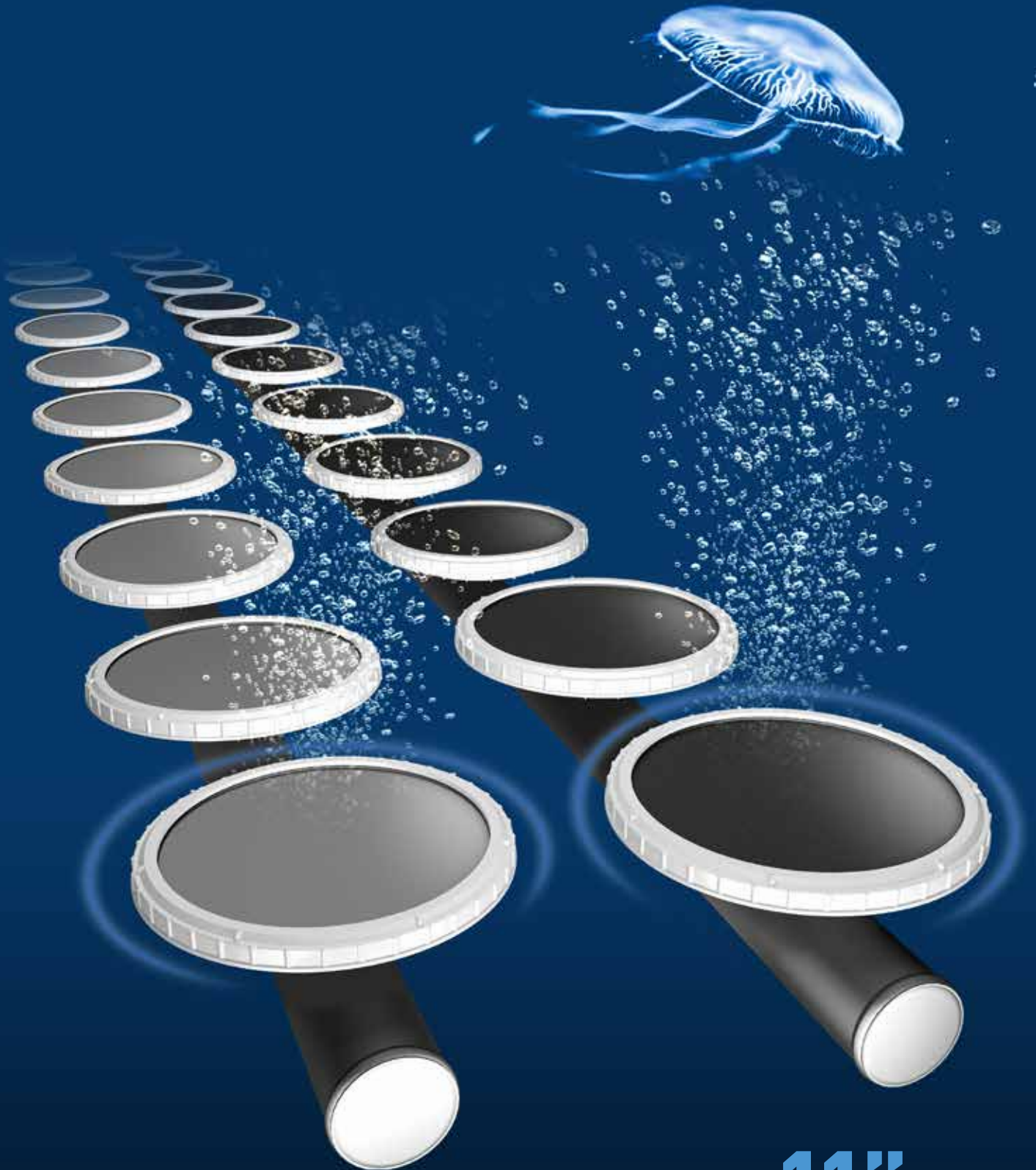


# DISC DIFFUSER **Ecoflex®** Series 11” Silicone/EPDM

Components for water and wastewater treatment



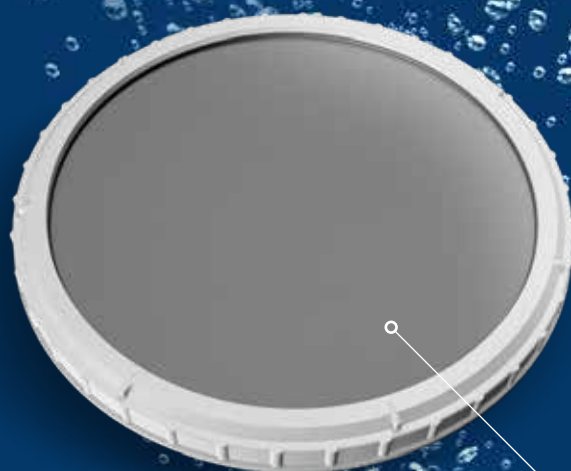
**11”**

# Ecoflex®

# 11"

## PRODUCT PROPERTIES

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



SILICONE



EPDM



### ECOFLEX® SILICONE DISC DIFFUSER SERIES 11", OPERATING RANGE

Model	Pore size $\mu\text{m}$	Range flow rate (Nm <sup>3</sup> /h) min-max	Optimal flow rate (Nm <sup>3</sup> /h)	Standard connection	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
EC050S	60	2-8	5	1" M	230°C/446°F	continuous intermittent	Aeration tank
EC0100S	100	3-10	6	1" M	230°C/446°F	continuous intermittent	Aeration tank, anaerobic sludge digestion
EC0150S	150	3-14	8	1" M	230°C/446°F	continuous intermittent	Aeration tank, anaerobic sludge digestion

Membrane in NBR, PTFE coated, Plasma treated, available on request

### New model EC050S HE model high efficiency with more than 2000 pores on the surface

EC050S HE	60	2-9	5	1" M	230°C/446°F	continuous intermittent	Aeration tank
-----------	----	-----	---	------	-------------	-------------------------	---------------

Connection 3/4" F, 3/4" M, 1" F or NPT thread, available on request



### ECOFLEX® EPDM DISC DIFFUSER SERIES 11", OPERATING RANGE

Model	Pore size $\mu\text{m}$	Range flow rate (Nm <sup>3</sup> /h) min-max	Optimal flow rate (Nm <sup>3</sup> /h)	Standard connection	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
EC050D	60	2-8	5	1" M	130°C/266°F	continuous intermittent	Aeration tank
EC0100D	100	3-10	6	1" M	130°C/266°F	continuous intermittent	Aeration tank, anaerobic sludge digestion
EC0150D	150	3-14	8	1" M	130°C/266°F	continuous intermittent	Aeration tank, anaerobic sludge digestion

Membrane in NBR, PTFE. Coated, Plasma treated, are available on request

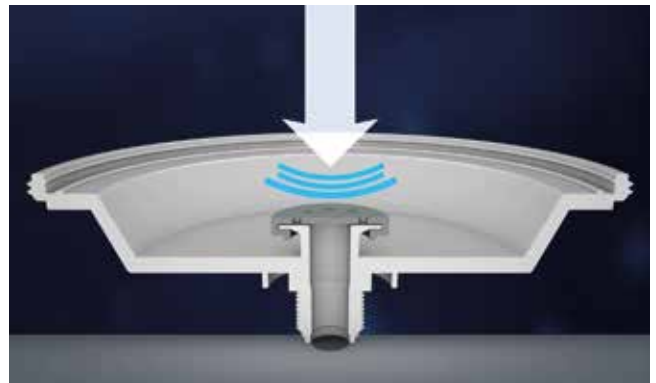
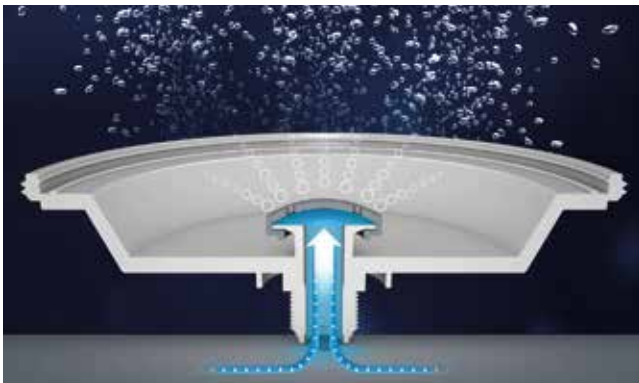
### New model EC050D HE model high efficiency with more than 2000 pores on the surface

EC050D HE	60	2-9	5	1" M	130°C/266°F	continuous intermittent	Aeration tank
-----------	----	-----	---	------	-------------	-------------------------	---------------

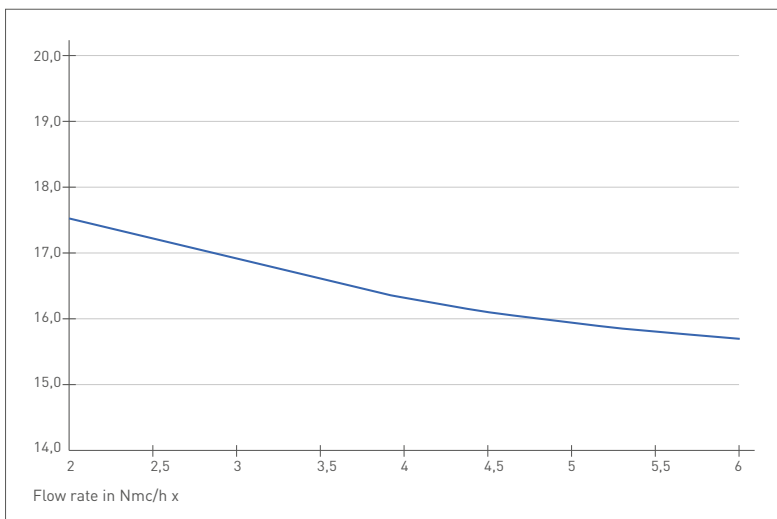
Connection 3/4" F, 3/4" M, 1" F or NPT thread, available on request

# Ecoflex® Silicone/EPDM 11"

## SILICONE $\mu$ m



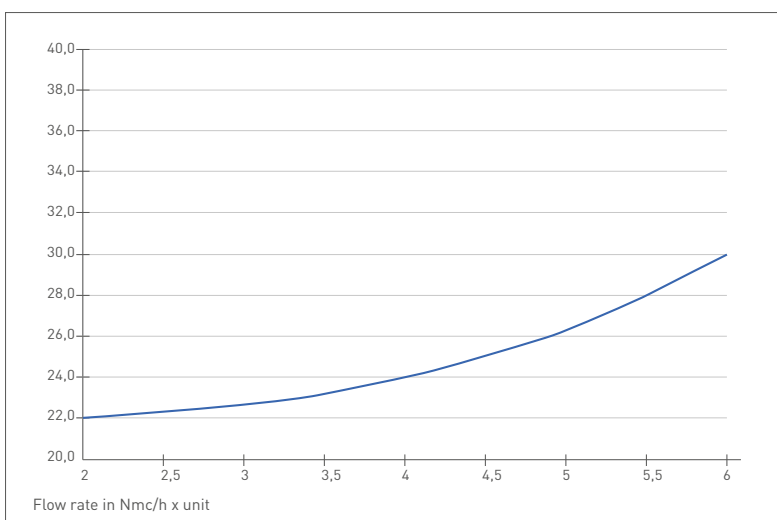
Oscillating non return valve ensures that the non return valve is not blocked with any dirt.



### ECOFLEX® EC050S DISC DIFFUSER 60 MICRO OXYGEN TRANSFER EFFICIENCY

— Oxygen transfer rate O<sub>2</sub> in gr / Nm<sup>3</sup> \* m submersion

Data refers to clean tap water normal standard condition at 20°C, 101,3kPa



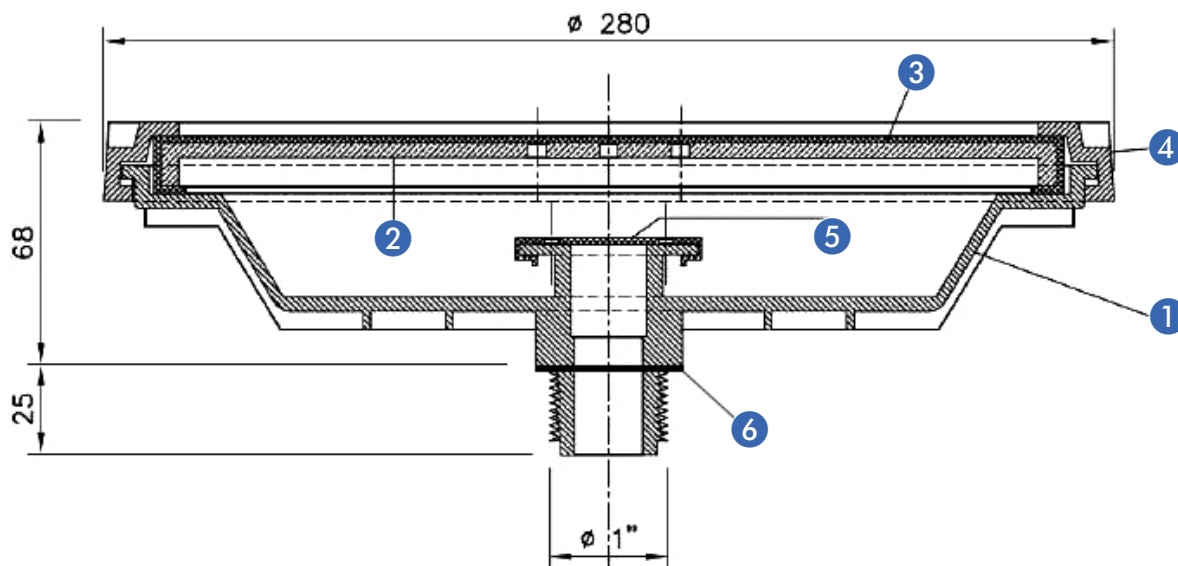
### ECOFLEX® EC050S DISC DIFFUSER 60 MICRO HEAD LOSS

— Head loss in mbar

Data refers to clean tap water normal 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	Polypropilene, glass fiber reinforced
2	Innerplate	Polypropilene, glass fiber reinforced
3	Diffuser membrane	SILICONE / EPDM Brillant! Surface with enhanced non-stick characteristic to reduce encrustations
4	Retaining ring	Polypropilene, glass fiber reinforced
5	Non return valve	Silicone
6	Gasket	EPDM

## DIMENSION

Type	Height (mm)	Diameter total (mm)	Diameter effective (mm)	Over all height above air distributor (mm)	Perforated area (m <sup>2</sup> )	Total weight (kg)
Ecoflex®	93	280	240	68	0,05	1,1

All data are approximate data!

# Ecoflex® Silicone/EPDM 11”

---

## AIR FLOW

The **air flow area** of Ecoflex® Silicone disc diffusers ranges **from 2 to 14 Nm<sup>3</sup>/(h x unit)**, depending on the perforation.

The following recommendations for the storage, cleaning, and maintenance of elastomers are based on the international standard DIN 7716.

## STORAGE

The diffusers and all accessories must be packed in a condition free from tension, compression and deformation. They must be kept in the original packaging until installation and do not place heavy weights on the packed products. Store in a dry, covered and aerated

room free from sources of heat, humidity and dust. The storage of rubber components up to the installation should not exceed 1 year. Should they be transported in open receptacles like lattice boxes, the packed products have to be covered for protection against UV radiation.

## MAINTENANCE

Diffusers can only be checked while the activated sludge tank is out of work and empty. Therefore conventional cleaning must be done during the process. Formic acid is used very successfully against scale. To keep the pores open, the formic

acid is sprayed into the compressed air for a short time. Also a regular use with maximum air flow for a short time helps keeping the diffusers in good condition for a long time. (Refer to maintenance manual).

## MEMBRANE LIFETIME

More than 5 years in municipal waste water treatment plants, depending on wastewater compound and operating method.

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







■ ■ **Geotierre** was founded in Bergamo (Italy) in 2007 to produce and develop hi-tech plastic components. With the acquisition of Tierre Srl in 2013, the company entered the wastewater treatment market with the development and manufacturing of micro bubble disc and tube diffusers and has since become a leading manufacturer of wastewater treatment products for our prestigious clients. ■ ■

## 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



**ISO**  
9001:2015

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