# **AUTOPUMPS**



### 2 INCH PUMPS

TOTAL FLUIDS PUMPING FOR LANDFILL,
REMEDIATION AND BROWNFIELD APPLICATIONS

The AP2 Bottom Inlet Short and the AP2 Top Inlet Short AutoPumps both provide maximum capabilities and flow in a pump for 2" (50 mm) diameter wells.

The AP2 Bottom Inlet Short AutoPump can handle even severe remediation and landfill pumping and applications, whilst the AP2 Top Inlet Short AutoPump is also suitable for wells having shorter water columns and / or the need to pump down to lower water levels. It is designed for applications requiring an elevated inlet, such as pumping total fluids or wells contaminated with LNAPLs.



#### SECTOR







#### **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 2" (50 mm) diameter and larger
- Landfill / remediation / petrochemical sites
- Leachate, condensate, product only, and total fluids
- · Compliance pumping

#### **FEATURES**

- ATEX certified to Zone 0
  - 0 (E
- Positive air displacement
- Top and bottom fill design
- Short and long bodies
- Pump from approximately 90 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

## AP2



## 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 AP2 BOTTOM	SHORT AP2 TOP
Liquid inlet location	Bottom	Тор
Outside diameter	1.75" (4.45 cm)	1.75" (4.45 cm)
Length overall (pump & fittings)	33" (85 cm)	35" (89 cm)
Length overall, with extended screen	35" (89 cm)	
Weight	5.4 lb (3.6 kg)	5.7 lbs (2.6 kg)
Maximum flow rate	2.0 gpm (7.6 lpm)	1.6 gpm (6.0 lpm)
Pump volume / cycle	0.05- 0.08 gal (0.19- 0.30 l)	0.05- 0.08 gal (0.19- 0.30 l)
Maximum depth	300 ft (91.4 m)	300 ft (91.4 m)
Air pressure range	5- 130 psi (0.4- 9.2 kg / cm²)	5- 130 psi (0.4- 9.2 kg / cm²)
Minimum actuation level	20" (51 cm)	31" (78.7 cm)
Air usage	0.39- 2.58 scf / gal. (2.9- 19.3 litres of air / fluid litre	0.39- 2.59 scf / gal. (2.9- 19.3 litres of air / fluid litre
Minimum liquid density	0.7 SpG (0.7g / cm³)	0.7 SpG (0.7g / cm³)
STANDARD CONSTRUCTION M	ATERIALS	
Pump body	Stainless steel	Stainless steel
Pump ends	Stainless steel	Stainless steel
Internal components	Stainless steel, viton, PVDF	Stainless steel, viton, PVDF
Tube and hose fittings	Brass or stainless steel	Brass or stainless steel
Fitting type	Barbs or quick connects	Barbs or quick connects
STANDARD CONSTRUCTION M	ATERIALS	
Tubing material	Nylon	Nylon
Sizes - liquid discharge	5/8" (16 mm) OD	5/8" (16 mm) OD
Pump air supply	3/8" (9.5 mm) OD	3/8" (9.5 mm) OD
Air exhaust	1/2" (13 mm) OD	1/2" (13 mm) OD
ATEX certification	(Ex)    1 G c    B T 6 Ta = 1°C to +65 °C	