

SPECIFICATIONS

STEP ACTION PUMP PERFORMANCE DATA

PRACTICAL APPLICATION DATA

Pump performance data is normally obtained in laboratories or ideal environments. Very rarely are they carried out in the field. Ecologics, recognising the needs of small scale farmers, has collected performance data under real life conditions. Pumping was undertaken at a sustainable stepping rate and over a distance of 100 metres. At elevations between 4 and 20 metres the following data was obtained:

A cabbage or corn plant requires one litre of water per day to support growth and evaporation. The number of plants to be irrigated plus the total height the pump must lift the water determine how long a person must operate the pump. The following table provides some practical examples.



elevation	steps	litres p/h
4.0 m	80 p/m	4260 p/h
8.0 m	76 p/m	4364 p/h
12.0 m	62 p/m	3038 p/h
16.0m	50 p/m	2264 p/h
20.0m	50 p/m	1440 p/h

elevation	plants	pump hours
2.0 m	2000	0.75 hrs
4.0 m	2000	0.75 hrs
6.0 m	2000	0.75 hrs
8.0 m	2000	0.75 hrs
10.0 m	2000	1.00 hrs
16.0 m	2000	1.50 hrs
16.0 m	5000	2.25 hrs

Mechanical reliability has been tested to over 9.5 million litres and diaphragm life in excess of 4.8 million litres.

2 Diaphragm configuration.

Low resistance internal valves.

High flow low resistance manifolds

Lubricated reinforced nylon bearings.

Zinc plated pressed steel construction.

Dimensions 60cm x 35cm x 27cm.

Weight: 11 Kilograms.

Tolerant of silt laden water.

Optional carry straps and fire nozzle.

Outstanding lift and lateral delivery volumes.

Extend capabilities by indefinitely connecting pumps in series.

