



**GeoTierre**

*Protecting the source of life*



**DISC DIFFUSER**  
**Newair<sup>®</sup> HDPE**

Components for water and wastewater treatment



## PRODUCT PROPERTIES

- energy-saving
- low headless
- high air flow
- high oxygen transfer
- break-proofeasy to install
- very good chemical resistance for continuous operation
- drinking water - approval

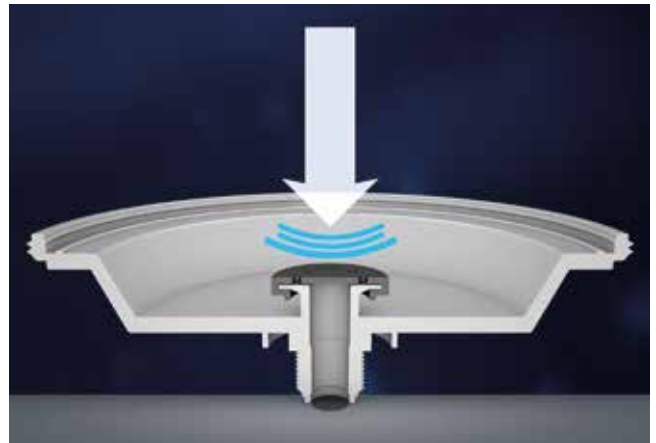


## NEWAIR® DISC DIFFUSER, OPERATING RANGE

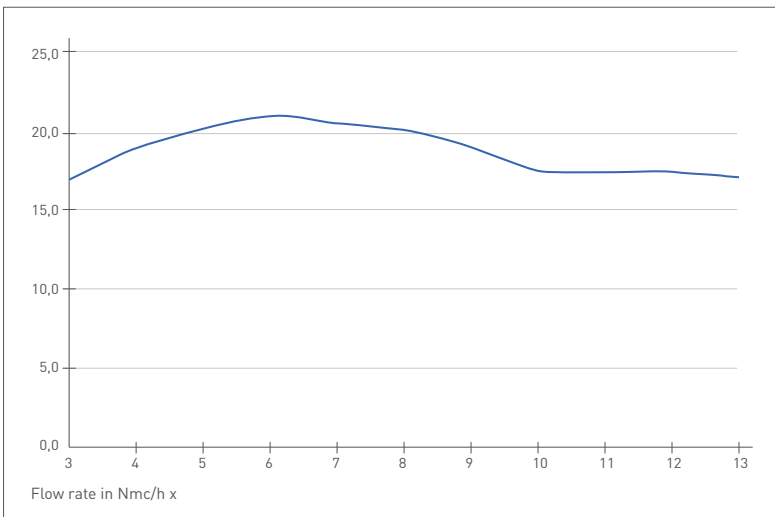
Model	Range flow rate (Nm <sup>3</sup> /h) min-max	Optimal flow rate (Nm <sup>3</sup> /h)	Thread connection Standard (1" female or other up request)	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
NWD280	4-12	6	1" M	80°C/176°F	continuous intermittent	Aeration tank

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

# Newair® HDPE



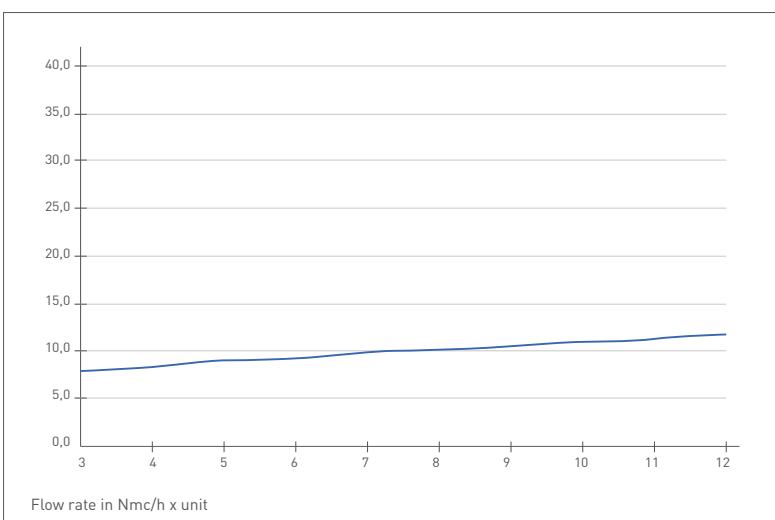
Oscillating non return valve, makes sure that the non return valve can not be blocked from any dirty.



## NEWAIR® NWA280 DISC DIFFUSER FINE BUBBLE OXYGEN TRANSFER EFFICIENCY

— Oxygen transfer rate O<sub>2</sub> in gr / Nmc \* m submersion

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



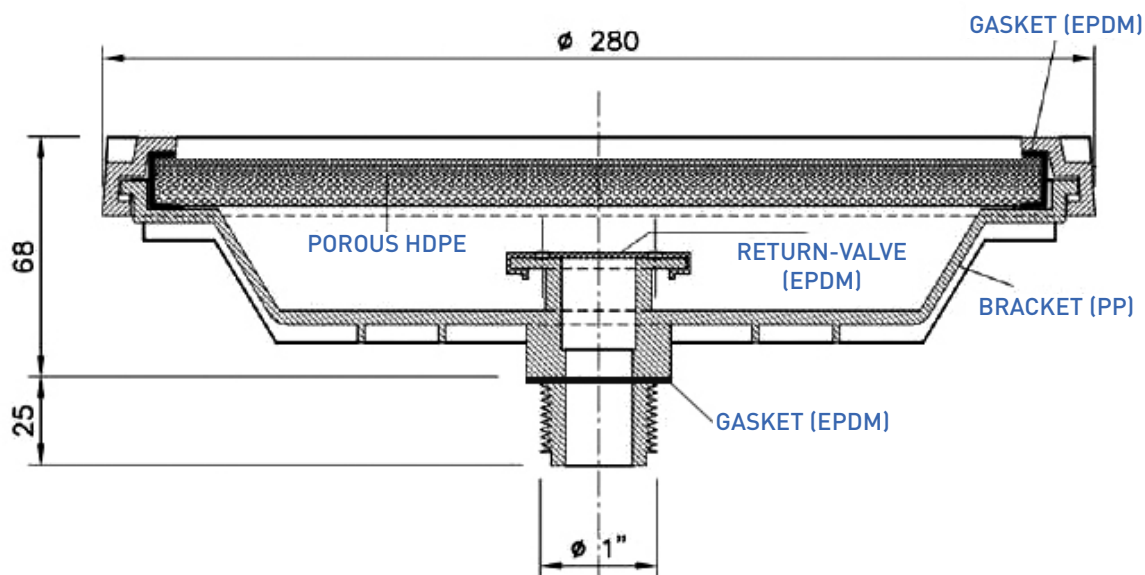
## NEWAIR® DISC NWA280 DISC DIFFUSER FINE BUBBLE HEAD LOSS

— Head loss in mbar

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

Comparable values can only be obtained 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	11 mm
Density	0,97 g/cm <sup>2</sup>
Chemical resistance	high
Pore size at the inside	350 $\mu$ m
Pore size at the outside	120 $\mu$ m
Operating temperature	0 - 80°C
Application	municipal and industrial waste water

## DIMENSIONS

Type	Height [mm]	Diameter total [mm]	Diameter effective [mm]	Over all height above distributor [mm]	Perforated area [m <sup>2</sup> ]	Fixed porous body	Total weight [kg]
11 mm	93	280	240	68	0,05	HDPE	1,35

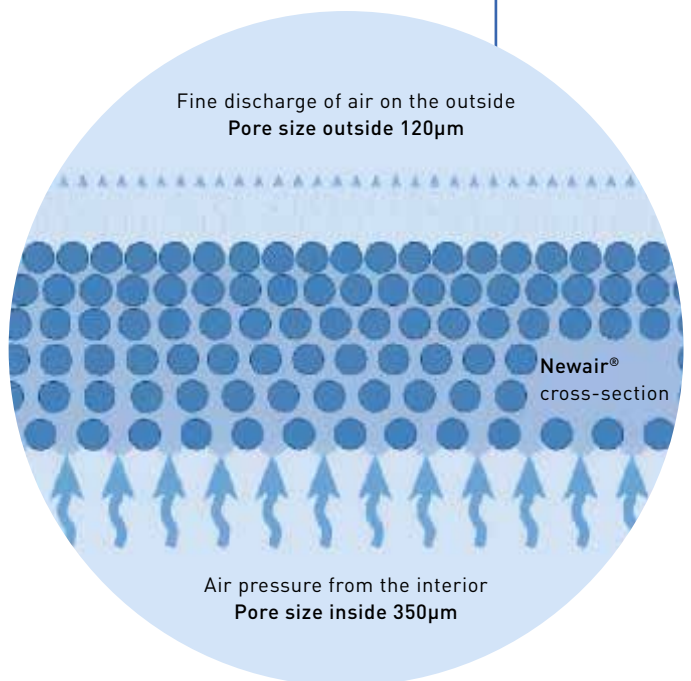
All data are approximate data!

# Newair® HDPE

## FUNCTION



THE NEWAIR AERATOR  
IS CHARACTERIZED  
BY A SPECIAL MATERIAL  
STRUCTURE



## AIR FLOW

The **optimum air flow** for the Newair® disc diffuser is **4-8 Nm<sup>3</sup>/(h x diff.)**. 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 Nm<sup>3</sup>/(h x diff.) 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.

Our continuing commitment to quality product, may mean a change without notice of specification, design and other content included in this brochure.



## CONTACT

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