

Gallons per Hour

	Sea Level	4,000 FT	7,000 FT
Full to Empty Bucket			
5 Gal Bucket			
1 FT Hose	12.3	10.6	8.7
3 FT Hose	19.4	16.8	13.7
55 Gal Drum			
1 FT Hose	15.9	13.7	11.2
3 FT Hose	22.2	19.2	15.7
Constantly Full			
5 Gal Bucket			
1 FT Hose	14.3	12.3	10
3 FT Hose	20.6	17.8	14.6
55 Gal Drum			
1 FT Hose	21.5	18.5	15.1
3 FT Hose	26.2	22.6	18.5

Gallons per Day

	Sea Level	4,000 FT	7,000 FT
Full to Empty Bucket			
5 Gal Bucket			
1 FT Hose	295	255	208
3 FT Hose	466	403	329
55 Gal Drum			
1 FT Hose	382	330	269
3 FT Hose	533	460	376
Constantly Full			
5 Gal Bucket			
1 FT Hose	342	295	241
3 FT Hose	496	428	349
55 Gal Drum			
1 FT Hose	515	445	363
3 FT Hose	629	543	443

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 5 gallon bucket with a 1 FT hose it should be about 26 inches.

For a 5 gallon bucket with a 3 FT hose it should be about 50 inches.

For a 55 gallon drum with a 1 FT hose it should be about 54 inches.

For a 55 gallon drum with a 3FT hose it should be about 78 inches.

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 1 Ft hose it is 14 inches,; for a 3 FT hose it is 38 inches. 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 5 gallon bucket, 1 FT connecting tube, and you are filtering at sea level. Your water level is 12 inches above the exit fitting. So you add 12 for the bucket, 12 for the tube between the bucket and quick disconnect, and 2 for the tube between the quick disconnect and the filter. You get 26 inches. The chart says you can expect 14.3 gallons per hour / 342 gallons 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 14 inches. The chart says you can expect 10.3 gallons hour / 248 gallons per day. You now have to average the numbers: $14.3 \text{ gallons} + 10.3 \text{ gallons} = 24.6 \text{ gallons}$. Divide this by 2 and you get 12.3 gallons per hour average. $342 + 248 = 590$. $590/2 = 295$ gallons per day.

Example Two: Same as example one, but now you are filtering at 4,000 FT elevation. At 4,000 Ft you would expect 12.3 gallons per hour / 295 gallons per day initially and at the end you would expect 8.9 gallons per hour / 222 gallons per day. When you average them it would be 10.6 gallons per hour / 259 gallons per day average.

Example Three: You are filtering at Sea Level, with a 5 gallon Bucket and have a 3 FT connecting tube. You would expect 20.6 gallons per hour / 496 gallons per day initially and at the end you would expect 18.2 gallons per hour / 436 gallons per day. When you average them it would be 19.4 gallons per hour / 466 gallons per day average.

Example Four: You are at 7,000 FT, with a 5 gallon Bucket and have a 3 FT connecting tube.

You would expect 14.6 gallons per hour / 349 gallons per day initially and at the end you would expect 12.8 gallons per hour / 308 gallons per day. When you average them it would be 13.7 gallons per hour / 329 gallons per day average.