

Bladder pumps

A range of pneumatic (gas-driven) low flow sampling pumps.

Portable Bladder Pumps

- Lightweight for portable use
- Can also be dedicated
- Easy change bladders
- Teflon[®] or PE bladders
- Up to 55m depth
- Drop tubes for greater depth
- Narrow diameter options



Portable Bladder Pumps

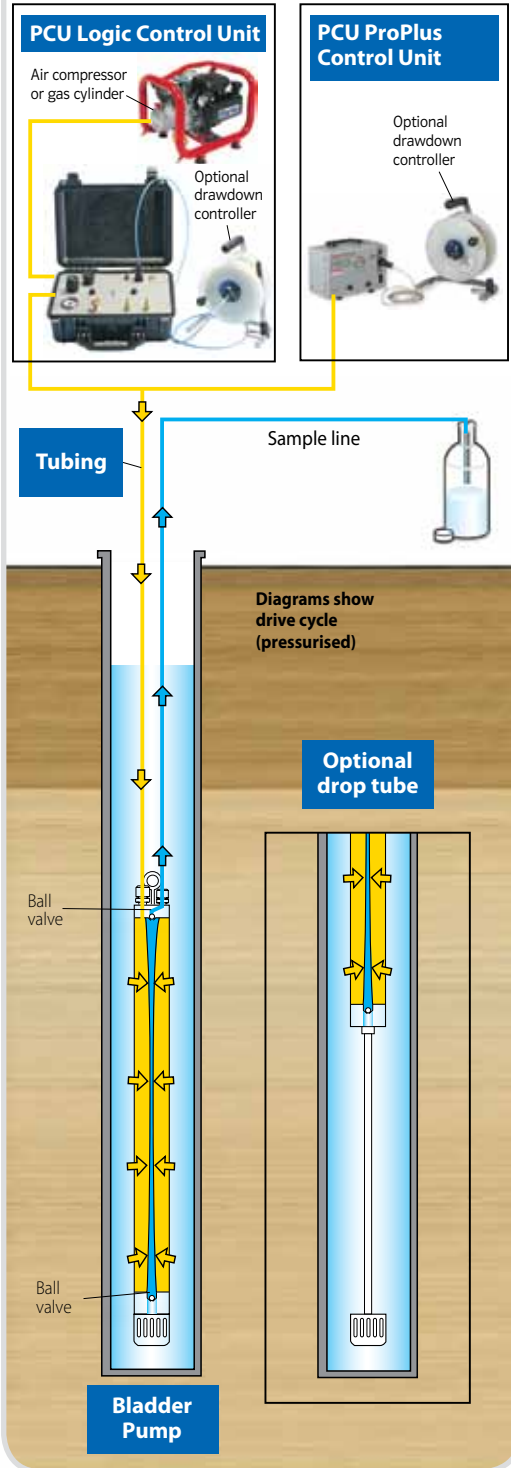
High performance Bladder Pumps

- Higher flow rates
- Economical PVC models available
- Teflon[®] bladder cartridges
- Up to 300m depth (42mm SS)
- Typically to 75m depth
- Drop tubes for greater depth
- Narrow diameter options



High Performance Bladder Pumps

Typical low-flow sampling setup



Bladder Pumps

		PORTABLE BLADDER PUMPS			HIGH PERFORMANCE BLADDER PUMPS					
Pump Material		SS	SS	SS	SS	SS	PVC	PVC	SS	SS
Nominal Diameter	mm	42	22	18	42	42	42	42	22	18
Pump Length inc. Screen	mm	483	473	476	965	510	914	559	635	457
Pump Weight	kg	1.4	0.5	0.4	1.9	0.9	1.3	0.7	0.6	0.4
Pump Volume per Cycle	litre	150	29	15	625	313	408	204	59	38
Max. Pumping Rate	litre/min	1.5	0.2	0.1	4.7	2.4	3.7	2.0	0.4	0.2
Max. Pump Depth **	metres	55	55	55	300	300	75	75	75	75
Max. Operating Pressure	psi (bar)	100 (7)	100 (7)	100 (7)	450 (31)	450 (31)	110 (7.5)	110 (7.5)	110 (7.5)	110 (7.5)
Drop Tube Option		Y	Y	Y	Y	Y	na	na	na	na
Bladder Style		Easy fit	Easy fit	Easy fit	Cartridge	Cartridge	Cartridge	Cartridge	Cartridge	Cartridge
Bladder Materials		PTFE or PE	PTFE or PE	PTFE or PE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Tether for Safety Cable		Inc	na	na	Y	Y	na	na	na	na

Standard Tubing Sizes (OD x ID)

Air/Gas Line	ins	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17	1/4 x 0.17
	mm	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4
Sample Line	ins	3/8 x 1/4	1/4 x 0.17	1/4 x 0.17	3/8 x 1/4	3/8 x 1/4	3/8 x 1/4	3/8 x 1/4	1/4 x 0.17	1/4 x 0.17
	mm	9.5 x 6	6 x 4	6 x 4	9.5 x 6	9.5 x 6	9.5 x 6	9.5 x 6	6 x 4	6 x 4

Notes: ** Max depth can be increased by use of a drop tube. Inc - Included. Y - Available as an option. na - Not available. SS - Stainless Steel (416 Grade). PE - Polyethylene. PTFE - Teflon®.

Control units

PCU Logic
(GT81150104)
300 psi / 200m
High performance unit for deeper installations
(6kg / 18 x 41 x 30 cm)



PCU ProPlus
(GT91150017)
100 psi / 55m
Compact all-in-one unit with built-in air compressor
(4kg / 17 x 13 x 29 cm)



Gas supply

12V Compressor
(AC/PBAT1)
(116 psi) / 30m max



Petrol powered compressor
(AC/PPET1)
(100 psi) / 55m max



Use **Gas cylinders** (N₂ or CO₂) for simplicity or for greater depths.

Tubing

All pumps require two tubing feeds – one for the Air/Gas Line and the second for the Sample Line



Available in high quality LDPE or as Teflon®-lined LDPE.

See specification table for standard tubing sizes.

Dual Skip-Bonded Tubing

Two tubes linked together – simplifies deployment and avoids snagging or differential coiling of tubing in boreholes.

Drop tubing

Drop tubes can be added to extend the depth of sampling or to reduce pressure requirements.



Portable tubing & reels

Portable systems can be customised using reels with varying lengths of tubing. Best with skip-bonded tubing



Well caps

Well caps to accommodate dedicated systems can be customised for most monitoring well sizes.



Safety cable

Heavier (42mm) pumps should be secured with a safety line.

Stainless steel cable (SC1002)
2mm diameter / cable connectors also available.

Kevlar Cord (KC2)
2mm diameter / chemically resistant



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