

0.80"/20MM GROUND WATER SAMPLING PUMP

## SAMPLE WELLS AS SMALL AS 1" DIAMETER AT DEPTHS TO 600+ FEET

The Well Wizard ST1000 from QED provides the high sample accuracy and proven reliability of our Well Wizard dedicated bladder pumps in a smaller diameter format. At just 0.80" (20mm) OD, the ST1000 can fit into wells down to 1" nominal ID and can be installed at depths to 600 feet (183m), far deeper than any other small diameter bladder pump. The optional drop tube inlet kit lets you sample wells at almost unlimited depth.

#### **FEATURES**

- EPA accepted low flow sampling accuracy
- QED's exclusive DuraFlex PTFE bladder formulation
- Flow rates to 350 ml/min
- Operating pressure to 300 PSI
- 316 stainless steel construction
- 10 year sampling pump warranty
- Every pump soak tested for VOCs and SVOCs

#### BENEFITS

- Fits wells down to 1" diameter, or larger wells with partial obstruction
- Long life bladder provides years of reliable operation
- Greater depth capability than any other bladder pump for 1" wells
- Purity testing and certification assures the highest sample quality
- Confidence inspired by decades of experience and service

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# ST1000

### DESIGNED FOR SUPERIOR LOW-FLOW SAMPLING PERFORMANCE

Pneumatic bladder pumps operate with a unique, gentle action ideal for low-flow sampling. Timed on/off cycles of compressed air alternately squeeze the flexible bladder to displace water out of the pump, and release it to allow the pump to refill by submergence, without creating any disturbance that could affect sample chemistry. Bladder pumps run easily at low rates for extended times, with out the problems of other devices.

- No overheating of high-speed electric pump motors, which can alter samples and ruin the pumps.
- No churning action, like that of bailers or inertial-lift samplers that increase turbidity.
- No suction to cause degassing of dissolved volatile contaminants

The bladder prevents contact between the pump drive air and the sample, and the down well equipment is

permanently dedicated to each well, so both samples and the well are protected from disturbance or the risk of cross-well contamination.

#### WELL WIZARD ST1000 PUMP SYSTEM SPECIFICATIONS

| Pump material:              | 316SS Body, inlet and discharge housings, inlet screen and fittings, PTFE bladder and check balls, Viton O-rings |
|-----------------------------|--|
| Length:                     | 36.0" (92 CM)  |
| Outside Diameter:           | 0.80" (20.3mm)   |
| Fitting Type:               | Barb fittings with external tubing pinch clamps  |
| Tubing Diameter:            | 0.25" OD x 0.170" ID (6.4mm x 4.3mm) discharge and air supply  |
| Inlet Thread Diameter:      | 1/8" Female NPT  |
| Bladder Volume:             | 70 ml (2.35 oz, 0.018 gal)   |
| Flow rate:                  | 350 mL/min @ 25 feet (7.6m) with 10 feet submergence (3.0m)  |
|                             | 210 ml/min @100 feet (30.5m) with 10 feet submergence (3.0m)   |
| Maximum operating pressure: | 300 PSI (20.7 bar, 2,068 kPa)  |
| Maximum lift depth:         | 600 feet (183m)  |

#### WELL WIZARD ST1000 PUMP SYSTEM COMPONENTS

| C14    | Recessed well cap for 1" (25mm) Well Casing, 1/4" Discharge with dust cover                |
|--------|--|
| 1120A  | External slip cap for 1" (25mm) Well Casing, 1/4" Discharge                                |
| 42075  | Drop tube inlet fitting and weight kit for 0.375" (9.5mm) OD tubing in 1" wells            |
| 42048  | Additional drop tube weight for 42075 kits, depths greater than 200 feet (61m)             |
| 37739  | MicroPurge flexible well cap discharge adapter, 3 feet (91 cm)                             |
| 40990  | MicroPurge flexible well cap discharge adapter, 6 feet (183 cm)                            |
| P5200  | Twin bonded HDPE pump tubing, 1/4" OD x 0.170" ID discharge and air supply                 |
| PT5200 | Twin bonded Teflon-lined HDPE pump tubing, $1/4$ " OD x 0.170" ID discharge and air supply |
| T5200  | Twin bonded Teflon pump tubing, 1/4" OD x 0.170" ID discharge and air supply               |
| 34115  | HDPE Drop inlet tubing, 3/8" OD x 1/4" ID  |
| 35374  | Teflon-lined HDPE Drop inlet tubing, 3/8" OD x 1/4" ID                                     |
| 34156  | Teflon Drop inlet tubing, 3/8" OD x 1/4" ID  |

\* Fits into nominal 1" Schedule 40 well casing (1.05"/27mm) and Schedule 80 (0.96"/24mm) inside diameter well casings, but always check actual well dimensions and survey wells for constrictions or damage that could prevent installation or removal of the ST1000 pump. Call QED with questions about proper application conditions.

+ Teflon® is a registered trademark and a brand name (Teflon ®) owned by Chemours (formally DuPont) and is used on a range of fluoropolymers. Teflon™ is not a specific chemical or product name.

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