

## Pulse Pump® System



2" Pulse Pump

Cleanup well conditions can be downright hostile: powerful solvents, strong acids, caustic bases, corrosive chlorides. That's why QED makes the Pulse Pump® series (our basic gas displacement pumps) in a variety of proven materials that won't just survive, but will deliver years of trouble-free performance.

Every Pulse Pump model has only two moving parts downwell: high-clearance, self-cleaning ball check valves. This simplicity keeps them working when high solids, viscosity, or chemical attack cause other pumps to clog or break down. An external controller is required to control the alternating pressurization and venting cycles for the pump.

The Pulse Pump design is especially suited for sinking hydrocarbons (DNAPL) recovery, which is often complicated by high viscosity and/or extremely aggressive solvents. Intrinsically safe Pulse Pump systems are fast and easy to install, with no electrical connections at the wellhead.

Flow optimization is simple too; rugged, dependable pumps and controllers (the solar/AC powered C100M and the all-pneumatic L360) deliver reliable operation without needing frequent attention or repair.

Even in the harshest environments, they just keep working – in the most demanding ground water cleanup, leachate collection, and sinking layer recovery applications.

### Warranty

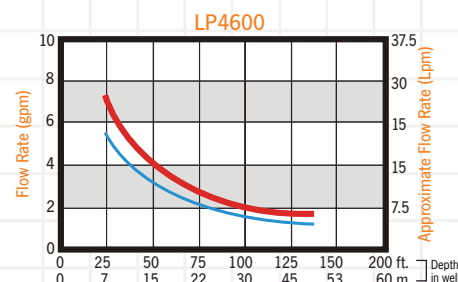
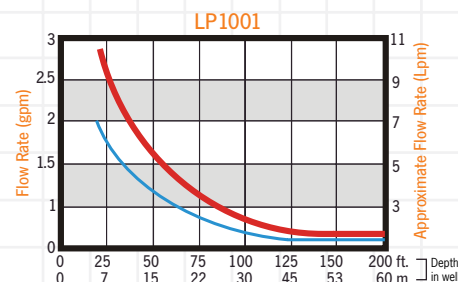
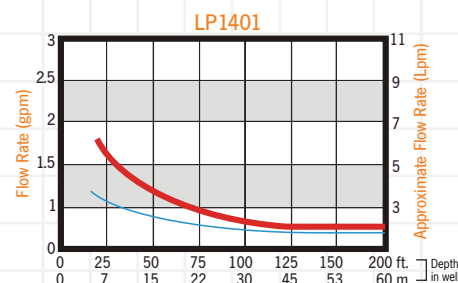
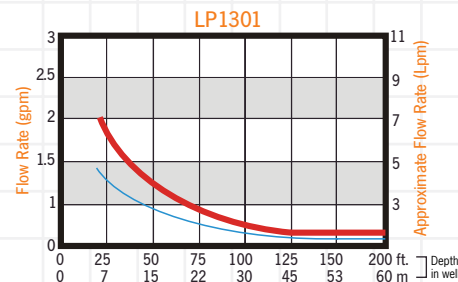
Pulse Pumps are warranted for one (1) year.

### Advantages

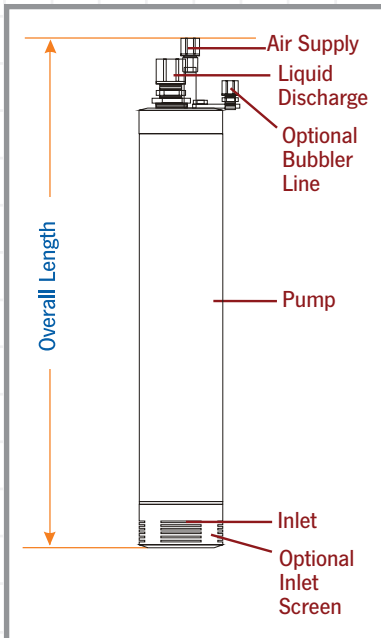
1. Only 2 moving parts downwell for reliable operation even in high solids and the thickest liquids.
2. Ultimate resistance to chemical attack. Durable materials and simple, rugged construction.
3. Economical, low-maintenance performance in sinking layer recovery and other tough applications.
4. Easy-to-use digital control of pump discharge and refill cycles.

### Pulse Pump Flow Rates

Note on flow curves: 100 psi (700 kPa) drive air supplied for all pumps.



2' Submergence    10' Submergence



## Specifications

	Pulse Pump 2 in.		Pulse Pump 4 in.	
Model No.	LP1301	LP 1401	LP1001	LP 4600
<b>Pump Type</b>	Pneumatic Displacement	Pneumatic Displacement	Pneumatic Displacement	Pneumatic Displacement
<b>Inlet</b>	Bottom*	Bottom*	Bottom*	Bottom*
<b>OD</b>	1.66 in. (42 mm)	1.25 in. (32 mm)	2.88 in. (73 mm)	2.88 in. (73 mm)
<b>Length</b>	20 in. (51 cm)	20 in. (51 cm)	15.5 in. (39.4 cm)	49.5 in. (126 cm)
<b>Weight</b>	2 lbs. (.9 kg)	1.5 lbs. (.7 kg)	3 lbs. (1.4 kg)	8 lbs. (3.6 kg)
<b>Materials</b>	Stainless steel, PTFE	Brass	PVC	PVC
<b>Fittings: Type / Materials</b>	Compression / SS	Barb / Brass	Compression / Nylon	Barb / Nylon
<b>Sizes: Liquid Discharge</b>	1/2 in. (13 mm)	1/2 in. (13 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)
<b>Air Supply</b>	3/8 in. (9 mm)	3/8 in. (9 mm)	1/2 in. (13 mm)	1/2 in. (13 mm)
<b>Pump Stroke</b>	.09 gal. (350 mL)	.08 gal. (300 mL)	.17 gal. (650 mL)	.53 gal. (2,000 mL)
<b>Operating Pressure Range</b>	40-100 psi (275-700 kPa)	40-100 psi (275-700 kPa)	40-100 psi (275-700 kPa)	40-100 psi (275-700 kPa)
<b>Maximum Depth</b>	230 ft. (70 m)	230 ft. (70 m)	230 ft. (70 m)	230 ft. (70 m)
<b>***Maximum Flow Rate</b>	2 gpm (7.5 Lpm) 2,880 gpd (10,900 Lpd)	1.8 gpm (6.8 Lpm) 2,592 gpd (9,810 Lpd)	3 gpm (11.4 Lpm) 4,320 gpd (16,350 Lpd)	7.5 gpm (28 Lpm) 10,800 gpd (40,880 Lpd)
<b>Minimum Submergence</b>	< 1 ft. (< 30 cm)	< 1 ft. (< 30 cm)	< 1 ft. (< 30 cm)	< 1 ft. (< 30 cm)
<b>Density of Pumped Liquid</b>	Any	Any	Any	Any
<b>Cap Sizes</b>	2, 4, 5, 6, and 8 in.** (50, 100, 125, 150 and 200 mm)	2, 4, 5, 6, and 8 in.** (50, 100, 125, 150 and 200 mm)	4, 5, 6, and 8 in.** (100, 125, 150 and 200 mm)	2, 4, 5, 6, and 8 in.** (100, 125, 150 and 200 mm)

\* Top Inlet Can also available.

\*\* Other sizes available by special order.

\*\*\* gpm = gallons per minute, gpd = gallons per day, Lpm = liters per minute, Lpd = liters per day

## C100M Pump Controller

The C100M Digital Controller is solar-powered and provides advanced operational capabilities at an economical price. Easy-to-use digital control of pump discharge and refill cycles and programmed OFF times make it convenient to optimize LNAPL recovery to match site conditions.



## L360 Controller

The L360 Cycle Controller provides rugged, all-pneumatic control of pump cycle times for the Programmable Genie, Ferret and Pulse Pump. The L360 is especially suited to sites where no electronics are allowed, or where pump cycle rates exceed the limits of the C100M in solar mode. The L370 LevelMate can be used with the L360 to shut off the system when the well level drops below the set point.

