

Van Walt Pump Comparison Table



Pump	Operation Type	Minimum well Diameter	Maximum Head Lift	Maximum Flow Rate	Low Flow Sampling	Purging	Advantages	Disadvantages
12.25 Advanced Peristaltic Pump	Peristaltic	≥8mm	9.5m	up to 2.2 litres per minute	✓✓✓	✓	- Easy to use - Built in battery - Only the tubing comes into contact with the product so the pump is left clean - Tubing is cheap - Can purge narrow diameter wells	- Low flow rate 2.2l per minute - Limited to pumping 9.5m head lift of water
Basic Peristaltic Pump	Peristaltic	≥8mm	9m	up to 2 litres per minute	✓✓✓	✓	- Easy to use - Can plug straight into a car cigarette lighter socket - Only the tubing comes into contact with the product so the pump is left clean - Tubing is cheap - Can purge narrow diameter wells	- Low flow rate 2l per minute - Limited to pumping 9.5m head lift of water - External battery
Grundfos MP1	Centrifugal	≥50mm	90m	up to 35 litres per minute	✓✓	✓✓✓	- Powerful, can pump deep and at fast rates - Made of Stainless steel that can be decontaminated	- Expensive - Requires Mains Electric or a generator - Does not like suspended solids in water which can lead to expensive repairs
Gigant/Booster	Centrifugal	≥45mm	30m	up to 8 litres per minute	✗	✓	- Cheap - Decent flow rate	- Requires Car Battery - Cannot be de-contaminated - Cannot be used for low flow sampling
Geosub	Centrifugal	≥50mm	20m	up to 21 litres per minute	✗	✓✓	- Cheap - Decent flow rate - Plugs straight into a car cigarette socket	- Requires Car Battery - Cannot be de-contaminated - Cannot be used for low flow sampling
Bladder Pumps	Pneumatic	≥45mm	90m	up to 124ml per cycle	✓✓✓	✗	- Pumps from depth - 22mm pump fits in one inch wells - Light weight portable controller	- Low flow rate means the pumps are not suitable for purging
Total Fluids Pump	Pneumatic	≥45mm	90m	up to 11 litres per minute	✗✗✗	✓✓✓	- Pumps from depth - Can handle product up to the thickness of gear box oil - Can pump suspended solids	- Cannot be used for sampling as the air used to operate the pump comes into contact with the discharge - Requires external controller and air compressor
Total Fluid Pump 42mm Auto Reclaimer	Pneumatic	≥45mm	75m	up to 11 litres per minute	✗✗✗	✓✓✓	- Pumps from depth - Can handle product up to the thickness of gear box oil - Can pump suspended solids - Simple to operate	- Cannot be used for sampling as the air used to operate the pump comes into contact with the discharge - Requires external air compressor - Thicker product and lots of suspended solids can affect internal pump workings
Total Fluid Pump 89mm Auto Reclaimer	Pneumatic	≥95mm	150m	up to 55 litres per minute	✗✗✗	✓✓✓	- Pumps from depth - Can handle product up to the thickness of gear box oil - Can pump suspended solids - Simple to operate	- Cannot be used for sampling as the air used to operate the pump comes into contact with the discharge - Requires external air compressor - Thicker product and lots of suspended solids can affect internal pump workings
Foot Valve Pump	Inertial	≥15mm	60m	Variable	✓✓✓	✓	- Pumps from relative depth - Cheap, Foot Valves are washable - No Electricity involved	- Manual pump is hard work - Not easily adapted to work with flow cell - Mechanical pump requires electric or fuel power