

AquaTron

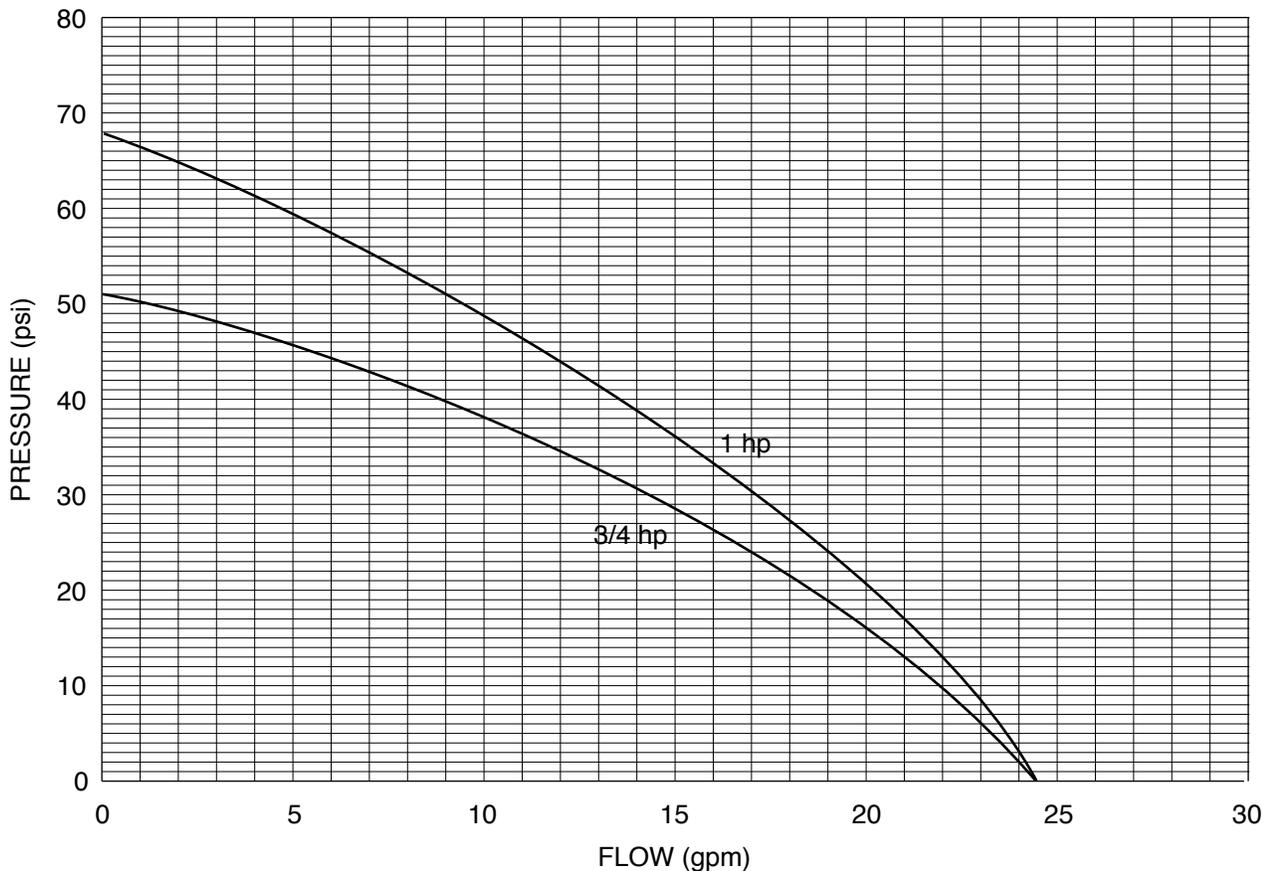
AquaTron pumps are submersible pressure pumps with internal controls that start and stop water flow in response to demand without the need for external pressure switches or flow sensing devices. Additionally, the internal controls automatically stop the pump when dry running is detected, and then periodically attempt to re-start until water pressure is restored.

Two versions are available: 3/4hp to operate faucets or drip irrigation systems, and 1hp to provide higher pressures for sprinklers and household water systems. Both feature rust-proof plastic housings, stainless-steel intake screens, oil-free motors with thermal overload protection, internal check valves, and 48 ft power cords with plugs. The pump motors are rated for continuous-duty and are cooled by the pumped water, permitting partially submerged vertical installation. Sound levels are very low.

The AquaTron is an affordable, entry-level rainwater harvesting pump, ideal for use in smaller cisterns with small access openings.



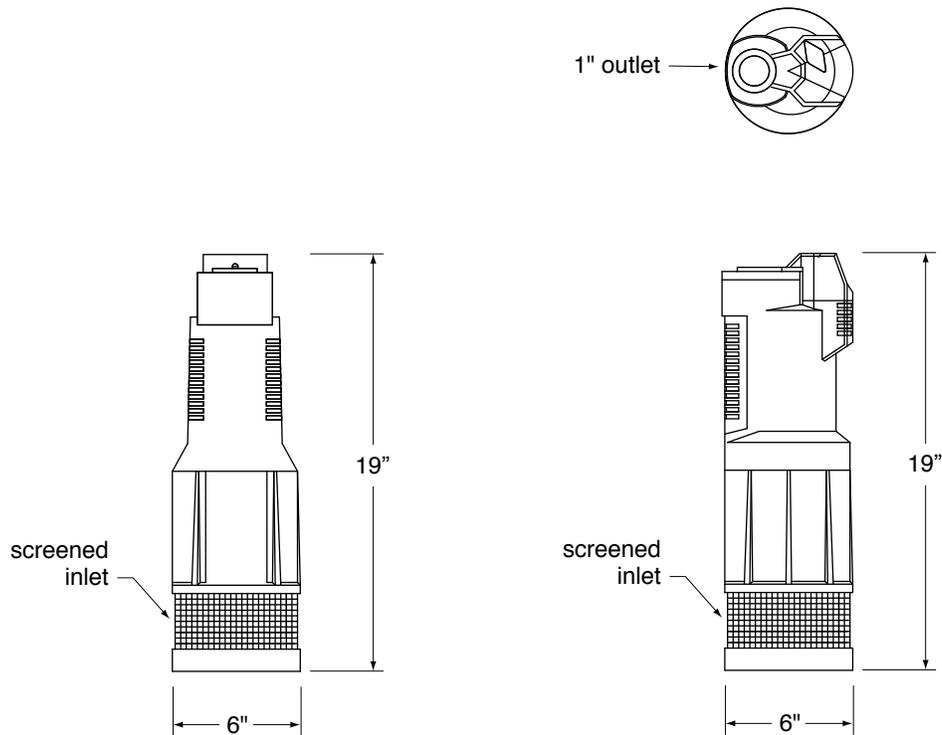
HYDRAULIC PERFORMANCE



PHYSICAL AND ELECTRICAL CHARACTERISTICS

Model	Power	Voltage	Current	Inlet	Outlet	LxWxH	Weight
AquaTron-S75	3/4 hp	120v-1Ø	7.5 a	screen	1" fpt	6x6x19	24
AquaTron-S100	1 hp	120v-1Ø	9.8 a	screen	1" fpt	6x6x19	24

AquaTron pumps include 48 ft power cords with plugs.



INSTALLATION AND OPERATION

AquaTron pumps are designed to be used in clean water with a maximum temperature of 35°C (95°F). Operation in small surface tanks exposed to sunlight in hot climates may cause thermal shutdown which, if repeated often, can shorten motor life. Cistern receiving surface water, or hybrid cisterns using gravel fill exposed to the stored water, can have high levels of abrasive grit which can shorten impeller life.

A high-pressure rubber discharge hose is recommended to reduce pump cycling from small drips or leaks by expanding and contracting like a miniature pressure vessel. The pump should not be lifted with the discharge hose or cable, but rather by a synthetic rope tether attached to an eye bolt in the tank accessway. An accessible disconnect device is essential for maintenance and winterization. A complete set of all components required for proper installation is included with the optional *Aquatron Discharge Kit*.

Installation is very easy: the pump is lowered into the tank and the discharge line is simply connected to piping that runs to a faucet, irrigation system, or other water use. When first connected to electrical power, the pump will attempt to prime for thirty seconds. If this is unsuccessful, priming will be repeated three more times separated by short delays. If there is still insufficient flow, priming will be attempted after one hour, then after five hours, and then after every twenty-four hours. During operation, if the pump cannot maintain sufficient flow for more than forty seconds, the pump will follow the priming program. When used in a rainwater harvesting system, the pump will continue to prime until the next rain event.

INSTALLATION IN UNDERGROUND CISTERN

AquaTron pump installed in underground tank using Aquatron Discharge Kit consisting of ten feet of high-pressure EPDM rubber hose, hose fittings, high-torque marine hose clamps, full-port ball valve with disconnect union, synthetic rope tether with stainless-steel eye bolt, and adapters for both rigid and flexible one-inch water pipe.

