SANITARY RISING STEM SAMPLING VALVE











BREWING

BEVERAGE

DAIRY

FOOD

WINE

PHARMACEUTICAL

BIOTECHNOLOGY











SAMPLING STEM

SAMPLING VALVE

PBM's Sanitary Sampling
Valve product line is
specifically designed for
taking process samples
in breweries, wineries,
food and beverage
manufacturing facilities, as
well as in pharmaceutical,
biotechnology, chemical
and cosmetic manufacturing
to ensure quality, consistency,
taste, sterility.

Sampling is extremely important at all stages of production, as it allows for trials and analyses and is often the way a potential problem is caught.

The Sanitary Rising Stem
Sampling Valve has minimal
moving parts, simple design,
competitive price, and
proven cleanliness in
process manufacturing.



QUALITY

consistency

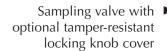
STERILITY

reliability





 Typical sampling valve with 1/2" Tri-Clamp® inlet and outlet





▼ Optional inline version





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 Valve	s	Manual Valves								
Adjusting Screw or 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							

Breweries Beverages



Successful breweries, wineries and other beverage manufacturers recognize the importance of using high-quality ingredients, reliable technology and paying attention to detail. Using PBM's Rising Stem Sampling Valve with a swickle outlet helps ensure that results are the same regardless of the observer.

features

- 316L Stainless Steel
- Swickle Outlet
- No tools required for disassembly
- Product line or vessel connection
 1/2-inch weld, 1/2-inch clamp,
 11/2-inch clamp
- ³/₈-inch male pipe straight thread
- Large Nylon 6/6 knob
- Quick disassembly for inspection or cleaning by removal of ¹/₂-inch body clamp
- Viton or EPR O-ring and body gasket
- TFM® seat
- 32 R_a ID wetted surfaces
- Autoclavable. Assembled or disassembled.
- All FDA compliant materials

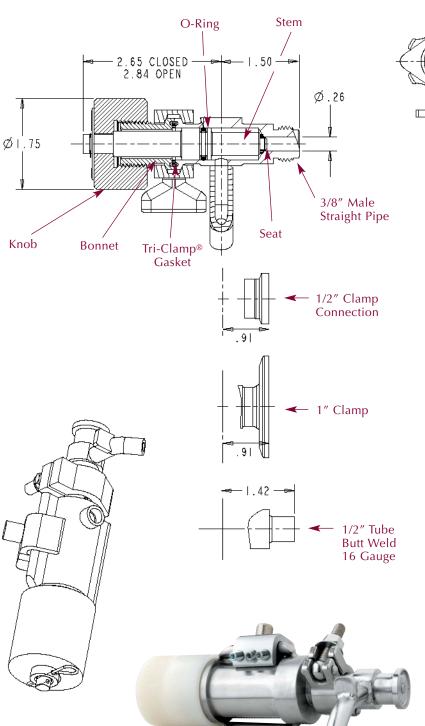
OPTIONS

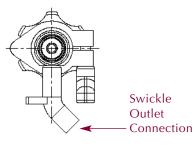
- Tri-Clamp[®] Inlet
- Tri-Clamp[®] or Hose Barb Outlet
- Optional SIP/CIP ports
- Locking tamper-resistant plastic cover
- Finer finishes, ID and OD, and electropolishing

MANUAL VALVES

Flow direction through the valve is from below the stem, through the body of the valve, and out the open discharge end of the valve (swickle, hose barb end or other). The valve is designed for use at liquid pressures from full vacuum to up to 100 psig (6.9 barg) and temperatures of up to 250°F (121°C). The valves are also capable of operation in saturated or superheated steam at up to 350°F (177°C).









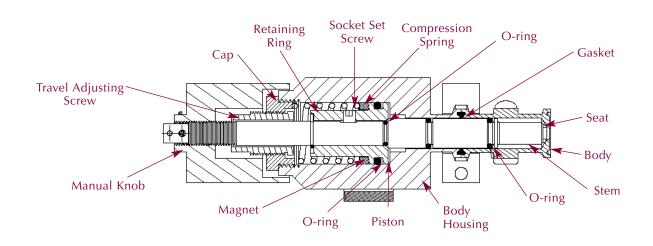
SAMPLING VALVE ASSEMBLY

- with ³/₈-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 1/4-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 IFM Efector MK 5005 proximity switches that sense the position of a magnet above the piston in the valve. These low current switches operate at voltages of 10 to 30 VDC.



Pharmaceutical Biotechnology

Chemical







MANUAL VALVES

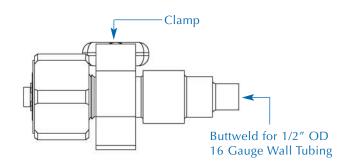
PBM's Sanitary Rising Stem Sampling Valve provides consistent cleanability and sterility in industries where sanitary manufacturing conditions are of the utmost importance. PBM's Rising Stem Sampling Valve design with a hose barb outlet is ideal for taking process samples in the pharmaceutical, biotechnology, chemical, and cosmetic manufacturing industries. The valve design is simple and clean. Simply turning the knob raises a stem with a TFM® seat seal. The stem is sealed with an FDA compliant Viton or EPR O-ring.

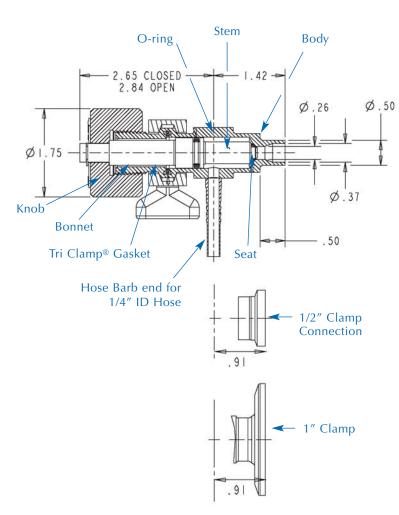
features

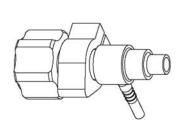
- 316L Stainless Steel
- Hose barb outlet for ¹/₄-inch ID hose
- No tools required for disassembly
- Product line or vessel connection
 1/2-inch weld, 1/2-inch clamp,
 1 1/2-inch clamp
- Large nylon 6/6 knob
- Quick disassembly for inspection or cleaning by removal of ¹/₂-inch body clamp
- Viton O-ring and body gasket
- TFM® seat
- Autoclavable, assembled or disassembled.
- Meets 3A requirements
- All materials are FDA compliant
- 32 R_a ID wetted surfaces

OPTIONS

- Tri-Clamp[®] Inlet
- Tri-Clamp® or Swickle Outlet
- Tri-Clamp[®] Purge Port connection
- Optional SIP/CIP ports
- Locking plastic cover
- Finer finishes, ID and OD, and electropolishing









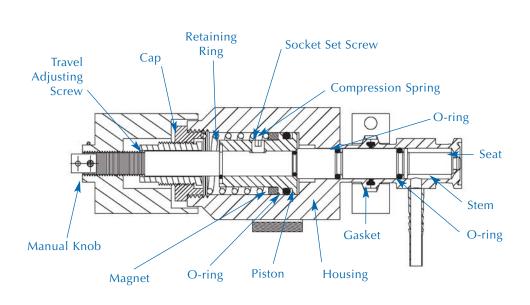
SAMPLING VALVE ASSEMBLY

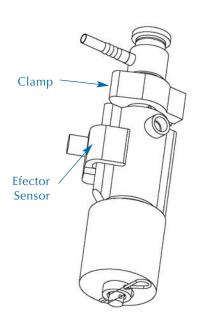
- with ½-inch buttweld for tubing inlet
- Hose Barb Outlet for ¹/₄-inch ID hose
- EPR O-Ring
- TFM® Seat
- Manually Operated

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 1/4-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 IFM Efector MK 5005 proximity switches that sense the position of a magnet above the piston in the valve. These low current switches operate at voltages of 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 Number

how to order

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

Pro	duct Code (1-2)	Mat	erial (3-4)	Inle	t Size (5)	Inl	et Type (6)	Out	let Size (7)	0ι	ıtlet Type (8)	Sea	t/Seal Code (9)	Pur	ge Qty/Location (10)	Pur	ge Type/Size (11)		Actuation (12)	Polish Options (15)						
S-	Sampling 1/4" diameter	HL	316L	Α	1/4"	χ	Tri-Clamp®	Α	1/4"	Χ	Tri-Clamp®	Α	TFM [®] , Viton	-	None	Α	1/4" Hose Barb	-	None		32 R _a ID					
	inlet hole	Н9	A479,	В	3/8"	Р	Male NPT	В	3/8"	Р	Male NPT	В	TFM [®] , EPR	Α	One	В	1/2" Tri-Clamp®	Α	Actuator	Α	20 R _a ID after					
S2	Short version		S31603 (wrought	С	1/2"	F	Butt Weld	С	1/2"	F	Butt Weld	С	TFM [®] , EPDM			С	1/4" FNPT				electropolish					
	w/ 1/4"diam. inlet hole		316L)	D	3/4"	G	Straight	D	3/4"	Н	Hose Barb	D	TFM [®] , Kalrez			D	1/8" FNPT			В	15 R _a ID after electropolish					
	Inline version w/ 1/4"diam.								Е	1"		Thread	Ε	1"	S	Swickle					Ε	1/2" Tubing			С	10 R _a ID after
	inlet hole			G	1-1/2"			G	1-1/2"												electropolish					
		•		Н	2"															D	20 R _a ID & 32 R _a OD after electropolish					
																				F	20 R _a ID after electropolish					
																				Н	10 R _a ID after electropolish					

Ordering Example

1 + 2	3 + 4	5	6	7	8	9	10	11	12	15
Product	Material	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Seat & Seal Code	Purge Quantity & Type	Purge Type & Size	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), 316L grade stainless steel, with a 1/2-inch Tri-Clamp® inlet and a 1/4-inch hose barb outlet, TFM® seat and Viton O-ring and body seal, with 20 R_a ID mechanical polish.



PBM, Inc.

1070 Sandy Hill Road • Irwin, PA 15642 • USA

Toll Free: 1.800.967.4PBM

Phone: 724.863.0550 • Fax: 724.864.9255 e-mail: info@pbmvalve.com • www.pbmvalve.com

