



Solvox®-B perforated hose for dissolving of oxygen without auxiliary energy

General In the SOLVOX®-B process, oxygen is transferred into the water through perforated diffuser hoses in the form of very fine bubbles – without the need for an external energy supply. This can generate cost savings in particular for medium-deep to deep tanks.

Process SOLVOX® diffuser hoses are made of flexible, chemical resistant polymer. Their mechanical stability has been enhanced by a fabric support. The fine perforations are produced by a standardized manufacturing process applying special needles. Mounted on frames, the diffuser hoses are placed on the bottom of the tank.

When oxygen is supplied, the pores of the diffuser hoses open. The emerging fine gas bubbles ensure optimum oxygen utilization. If the supply is cut because no oxygen is required, the pores close – preventing ingress of water and dirt particles.

The oxygen transfer rate basically depends on:

- Water depth
- Length of hose
- Specific oxygen flow
- Water components
- Water temperature

More than 150 customers already profit from the advantages of the SOLVOX®-B process.

Performance characteristics

- Low investment cost
- No external energy supply required
- High flexibility of oxygen transfer
- Fast and easy installation, even in filled tanks
- Easy adaptation to any tank shape
- High oxygen utilization in medium-deep to deep water
- No clogging of pores, not even after long periods of non-operation
- Maintenance-free
- Silent, environmentally friendly operation



Fields of application

Biological wastewater treatment:

- Covering peak oxygen demand in overloaded aeration tanks
- Conversion of wastewater treatment plants to nitrogen elimination
- Odor control in mixing and equalization tanks
- Preliminary purification of highly polluted industrial wastewater
- Emergency oxygen transfer
- Temporary oxygen supply during rebuilding of plants

Surface waters:

- Oxygen transfer into organically und thermally polluted ponds and running waters

Fish-farming:

- Oxygen transfer into influent channels and aeration tanks
- Emergency oxygen supply

Technical data SOLVOX® diffuser hose

Material	EPDM
Dimensions [mm]	18 x 4.5
Operating pressure [bar]	6
Perforations [1/m]	1,000

SOLVOX® standard diffuser mats

O ₂ transfer capacity [m ³ /h]	4-12	8-24	12-36
Length of diffuser hose [m]	20	40	60
Dimensions of diffuser mat [m]	4 x 1	5 x 2.2	5 x 2.2
Weight [kg]	35	60	70

More information

Would you like to know more about our SOLVOX®-B and other gas application technologies for aquaculture? Experts from BOC are at your service. Just contact your local BOC representative or visit our website: www.boconline.co.uk

BOC

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