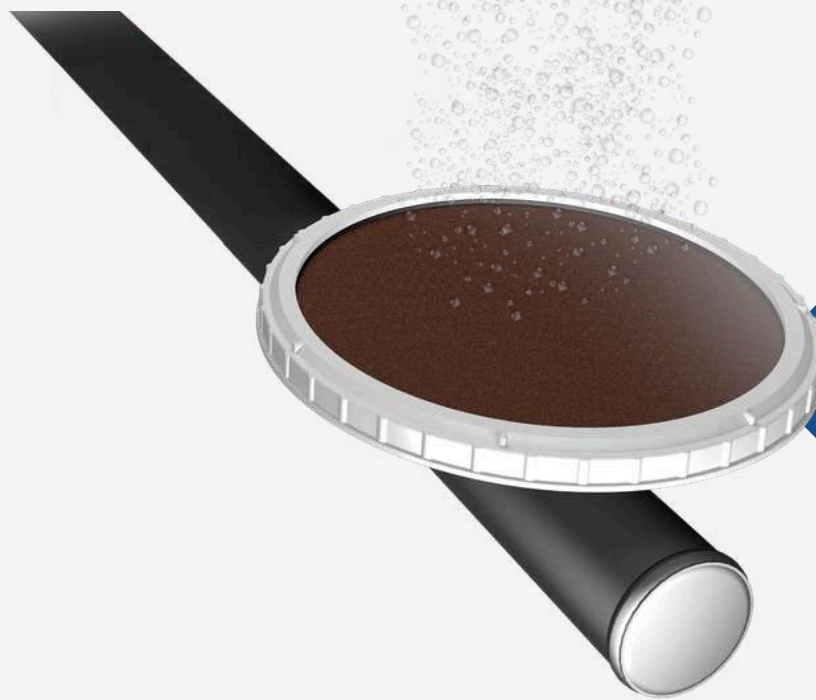


## High-Efficiency Aeration for Wastewater treatment plants



**OXYGEN TRANSFER**  
High Performance



**LOW HEAD LOSS**  
Optimized Design



**LONG-LASTING**  
High-quality raw materials



**LOW INSTALLATION COST**  
Quick Installation

  
**MADE IN ITALY**  
Since 1983



## FEATURES

Ceramic disc diffusers for wastewater aeration are also available in tubular form and are sintered with epoxy resin.

The materials used, such as quartz sand bonded with oven-dried thermosetting resin, are specially designed to reduce the risk of blockages even under harsh operating conditions.

## PRODUCT PROPERTIES

- low installation costs
- high operational safety
- low maintenance
- low-cost construction for continuous operation
- powerful

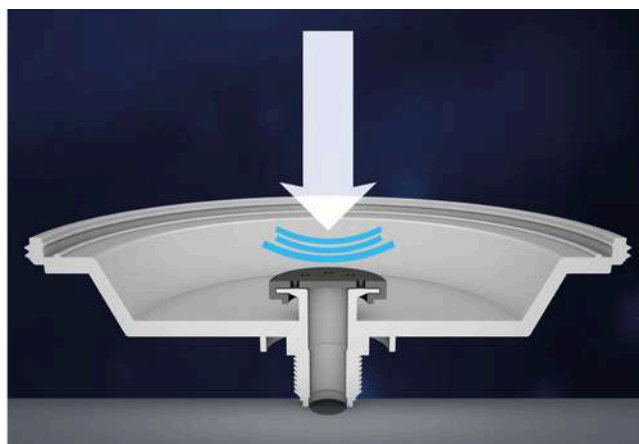


## ECOQUARZ® DISC DIFFUSER SERIES, OPERATING RANGE

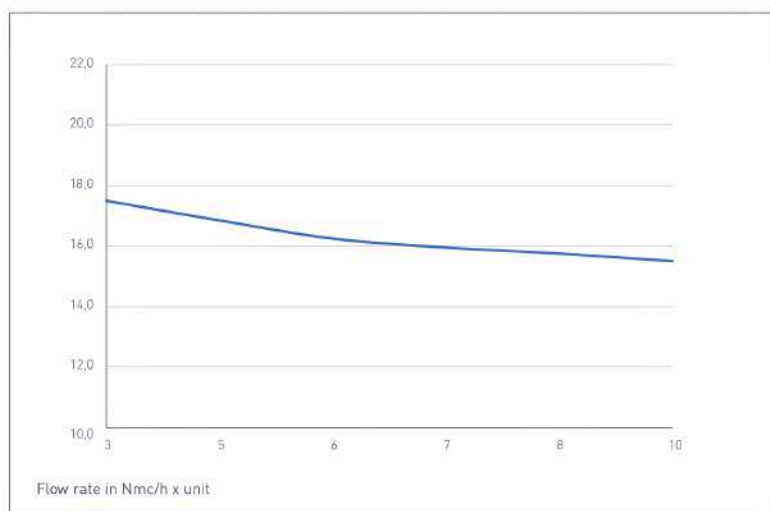
Model	Pore size µm	Range flow rate min-max	Optimal flow rate	Standard connection	Max temperature	Peak Air Flow	Application
<b>ECO250-50</b>	60	3-10 (Nm <sup>3</sup> /h) 1,9-6,2 (scfm)	6 (Nm <sup>3</sup> /h) 3,7 (scfm)	1" M	80°C 176°F	13 (Nm <sup>3</sup> /h) 8 (scfm)	Aeration tank
<b>ECO250-100</b>	100	5-12 (Nm <sup>3</sup> /h) 3,1-7,5 (scfm)	8 (Nm <sup>3</sup> /h) 5 (scfm)	1" M	80°C 176°F	15 (Nm <sup>3</sup> /h) 9 (scfm)	Aeration tank
<b>ECO250-250</b>	250	7-15 (Nm <sup>3</sup> /h) 4,4-9,3 (scfm)	11 (Nm <sup>3</sup> /h) 6,8 (scfm)	1" M	80°C 176°F	19 (Nm <sup>3</sup> /h) 12 (scfm)	Grit chamber tank

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

# Ecoquarz® Disc Diffuser



Oscillating non return valve, ensures that the non return valve is not blocked with any sludge.

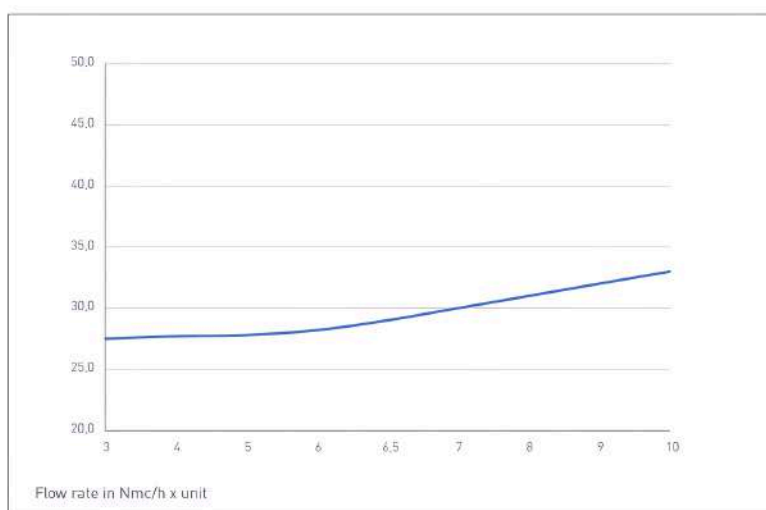


## ECOQUARZ® DISC DIFFUSER FINE BUBBLE 60 MICRO OXYGEN TRANSFER EFFICIENCY

— Oxygen transfer rate O2 in gr / Nmc \* m submersion

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

Example: Diffuser works with 6 Nmc/h and waterlevel above diffuser surface is 5 meter, then consider:  
 $16.3\text{gr/Nmc} \times \text{m} * 6\text{Nmc/h} * 5\text{m} = 489\text{gr/h}$



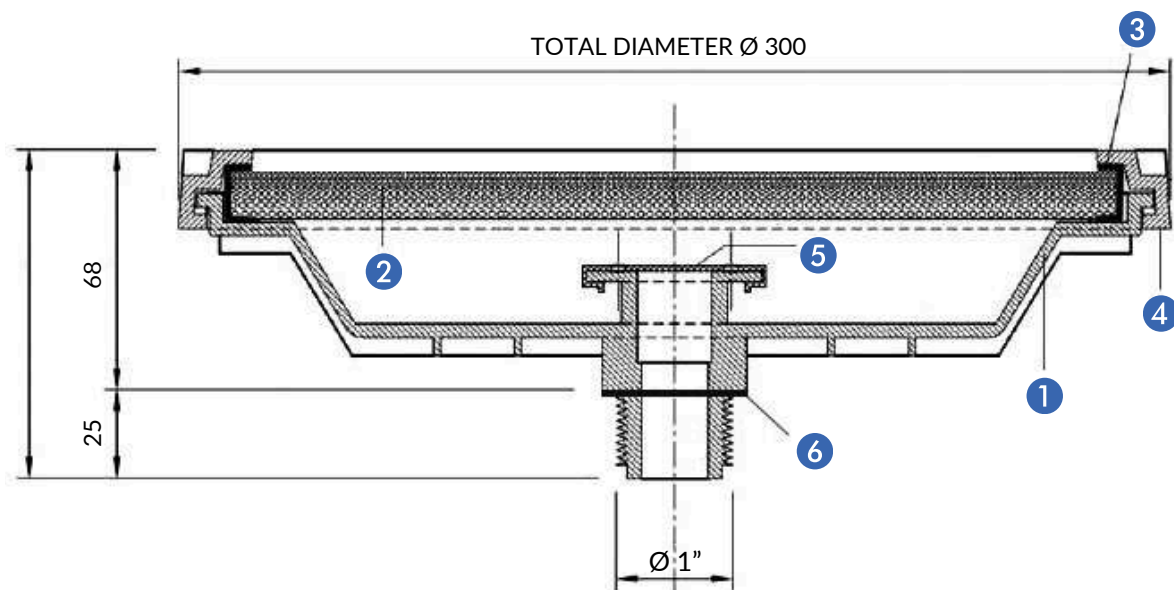
## ECOQUARZ® DISC DIFFUSER FINE BUBBLE 60 MICRO HEAD LOSS

— Head loss in mbar (incl. check valve)

Data are referred to 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!

## INSTALLATION DRAWING



## MATERIAL OF THE SINGLE COMPONENTS

Number	Description	Material
1	Diffuser body	PP GF
2	Porous Disc	Quartz
3	H-Gasket	EPDM
4	Threaded retaining ring	PP GF
5	Not return valve	EPDM
6	Gasket	EPDM

## DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
<b>Ecoquartz Disc</b>	93 mm 3,6 in	300 mm 11,8 in	240 mm 9,5 in	68 mm 2,7 in	0,05 m <sup>2</sup> 0,54 ft <sup>2</sup>	1,5 kg 2,98 lb

All data are approximate!

## AIR FLOW

The **optimal air flow area** of Ecoquartz disc diffusers ranges from **1,5 to 15 Nm<sup>3</sup> /(h x unit) (1,9 to 9,3 scfm)**, 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

Ecoquartz 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.

### LIFESPAN OF THE POROUS QUARTZ DISC

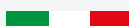
Preconditioned for a long lifespan. The aerators are suitable for communal waste water treatment. Existing indirect dischargers of industry must correspond to ATV A 115 in its current version. Should industry dischargers exceed a rate of 20% it is advisable to contact the manufacturer. Furthermore, assembly and operation instructions must be adhered to.

### SERVICE

We recommend regular inspection of the diffuser system. The mentioned maintenance possibilities should be applied and enables a long lifetime. If required, the diffusers can be sent to the manufacturer to receive a status analysis (cost depend on time and effort). They have to be rinsed but non cleaned by high-pressure cleaner.



Since 1983 your partner for wastewater treatment products.  
Proudly Made in Italy.



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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Italia

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di gestione qualità  
certificato secondo la  
Norma ISO9001:2015

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