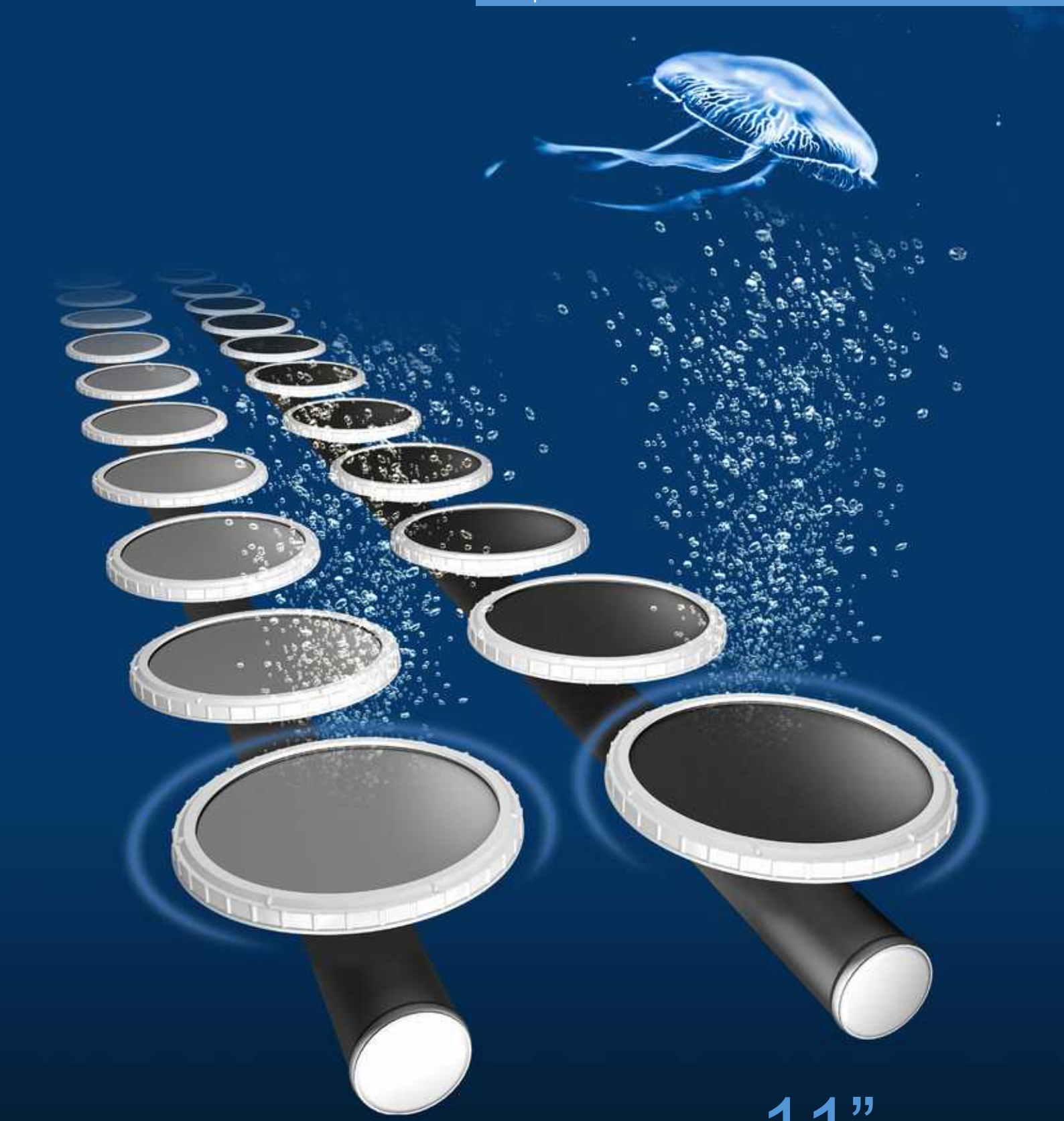
GeoTierre

Protecting the source of life

DISC DIFFUSER
Ecoflex® Series 11”
Silicone/EPDM

Components for water and wastewater treatment

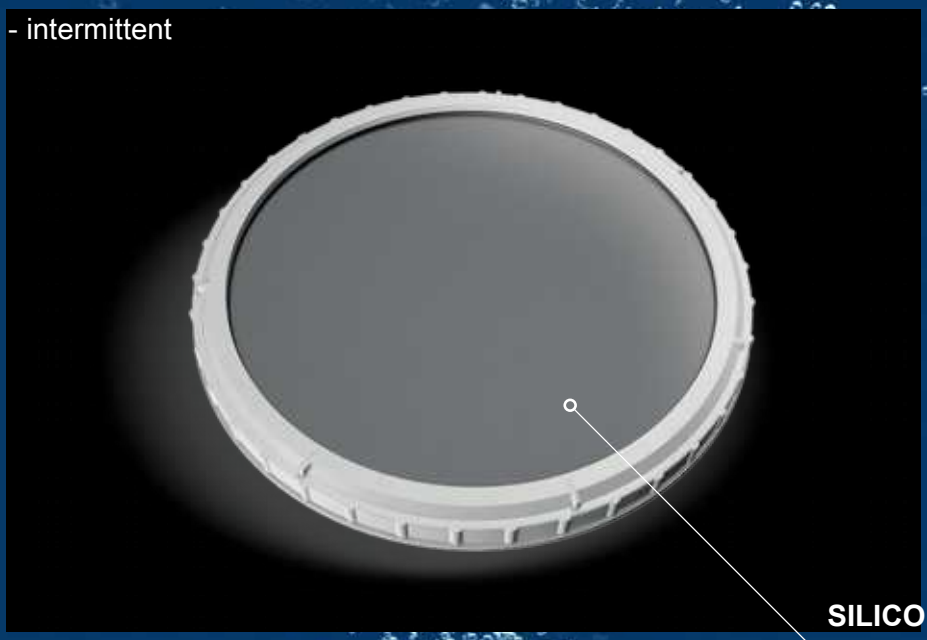


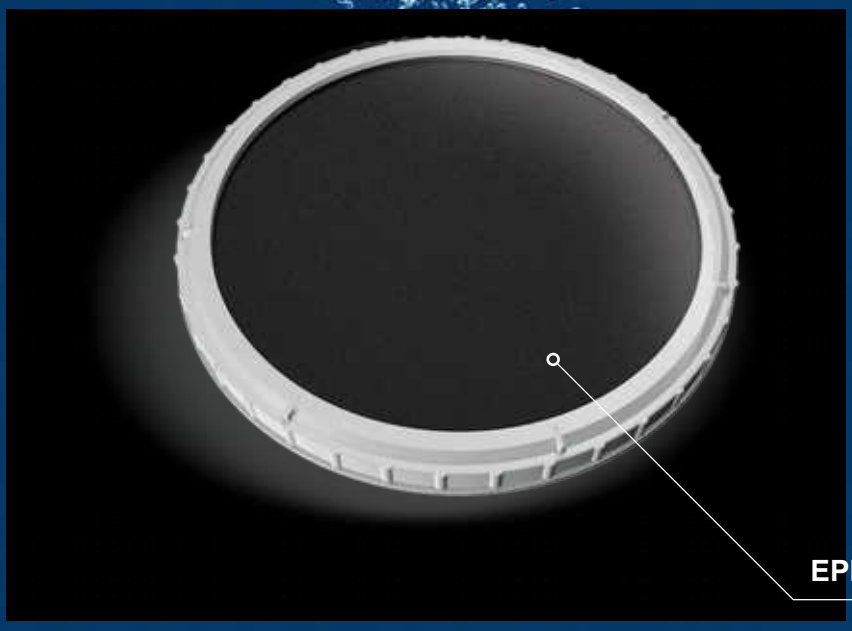
11”

Ecoflex®
11”

PRODUCT PROPERTIES

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





ECOFLEX© SILICONE DISC DIFFUSER SERIES 11",

OPERATING RANGE

Model	Pore size µm	Range flow rate (Nm^3/h) min-max	Optimal flow rate (Nm^3/h)	Standard connection	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
ECO50S	60	2-6	4	1'' M	230°C/446°F	continuous intermittent	Aeration tank
ECO100S	100	3-10	6	1'' M	230°C/446°F	continuous intermittent	Aeration tank, anaerobic sludge digestion
ECO150S	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 ECO50S HE model high efficiency with more than 2000 pores on the surface

ECO50S HE	60	2-8	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 µm	Range flow rate (Nm^3/h) min-max	Optimal flow rate (Nm^3/h)	Standard connection	Max temperature Celsius/ Fahrenheit	Operating procedure	Application
ECO50D	60	2-6	4	1'' M	130°C/266°F	continuous intermittent	Aeration tank
ECO100D	100	3-10	6	1'' M	130°C/266°F	continuous intermittent	Aeration tank, anaerobic sludge digestion
ECO150D	150	3-14	8	1'' M	130°C/266°F	continuous intermittent	Aeration tank, anaerobic sludge digestion

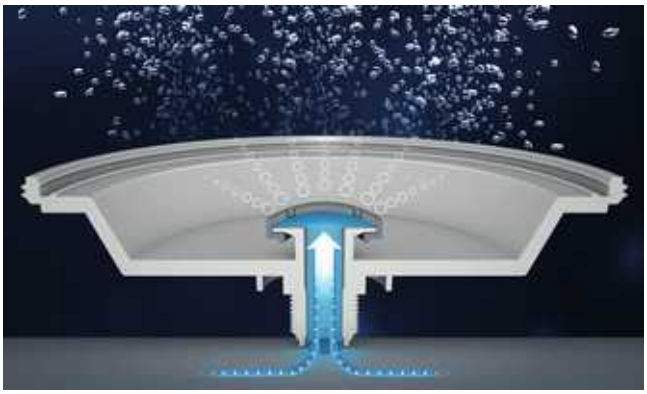
Membrane in NBR, PTFE. Coated, Plasma treated, are available on request

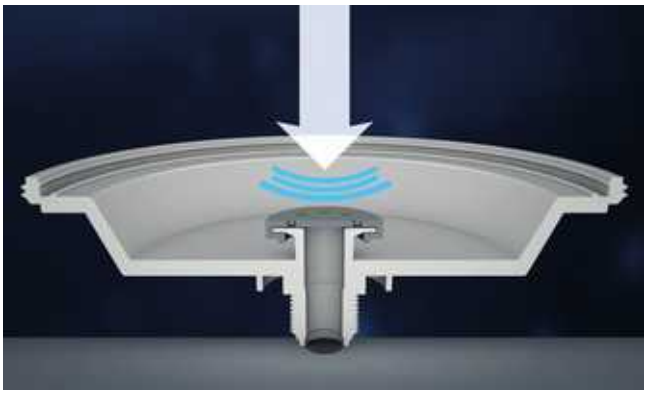
New model ECO50D HE model high efficiency with more than 2000 pores on the surface

ECO50D HE	60	2-8	5	1'' M	130°C/266°F	continuous intermittent	Aeration tank

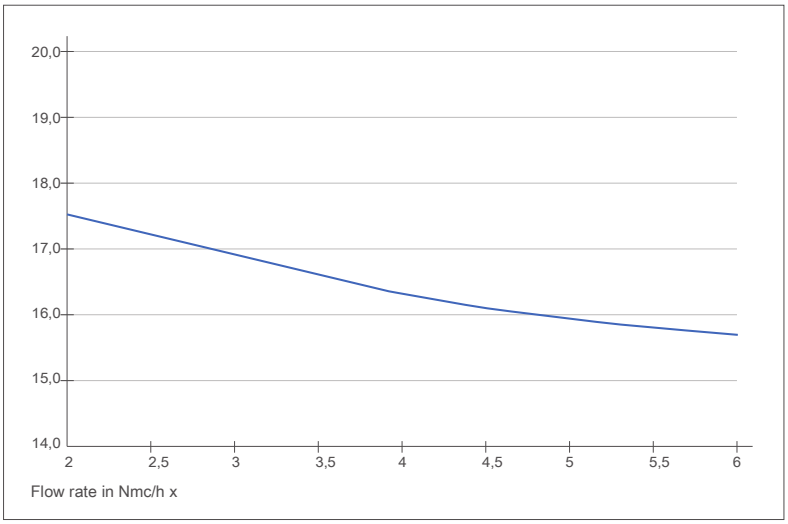
Connection 3/4"F, 3/4" M, 1"F or NPT thread, available on request

Ecoflex® Silicone/EPDM 11”





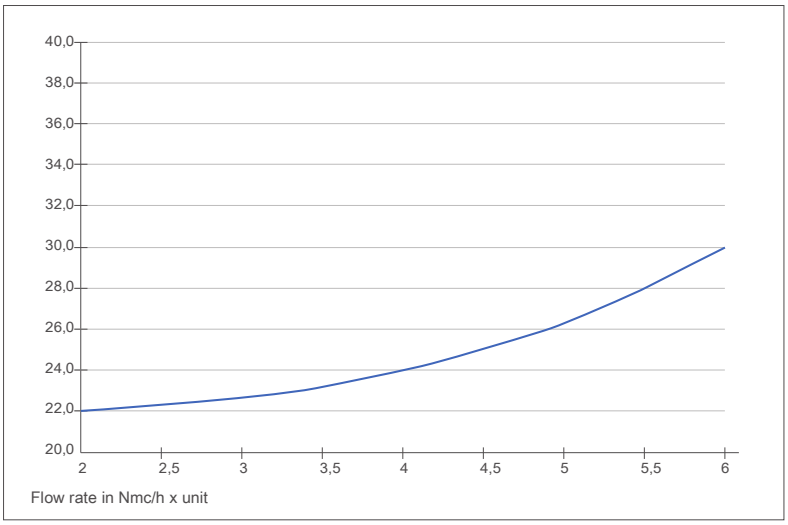
Oscillating non return valve ensures that the non return valve is not blocked with any dirt.



ECOFLEX®
ECO5OS DISC DIFFUSER 60 MICRO
OXYGEN TRANSFER EFFICIENCY

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

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



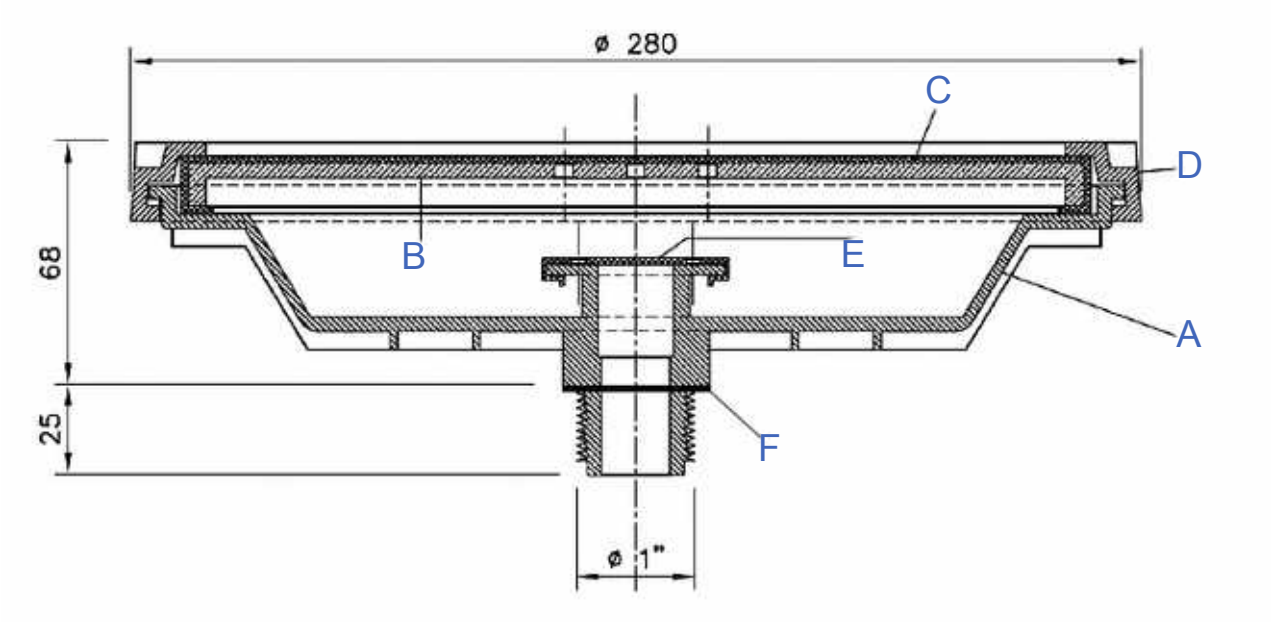
ECOFLEX®
ECO50S DISC DIFFUSER 60 MICRO
HEAD LOSS

— Head loss in mbar

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

Comparable values can only be 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



MATERIAL OF THE SINGLE COMPONENTS

Number	Description	Material
A	Diffuser body	Polypropilene, glass fiber reinforced
B	Innerplate	Polypropilene, glass fiber reinforced
C	Diffuser membrane	SILICONE / EPDM Brillant! Surface with enhanced non-stick characteristic to reduce encrustations
E	Retaining ring	Polypropilene, glass fiber reinforced
F	Non return valve	Silicone
G	Gasket	EPDM

DIMENSION

Type	Height (mm)	Diameter total (mm)	Diameter effective (mm)	Over all height above air distributer (mm)	Perforated area (m^2)	Total weight (kg)
Ecoflex©	93	280	240	68	0,05	1,1

All data are approximate data!

AIR FLOW

The air flow area of Ecoflex® Silicone disc diffusers ranges from 2 to 14 Nm³/(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 trasported 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.

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

Geoteck-Tierre S.R.L.
Phone +39 035 810296
TeleFax + 39 035 810296
email: info@geotierre.com
Address: Via Prato Pieve 54, 24060 Casazza (BG)
ITALY

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