

# Mechanical Bladder Pump



The Mechanical Bladder Pump saves money, requires less field effort, and collects high-quality, low-flow groundwater samples.

The Mechanical Bladder Pump requires no expensive, cumbersome equipment or accessories. Forget about heavy generators, compressors, and pneumatic controllers. This simple, easy-to-assemble pump can collect representative samples for VOCs and other environmental analytes without compromising sample quality.

The Mechanical Bladder Pump meets low-flow sampling protocol recommended by the Environmental Protection Agency. The EPA's Environmental Technology Verification Program confirmed,

*"The Geoprobe® Mechanical Bladder Pump can be used to collect VOC contaminated water samples from monitoring wells such that results are statistically comparable to reference samples. Furthermore, the pump is compatible with sampling programs that incorporate low-volume purgemethodologies."*

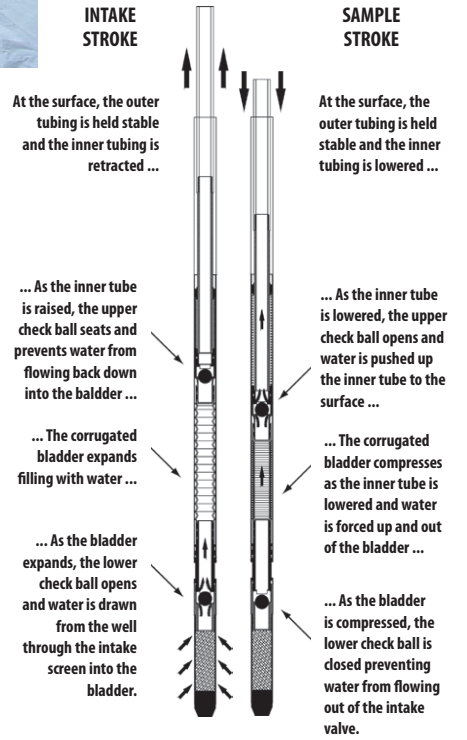
... EPA ETV Program, August 2003



Operation in the field is simple. All you need is the bladder pump and concentric tubing. The tubing is attached to the top of the pump and extends to the surface. The assembled Mechanical Bladder Pump is then lowered into the monitoring well or into the small diameter groundwater sampler. During operation, the outer tubing is held in place while the inner tubing is raised and lowered. This action alternately expands and compresses the corrugated bladder inside the pump. A few seconds of pumping brings the fluid to the surface, and a sample is quickly retrieved.



Mechanical Bladder Pump Specifications	
Dimensions	
Assembled pump (w/stainless steel mesh intake screen)	26.75 in. x 0.47 in. OD (679 mm x 12 mm)
Assembled pump (w/bullet nose intake)	21 in. x 0.47 in. OD (533 mm x 12 mm)
Weight	
Assem. pump (w/ss mesh intake screen)	7.2 oz (204 g)
Assem. pump (w/bullet nose intake)	6.4 oz (182 g)
Component Materials	
Pump Housing	stainless steel
Return Spring	stainless steel
Bladder	Teflon*
Tubing (outer) 7/16 in. OD	polyethylene
Tubing (inner) 1/4 in. OD	polyethylene or Teflon*
Flow Rates*	<100 to 1,000 mL/min.
*Achievable flow rates depend on depth to water and other factors	



▼ Manual Actuator      ▼ Mechanical Actuator



◀ The Geoprobe® Electric Actuator, in combination with the Mechanical Bladder Pump (MBP), allows for the collection of high quality, low turbidity groundwater samples from direct push installed small diameter groundwater samplers and monitoring wells. The 12-volt Electric Actuator minimizes the field effort to conduct low flow sampling by electrically completing the sample retrieval process instead of the field operator doing it manually.



1-800-436-7762 • www.geoprobe.com