

## PBM VALVE SOLUTIONS

# RISING STEM SAMPLING VALVES

## markets

brewing

wine

beverage

dairy

pharmaceutical

food

biotechnology





Typical sampling valve with 1/2" sanitary clamp inlet and outlet

Optional inline version

## **Features**

- 316L Stainless Steel
- No tools required for disassembly
- Product line or vessel connection
  1/2-inch weld, 1/2-inch clamp,
  1 1/2-inch clamp
- Large Nylon 6/6 knob
- Quick disassembly for inspection or cleaning by removal of <sup>1</sup>/<sub>2</sub>-inch body clamp
- Viton or EPDM O-ring and Viton body gasket
- TFM® seat
- Autoclavable, assembled or disassembled.
- All materials are FDA compliant
- 32 R<sub>a</sub> ID wetted surfaces
- Meets USP Class VI with EPDM O-ring



Sampling valve with optional tamper-resistant locking knob cover



Beverage Sampling Valve

Materials of Construction					
Valve		Actuator			
Part	Material	Material Part			
Cast Body	A351, CF3M	Actuator Housing	A351, CF8		
Wrought Body	A479, S31603	Wrought Actuator Parts	A479, S31603		
Stem	A479, S31603	Actuator Spring	301 SS Purchased Part		
Bonnet	A479, S31603	Magnet	Neodymium		
Clamp	304 SS Purchased Part	Proximity Switch	Aluminum		

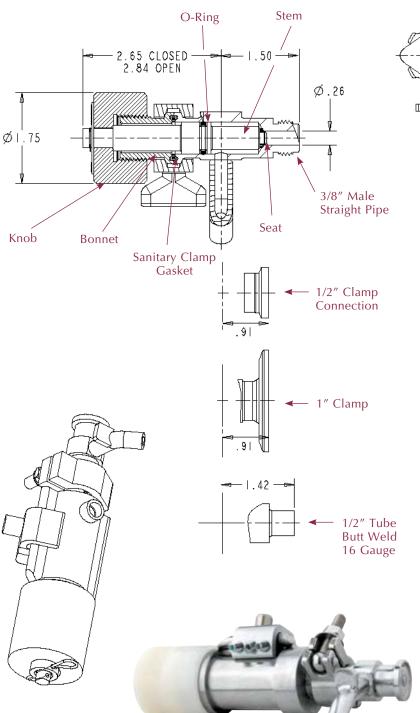
Rating and Material Specifications

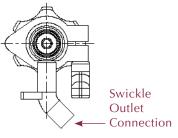
Valve Rating: 120 psig at 350°F or 150 psig CWP, ASME B16.34 Intermediate Rating Actuator Rating: 60 to 150 psig at 32°F to 125°F, air or inert gas

Flow Coefficient (Cv) testing of the PBM Sanitary Rising Stem Sampling Valve

Total full open  $C_V$  is about 1.0 gpm. The  $C_V$  of PBM's Sanitary Rising Stem Sampling Valve has a gradual increase between just off closed to  $1^{1/4}$  turns open, making it extremely controllable.

Cv vs. Position						
Actuated Valves			Manual Valve			
Adjusting Screw of Knob (Turns Out)	Swickle Outlet Hose Barb Outlet		Swickle Outlet	Hose Barb Outlet		
None	0.00	0.00	0.00	0.00		
1/8	0.09	0.13	0.01	0.07		
1/4	0.10	0.13	0.08	0.15		
3/8	0.10	0.16	0.04	0.16		
1/2	0.10	0.16	0.22	0.23		
5/8	0.12	0.16	0.37	0.30		
3/4	0.14	0.19	0.48	0.44		
7/8	0.27	0.23	0.60	0.51		
1	0.44	0.33	0.68	0.63		
1-1/4	0.66	0.53	0.86	0.78		
1-1/2	0.81	0.66	.1.00	0.83		
1-3/4	0.95	0.79	1.07	0.90		
2	1.04	0.85	1.11	0.90		
2-1/2	1.05	0.86	1.12	0.90		
3 or more	1.05	0.86	1.12	0.90		







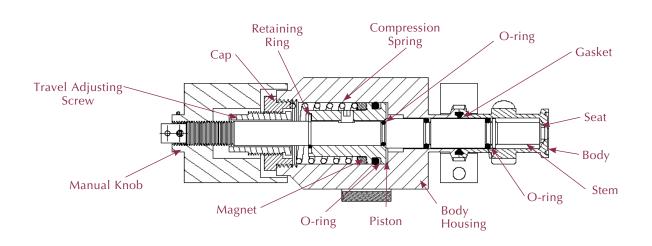
#### SAMPLING VALVE ASSEMBLY

- with <sup>3</sup>/<sub>8</sub>-inch male pipe inlet
- Swickle Outlet
- Viton O-Ring
- TFM® Seat
- Manually Operated

## **Actuated Valves**

The actuator is single acting, pneumatic and is spring return to the closed valve position and operates with 50 to 120 psig air pressure. A 1/8-inch FNPT tap is provided for connecting the air line from the solenoid valve. It features an adjustment to set full open flow to the desired level. This flow can be adjusted from a trickle flow to as much as 5 gpm at 25 psi pressure drop. A knob is provided to operate the valve manually in lieu of operating the valve with air.

Position of the valve can be detected with one or two proximity switches that sense the position of a magnet above the piston in the valve. These low current switches operate at voltages 10 to 30 VDC.



## **About PBM**

PBM offers a comprehensive product line for optimum performance in controlling and automating process lines. Our valves minimize contamination, comply with sanitary regulations, facilitate clean-in-place, solve clogging problems and reduce downtime. PBM's engineering and manufacturing teams will work with you to design special valve configurations.

Exceptional value, reliability and service that customers have relied on for over 100 years. You shouldn't expect anything less from a leading manufacturer of dependable, high quality valves. Call 800-967-4PBM to speak to a sales representative, or e-mail PBM with questions or a quote request at info@pbmvalve.com.







## **Sampling Valve Part Numbers**

POS 1 & 2	POS 3 & 4	POS 5	POS 6	POS 7	POS 8	
SANITARY SAMPLING VALVES	MATERIAL	INLET SIZE	INLET TYPE	OUTLET SIZE	INLET TYPE	
S- = Split Body	H9 = 316L Barstock S/S Body & End Conn.	A = 1/4 inch	F = Ext. Butt weld for tube	A = 1/4 inch	F = Ext Butt weld for tube	
S2 = Beverage Unibody	HL = 316L S/S Body & End Conn.	B = 3/8 inch	X = Sanitary Clamp	B = 3/8 inch	X = Hygenic Clamp	
S3 = Unibody		C = 1/2 inch	P = Male NPT	C = 1/2 inch	H = Hose Barb	
	'	D = 3/4 inch	G = Straight Thread Swivel	D = 3/4 inch	S = Swickle End	
		E = 1 inch Nut (S2 Valves Only)	Nut (S2 Valves Only)	E = 1 inch		
		G = 1-1/2 inch		G = 1-1/2 inch		
		H = 2 inch		H = 2 inch		
				- = Swickle End		

POS 9	POS 10 & 11	POS 12
SEAT AND SEAL MATERIAL	OPERATOR	POLISH
A = TFM / Viton Seats & Seals	= No Options	- = no polish
B = TFM / EPR Seats & Seals	04 = Plastic Lockout (S- Valves Only)	A = 20 RA ID polish
C = TFM / EPDM Seats & Seals	12 Single Accordy opining Account	D = 15 RA ID polish
		E = 10 RA ID polish
		F = 20 RA ID polish after EP
		G = 15 RA ID polish after EP
		H = 10 RA ID polish after EP



### how to order

Sampling Valve has 1/4-inch bore inlet diameter. Number in "()" represents part number character position.

1 + 2	3 + 4	5	6	7	8	9	10 & 11	12
Product	Material	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Seat & Seal Code	Actuation	Polish
S-	HL	С	X	А	Н	А		А

S-HLCXAHA - - A is the code for a Sampling Valve (1/4-inch diameter inlet hole), cast 316L grade stainless steel, with a 1/2-inch Sanitary Clamp inlet and a 1/4-inch hose barb outlet, TFM® seat and Viton O-ring and body seal, with 20 R<sub>2</sub> ID mechanical polish.



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