



# DISC DIFFUSER

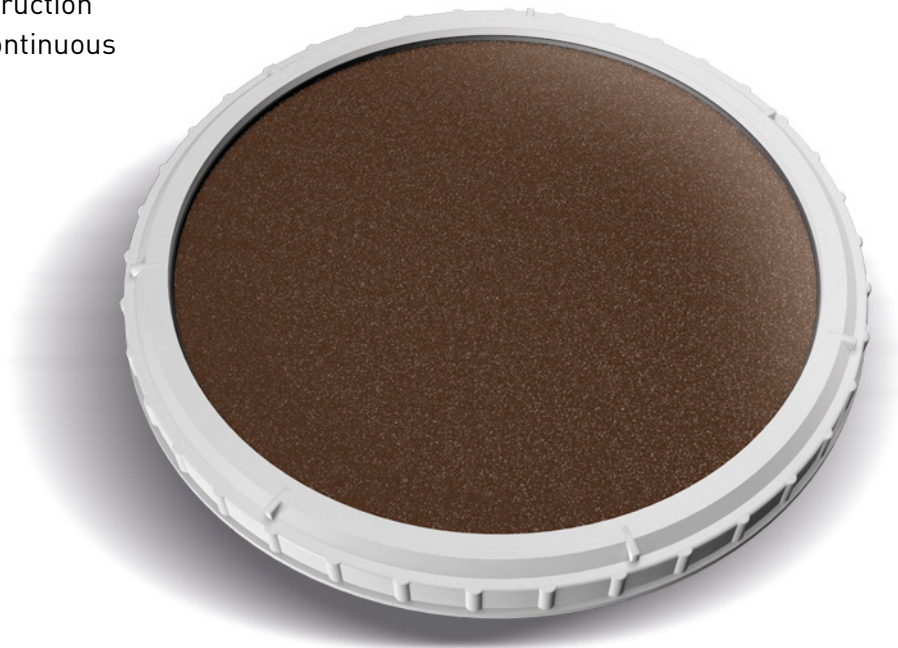
## **Ecoquarz®**

Components for water and wastewater treatment



## PRODUCT PROPERTIES

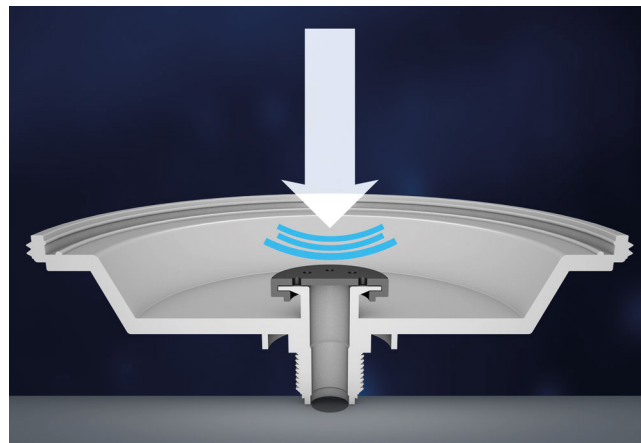
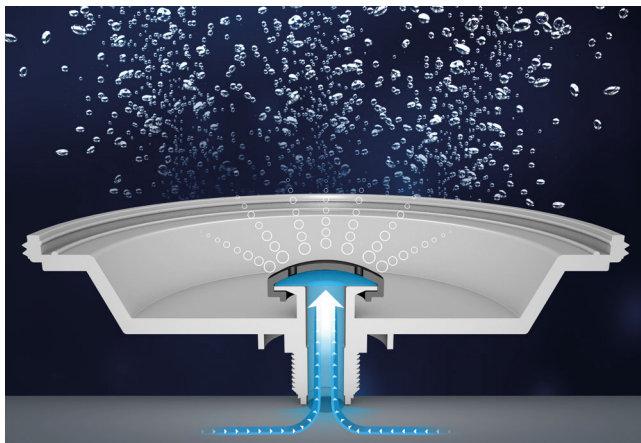
- low installation costs
- high operational safety
- powerful
- low maintenance
- low-cost construction
- application: continuous



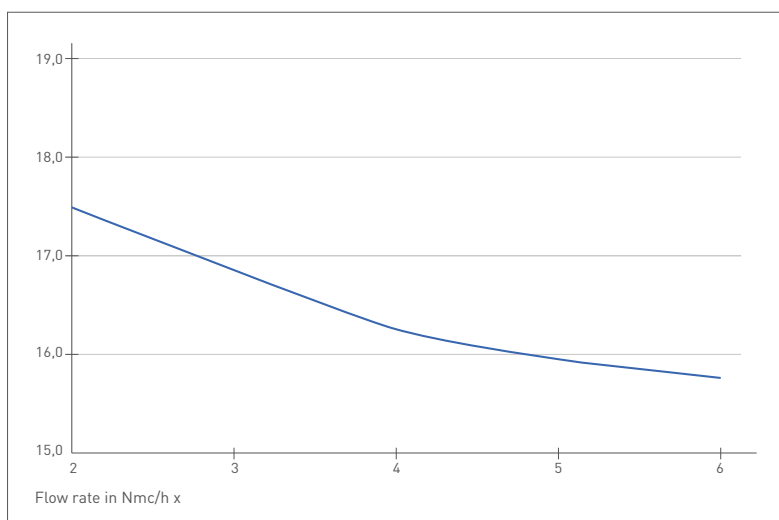
## ECOQUARZ® DISC DIFFUSER, OPERATING RANGE

Model	Pore size µm	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
EC0250-30	30	1,5-5	3	1" M	80°C/176°F	continuous	Aeration tank
EC0250-50	60	3-10	6	1" M	80°C/176°F	continuous	Aeration tank
EC0250-100	100	5-12	8	1" M	80°C/176°F	continuous	Aeration tank
EC0250-250	250	7-15	11	1" M	80°C/176°F	continuous	Grit chamber tank

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



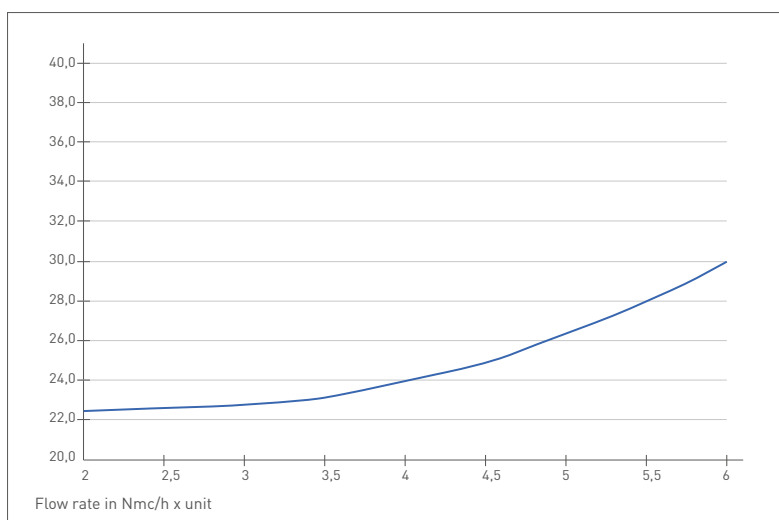
Oscillating non return valve, makes sure that the non return valve can not be blocked from any dirty.



## ECOQUARZ® DISC DIFFUSER FINE BUBBLE 60 MICRO 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



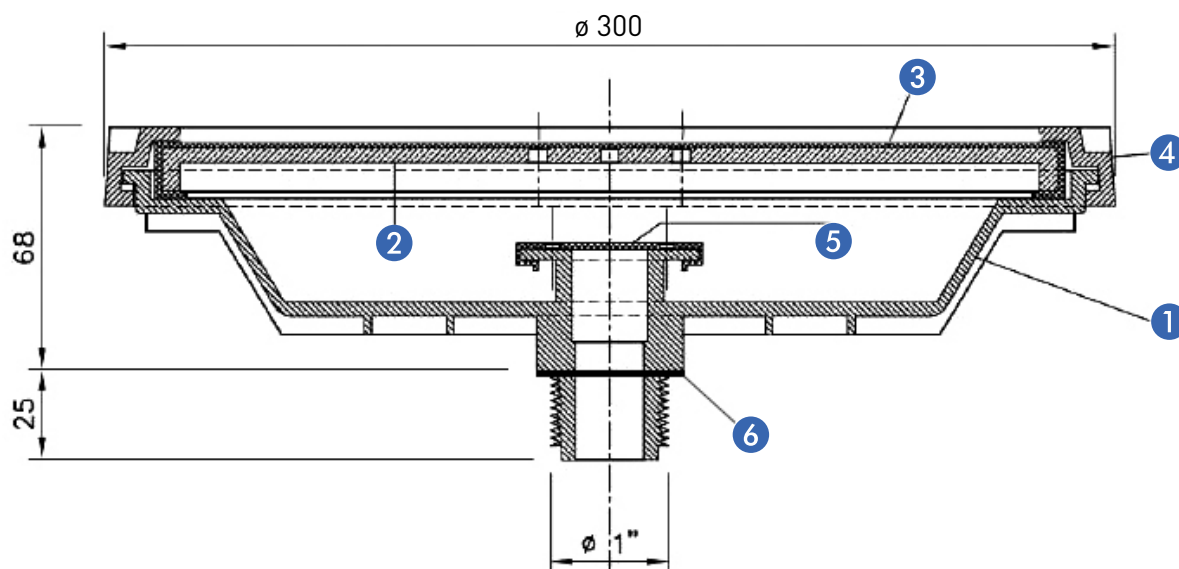
## ECOQUARZ® DISC DIFFUSER FINE BUBBLE 60 MICRO HEAD LOSS

— 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



## MATERIAL OF THE SINGLE COMPONENTS

Number	Description	Material
1	Diffuser body	PP GF
2	Porous disc	Quartz
3	Gasket	EPDM
4	Retaining ring	PP GF
5	Non-return valve	EPDM
6	Gasket	EPDM

## DIMENSIONS

Type	Height [mm]	Diameter total [mm]	Diameter effective [mm]	Over all height above distributor [mm]	Perforated area [m²]	Total weight [kg]
Ecoquarz 30	93	300	240	68	0,05	1,5
Ecoquarz 60	93	300	240	68	0,05	1,5
Ecoquarz 100	93	300	240	68	0,05	1,5
Ecoquarz 250	93	300	240	68	0,05	1,5

All data are approximate data!

## AIR FLOW

The **optimal air flow area** of Ecoquarz<sup>©</sup> disc diffusers ranges from **1,5 to 15 Nm<sup>3</sup>/(h x unit)**, depending on the pore size.

Should this range fall below, we recommend a flushing of the diffusers with an air flow of **30 Nm<sup>3</sup>/(h x unit)**.

## STORAGE

The diffusers must be stored in a dry room with their original packing and they have to be protected from damages of their proximity (heat, painting). The storage of the diffusers and accessories should not exceed 1 year.

## MAINTENANCE

Ecoquarz diffusers require only low maintenance. A main condition for the function of the diffusers is that the air is able to outgas from their porous structure. Therefore, the structure should be free of fouling because it influences or prevents the out gassing. Carbonate, iron salt (coagulant), microbial film and polymers are substances in the waste water which can cause this fouling.

For undisturbed operation, we recommend to dose coagulant and additives sparingly according to the engineering rules.

## LIFETIME OF THE POROUS QUARTZ DISC

Precondition for a long lifetime is that the diffusers are used in municipal wastewater. Existing indirect dischargers of industry must correspond to ATV A 115 in its current version. Should industry dischargers exceed a rate of 20 % it is advisable to contact the manufacturer. Furthermore, assembly and operation instructions must be adhered to.

## SERVICE

We recommend regular inspection of the diffuser system. The mentioned maintenance possibilities should be applied and enable a long lifetime.

If required, the diffusers can be send to the manufacturer to receive a status analysis (costs depend on time and effort). They have to be rinsed but not cleaned by a high-pressure cleaner.







## CONTACT

**Geotek-Tierre S.R.L.**

Phone +39 035 810296

TeleFax + 39 035 810296

email: [info@geotierre.com](mailto:info@geotierre.com)

Address: Via Prato Pieve 54, 24060 Casazza (BG)

ITALY

Certified ISO9001:2015

**Geotek-Tierre SRL**  
Via Prato Pieve 54  
24060 Casazza (BG)  
Italy



Azienda con sistema  
di gestione qualità  
certificato secondo la  
Norma ISO9001:2015

[geotierre.com](http://geotierre.com)