

Technical Data Sheet for

AirOxi Tube AO125250-AR

Ver – 1.9 / July 2019

Product name - AirOxi Algae Resistant Tube
 Product code – AO125250-AR
 Generic name – Aeration Tube
 Brand name – AirOxi™ Tube

Material

Elastomeric blended compound of various polymers and additives. Silver based additive added to the Elastomeric compound for providing mild to moderate anti-microbial, anti-fungal and anti-algal properties.

Regulatory Compliance

RoHS compliant material (RoHS Directive 2001/95/EC Amendment 2011/65/EU). Test Report available on request

Tube properties

(Approximate values and range given here, since actual values will differ widely)

Inside Diameter	12.5 mm (tolerance +/- 0.5 mm)
Outside Diameter	25.0 mm (tolerance +/- 0.5 mm)
Wall Thickness	6.25 mm (tolerance (+/- 0.25 mm)
Micro Hole size	0.5 to 2.0 mm
Micro Hole Density	1300 to 1800 per meter
Designed Air Flow	1.8 to 2.4 m ³ / hour. However when calculated as direct output of blower air, this should be considered as 1.5 to 2.0 m ³ /hr
Bubble Diameter	1 to 2 mm depending on water depth, air pressure, water salinity, etc.
Effective working area	– 3 to 8 m ² per mtr (will vary depending on stocking density and type of culture in which it is used)

All information provided here is in good faith but without warranty

Oxygen utilization rate (%)	10 to 20%
Oxygenation capacity	0.1 to 0.2 Kg of O ₂ per mtr per hr depending on use
Burst Pressure	50 PSI
Effective water depth	0 to 3 mtr
Recommended blower size to tube ratio	20 to 30 mtr. per HP of blower (30 to 40 mtr. per KW of blower) depending on water depth and air flow pressure
Operating temperature range	0° Celsius to 50° Celsius

Detailed explanation of Flow parameters

Air Flow – Depends on blower size and output. At 2 PSI pressure and 1 mtr water head, Average flow rate per mtr is approximately 30 Ltrs per minute (1.8 m³ / hr). However since bursting is not a concern, the air flow can increase as high as required by increasing blower and motor size. This is not however useful for aeration purpose since the flow will be too high to have any meaningful dissolution of air.

Bubble size – varies with depth of installation and blower pressure. At 1.5 mtr depth, bubble size at exit of tube is less than 1 mm, at a pressure of 2.0 PSI. However it will change depending on salinity, air flow from blower, pressure, water depth, etc.

Usage instructions for better results

- For best results, ensure all piping and joints are free of air leakage
- Install at a height of at least 12” above floor of the pond. If it is PE lined pond then the tube can be installed at 6” above bottom.
- Install on all sides of the pond
- Operate as long as possible, preferably 24 / 7 to avoid any choking of the micro holes
- Minimum bending radius – 0.3 mtr
- Fittings to be used are ½” / 16 mm fittings
- Minimum Inlet pipe size – ½” / 12 mm

PRODUCT PICTURE

AO125250 - AR

