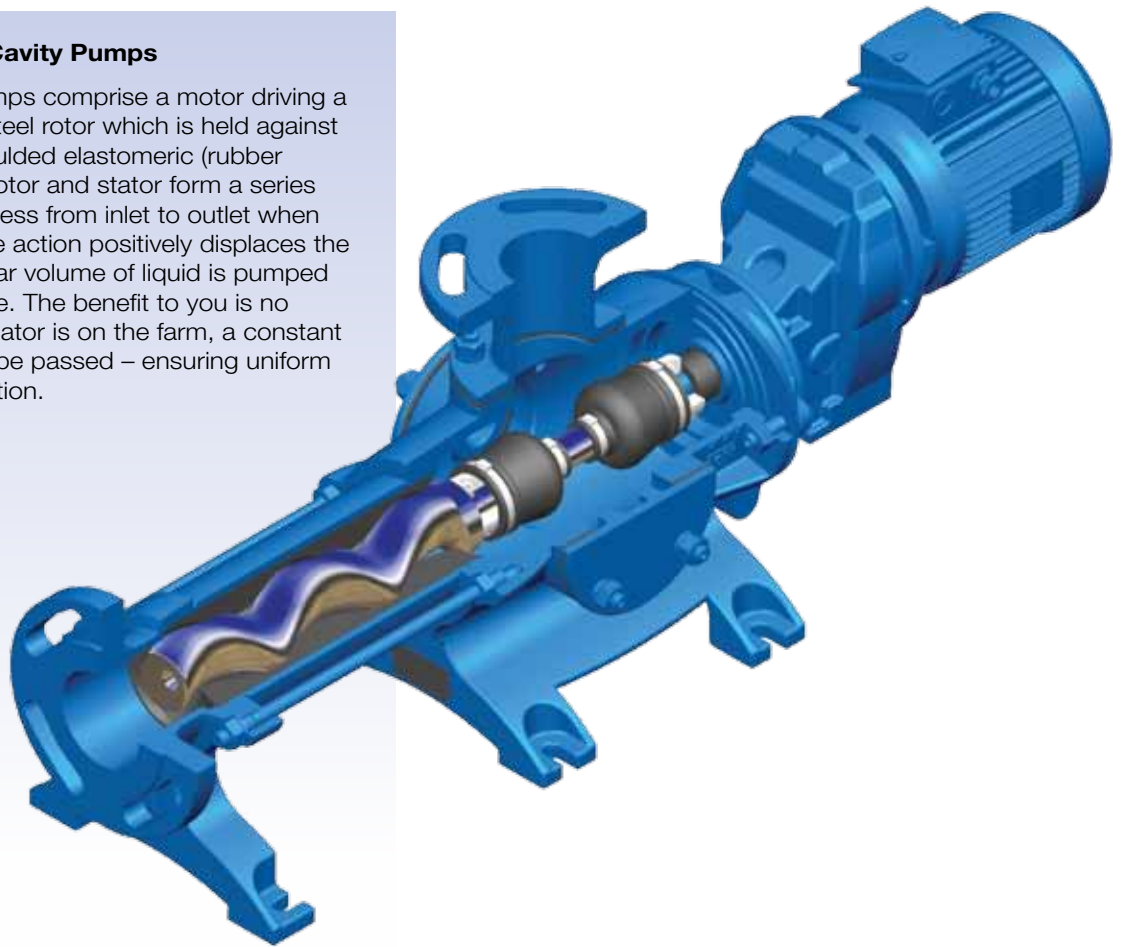


EcoPump™ technical data

About Progressive Cavity Pumps

Progressive cavity pumps comprise a motor driving a hardened chromium steel rotor which is held against and rolls around a moulded elastomeric (rubber stator). Together, the rotor and stator form a series of cavities which progress from inlet to outlet when the rotor is turned. The action positively displaces the liquid, meaning a similar volume of liquid is pumped irrespective of pressure. The benefit to you is no matter where your irrigator is on the farm, a constant volume of effluent will be passed – ensuring uniform and compliant application.



Technical Specifications

- 415Vac, three phase supply by way of a 3L PDL plug on 5m lead
- 4.0kW to 15kW (Standard)
- Flow up to 60m³/hr
- Pressure up to 240m (350psi)
- Operating temperature: up to 100°C
- Self-priming
- Horizontal mounting (Vertical pontoon or tank mounting available)
- 3" or 4" flanged inlet (a variety of options are offered)
- 2" or 3" flanged outlet (a variety of options are offered)

Standard Models	Nominal power kw (hp)	Flow rate range (m ³ /hr)	Nominal mainline size (OD)
40-413	4.0kW (5.4)	4-15	63-90mm
75-387	7.5kW (10)	5-28	75-90mm
75-478	7.5kW (10)	5-28	75-90mm
15-611	15 kW (20)	5-32	90-110mm

Note: Nominal pumping distance assumes a pump and pipe pressure up to 8.0 bar (116psi), a residual pressure of 2.0 bar (29 psi) to drive an irrigator, an allowance for 150m of drag hose and assumes there is no elevation change.

On-farm Advisory Service

WaterForce offer a full on-farm no-obligation advisory service to discuss and work through your present and future requirements.



WaterForce

www.waterforce.co.nz

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EcoPump™

Turn-key effluent pumping

WaterForce



EcoPump™

The complete effluent pumping system



The EcoPump™ is a modular “turn-key” effluent pumping system using progressive cavity pumping technology. With a high pump operating performance, you will have the ability to irrigate across all terrain types and apply effluent further away from your farm dairy which delivers a reduction in annual fertiliser costs. The advanced pump design can handle a wide range of media including sludge and slurries, chemicals and will process particles up to 22mm in size.

By upgrading your existing effluent pump to an EcoPump™ you will have improved pumping performance and can shave 50%* off your power consumption.

Applications

The pumps are suitable for all effluent pumping solutions including:

- Replacement of existing pontoon and shore mounted pump systems
- New installations
- Effluent transfer to ponds & separators and other treatment services
- Use with:
 - rotary irrigators to improve their performance for greater compliance
 - pod and long line sprinkler irrigation systems
 - hard hose irrigation systems
 - pivot irrigation systems
- Injection into irrigation systems.

Key Features of EcoPump™

- High operating performance allows you to irrigate effluent further away from the farm dairy
- Dispersing effluent on paddocks further away from the farm dairy allows a reduction in annual fertiliser costs
- Ability to maintain low uniform application rates using new or often existing travelling irrigators
- Designed to futureproof your farm effluent system to ensure compliance with local regulations
- Unique pumping technology that delivers improved system performance and a reduction of power costs – can half your power consumption
- Highly efficient, handling a wide range of media including sludge and slurries, chemicals and will process sand/water slurries & solid particles up to 22mm in size
- Heavyduty construction
- Advanced pump design ensures reliable service with minimal maintenance – no bearings that need regular greasing or pontoons requiring supervised access.

EcoPump™ Package Design

The EcoPump™ is designed as a complete unit to be installed beside the storage pond on a solid pad without the need for a shed and electrical controls.

Offered as standard package:

- Solid galvanised self-supporting steel base with fixing bolt holes and forklift or tractor prong access
- Heavyduty galvanised steel plate case which has been powdercoated for extra protection
- Removable hinged lid with gas strut support
- Ventilated motor housing
- 5m power cable with three phase plug
- PCM EcoMoineau™ progressive cavity pump
- Dry pump protection
- Schneider™ control system with LCD display and heavyduty control switches
- Pressure transducer with adjustable high and low pressure cut out setting and display
- Manual timer (0-12hours offered as standard)
- Xenon strobe lamp on pole
- Heater with thermostat (option for colder climates)
- Complete range of accessories.

The pump station includes all of the electrical and controls required. The controls are installed into the enclosure for protection. Standard controls for the pump station include:

- Operation by a manual switch, timer or remote control
- Automatic shut down of pump station and the warning lamp will flash when;
 - the pump runs dry or loses prime
 - the pond level is signalled low
 - the pump faults
 - the irrigator finishes its run: i.e. signal / time-out or high pressure cutout from irrigator auto-shutoff valve
- Low pressure cutout – possible hydrant or pipe blowout protection
- Facility for connection to remote monitoring
- Hours run indication via LCD display
- Diagnostics indication via LCD display
- Power supply for additional controls (eg flow meter)
- Interfaces to other irrigation services
- Custom controls are available on request.

*Approximate



EcoPump Accessories

The EcoPump™ system is designed in modular form. For a standard set-up you can order your system, have it delivered to farm and bolt it together. Parts and modules are interchangeable, so the replacement of worn and damaged parts is made easy. If you want to start simply and upgrade as compliance and other farming requirements evolve, order the base unit and add accessories when required.

Accessories include:

- Pond intake: screen or basket set-up
- Pond intake float: mussel buoy or drum bracket
- Pond intake boom: 7m standard
- Pond intake bracket assembly, c/w flexible coupling hose
- Pond high/low level sensor
- Tank intake
- Electronic effluent flow meter, c/w pipework
- Filtration
- Outlet manifold (specify number of outlets) c/w isolation valves (manual and automatic)
- Coupling to pipeline: camlock, compression coupling, flanged couplings above or below ground
- Remote monitoring services: soil moisture, text & email monitoring, flow volume, run time and service notification
- Wind and temperature lockout.

