

# CDF Series Fine bubble membrane diffuser



## Special Features

- High Oxygen Transfer Efficiency
- Back Flow Prevention
- Low Pressure Loss Across Diffuser
- Non-Clog Operation
- Wide Range of Air Flow
- Material Resistant To Wastewater
- Simple Installation Procedures
- Low Energy Consumption
- Extended Lifetime Expectancy

## Typical Application

- Treatment of municipal or industrial wastewater
- Treatment of landfill leachate
- Aeration in conventional activated sludge systems, extended aeration or sequencing batch reactor
- Potable water treatment aeration
- Wastewater ozone diffusion
- Oxygenation for sludge stabilization
- Aeration of streams and fish ponds.

## Parts drawing

Ring-Cap



Membrane



Separate Plate



Seal



Check Valve-Membrane



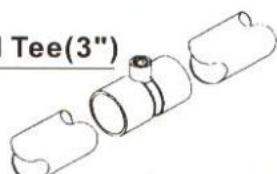
Check Valve-Socke



Main Body



Special Tee(3")



## Construction

The CIRCUIT-330(N), -250(N) type fine bubble membrane diffusers are very flexible, durable and consistent. An upwardly convex disc is covered by an elastic rubber diaphragm which perforated "U" slits. In addition, the rubber diaphragm is circumferentially secured by a clamp ring, the non-return valve in the center of the diaphragm as a safety feature preventing sludge from entering the piping and clogging the whole system.

## Membrane-

The rubber diaphragm is made from high-grade EPDM which includes an ultraviolet inhibitor. This material is resistant to aggressive chemical attack, weathering and aging.

## Main Disc-

The upward disc is made of ABS reinforced polymers. Their copolymer can fully bring out the strong points of the three and eliminates various weak points. ABS is a plastic material with vast purpose, and it is a good and stabilized plastic material in present wastewater treatment. This provides operation without the requirement for acid dosing. Due to the disc's upward convex shape, the diaphragm is only slightly stretched and lifted off the disc when air is supplied. The convex disc permits the diaphragm to lay out flat, even when its elasticity is reduced by time.

All materials of the CIRCUIT-330(N); -250(N) disc membrane diffuser resist in long term operation temperature up to 120°C.