GeoTierre

Protecting the source of life

TUBE DIFFUSER
Newair® HDPE

Components for water and wastewater treatment

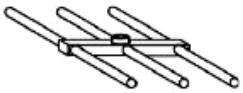
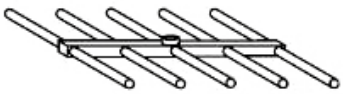
Newair® HDPE

PRODUCT PROPERTIES

- energy-saving
- low head loss
- high air flow
- high oxygen transfer
- break-proofeasy to install
- very good chemical resistance
- abilities of operation: continuous
- KTW-approval (can be uses for drinking water)
- applications:
  - municipal waste water
  - industrial waste water
  - general aeration feedings

NEWAIR© TUBE DIFFUSER, OPERATING RANGE

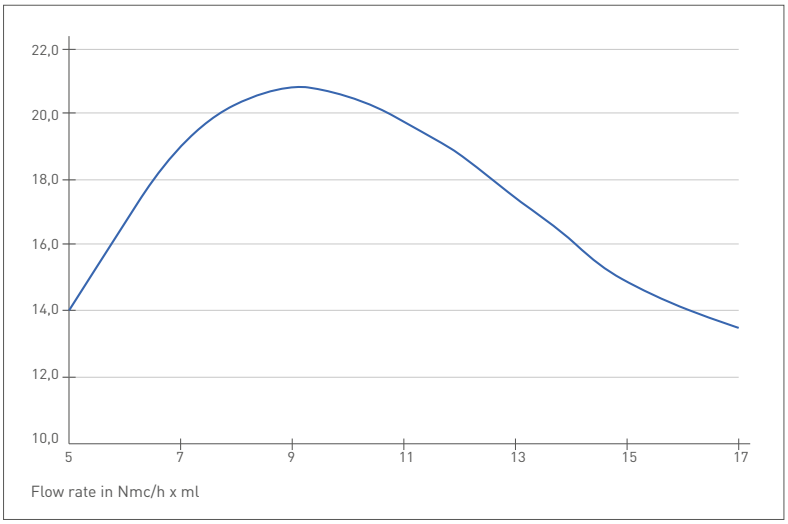
Model	Range flow rate (Nm^3/h x ml) min-max	Optimal flow rate (Nm^3/h x ml)	Thread connection Standard (3/4'' female other up request)	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
NWA500	6-12	8	3/4''F	80°C/176°F	continuous intermittent	Aeration tank
NWA750	6-12	8	3/4''F	80°C/176°F	continuous intermittent	Aeration tank
NWA1000	6-12	8	3/4''F	80°C/176°F	continuous intermittent	Aeration tank

Manifold in PP, Connection thread 1'' female	Air distributor square pipe in AISI 304 connection 2'' female			
NWA-1001 NWA-1501 NWA-2001	NWA-1002 NWA-1502 NWA-2002	NWA-1003 NWA-1503 NWA-2003	NWA-1004 NWA-1504 NWA-2004	NWA-1005 NWA-1505 NWA-2005
				

Data are based on clean water 20°C temperature, 1013mbar / 68°F, 101,3kpa. All data are approximate data!

Newair® HDPE

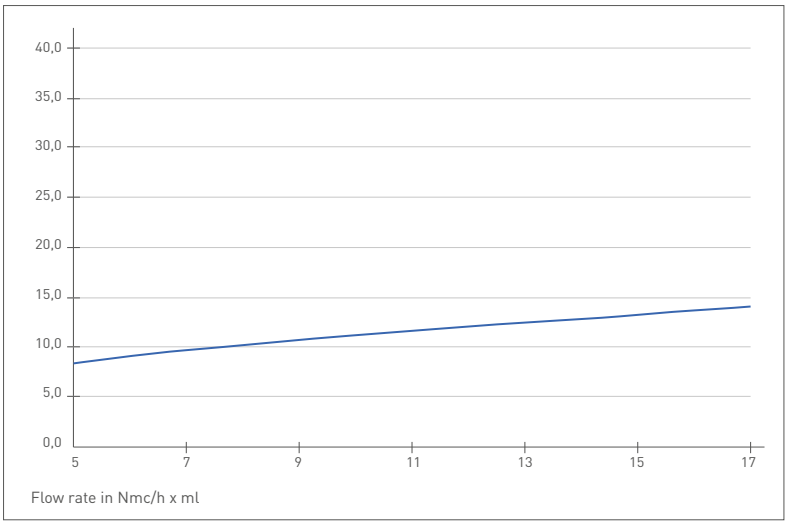
Oscillating non return valve, makes sure that the non return valve can not be blocked from any dirty.



NEWAIR©
NWA TUBE DIFFUSER FINE BUBBLE
OXYGEN TRANSFER EFFICIENCY

— Oxygen transfer rate 02 in gr / Nmc * m submersion

Data are referd to in clean tap water standard condition at 20°C, 101,3kPa



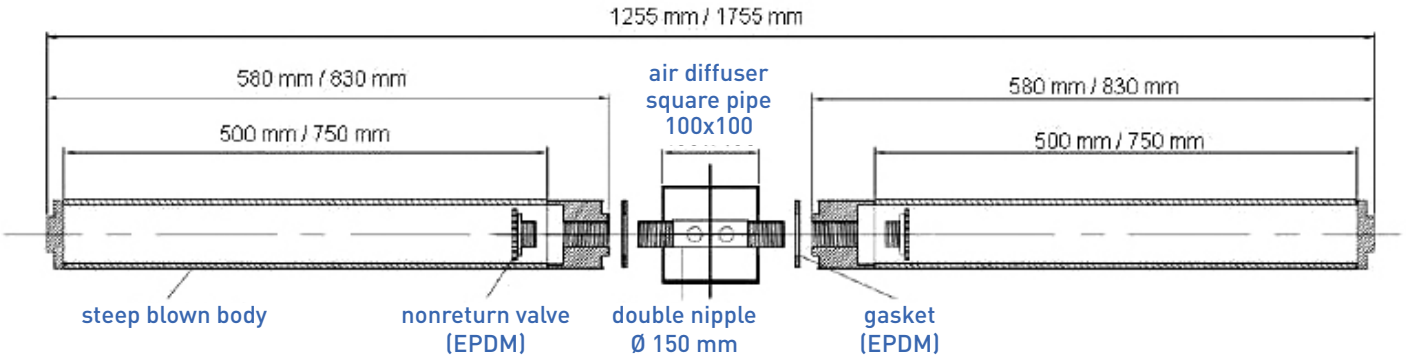
NEWAIR©
NWA TUBE DIFFUSER FINE BUBBLE
HEAD LOSS

— Head loss in mbar

Data are referd to in clean tap water standard condition at 20°C, 101,3kPa

Comparable values can only be optained with a similar setup and condition. Depending on the tank geometry, slit chart, water depth and planar allocation, the quoted values can change. All the data are based on clean water 20° temperature, 1013mbar / 68°F, 101,3kpa.
All data are approximate data!

INSTALLATION DRAWING



PRODUCT PROPERTIES

Number	HDPE
Colour	white
Wall thickness	5,2 mm
Density	0,97 g/cm²
Chemical resistance	high
Pore size at the inside	350 µm
Pore size at the outside	120 µm
Operating temperature	0 - 80°C
Application	municipal and industrial waste water

STANDARD DIMENSIONS

Aerator length [mm]	Total length [mm]	Tube diameter [mm]	Aeration area [m²]	Adapter	Total weight [g]
500	580	72	0,11	¾ internal thread	570
750	830	72	0,17	¾ internal thread	760
1000	1080	72	0,23	¾ internal thread	950

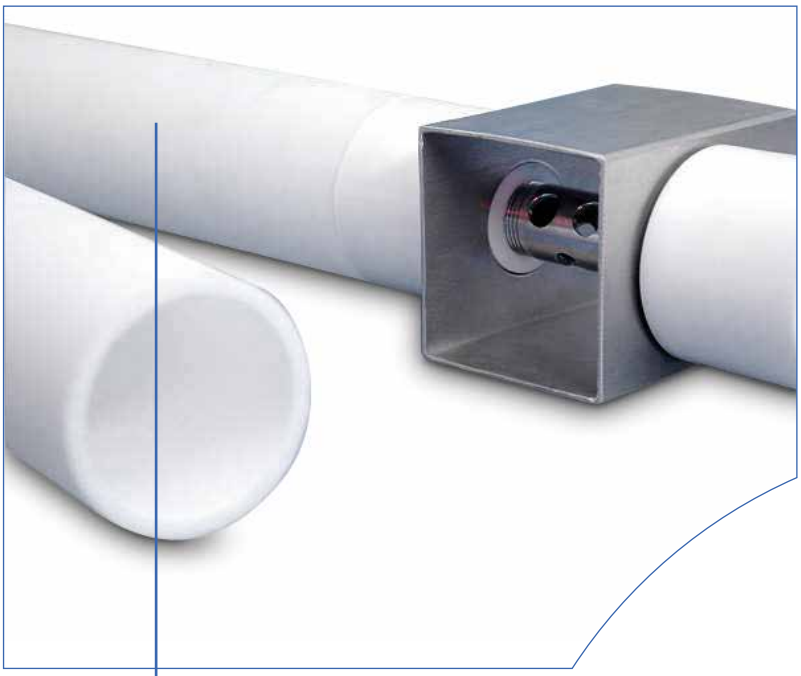
SPECIAL DIMENSIONS

Possible lengths	100 1000 mm
Possible adapter forms	½ , ¾ , 1 , 1 ¼ internal thread and on request

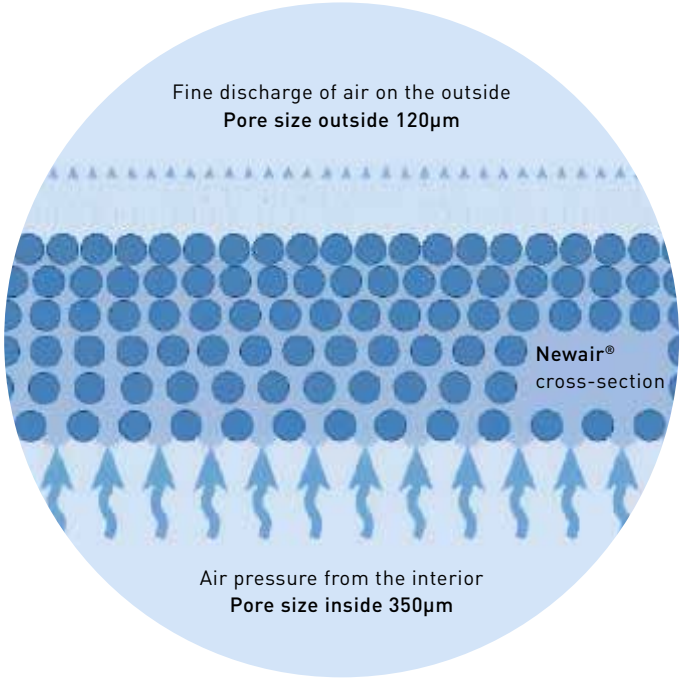
All data are approximate data!

Newair® HDPE

FUNCTION CHART OF THE PORE STRUCTURE



THE NEWAIR AERATOR IS CHARACTERIZED BY A SPECIAL MATERIAL STRUCTURE



The newair aerator is characterized by a special material structure. The size of the pores reducing in flow direction. On the one hand there will be created a huge upstream flow area for the air, on the other hand there will be reached a fine allocation of the bubbles by a small pore size on the outlet side.

AIR FLOW

The **optimum air flow** for the Newair® tube diffuser is 6-12 Nm³/(h x ml). If the air flow rate falls below the optimum range for a longer period of time (approx. 24 hrs.), the flushing of the aerator elements with an air flow rate of 30 Nm³/(h x ml) is recommended.

STORAGE

The aerators must be stored in their original packing in a dry room. During storage the aerators must be protected from damage caused by ambient conditions (heat, painting, etc.). The aerators and accessories should be installed and put into operation within the usual periods of time (max. 1 year).

MAINTENANCE

Newair® aerators require only a little service, but they are not maintenance-free. The functioning of the aerators depends on the discharge of air from the porous structure of the aerators. Therefore the structure should be free from sediments and incrustation because these affect or can even prevent the discharge process. As a rule, waste water contains substances which can cause the formation of sediments, such as carbonates (water hardness), ferric and aluminium salts (precipitants), biological growth, polymers.
For a trouble-free operation it is recommended to dose precipitants and other auxiliary agents with the objective of making sparing use of those according to the technical regulations.

LIFETIME

The precondition for a long lifetime is that the aerators are used in communal waste water. The composition of existing trade and industrial effluents must comply with the regulations laid down in the latest version of working sheet ATV A 115.
If the discharge of industrial effluents exceeds a proportion of 20 %, the manufacturer has to be consulted. In addition, the assembly and operating instructions must be adhered to.

SERVICE

It is in your interest to perform regular controls of the aerator system by using the types of maintenance mentioned above. They help to prolong the lifetime of the aerators.
If necessary, you can send aerators to the manufacturer in order to obtain an analysis of the condition of the aerators (charge according to time involved). The aerators sent in for this purpose should be rinsed, but not cleaned with a pressure washer.

CONTACT

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