



SOLVOX[®] dropin

High-capacity oxygenation of sea water



SOLVOX[®] dropin in operation

Introduction SOLVOX[®] dropin is a microbubble oxygenation system for sea water and brackish water. It features a unique design for easy and flexible use in open and closed aquaculture systems.

- Benefits**
- Compact design
 - Large capacity and low energy consumption
 - Mobile, easy to handle and operate
 - Efficient distribution of oxygen
 - Low operation and installation cost

Description SOLVOX dropin is based on Linde's patented and renowned microbubble technology. The oxygenation unit has high capacity, despite its compact size. SOLVOX dropin is designed to operate in large volumes of sea water.

SOLVOX dropin consists of a submersible pump, a patented oxygen dissolver, and four distribution nozzles. The water enters through the inlet filter in the lower section, then the water is pressurized and mixed with oxygen before the oxygenated water is distributed through nozzles in the top of SOLVOX dropin.

The microbubbles created by SOLVOX dropin have low rising velocity. This extends the bubble residence time in the water. Combined with the large surface-to-volume ratio of microbubbles, this increases the oxygen dissolution efficiency – even at low pressures.

SOLVOX dropin can achieve up to 100% efficiency. For optimal oxygen efficiency, we recommend the use of oxygen at purity > 99.5%. The use of oxygen at lower purity can reduce the dissolving efficiency and potentially result into super-saturation of nitrogen in the water.

Installation SOLVOX® dropin is designed for easy handling and operation. It can be deployed by hand or by means of a light-duty lifting device. SOLVOX dropin is normally positioned using its top fixation point.

Recommended deployment depth is from 4 to 20 m.

System integration SOLVOX dropin can be integrated with any control system. The unit requires a 400 V power source and suitable oxygen supply. To meet customer demands, Linde offers the following accessories:

- SOLVOX in control
- SOLVOX dosing cabinet
- SOLVOX dropin extension box
- Multicable for oxygen and power supply
- Buoy

Technical data

Weight	45 kg
Height	145 cm
Power requirements	2.2 kW, 400-440 V, 50-60 Hz,
Oxygen gas pressure	6-10 bar
Material	PU, POM-C, EPDM and stainless steel

1. Lifting point
2. Multicable for oxygen and power
3. Multicable anchor
4. Outlet nozzle x 4
5. Wet sensor
6. Water inlet



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