

# Inertial Pumps

## Technical Data



### Purging and sampling of monitoring boreholes

Waterra inertial pumps can be used for both purging and sampling small diameter monitoring boreholes (from 10 to 200mm diameter). By dedicating pumps to each borehole, cross-contamination between boreholes can be eliminated. Use the table below to choose the foot valve and tubing best suited to a specific borehole size.

#### Physical dimensions

Waterra Tubing System	Tubing Code	Tubing ID	Tubing OD	Tubing volume ml/m	Foot valve	Valve OD	Use in borehole dia*.
High Flow	HF	21	25	346	VS5	25	35, <b>50</b> , <b>100</b> , 150, 200
					D32	32	40, <b>50</b> , <b>100</b> , 150, 200
Standard	STD	13	16	79	VS4	16	25, 35, <b>50</b> , 100
					D25	25	35, <b>50</b> , 100
Standard X	STDX	10	16	133	VS3	13	<b>50</b>
					D25	25	<b>50</b>
Low Flow	LF	10	13	79	VS3	13	<b>19</b>
Micro Flow	MF	6	10	28	VS2	10	<b>13</b> , <b>19</b>
Super Micro	SMF	4	6	13	VS1	6	<b>10</b>

\* Figures in **bold** show most typical.

Technical data for operation of Waterra Inertial Pumps is provided in the table below. Manual operation is possible at depths indicated, but we recommend the use of a mechanical actuator (PowerPack PP1) or suction pump (Waterra SP1) for consistent and easier pumping performance.

#### Performance

Waterra Tubing System	Max. depth of operation		Maximum pumping rate (litres/min.)	Pumping using SP1
	Manual* (metres)	With PP1 (metres)		
High Flow	<b>5</b> (10)	40	10 - 15	✓
Standard	<b>10</b> (20)	60	6 - 8	✓
Standard X	N/A	85	0.5 - 2	✗
Low Flow	<b>30</b>	40+	1.5	✗
Micro Flow	<b>30</b>	40+	0.5	✗
Super Micro Flow	<b>30</b>	40+	0.3	✗

Actual performance varies depending on depth to water, length of tubing used, diameter of borehole, friction (in narrow tubes), sediment content in water.

\* **Bold** figures indicate recommended maximum depth.



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Our policy is to continuously review and update product design, therefore some details may differ from the actual product sold.

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