



GROUNDWATER
SAMPLING



HydroTerra

Environmental Monitoring Specialists

LOW FLOW SAMPLING KITS

Solutions from HydroTerra

hydroterra.com.au



HydroTerra Low Flow Sampling kits on offer.

1. Peristaltic Pump – sampling to 8m.

1(i) Solinst 410 Peristaltic Pump

1(ii) Spectra Field Pro 111 Peristaltic Pump

2. Submersible Pumps - sampling to 52m

2(i) – Whale Pumps – 27m

2(ii) – Solinst 12v Submersible Pump – 36m

2(iii) – Proactive Stainless Steel Mega Monsoon XL – 52m

3. Bladder Pump and Double Valve Pump Low Flow Kits – sampling to 150m and greater.

3(i) – Shallow (Max 30m) Low Flow Kit – Double Valve Pump

3(ii) - Shallow (Max 30m) Low Flow Kit – Bladder Pump

3(iii) – Medium (Max 75m) Low Flow Kit – Double Valve Pump

3(iv) – Medium (Max 75m) Low Flow Kit – Bladder Pump

3(v) - Deep (Max 150m) Low Flow Kit – Double Valve Pump

3(vi) - Deep (Max 150m) Low Flow Kit – Bladder Pump

4. Spectra Bladder Pumps and Hydro Pro Controller

4(i) - Spectra Bladder Pumps

4(ii) - Spectra Hydro Pro Controller

1. Peristaltic Pump – sampling to 8m.

Peristaltic Pumps are ideal for vapor sampling or water sampling from shallow wells and surface water.

HydroTerra has 2 options to consider for peristaltic pumps:

- a) Solinst 410 Peristaltic Pump
- b) Spectra Field Pro III Peristaltic Pump

1(i) Solinst 410 Peristaltic Pump

The Solinst Model 410 Peristaltic Pump has variable pumping rates, using two different sizes of silicone pump head tubing. With the standard 5/8" OD (16 mm) tubing it delivers 3.2 L/min. The 3/8" OD (10 mm) tubing adaptor kit allows a sample rate as low as 40 ml/min.

Connect an optional 12V Battery Holder to the Pump and conveniently add a battery right to the assembly.

This is ideal for sampling in inaccessible areas. The pump may also be connected directly to your vehicle battery.



Standard Kit Includes:

- 1 x 410 Peristaltic Pump c/w 3ft 5/8" OD Silicone
- 1 x 3DP - 410 Pump Add-on Battery Holder
- 1 x Silicone Tubing 6.4mm ID x 9.5mm OD (15m Roll)
- 1 x LDPE 5/8" Low Flow Tubing (100m Roll)

1(ii) Spectra Field Pro III Peristaltic Pump

A recent addition to the HydroTerra range, the Spectra Field Pro is an all-in-one portable unit: with an internal battery and smart charger; includes ~4300 cm³ storage for vials and tools.

- Rugged, field-ready design: powder-coated aluminium case, rust-resistant, top-angled pump head keeps tubing off the ground.
- Built-in 12V pump controller and smart electronics suitable for submersible pumps. Supports very low flow rates (~25 ml/min).
- Internal battery life: ~5 hours under load; built-in alligator clips allow emergency field charging.
- Quick setup and maintenance: stainless steel quick-lock pump head, easy tubing replacement, flow direction toggle.
- Compatible with multiple tubing sizes



**ALSO
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2. Submersible Pumps – sampling to 52m

Three options to consider for submersible pumps.

2(i) – Whale Pumps – 27m

2(ii) – Solinst Submersible Pump – 36m

2(iii) – Proactive Stainless Steel Mega Monsoon XL – 52m

2 (i) Whale Pump + WASP Low Flow Controller – sampling to 27m

The Whale Mega Purger is suitable for low flow sampling to a depth of 27m. Straightforward to use, it is powered from a 12VDC battery and is supplied with a 29m cable with crocodile clips.

The WASP low flow controller connects in between the battery and the pump and using the on-off speed control knob, one can adjust the flow to the desired level.



Standard Kit Includes:

1 x Mega Purger 12V Submersible Pump with a 29m cable

1 x WASP Low Flow Controller

1 x LDPE 1/2" Low Flow Tubing (100m Roll)



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Standard Kit Includes:

- 1 x 12V Submersible Pump with 39.5m cable
- 1 x 12V Pump Controller
- 1 x 12V Submersible Pump Filter Assembly
- 1 x LDPE 1/2" Low Flow Tubing (100m Roll)



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Standard Kit Includes:

- 1 x Stainless Steel Mega-Monsoon XL Pump with 55m of cable on metal reel.
- 1 x Spare Motor Module
- 1 x Low Flow with Power Booster 3 LCD XL Controller
- 1 x Stainless Steel Non-Return Check Valve
- 1 x LDPE 1/2" Low Flow Tubing (100m Roll)

2(ii) Solinst 12V Submersible Pump – sampling to 36m

The Solinst 12V Submersible Pump provides an efficient means of purging and obtaining groundwater samples. The 12V Submersible Pump and 12V Pump Controller are lightweight, portable, and easy to set up, deploy and operate.

The Solinst 12V Submersible Pump is capable of pumping groundwater from 36.5 m below ground surface, with flow rates up to 13.5 L/min in shallow conditions.

2(iii) Proactive Stainless Steel Mega Monsoon XL – 52m

The Stainless Steel Mega-Monsoon® XL pump is capable of pumping up to 52m from ground level by simply connecting the Stainless Steel Mega-Monsoon® XL to the Low Flow with Power Booster 3 XL "LCD" Controller, then to a 12 volt deep cycle battery, energizing the pump.

Flow Sample as low as 10 mLs per minute, from any depth, when using the Low Flow with Power Booster 3 XL "LCD" Controller and SS Non-Return Check Valve.



3. Bladder Pump and Double Valve Pump Low Flow Kits – sampling to 150m and greater.

First some background on these pumps - Which one is right for you?

Both have their advantages. Bladder Pumps have low flow capability and ensure that no drive gas comes into contact with sample water, making them ideal, and approved by regulators worldwide for VOC sampling. Select a Bladder Pump for higher regulator acceptance and lower flow rates. Double Valve Pumps provide greater flow rates, as well as low flow capabilities, better performance in silty water, and are low maintenance, with no bladder to replace and fewer parts to decontaminate. Select a Double Valve Pump for faster purging, and operation in harsher environments.

Eight (8) options to consider for Bladder / Double Valve Low Flow Kits.

- 3(i) – Shallow (Max 30m) Low Flow Kit – Double Valve Pump
- 3(ii) - Shallow (Max 30m) Low Flow Kit – Bladder Pump
- 3(iii) – Medium (Max 75m) Low Flow Kit – Double Valve Pump
- 3(iv) - Medium (Max 75m) Low Flow Kit – Bladder Pump
- 3(v) - Deep (Max 150m) Low Flow Kit – Double Valve Pump
- 3(vi) - Deep (Max 150m) Low Flow Kit – Bladder Pump
- 3(vii) - Spectra Bladder Pumps
- 3(viii) - Spectra Hydro Pro Controller

Note: All kits have been setup using HydroTerra's considerable experience with these low flow kits. For example, a M Style Quick Connect Fitting is always supplied when a regulator is used. This makes it very easy and quick to assemble kits in the field.



Standard Kit Includes:

- 1 x 1.66" x 2' Double Valve Pump.
- 1 x set of Push Lock Fittings
- 1 x 125 PSI Controller
- 1 x 12V DC Compressor
- 1 x 100m of Dual Bonded Tubing
- 1 x 30m Tag Line + Carry Case

3(i) - Shallow (Max 30m) Low Flow Kit – Double Valve Pump

This kit comprises a Double Valve Pump used with a 125 PSI Electronic Pump Control Unit and the Solinst 12 Volt Compressor.

The 12 Volt Compressor is ideal for low flow applications of less than 30 m (100 ft) depths.

The 103 Tag line is ideal for lowering / raising the Double Valve pump into the well.



Standard Kit Includes:

- 1 x 1.66" x 2' Bladder Pump
- 1 x set of Push Lock Fittings
- 1 x 125 PSI Controller
- 1 x 12V DC Compressor
- 1 x 100m of Dual Bonded Tubing
- 1 x 30m Tag Line + Carry Case

3(ii) - Shallow (Max 30m) Low Flow Kit – Bladder Pump

This kit comprises a Bladder Pump used with a 125 PSI Electronic Pump Control Unit and the Solinst 12 Volt Compressor.

The 12 Volt Compressor is ideal for low flow applications of less than 30 m (100ft) depths.

The 103 Tag line is ideal for lowering / raising the Bladder Pump into the well.



3(iii) – Medium (Max 75m) Low Flow Kit – Double Valve Pump

This kit comprises a Double Valve Pump used with a 125 PSI Electronic Pump Control Unit and a CO2 regulator for compressed gas.

Compressed gas is required to reach sampling depths greater than 30m and CO2 is an economical option at these depths. An M style quick Connect fitting is also included for quick connection to the regulator.

The 103 Tag line is ideal for lowering / raising the Double Valve pump into the well.

ALSO
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Standard Kit Includes:

- 1 x 1.66" x 2' Double Valve Pump.
- 1 x set of Push Lock Fittings
- 1 x 125 PSI Controller
- 1 x CO2 Regulator
- 1 x M Style Connector
- 1 x 100m of Dual Bonded Tubing
- 1 x 100m Tag Line + Carry Case

3(iv) - Medium (Max 75m) Low Flow Kit – Bladder Pump

This kit comprises a Bladder Pump used with a 125 PSI Electronic Pump Control Unit and a CO2 regulator for compressed gas.

Compressed gas is required to reach sampling depths greater than 30m and CO2 is an economical option at these depths. An M style quick Connect fitting is also included for quick connection to the regulator.

The 103 Tag line is ideal for lowering /raising the Double Valve pump into the well.

ALSO
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Standard Kit Includes:

- 1 x 1.66" x 2' Bladder Pump.
- 1 x set of Push Lock Fittings
- 1 x 125 PSI Controller
- 1 x CO2 Regulator
- 1x M Style Connector
- 1 x 100m of Dual Bonded Tubing
- 1 x 100m Tag Line + Carry Case



**ALSO
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Standard Kit Includes:

- 1 x 1.66" x 2' Double Valve Pump.
- 1 x set of Push Lock Fittings
- 1 x 250 PSI Controller
- 1 x N2 Regulator
- 1 x M Style Connector
- 1 x 200m of Dual Bonded Tubing
- 1 x 150m Tag Line + Carry Case

3(v) - Deep (Max 150m) Low Flow Kit – Double Valve Pump

This kit comprises a Double Valve Pump used with a 250 PSI Electronic Pump Control Unit and a N2 regulator for compressed gas. N2 selected for greater depths as it does not freeze.

Compressed gas is required to reach sampling depths greater than 30m and N2 is the preferred option at these depths. An M style quick Connect fitting is also included for quick connection to the regulator.

The 103 Tag line is ideal for lowering / raising the Double Valve pump into the well.



**ALSO
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Standard Kit Includes:

- 1 x 1.66" x 2' Bladder Pump.
- 1 x set of Push Lock Fittings
- 1 x 250 PSI Controller
- 1 x N2 Regulator
- 1 x M Style Connector
- 1 x 200m of Dual Bonded Tubing
- 1 x 150m Tag Line + Carry Case

3(vi) - Deep (Max 150m) Low Flow Kit – Bladder Pump

This kit comprises a Bladder Pump used with a 250 PSI Electronic Pump Control Unit and a N2 regulator for compressed gas. N2 selected for greater depths as it does not freeze.

Compressed gas is required to reach sampling depths greater than 30m and N2 is the preferred option at these depths. An M style quick Connect fitting is also the included regulator.

The 103 Tag line is ideal for lowering / raising the Double Valve pump into the well.

4(1) - Spectra Bladder Pumps

New to the range of pumps offered by HydroTerra is the Spectra Sil Series.

The Sil Bladder Pump Series features

- Sil 2.0 (1.87 in OD),
- Sil 1.0 (.87 OD) and
- Sil Mini (.87 OD + miniature body).

The Sil Series is a 100% PFAS Free design with no LDPE, HDPE or Teflon Parts.

Bladders are made of 100% Medical Grade Silicone and 100 % PFAS Free Bladder Sleeves.

The Spectra Bladder Pump is available in 3 different sizes:

- Sil 2.0 (47,5mm OD x 34.29cm)
- Sil 1.0 (22mm OD)
- Sil Mini 9 (22mm OD + miniature body)

A useful feature is that the bladder is adjustable (i.e. can be trimmed to reduce flow rate).

The Spectra Sil series operates in tandem with the Spectra Hydro Pro Controller.



4(ii) - Spectra Hydro Pro Controller

Self-contained controller with internal compressor (no external air source required).

150 PSI maximum pressure capability making it suitable for deeper bores (up to ~90 m / 300 ft) and repeatable sampling between rounds.

Designed for pneumatic and bladder pumps, operating on programmable pump and refill cycles.

Independent pump and refill times (1-60 s) allow flow control via cycle timing rather than regulator adjustment alone.

Refill-time control supports low-flow sampling by allowing full bladder recharge and minimising drawdown.

LCD shows pump/refill settings, countdown timers, runtime, and battery voltage for clear field feedback.

Powered by an external 12 V battery; larger batteries recommended for longer or deeper sampling.

The rugged design of the unit ensures that it is resistant to heat, humidity, rain and field contaminants. It is not weatherproof however and requires protection during heavy rainfall events

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marketplace for environmental
monitoring technologies and
services