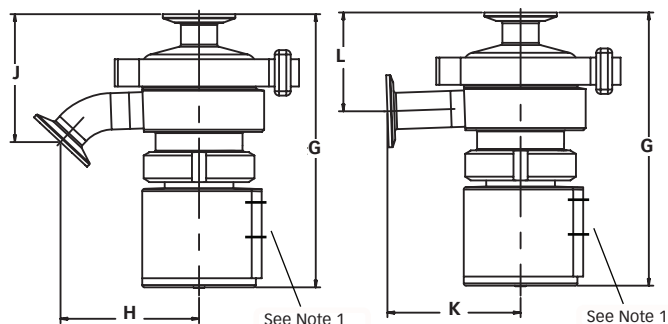
PBM Radial Diaphragm Actuated Valves

Actuated Flush Mounted Radial Diaphragm Valves



Size	Port	A	B	C	D	E	F
1/2"	0.37	6.08	2.25	3.11	2.64	3.18	1.93
3/4"	0.62	6.08	2.25	3.11	2.50	3.18	1.80
1"	0.87	6.96	3.25	3.81	2.95	3.66	2.15
1-1/2"	1.37	8.24	3.25	4.32	3.44	3.66	2.40
2"	1.87	9.42	4.25	5.34	4.05	4.65	2.79
3"	2.87	13.42	6.25	7.34	5.72	5.59	3.98

Actuated Clamp Mounted Radial Diaphragm Valves



Size	Port	G	H	J	K	L
1/2"	0.37	6.83	3.11	3.39	3.18	2.69
3/4"	0.62	6.83	3.11	3.25	3.18	2.55
1"	0.87	7.51	3.81	3.51	3.66	2.61
1-1/2"	1.37	8.79	4.32	3.99	3.66	2.86
2"	1.87	9.97	5.34	4.60	4.65	3.34
3"	2.87	13.62	7.34	5.84	5.59	4.11



Note 1: Air connection on actuator is 1/8" F.N.P.T.
Dimension tables are in inches. For metric multiply by 25.4.

Specifications, Weights, CV

SPECIFICATIONS	RD VALVE
Sizes	1/2" - 3" (DN15 - DN80)
Body and Weld pad	316L Stainless, Hastelloys, AL6XN, & more
Maximum Working Pressure	175 psig/12 bar
Diaphragm/Gasket Materials	Silicone or V-TEF™/PTFE
Temperatures	Silicone to -60°F to 275°F (-50°C to 135°C), V-TEF™ +32°F to 400°F (0°C to 204°C)

Custom fit, copper, chill block fixtures are available to facilitate welding of PBM's Radial Diaphragm tank outlet valve weld pad.



WEIGHTS									
Size		Valve, manual		Valve + actuator		Valve + clamp, manual		Valve + Clamp + actuator	
		lb.	kg.	lb.	kg.	lb.	kg.	lb.	kg.
1/2"	DN15	3.14	1.4	4.46	2.0	2.87	1.3	4.20	1.9
3/4"	DN20	3.17	1.4	4.32	2.0	3.00	1.4	4.15	1.9
1"	DN25	7.10	3.2	9.50	4.3	6.53	3.0	8.90	4.0
1-1/2"	DN40	8.56	3.9	14.20	6.4	9.16	4.2	14.00	6.4
2"	DN50	15.90	7.2	21.90	9.9	15.10	6.8	21.00	9.5
3"	DN80	31.80	14.4	62.80	28.5	27.70	12.6	59.70	27.1

CV Values (gpm)			
Size		gal./ min.	liter/ min.
1/2"	DN15	3.30	12.5
3/4"	DN20	10.30	39.0
1"	DN25	14.60	55.3
1-1/2"	DN40	48.10	182.1
2"	DN50	72.20	273.3
3"	DN80	167.70	635.8

How to Order

PRODUCT (1-2) MATERIAL (3-4)			SIZE (5) SERIES (6)		OUTLET END CONNECTION (7)		OUTLET ORIENTATION CONNECTION (8)		DIAPHRAGM /GASKET (9)		TANK PAD OPTIONS (10-11)		PURGE PORTS/ SATELLITE VALVE (12)		OPERATOR (13-14)		POLISH (MECH. UNLESS NOTED) (15-16)		
RD	HL	316L Stainless	C	1/2"	1	F	Extended Butt Weld	1	2 Degree Slope W/ Straight Outlet	B	Silicone/ Silicone	--	Standard Weld Pad	-	No purge option(s) selected	--	w/Manual Knob	G	15Ra ID / 63Ra OD after EP (Standard)
	C-	Hastelloy® C-276	D	3/4"	X		Hygienic Clamp	2	2 Degree Slope W/ 45 Degree Outlet	G	V-TEF™/PTFE	LP	Less Weld Pad	A	(1) 1/2" clamp on center opposite outlet	34	SR80 psig actr	H	10Ra ID / 63Ra OD after EP
	Y-	Hastelloy® C-22®	E	1"				3	Tangential 2 deg slope W/ Straight Outlet	H	V-TEF™/EPDM	CX	1/2" Clamp Inlet	B	(1) 1/2" BWTE on center opposite outlet	35	SR80 psig actr & GP LS	O	15Ra ID / 32Ra OD / EP
	P-	AL6XN	G	1-1/2"				4	Tangential 2 deg slope W/ 45 Degree Outlet	I	V-TEF™/FKM	DX	3/4" Clamp Inlet	R	(1) 1/2" Satellite Valve - Hygienic Clamp - Manual	64	SR80 psig actr & GP Limit switch & 120VAC Solenoid	S	10Ra ID / 32Ra OD / EP
			H	2"															
			K	3"															
												EX	1" Clamp Inlet	S	(1) 1/2" Satellite Valve - Ext. Butt Weld - Tube - Manual				
											GX	1-1/2" Clamp Inlet							
											HX	2" Clamp Inlet							
												KX	3" Clamp Inlet						

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

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

Other purge port / satellite
valve options - Consult factory.



<http://pbmvalve.com/valves/radial-diaphragm-tank-valve>

<http://pbmvalve.com/maintenance-instructions>



www.PBMValve.com

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