

Liters per Hour

	Sea Level	1,220 M	2,135 M
Full to Empty Bucket			
19 Liter Bucket			
30 CM Hose	46.5	40.2	32.8
91 CM Hose	73.5	67.5	51.8
208 Liter Drum			
30 CM Hose	60.2	52	42.4
91 CM Hose	84	72.6	59.2
Constantly Full			
19 Liter Bucket			
30 CM Hose	53.9	46.6	38
91 CM Hose	78.2	67.5	55.1
208 Liter Drum			
30 CM Hose	81.3	70.2	57.3
91 CM Hose	99.2	85.7	69.9

Liters per Day

	Sea Level	1,220 M	2,135 M
Full to Empty Bucket			
19 Liter Bucket			
30 CM Hose	1117	964	787
91 CM Hose	1764	1523	1244
208 Liter Drum			
30 CM Hose	1445	1248	1019
91 CM Hose	2017	1741	1422
Constantly Full			
19 Liter Bucket			
30 CM Hose	1295	1118	913
91 CM Hose	1876	1620	1323
208 Liter Drum			
30 CM Hose	1951	1685	1376
91 CM Hose	2381	2056	1679

What can you expect as a flow rate from your Pointone filter?

The flow rate of a filter is determined by a combination of:

- Head Pressure (the distance from the top of the water to the filter).
- Altitude
- How clean the filter is.
- The filter itself (there are slight variations between filters).

To get an approximation of what to expect, use the following method of calculation:

A) Measure the distance from the top of the water to the filter. This is your initial Head Pressure

For a 19 liter bucket with a 30 CM hose it should be about 66CM.

For a 19 liter bucket with a 91 CM hose it should be about 127 CM.

For a 208 liter drum with a 30 CM hose it should be about 137 CM.

For a 208 liter drum with a 91 CM hose it should be about 198 CM.

B) If the container is always full, the Head Pressure remains constant. In this case the distance calculation in section A (above) can be used directly on the chart below. If,

however, you allow the quantity of water in the bucket to decrease (as you draw water out through the filter), then you will need a second piece of information. You will need to know the distance from the exit fitting (where the water leaves the vessel) to the filter. For a 30 CM hose it is 36 CM; for a 91 CM hose it is 97 CM. This is your lowest Head Pressure.

C) Go to the flow chart to find the estimated flow rate for a full bucket at your approximate altitude. To do so you will need the initial Head Pressure determined in Section A (above). If you determined in Section B (above) that your container is always full, then this flow rate represents the approximate number of gallons per hour and gallons per day that your filter can output. If you calculated the lowest Head Pressure in section B (above), you will also need to find this flow rate on the chart. To find your average flow rate, add the initial flow rate to the lowest flow rate and divide by two.

Here are some examples:

Example One: You have a 19 liter bucket, 30 CM connecting tube, and you are filtering at sea level. Your water level is 30 CM above the exit fitting. So you add 30 for the bucket, 30 for the tube between the bucket and quick disconnect, and 6 for the tube between the quick disconnect and the filter. You get 66 CM. The chart says you can expect 53.0 liters per hour / 1295 liters per day. You then look up the flow rate for when the bucket is empty. In this case, the distance from the filter to the connector is 36 CM. The chart says you can expect 39.1 liters per hour / 938 liters per day. You now have to average the numbers: $53.9 \text{ liters} + 39.1 \text{ liters} = 93 \text{ liters}$. Divide this by 2 and you get 46.2 liters per hour average. $1295 + 938 = 2233$. $2233/2 = 1117 \text{ liters per day average}$.

Example Two: Same as example one, but now you are filtering at 1,220 M elevation. At 1,220 M you would expect 46.6 liters per hour / 1118 liters per day initially and at the end you would expect 33.7 liters per hour / 2810 liters per day. When you average them it would be 1040.2 liters per hour average / 964 liters per day average.

Example Three: You are filtering at Sea Level, with a 19 liter bucket and have a 91 CM connecting tube. You would expect 78.2 liters per hour / 1876 liters per day initially and at the end you would expect 68.8 liters per hour / 1652 liters per day. When you average them it would be 73.5 liters per hour average / 1764 liters per day average.

Example Four: You are at 2,135 M, with a 19 liter bucket and have a 91 CM connecting tube. You would expect 55.1 liters per hour / 1323 liters per day initially and at the end you would expect 48.5 liters per hour / 1165 liters per day. When you average them it would be 51.8 liters per hour average / 1244 liters per day average.