

Apollo-AC Electric Piston Pump™

TECHNICAL SPECS.

MODEL 102

Flow to 2.7 gpm, to 175 ft.

- Operational Depth: To 175 ft. / 53 m.
- Flow Range: To 2.7 gpm / 10.2 lpm
- Well-Casing Size: Minimum 3 in. / 7.62 cm.
- Drive Motor: 3/8 hp
- Well Temperature: To 200°F

Linear-Rod Piston Pump; Anything Flowable

The Apollo-AC Electric Model 102 is a positive-displacement, reciprocating-action piston pump. Powered by 115v-230v-460v single-phase or 3-phase AC, it pumps virtually any flowable fluid.

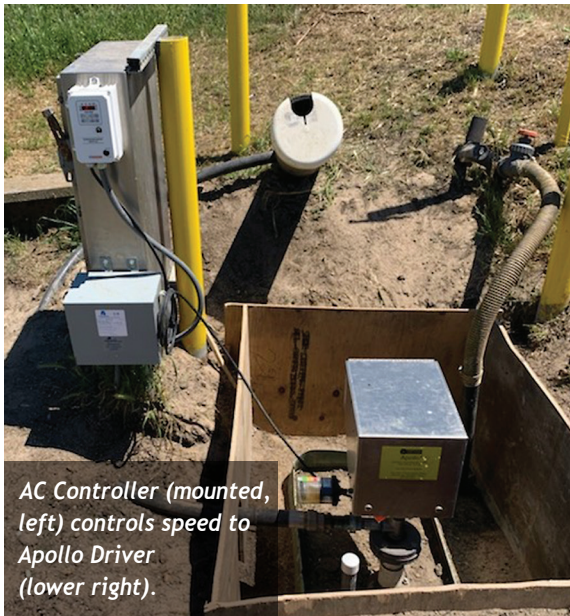
The non-polluting linear-rod driver is mounted above the wellhead or sump for easier installation and faster servicing at surface grade.

Model 102, which has a lower purchase price than comparable electric pumps, maintains a steady flow rate up to 2.7 gpm (10.2 lpm); 3,888

gpd (14,717 lpd) to maximum submergence depths of 175 feet (53 meters), at temperatures to 200°F; higher with special components.

The Apollo-AC Electric combines the simplicity of Blackhawk's liner-rod Apollo driver design with the convenience of AC grid power.

Applications include landfill leachate, gas-well dewatering, low-flow remediation, condensate, biofuel and pipeline drip-leg sump. Apollo-ACs can be built to site requirements.



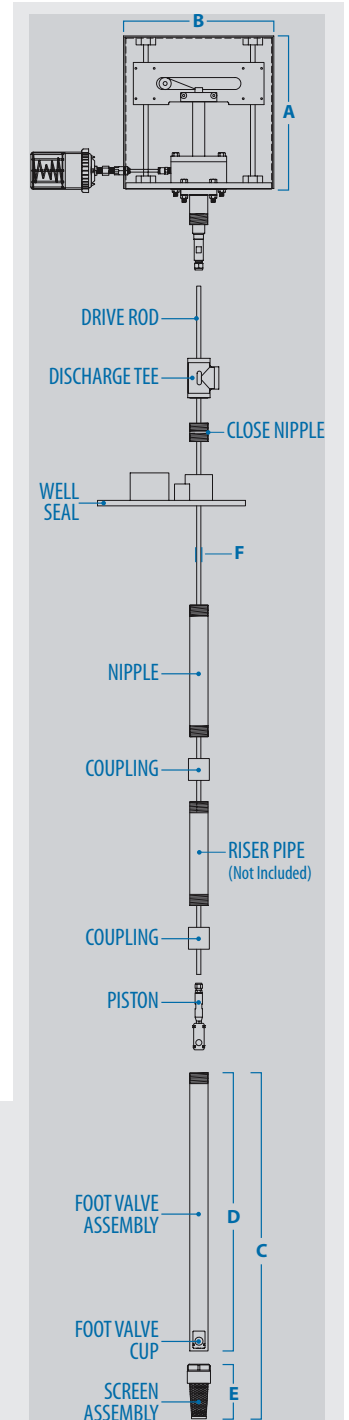
AC Controller (mounted, left) controls speed to Apollo Driver (lower right).



AC Controller



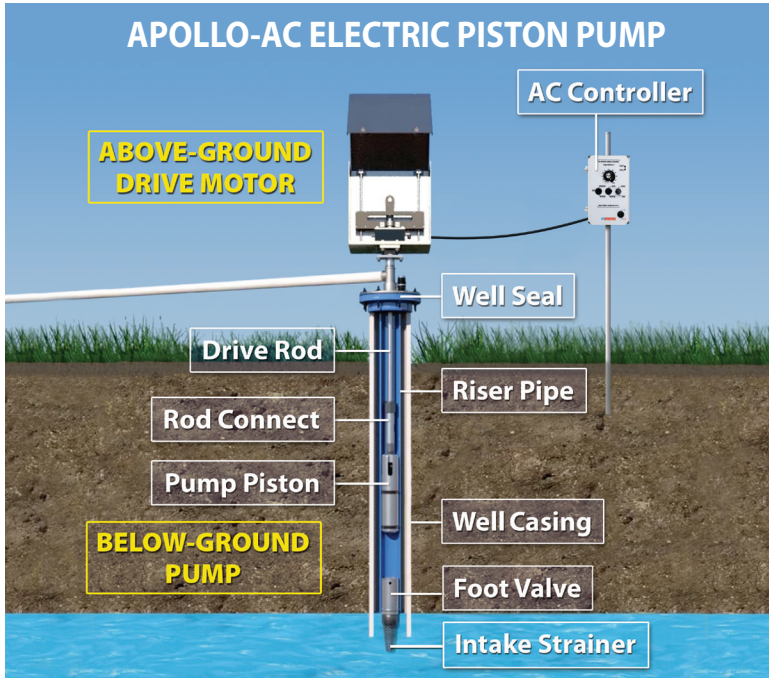
Linear-rod driver has few moving parts.



DIMENSIONS (IN INCHES)

- A. Above Well Height29.5
- B. Driver Width12.0
- C. Foot Valve Assembly44.0
- D. Foot Valve Length38.0
- E. Intake Screen Length 6.0
- F. Downhole Diameter 2.9

Apollo-AC Electric Piston Pump™ Model 102



blackhawkco.com/how-blackhawk-solar-linear-rod-piston-pumps-work

How A Piston Pump Works

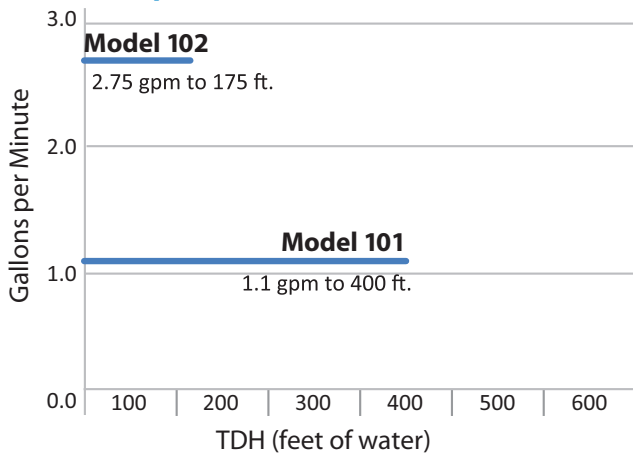
Above the sump/wellhead, the drive motor pushes and pulls a durable, flexible rod connected to a reciprocating piston near submergence depth.

As the motor draws the rod up, the piston creates suction at intake and liquid is pulled through a strainer and into a foot valve.

Stainless-steel balls open naturally to allow liquid into the piston and then close to prevent liquid from returning.

The pumping action pulls liquid up through a riser pipe, expelling the liquid through a discharge tee.

Apollo-AC - GPM vs TDH



Performance Data

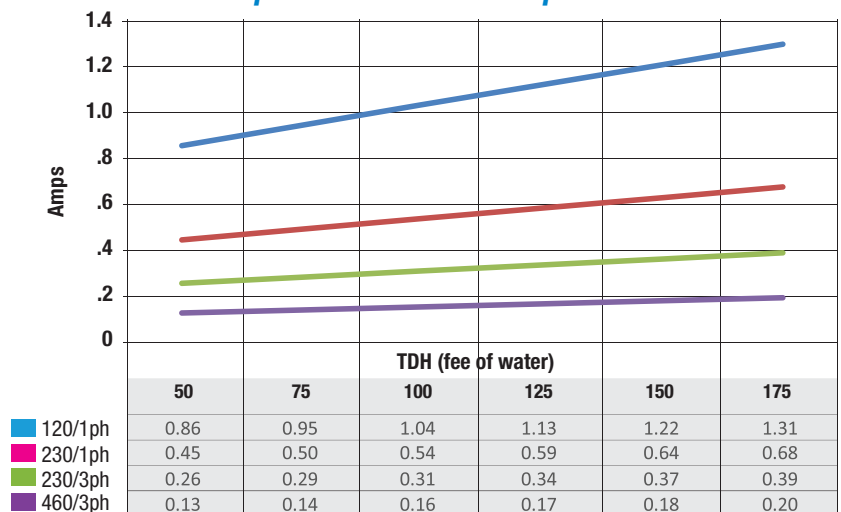
Operational Depth	175 ft. / 53 m.
Flow Range*	To 2.7 gpm / 10.2 lpm 3,888 gpd / 14,717 lpd
Motor	3/8 hp 230v/3 phase & 460v/3 phase
Power Supply	115v-230v-460v 1 phase and 3 phase
Maximum Lift	175 ft. (53 m.) of water at 76 psi
	Variable speed control adjusts to well conditions; liquid is drawn down to top of screen
Discharge per Stroke	0.06 US gal / 0.22 liter (flow does not vary with depth)
Temperature Range	To 200°F / 93°C (higher with custom components)

* Meets Reciprocating Pump Tests (ANSI/HI 6.6-2015)

Technical Data

Maximum External Diameter	2.9" (7.37 cm.)
Connection to Riser Pipe	1 1/4" (3.18 cm)
Connection Tubing	3/4" (1.9 cm) or greater
Recommended Internal Diameter of Bore Hole	3 - 4" (7.62 - 10.16 cm) or greater
Discharge Size	2" or 1 1/4" NPT
Installation	Unit can install vertically or horiz.
Driver Weight	50 lbs. (22.68 kg)
Driver Rod Weight	12 lbs./100' (3.7 kg per 100 m)
Foot Valve Assembly Weight	17 lbs. (7.71 kg)
Min. Well Casing Size	3" (7.62 cm)
Foot Valve Assembly Weight	20 lb. (9.1 kg)

Apollo-AC 102 Amps vs TDH



The best-performing environmental pump in the business

