

AUTOPUMPS



3 INCH PUMPS

TOTAL FLUIDS PUMPING FOR LANDFILL,
REMEDICATION AND BROWNFIELD APPLICATIONS

The AP3 Top Inlet, Short AutoPump is designed for applications requiring an elevated inlet, such as pumping total fluids from wells contaminated with LNAPLs.

The AP3 Bottom Inlet Short AutoPump is designed for wells having shorter water columns and / or the need to pump down to lower water levels, compared to full-length pumps.



SECTOR



Groundwater



Remediation



Landfill

APPLICATIONS

- Designed to handle difficult pumping challenges that other pumps can't, extreme temperature, viscous fluids, and frequent start / stop cycles
- Remediation pumping applications with well casings 3" (75mm) diameter and larger
- Landfill, remediation and petrochemical sites
- Leachate, condensate, product only, and total fluids
- Compliance pumping

FEATURES

- ATEX certified  to Zone 0
- Positive air displacement
- Top and bottom fill design
- Short and long bodies
- Pump from approximately 60 metres

BENEFITS

- Based on the original automatic air-powered well pump, proven worldwide
- Competitive flow rates and pumping capabilities
- Patented, proven design for superior reliability and durability
- Handles solids, some solvents, hydrocarbons and corrosive conditions beyond the limits of electric pumps

AP3



TECHNICAL SPECIFICATIONS

PUMP OPERATION

- **Fill Cycle:** The fluid inlet check valve opens, allowing fluid to enter the pump. As the fluid level rises, air is expelled through the exhaust air valve and the internal float rises to the top of its stroke. In this upper position, the float triggers a lever assembly, which opens the air inlet and closes the air exhaust valve, which allows air to enter and pressurises the pump.
- **Discharge Cycle:** With the air inlet valve open, air pressure builds up within the pump body. This causes the fluid inlet check valve to close allowing the fluid to be displaced up and out of the fluid discharge check valve. As the fluid level falls, the float moves downward to the bottom of its stroke. In this lower position, the float triggers the lever assembly to close the air supply and open the air exhaust valve and a new cycle begins.

	SHORT AP3 BOTTOM	SHORT AP3 TOP
Liquid inlet location	Bottom	Top
Outside diameter	2.63" (6.68 cm)	3.4" (8.64 cm) (2.63" available)
Length overall (pump & fittings)	42" (107 cm)	47" (119 cm)
Length overall, with extended screen	47" (117 cm)	
Weight	10 lbs (4.5 kg)	10 lbs (4.5 kg)
Maximum flow rate	6.0 gpm (22.7 lpm) - See flow rate chart	4.8 gpm (18.1 lpm) - See flow rate chart
Pump volume / cycle	0.08- 0.15 gal (0.30- 0.57L)	0.08- 0.15 gal (0.30- 0.57 L)
Maximum depth	175 ft. (53.3 m)	175 ft. (53.3 m)
Air pressure range	5- 80 psi (0.4- 5.6 kg / cm ²)	5- 80 psi (0.4- 5.6 kg / cm ²)
Minimum actuation level	22" (56 cm)	42" (107 cm)
Air usage	0.35- 1.6 scf / gal. (2.6- 12.0 litres of air / fluid litre) - See air usage chart	0.43- 1.6 scf / gal. (3.2- 12.0 litres of air / fluid litre) - See air usage chart
Minimum liquid density	0.7 SpG (0.7 g / cm ³)	0.7 SpG (0.7 g / cm ³)
STANDARD CONSTRUCTION MATERIALS		
Pump body	Fibreglass or stainless steel	Fibreglass or stainless steel
Pump ends	Stainless steel, brass	Stainless steel, acetal, HDPE, brass
Internal components	Stainless steel, viton, acetal, nylon	Stainless steel, viton, acetal, nylon
Tube and hose fittings	Brass or stainless steel	Brass or stainless steel
Fitting type	Push fit or quick connects	Push fit or quick connects
STANDARD CONSTRUCTION MATERIALS		
Tubing material	Nylon / MDPE	Nylon / MDPE
Sizes - liquid discharge	32 mm MDPE OD	32 mm MDPE OD
Pump air supply	10 mm OD	10 mm OD
Air exhaust	10 mm OD	10 mm OD
ATEX certification	II 1 G c IIB T6 Ta = 1°C to +65 °C	