

GEOVALVE®

GROUNDWATER ABSTRACTION & INJECTION USING A SINGLE PIPELINE

The Geovalve® is a dual function valve for controlling abstraction of groundwater from, and re-injection into, an aquifer while maintaining a constant pressure on the system. The compact design makes it ideal for use in tight boreholes where bi-directional flow is required as it only requires a single line for both functions. The valve provides accurate control of the system pressure so it can also be used simply as an injection valve. The Geovalve® is connected to the discharge of the borehole pump and acts as a non return valve for the off duty pump. The borehole pump must be set at approximately 10 metres below the pumped water level to prevent aeration at the injection point. By injecting water, thus, a positive pressure can be maintained on the complete system. i.e. pipes remain full and no air is allowed into the water.

OPERATIONAL MODES





PUMPING



SHUTOFF

PRESSURE REGULATOR WITH **ELECTRIC ACTUATOR**

Features and Benefits

- A smaller well diameter is required for dual flow
- Cost Reduction over conventional systems 2.
- 3. No injection control valve required
- 4. No large actuated head valves required
- 5. Uses own medium for activating in water. No separate wiring
- Allows a smaller wellhead chamber 6.
- 7. Reduced installation time
- Pipelines remain full (Reduced effect of Biofouling)
- System will always be under a positive pressure
- 10. No cascading of water on injection thus eliminating aeration
- 11. Improves motor cooling through smaller diameter wells
- 12. Easily retro-fitted into existing systems
- 13. Accurate flow-meter readings
- 14. Robust compact design



GEOVALVE®

Advanced manufacturing technology has been used to produce this highly durable control valve. The Geovalve® is resistant to abrasion and designed for a long life service.

Materials of Construction

Piston : Hard Chromed 316L stainless steel : Nickel Aluminium Bronze Body

Piston seal : NBR Piston Scraper : Polyurethane

Geovalve® Dimensions							
Nominal Valve Size	Capacity m³/h	Diameter / Height (mm)	Valve Inside / Outside Dia.	Top Connection (female thread)	Bottom Connection (male thread)	Pressure Line Connection	Shipping Weight kg
1¼″	13	60 / 140	90 (110)	1¼″	1½″	1/4"	1.5
2″	28	80 / 190	110 (125)	2″	2½″	1/4"	3
3″	68	110 / 240	140 (160)	3″	3″	1/4"	6
4″	130	140 / 290	180 (200)	4″	5″	1/4"	12
5″	280	160 / 330	230 (250)	5″	6″	3/8"	16