

# GeoPump

Ground Water Pumping Solutions

## PURGE PACKERS

The U.S.E.P.A.'s Solid Waste Disposal Facility, Technical Manual (November 1993) recommends; ***"Purging should be accomplished by removing ground water from the well at low flow rates using a pump...The rate which ground water is removed from the well during purging ideally should be approximately 0.2 to 0.3 liters per minute or less. Wells should be purged at rates below those used to develop the well to prevent further development of the well, to prevent damage to the well and to avoid disturbing accumulated corrosion or reaction products in the well. Wells also should be purged at or below their recovery rate so that migration of water in the formation above the well screen does not occur. A low purge rate also will reduce the possibility of stripping VOCs from the water, and will reduce the likelihood of mobilizing colloids in the subsurface that are immobile under natural flow conditions... The Agency suggests that a packer be placed above the screened interval to ensure that 'stagnant' casing water is not drawn into the pump. The packer should be inflated in the well until the sample is collected"***.

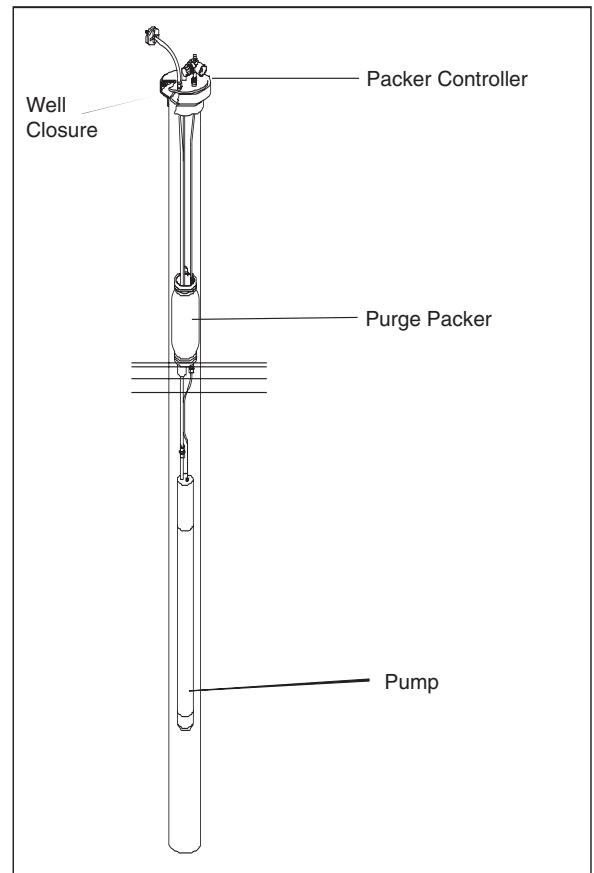
GeoPump Packers are designed to provide a leak proof seal between the well casing and the open or screened interval. The packers are installed on the bladder pump tubing such that the pump is in the sampling zone and the packer is in the casing immediately above. Between sampling events, the packer is deflated to permit the water level in the well to equalize with the water table. Prior to purging the packer is inflated, thus reducing the volume that must be removed before the sample is collected.

- Type 316 Stainless Steel and lead-free Viton® construction.
- Sizes for 2 inch and 4 inch wells.
- Inflation pressures up to 70 psi differential.
- Contaminant free certification - all packers are cleaned, laboratory tested, and individually sealed in polyethylene bags.
- Easy installation by one person.

### To Select A Packer, Specify:

- Packer size and material of construction.
- The distance between the packer and the top of the pump.
- Length of packer inflation tubing.
- Length of support cable.

• **GeoPump, Inc.** • 213 State Street • Medina, NY 14103 • [www.geopump.com](http://www.geopump.com) •  
• Toll Free 877-Geo-Pump • 585-798-6666 Outside USA • 585-798-0175 Fax •



## PACKER ACCESSORIES

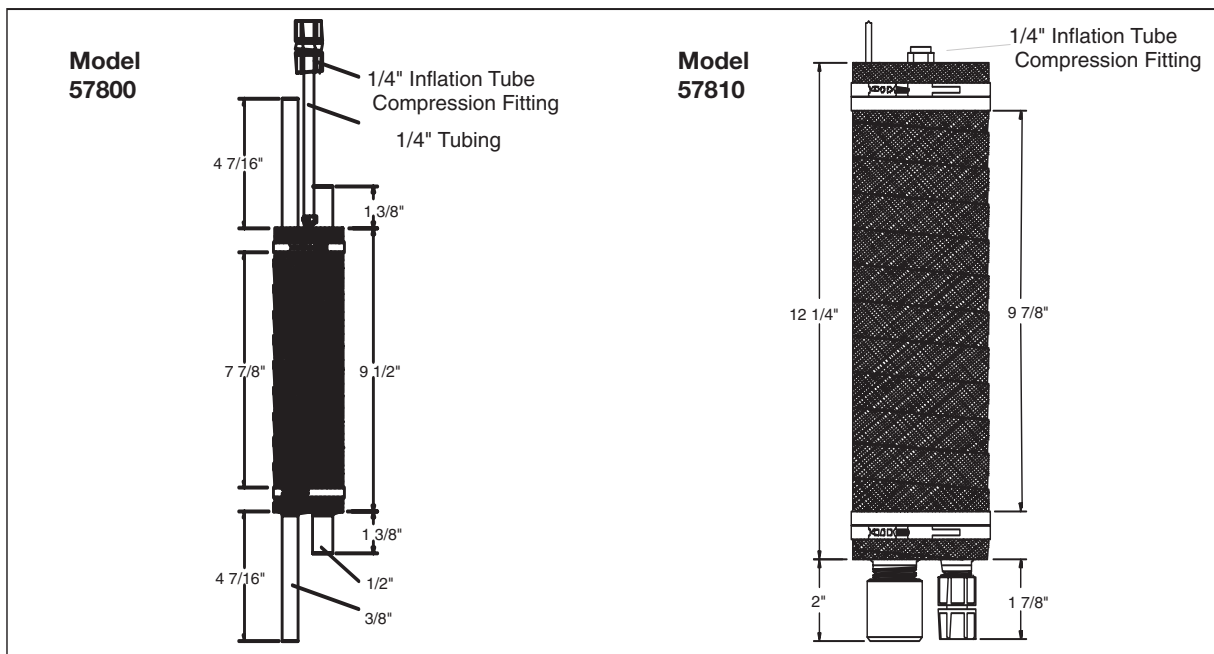
5842	INFLATION CONTROLLER ADAPTER WITH AIR CHUCK
5783	PACKER SUPPORT CABLE (S.S.) .063" (0.16 CM) DIAMETER
5076	PACKER INFLATION TUBING (PE) .170" I.D. X .250" O.D. (0.32 CM I.D. X 0.64 CM O.D.)

The packer controller adapter provides for the inflation of the packer and verifies that the packer remains inflated during the purge/sample activity. The packer controller adapter attaches between the cycle controller airline and the packer inflation fitting on the well closure. One is required per cycle controller. Packer inflation fittings for the well closure and packer are included with the packer.

# PURGE PACKERS

## DESIGN SPECIFICATIONS

MODEL	WELL SIZE (in./mm)	DIAMETER (in./cm.)	LENGTH (in./cm.)	MATERIAL	WEIGHT (lbs./kg)
57800	2.0/51	1.75/4.4	14/35.6	S.S./VITON	1.8/0.8
57810	4.0/102	3.50/8.9	20/50.8	S.S./VITON	4.6/1.9



## ENGINEERING SPECIFICATIONS

1. The packer shall be of a diameter that permits its use in either a schedule 40 or schedule 80 well.
2. The packer shall be capable of withstanding 70 psi differential pressure.
3. The packer shall consist of a rigid interior body, with an inflatable exterior sleeve.
4. The packer body shall be constructed from Type 316 Stainless Steel.
5. The inflatable gland shall be constructed from lead-free Viton<sup>®</sup> and shall be free of mold release compounds, ink and adhesives.
6. The inflatable gland shall be attached to the body with Type 316 Stainless Steel clamps.
7. The packer shall provide for the attachment of pump tubing such that each tube is sealed as it passes through the packer body. Further, the tubes must pass through the packer without restricting their inside diameters.
8. The packer shall include a provision for attachment of a support cable ( Model 57810 only).

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

**• GeoPump, Inc. • 213 State Street • Medina, NY 14103 • [www.geopump.com](http://www.geopump.com) •**  
**• Toll Free 877-Geo-Pump • 585-798-6666 Outside USA • 585-798-0175 Fax •**