# GeoPump Ground Water Pumping Solutions

## HIGH FLOW PVC BLADDER PUMPS

GEOPUMP high flow bladder pumps are designed for ground water remediation applications when air contact with the fluid is not desired due to the potential for metal precipitation. Many air driven pumps develop problems in these types of environments so the bladder membrane provides a barrier between the drive air and the fluid pumped. The membrane also prevents volatile gas emissions back to the environment during the exhaust cycle.

- PVC construction with heavy wall Nitrile rubber bladder membrane
- Rugged threaded construction for easy disassembly
- Pumping rates up to 4 gpm at 20 feet
- Withstands dry pumping
- Threaded intake permits the use of an inlet screen or intake drop tube extension
- A slotted intake screen is available to protect the bladder from sand
- Intrinsically safe



• GeoPump, Inc. • 213 State Street • Medina, NY 14103 • www.geopump.com • • Toll Free 877-Geo-Pump • 585-798-6666 Outside USA • 585-798-0175 Fax •

# HIGH FLOW PVC BLADDER PUMPS



#### Notes:

- 1. Flow based on air pressure of 100psi, air displacement rate of 3.5 cfm, and 10 feet of submergence.
- Pumps utilize discharge tubing measuring 3/4" O.D. x 5/8" I.D., and air tubing measuring 1/2" O.D. x 3/8" I.D.
- 3. Flow at any depth based on specific tubing length and free discharge to atmosphere.
- 4. Flow of any models used in multiple pump, single controller systems will be reduced. Consult the factory for specifics.

### **DESIGN SPECIFICATIONS**

MODEL	MATERIAL	D (in./mm.)	L (in./cm.)	WEIGHT (lbs./kg.)	CAPACITY (gal./L.)
51020	PVC	2.88/73	33/83	3.5/1.6	0.25/0.95
51018	PVC	2.88/73	60/150	6.0/2.7	0.50/1.90

## ENGINEERING SPECIFICATIONS

- The pumps shall have a major diameter of 2.88" (73 mm) to permit installation into 3 inch (76 mm) and larger wells.
- 2. The pump shall be constructed of NSF-PW rated PVC and Nitrile.
- 3. The pump shall utilize Teflon<sup>®</sup> intake and discharge check balls.
- 4. The pump shall utilize a twin tubing design, such that it has separate air delivery and water discharge ports.
- 5. The pump shall be a positive displacement bladder pump, whereby a compressed air charge displaces the water contained within the interior of the pump, forcing it up through the discharge tubing.

- 6. The pump shall be capable of pumping dry without damage. It shall also be capable of pumping sand, silt, etc., without damage.
- The pump shall be capable of lifting from 300 feet (90 m), with the application of 150 psi (10 bars) air pressure, without modification.
- 8. The pump shall have a 3/4" female pipe thread to permit the use of an intake filter screen or drop tube extension.

Note: Teflon is a registered trademark of E.I. duPont.

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