

## Tools & Accessories — Surge Blocks

### well development

SBD-25

SBD-25-4

SBD-32

SBD-32-4

**W**aterra Surge Blocks are available to assist and improve the well development capacity of the Standard Flow and High Flow Waterra Inertial Pumping Systems.

The Waterra Surge Block is an excellent well development tool. It simply press fits over the body of the Standard Flow or High Flow foot valve (D-25 or D-32). The inertial pump has a substantial capacity for developing monitoring wells because of the cyclical action of the valve in the well screen area. This characteristic can be utilized to remove silt and sediment that has accumulated in the foot of the monitoring well and can also be used to remove fines from the sand pack and well screen.

The surge block effectively increases the outside diameter of the D-25 or D-32 foot valve to 1<sup>7/8</sup>" in 2" wells and 3<sup>7/8</sup>" OD in 4" wells, reducing the annular gap between the valve and the inside of the well screen to approximately 1/16". This results in a significant increase in the surging action of the valve.

The use of the inertial pump and surge block together is one of the most effective methods for developing monitoring wells because it simultaneously surges and pumps the well. This frees up silt and sediment in the sand pack and screen and breaks down



bridging, drawing these particles it into the well and then removes this material from the well.

The recommended method for developing a monitoring well with the inertial pump and surge block is to begin the development process with the surge block near the top of the well screen. The inertial pump is operated with the surge block in this position until the turbidity level of the water being delivered from the pump decreases to an acceptable level. Once this level of turbidity is reached, the surge block is lowered into the well screen (one to two feet) and the process is repeated. Developing wells in this manner is one of the best methods, often resulting in turbidity levels below 10 NTUs.

### features

- DESIGNED FOR USE IN 2" OR 4" SCHEDULE 40 MONITORING WELLS
- SBD-25 & SBD-25-4 AVAILABLE FOR STANDARD FLOW SYSTEM (D-25 FOOT VALVE)
- SBD-32 & SBD-32-4 AVAILABLE FOR HIGH FLOW SYSTEM (D-32 FOOT VALVE)
- WATERRA CAN ALSO PRODUCE SPECIAL ORDER SURGE BLOCKS FOR UNIQUE WELL DIAMETERS



SBD-25-4



SBD-32-4