



AirOxi Ceramic Plate Diffuser



Ceramic Plate Diffuser is an extremely fine bubble diffuser and is often referred to as a Nano-bubble diffuser. It is made of a ceramic plate with very small micro holes, not even easily visible to the naked eye

It is easy to clean. Because it is made of ceramic, very few substances can actually stick to it and those that do, can be wiped off easily or scrubbed with a nylon brush.

Their high oxygen transfer characteristic makes them ideal for use in hatcheries and RAS systems. Aerating the reservoir is also an efficient way to add Dissolved Oxygen (DO) to the system

Technical parameters

The ceramic plate diffuser has an inlet of $\frac{1}{4}$ " and a bubble size of 10 to 20 microns mm which gives it very high Standard Oxygen Transfer Rate (SOTR). Because of such small size of holes and bubbles, the gas / air / oxygen remains suspended in the water for very long hence increasing the gas transfer rate to almost 30% of flow.

The designed air flow in each plate is about 3 ltrs / minute

The main body is made of ceramic and the border is made of fibre. The product size is 350 mm length x 115 mm width with the plastic border. The actual diffuser area is 300 mm x 60 mm. The plate is heavy enough to stay at the bottom without any external anchors.

The ceramic plates are designed for use with low pressure, including a diaphragm air pump or a ring blower, as well as low pressure through oxygen concentrator or oxygen cylinder. The continuous operating pressure required is of 1 – 2 PSI. For example, with a 10 ltr/minute Oxygen concentrator or a 120 LPM air pump, one can connect about 4 plates depending on the depth of the fluid or water.

The operating pressure is 1 to 4 PSI. The plate will break at pressure higher than 4 PSI especially if it is given suddenly. Pressure needs to be increased slowly when using it. The product life is around 10 years and it is compatible with Air, Oxygen, Ozone, Nitrogen and Carbon Dioxide