

How it works

VP4 Bottom Loader



- Liquid enters the pump via the strainer (1) and bottom check valve (2)
- Air trapped within the pump escapes through the air exhaust (3)
- The float (4) rises as the liquid enters and when it gets to the top of its travel (5), it trips the rocker mechanism (6)
- The air exhaust valve (11) closes
- The air inlet valve (7) opens allowing compressed air into the pump
- Compressed air closes the bottom check valve (2)
- Liquid within the pump is discharged from the pump through the discharge port (8) and up the central discharge tube
- Liquid passes through the top check valve (enclosed in head) and out through the riser (9)
- The float descends as liquid is discharged
- The float pulls the rocker mechanism back when the spring (10) is compressed
- The air inlet valve (7) closes and the air exhaust valve (11) opens
- Compressed air trapped within the pump can now escape to atmosphere via the air exhaust (3)
- The pump continues to cycle in this way

VP4 Bottom Loader

Model & Type	VP4-BL
Liquid Inlet Position	Bottom
Max Flow Rate Litres/hr	>2,880
Volume/Cycle: Litres	0.9-1.1
Pump Length: mm	1,030
Weight: Kg	6
Pump Diameter: mm	90
Pump Trigger Point: mm	770
Min Internal Well Dia: mm	100
Max Working Depth: m	130
Max Operating Temp: °C	100
pH Operating Range	3 -12

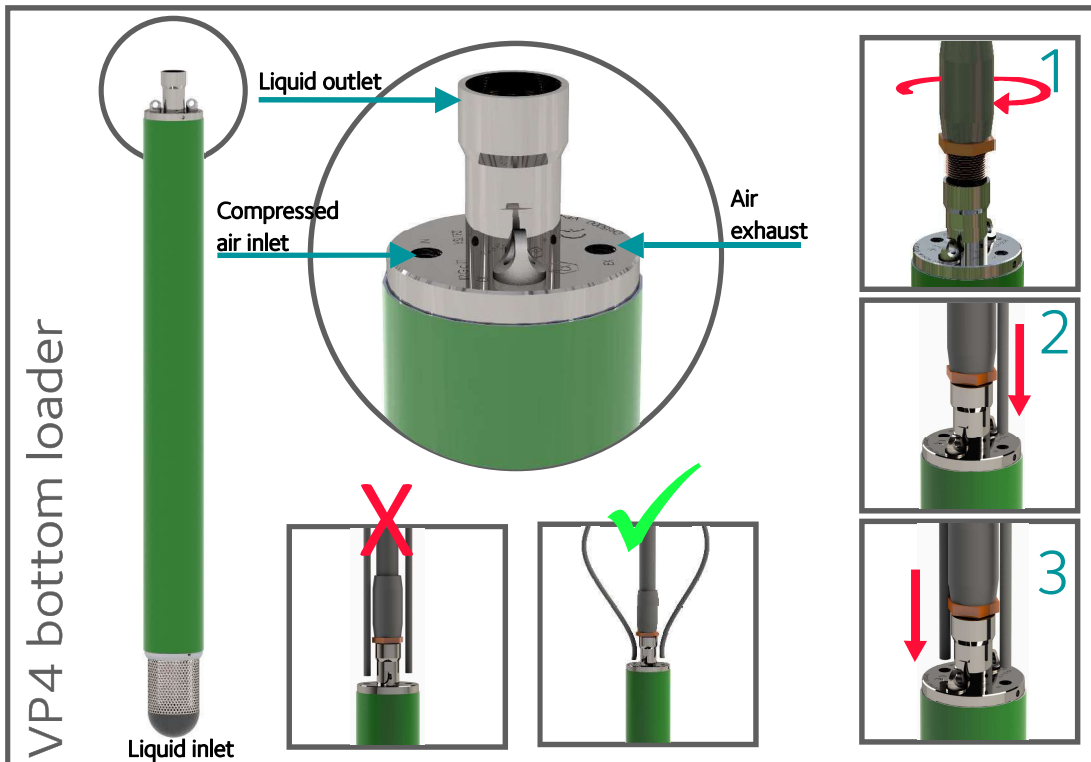
The VP4-BL can be installed in wells of 4"/100 mm minimum internal diameter. They are designed to pump landfill leachate, landfill gas condensate and contaminated or clean groundwater.

The base of the pump is domed to aid installation and to deflect entrained gases in liquids.

Viridian pumps are designed for user serviceability and longevity, providing the lowest whole-life cost of any similar pump on the market.

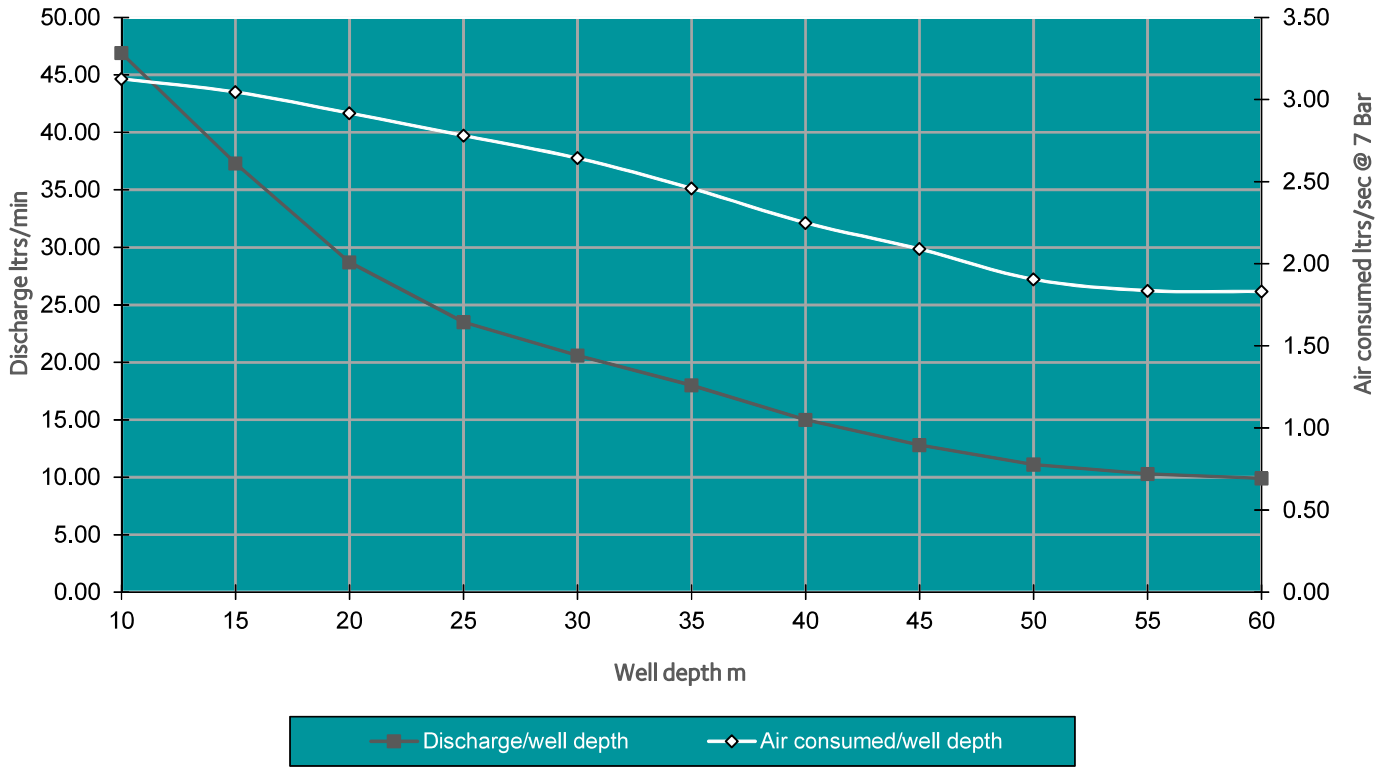


Quick installation guide



VP4 BL Performance Curve

VP4-BL liquid discharged & air consumed/well depth.
Pump submerged by 3m and 25mm bore discharge hose.
Air inlet pressure 7 Bar



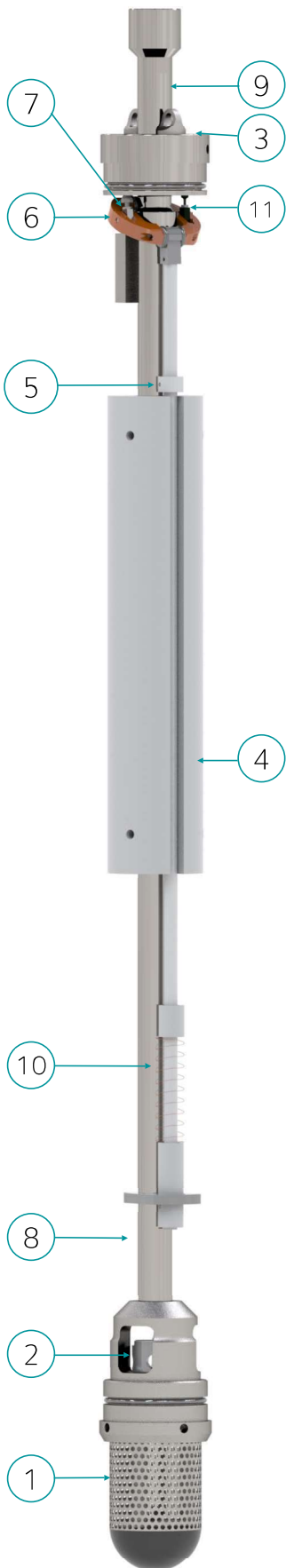
Well Depth	Discharge LPM	Total Air Requirement (L/S)	Total Air (SCFM) Requirement
10	46.90	3.13	6.63
15	37.30	3.05	6.45
20	28.70	2.92	6.18
25	23.50	2.78	5.89
30	20.60	2.64	5.6
35	18.18	2.46	5.21
40	15.00	2.25	4.77
45	12.80	2.09	4.43
50	11.10	1.91	4.04
55	10.30	1.84	3.89
60	9.90	1.83	3.88

DATA table

Values for SCFM have been shown in the DATA table for ease of compressor specification.

How it works

VP3 Bottom Loader



- Liquid enters the pump via the strainer (1) and bottom check valve (2)
- Air trapped within the pump escapes through the air exhaust (3)
- The float (4) rises as the liquid enters and when it gets to the top of its travel (5), it trips the rocker mechanism (6)
- The air exhaust valve (11) closes
- The air inlet valve (7) opens allowing compressed air into the pump
- Compressed air closes the bottom check valve (2)
- Liquid within the pump is discharged from the pump through the discharge port (8) and up the central discharge tube
- Liquid passes through the top check valve (enclosed in head) and out through the riser (9)
- The float descends as liquid is discharged
- The float pulls the rocker mechanism back when the spring (10) is compressed
- The air inlet valve (7) closes and the air exhaust valve (11) opens
- Compressed air trapped within the pump can now escape to atmosphere via the air exhaust (3)
- The pump continues to cycle in this way

VP3 Bottom Loader

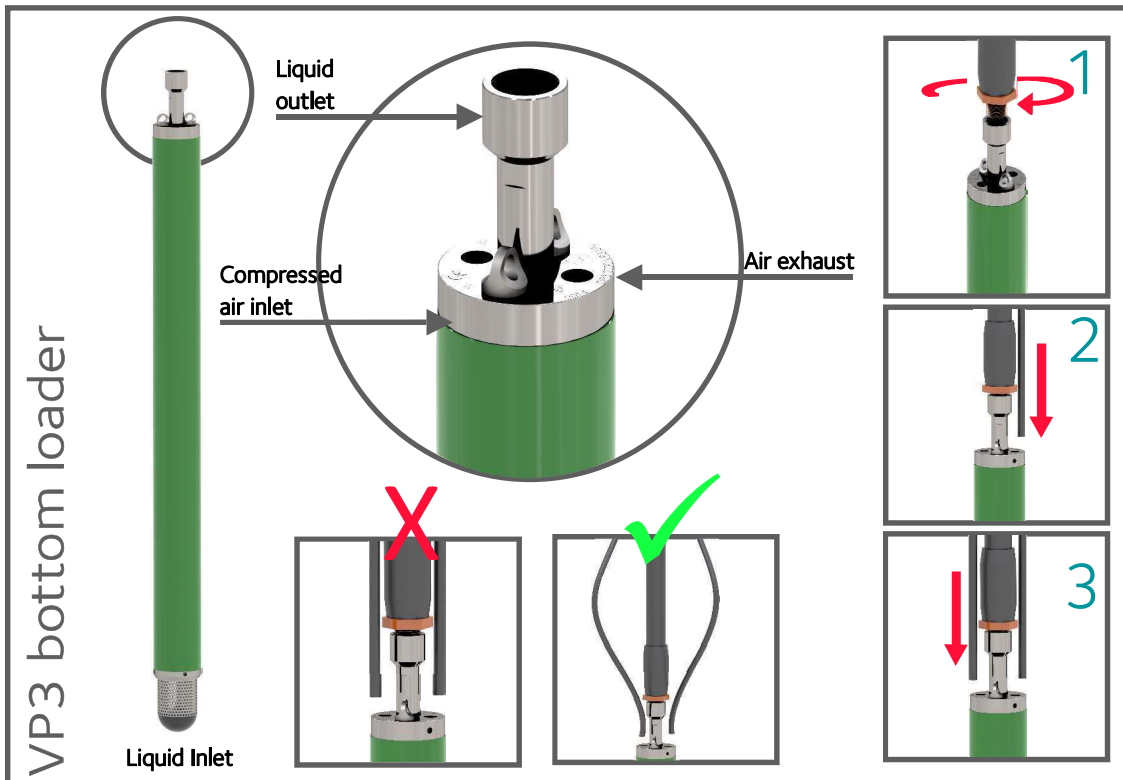
Model & Type	VP3-BL
Liquid Inlet Position	Bottom
Max Flow Rate Litres/hr	>1,200
Volume/Cycle: Litres	0.6
Pump Length: mm	1,120
Weight: Kg	5
Pump Diameter: mm	70
Pump Trigger Point: mm	715
Min Internal Well Dia: mm	80
Max Working Depth: m	130
Max Operating Temp: °C	100
pH Operating Range	3 -12

The VP3-BL can be installed in wells of 3"/80 mm minimum internal diameter. They are designed to pump landfill leachate, landfill gas condensate and contaminated or clean groundwater. The base of the pump is domed to aid installation and to deflect entrained gases in liquids.

Viridian pumps are designed for user serviceability and longevity, providing the lowest whole-life cost of any similar pump on the market.

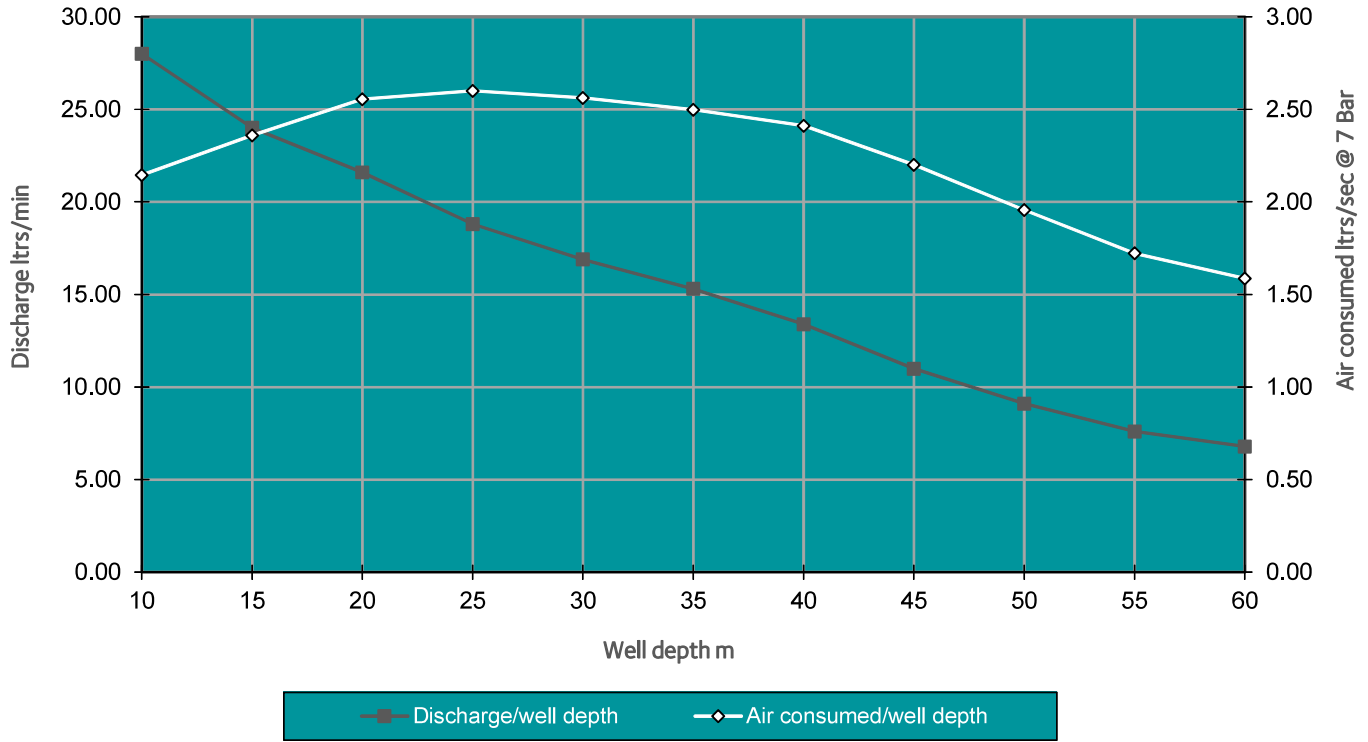


Quick installation guide



VP3 BL Performance Curve

VP3-BL liquid discharged & air consumed/well depth.
 Pump submerged by 3m and 25mm bore discharge hose.
 Air inlet pressure 7 Bar



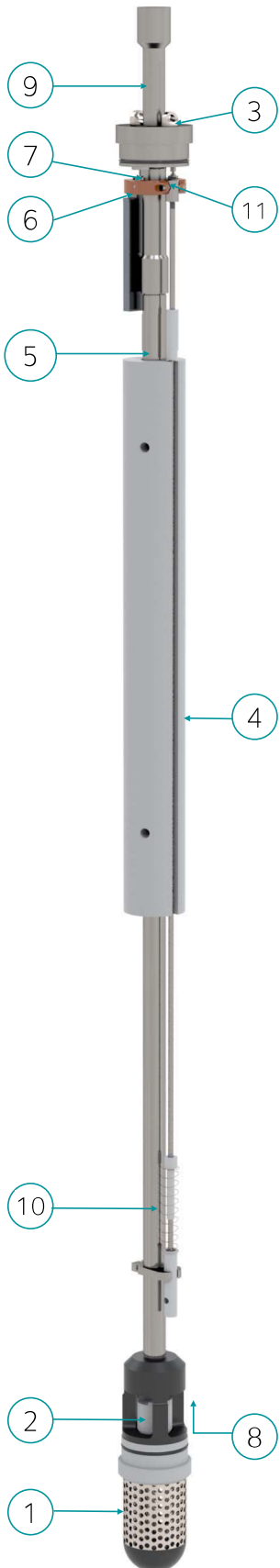
Well Depth	Discharge LPM	Total Air Requirement (L/S)	Total Air (SCFM) Requirement
10	28.00	2.15	4.55
15	24.00	2.36	5.00
20	21.60	2.56	5.42
25	18.80	2.60	5.51
30	16.90	2.56	5.43
35	15.30	2.50	5.30
40	13.40	2.41	5.11
45	11.00	2.20	4.66
50	9.10	1.96	4.15
55	7.60	1.72	3.65
60	6.80	1.59	3.36

DATA table

Values for SCFM have been shown in the DATA table for ease of compressor specification.

How it works

VP2 Bottom Loader



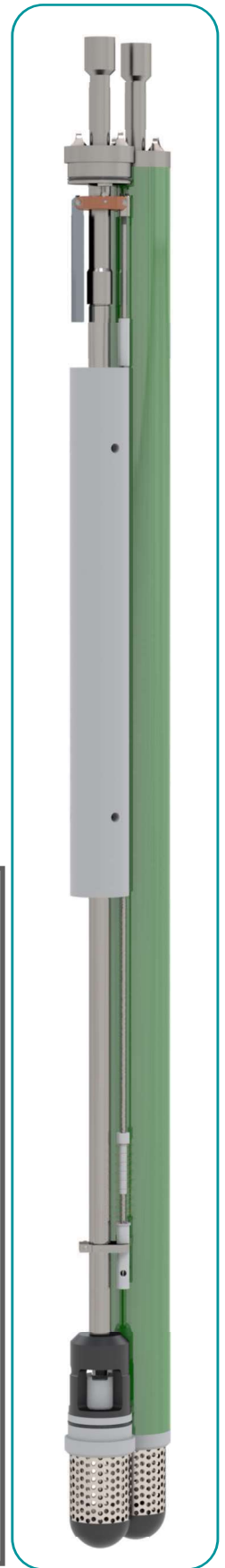
- Liquid enters the pump via the strainer (1) and bottom check valve (2)
- Air trapped within the pump escapes through the air exhaust (3)
- The float (4) rises as the liquid enters and when it gets to the top of its travel (5), it trips the rocker mechanism (6)
- The air exhaust valve (11) closes
- The air inlet valve (7) opens allowing compressed air into the pump
- Compressed air closes the bottom check valve (2)
- Liquid within the pump is discharged from the pump through the discharge port (8) and up the central discharge tube
- Liquid passes through the top check valve (enclosed in head) and out through the riser (9)
- The float descends as liquid is discharged
- The float pulls the rocker mechanism back when the spring (10) is compressed
- The air inlet valve (7) closes and the air exhaust valve (11) opens
- Compressed air trapped within the pump can now escape to atmosphere via the air exhaust (3)
- The pump continues to cycle in this way

VP2 Bottom Loader

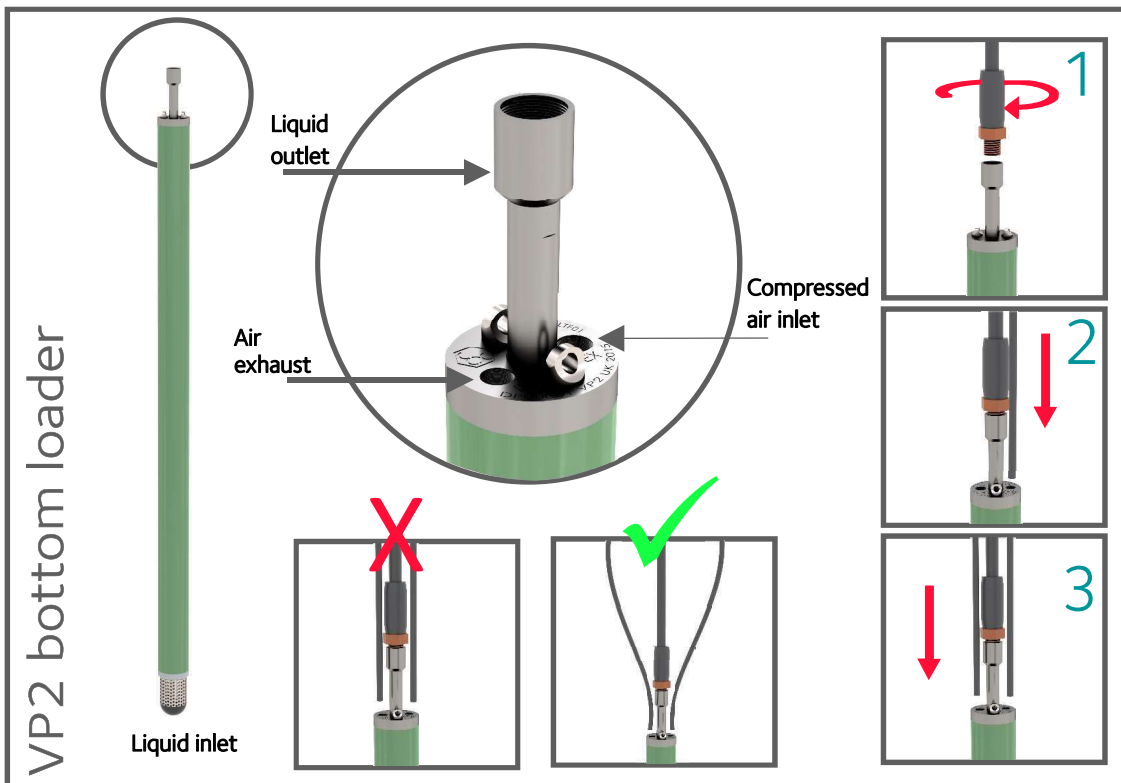
Model & Type	VP2-BL
Liquid Inlet Position	Bottom
Max Flow Rate Litres/hr	>475
Volume/Cycle: Litres	0.33
Pump Length: mm	945
Weight: Kg	1.5
Pump Diameter: mm	44
Pump Trigger Point: mm	650
Min Internal Well Dia: mm	50
Max Working Depth: m	130
Max Operating Temp: °C	100
pH Operating Range	3 -12

The VP2-BL can be installed in wells of 2"/50 mm minimum internal diameter. They are designed to pump landfill leachate, landfill gas condensate and contaminated or clean groundwater. The base of the pump is domed to aid installation and to deflect entrained gases in liquids.

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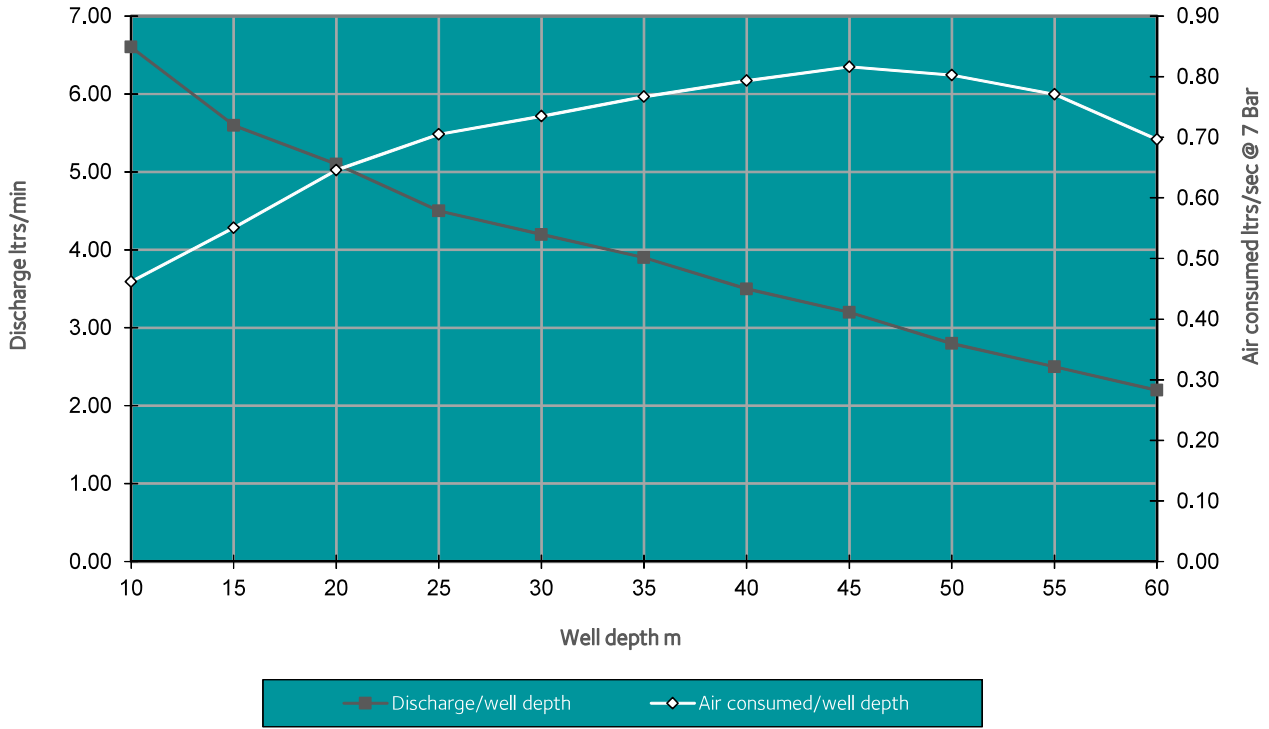


Quick installation guide



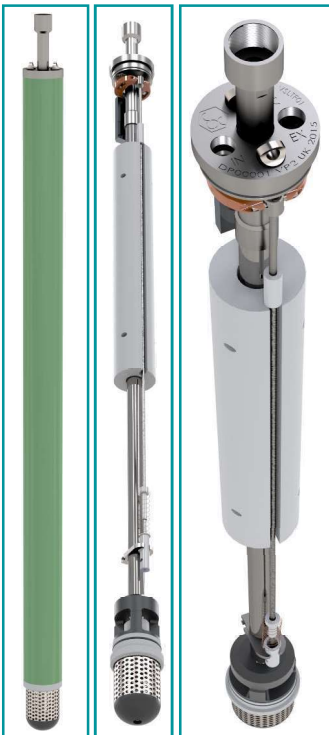
VP2 BL Performance Curve

VP2-BL liquid discharged & air consumed/well depth.
 Pump submerged by 3m and 12.5mm bore discharge hose.
 Air inlet pressure 7 Bar



Well Depth	Discharge LPM	Total Air Requirement (L/S)	Total Air (SCFM) Requirement
10	6.60	0.46	0.98
15	5.60	0.55	1.17
20	5.10	0.65	1.37
25	4.50	0.71	1.49
30	4.20	0.74	1.56
35	3.90	0.77	1.63
40	3.50	0.79	1.68
45	3.20	0.82	1.73
50	2.80	0.80	1.70
55	2.50	0.77	1.63
60	2.20	0.70	1.48

DATA table



Values for SCFM have been shown in the DATA table for ease of compressor specification.