

TopDrive™ Piston Pumps



Flexible Options for Drive, Depth Setting and Flow

This versatile system offers the most flexible pumping setup for every landfill and cleanup pumping need. Designed for reliable, high-performance pumping of almost any fluid under the most difficult operating conditions, Top-Drive™ piston pumps allow for substantial flexibility in depth setting, drive and flow options.

There are no down-well pneumatic lines or electric motors, and the mechanism provides an optimal blend of power, reliability and efficiency. A compact cylinder stroke results in greater efficiency and lower air or power consumption. Unique bearing design and durable

seals deliver longer lifespan with simple installation and maintenance.

Key Advantages

- 100% interchangeable drive assembly, switches from top drive solar or electric to pneumatic without removing the well seal.
- Pumps can be upgraded to a higher flow rate with only a change of the lower assembly.
- The intake design of the lower pump requires minimal liquid level to operate; pumps can run dry with nominal impact on long term performance.



Adjustable drop assembly has 5 and 10 foot sections, optimizing pump inlet depth.



Patented well seals provide unsurpassed rigidity; customizable port options meet site specific needs.



Custom control panels offer level alarms, on/off, timers, beacons and other key parameters.



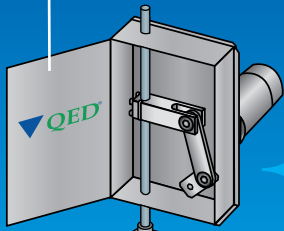
Innovative Environmental Products

(800) 624-2026 • www.qedenv.com

P.O. Box 3726 Ann Arbor, MI 48106-3726 USA • (734) 995-2547 • Fax (734) 995-1170 • info@qedenv.com

Interchangeable Drive Heads

Electronic Drive Assembly Shown



3/4" NPT Discharge

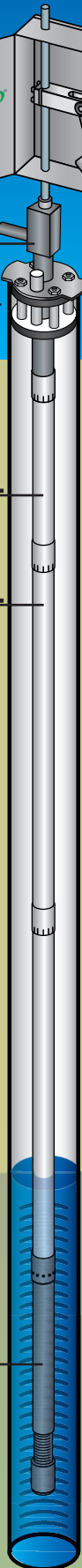
Well seal

Drop assembly

5 ft.

10 ft.

Lower pump assembly



Solar Pump Head



- **Easily Implemented** – Eliminates the infrastructure required for pneumatic or electric pumping systems.
- **Flexible** – System design allows flexibility in pump operation based on site specific environmental and operational conditions.
- **Environmentally friendly** – Pumping alternative reduces operational costs and improves green image.
- **Top quality** – Manufactured with industry standard, highest grade materials.
- **Easy service & installation** – Minimal tools and personnel required; most serviceable components are located above the well-head for easy access instead of pulling submerged pumps.

Electric Pump Head



- **Unsurpassed control options** - Explosion-proof, brushless motors available. Low power requirements.
- **Proven track record** – 24/7/365 operation with millions of uninterrupted operating hours in extreme climates.
- **Top quality** – Manufactured with industry standard, highest grade materials.
- **Easy service & installation** – Minimal tools and personnel required; most serviceable components are located above the well-head for easy access instead of pulling submerged pumps.

Pneumatic Pump Head



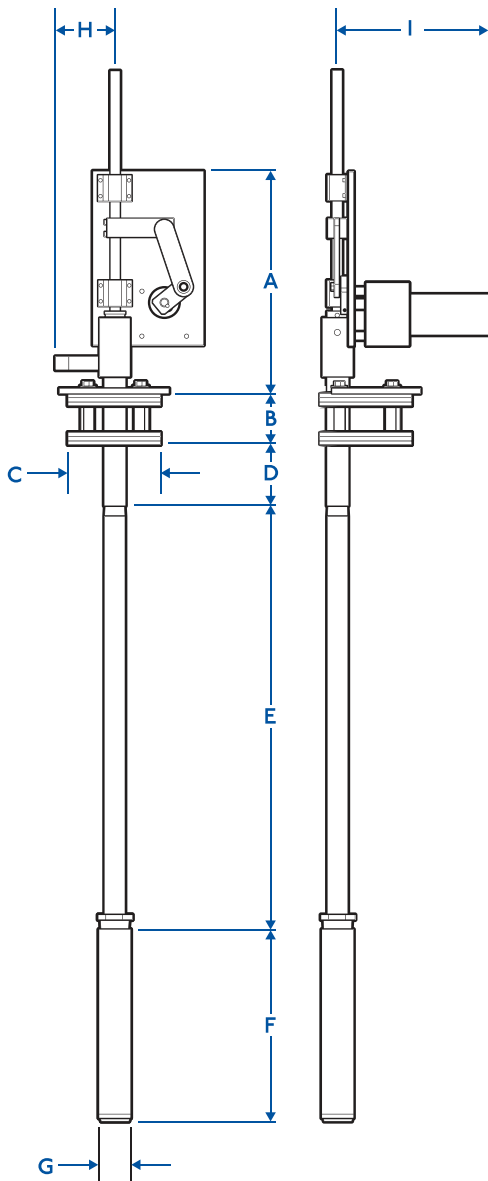
- **Dependable** – Designed for applications where airlift pumps fail: high pressure, high solids, and extreme weather conditions.
- **Flexible** – Easily adjustable built-in speed and stroke control with optional level controller allows for a wide range of pumping options.
- **No Air in Well** – Piston pump isolates air from pumped liquids to keep oxygen levels low.
- **Longer Lifespan** – Drive assembly life is maximized by incorporating a linear bearing in addition to the internal pneumatic drive cylinder bearing.
- **Low Air Consumption** – Efficient operation and flexible pump sizing result in significant savings for the owner/operator.
- **Easy service & installation** – Minimal tools and personnel required; most serviceable components are located above the well-head for easy access instead of pulling submerged pumps.

Down-Well Pump Choices



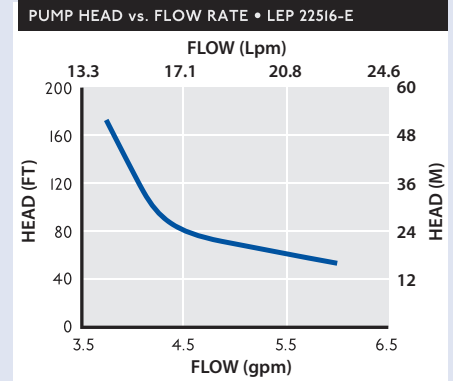
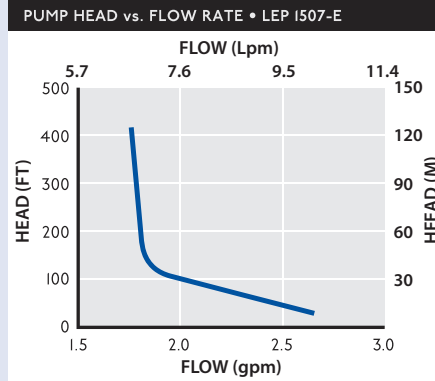
- **Low draw intake** – Intake design requires minimal liquid level to operate.
- **Two sizes** – Interchangeable Standard and High Flow models are available.

Solar and Electric TopDrive™ Pumps



Dimensions

Pump Head Height	A	17.9" (45.5 cm)
Well Seal Insertion	B	4.0" (10.2 cm)
Well Seal Diameter	C	7.5" (19.0 cm)
Drop Tube Connector	D	5.0" (12.7 cm)
Drop Tube Length	E	5 or 10 ft. (1.5 or 3 m) sections up to maximum pump head
Lower Pump Length	F	15.5" (39.4 cm)
Piston Cylinder Diameter	G	
LEP 1507-E		1.75" (4.45 cm)
LEP 22516-E		2.5" (6.35 cm)
Width at Discharge	H	4.8" (12.2 cm)
Standard Motor Depth (Optional Models Vary)	I	12.3" (31.2 cm)



Solar Pumps

Pump Model	Standard Solar Pump	Max. Head ft (m)	Flow Range gpm (Lpm)	Motor Ratings (HP)	Power Requirements
LEP 1507-S	Solar	200 (61)	1.8 - 2.5 (.48 - .66)	0.2	12-24v DC
LEP 22516-S	Solar	160 (49)	4.0 - 6.0 (1.06 - 1.59)	0.33	12-24v DC

Electric Pumps

LEP 1507-E	Single	400 (122)	1.8 - 2.5 (.48 - .66)	0.33	120/208/240 1ø - 50/60 Hz
	3-Phase	400 (122)	1.8 - 2.5 (.48 - .66)	0.33	208/230/440/600 1ø or 3ø - 50/60 Hz
LEP 22516-E	Single	160 (49)	4.0 - 6.0 (1.06 - 1.59)	0.33	120/208/240 1ø - 50/60 Hz
	3-Phase	160 (49)	4.0 - 6.0 (1.06 - 1.59)	0.33	208/230/440/600 1ø or 3ø - 50/60 Hz

Components

LP-EB-ASSBLY_120V	Electric Drive Assembly
LP-EB-ASSBLY_12V	Solar Drive Assembly
LP-PH-ASSBLY	Pump Head Assembly
LP-DA-ASSBLY_5FT	Drop Assembly 5'
LP-DA-ASSBLY_10FT	Drop Assembly 10'
LP-LP150-ASSBLY	Standard Lower Pump
LP-LP225-ASSBLY	High Flow Lower Pump
xxx-x-WCA	Well Seal Assembly

The 150 and 225 series pump have a discharge pipe size of 3/4" (1.9 cm) NPT, a **minimum** nominal pipe size for well casing (inches) of 4" without gas extraction, and 6" with gas extraction; 8" (20.3 cm) and other custom sizes are available. Max temperature for both are 212°F/100°C, and includes a speed stroke control.

Controls Standard

Nema 4x enclosure with cover interlocked disconnect switch, overload contactor. All panels are SCA/UL approved and manufactured in an ISO 9001 certified facility.

Control Options

- On-off cycle timers, wireless interface (operation and status), GFI protected heat trace circuit.
- Variable speed can be provided with custom motor selection.
- Step down transformers and control circuits as required.

Other Options

Solar system sizing is done to meet site specific environmental and run time conditions.

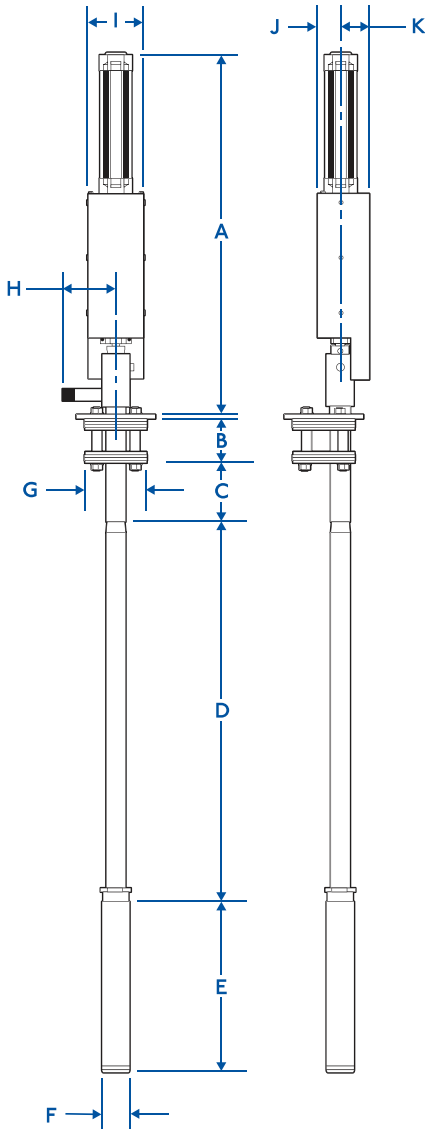
Materials

In-well components are fabricated from stainless steel or PVC, and feature Buna-N seals. These materials provide the best corrosion resistance possible. Above-ground components are fabricated from stainless steel, 6061-T6 aluminum and PVC. All fasteners are stainless steel for maximum corrosion resistance. High temperature and chemical resistant options are available.

Warranty

Each leachate pump comes with a no-hassle 2-year warranty against manufacturers' defects.

Pneumatic TopDrive™ Pumps



Dimensions

Pump Head Height	A	32.6" (82.8 cm)
Well Seal Insertion	B	4.0" (10.2 cm)
Drop Tube Connector	C	5.37" (13.7 cm)
Drop Tube Length	D	5 or 10 ft. (1.5 or 3 m)
		sections up to maximum pump head
Lower Pump Length	E	15.5" (39.4 cm)
Piston Cylinder Diameter	F	
150 Series		1.75" (4.4 cm)
225 Series		2.5" (6.4 cm)
Well Seal Diameter	G	5.36" (13.6 cm)
(6"/15 cm Nominal Well)		
Width at Discharge	H	4.8" (12.2 cm)
Cover Width	I	5.1" (13.0 cm)
Cover Depth (Front)	J	2.1" (5.3 cm)
Cover Depth (Rear)	K	2.6" (6.6 cm)

Pneumatic Pumps

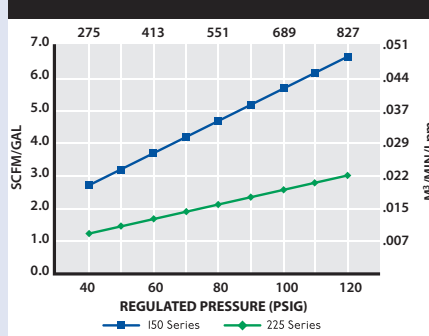
Pump Model	Max. Flow Rate gpm (Lpm)	Pump Vol. Cycle gal. (l)	Max. Depth ft. (m)	Max. Air Pressure psi (kg/cm ²)
150 Series	2.4 (9.1)	0.06 (0.23)	350 (107)	120 (8.4)
225 Series	5.4 (20.4)	0.23 (0.51)	150 (46)	120 (8.4)

Components

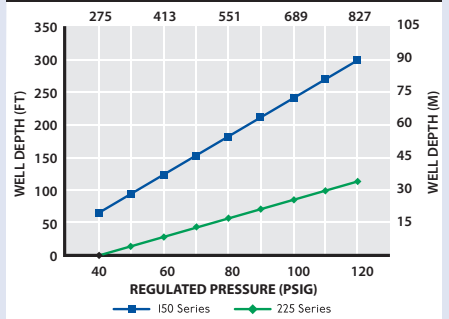
LP-PB-ASSBLY	Pneumatic Drive Assembly
LP-PH-ASSBLY	Pump Head Assembly
LP-DA-ASSBLY_5FT	Drop Assembly 5'
LP-DA-ASSBLY_10FT	Drop Assembly 10'
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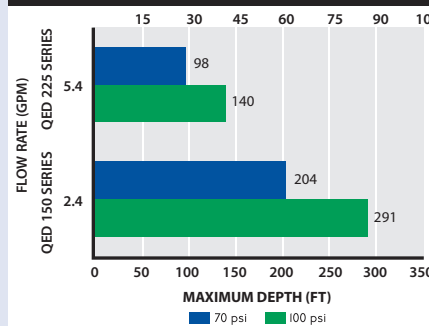
SCFM/GPM BY REGULATED PRESSURE



DEPTH BY REGULATED PRESSURE WITH 25PSI DISCHARGE HEAD



FLOW RATE VS. MAXIMUM DEPTH (M)



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