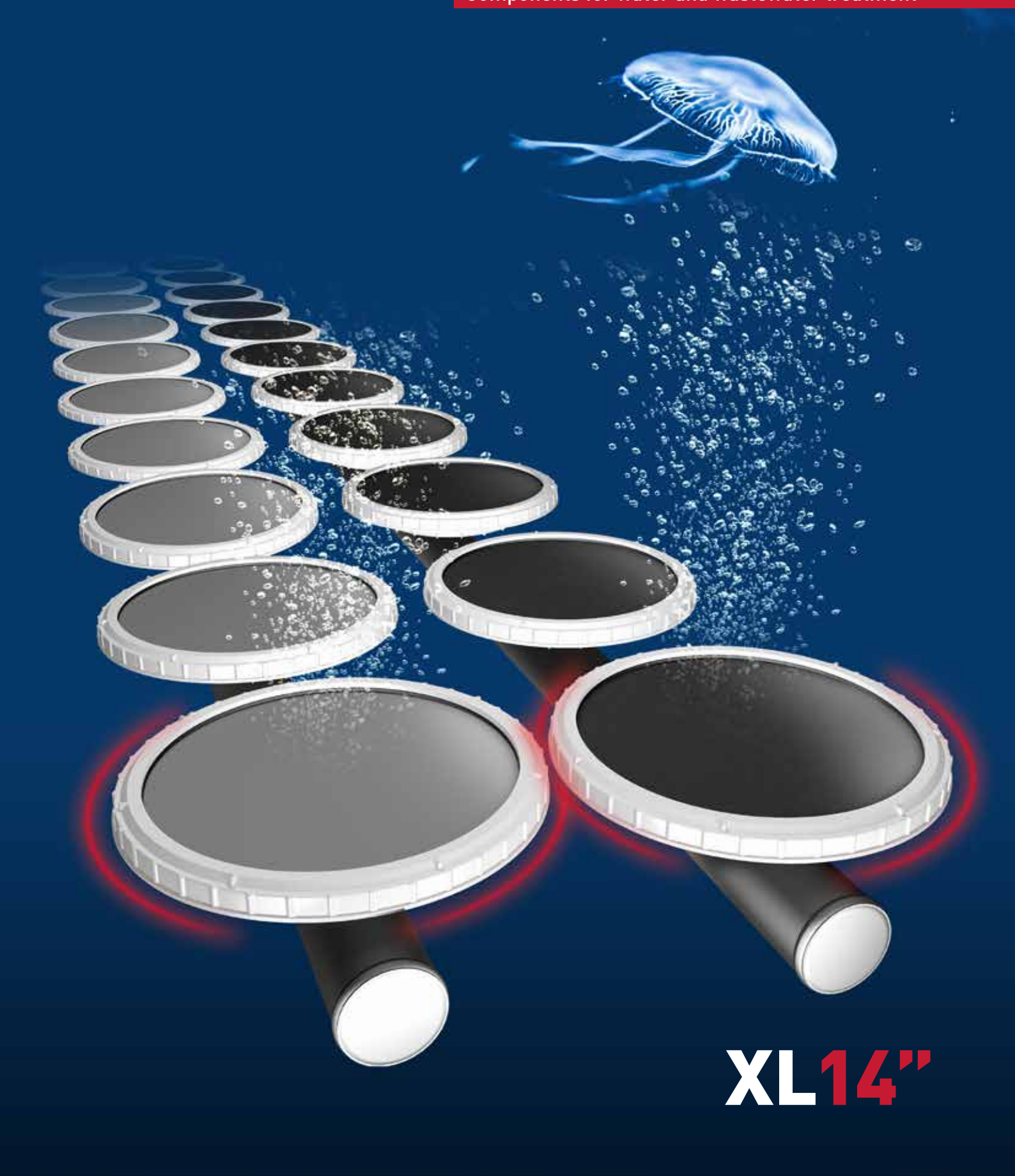
GeoTierre

Protecting the source of life

DISC DIFFUSER
Ecoflex® XL Series 14”
Silicone/EPDM

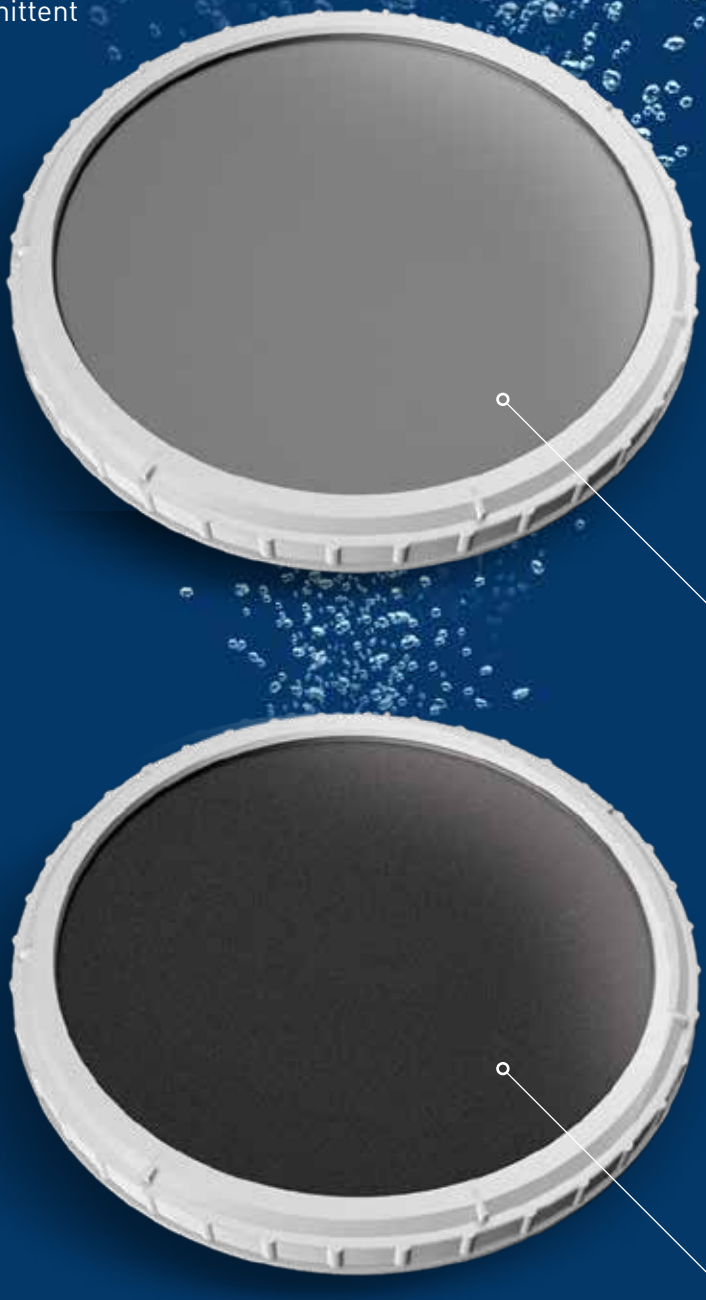
Components for water and wastewater treatment



Ecoflex®
XL 14"

PRODUCT PROPERTIES

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



ECOFLEX© XL EXTRA LARGE DISC DIFFUSER SERIES 14" SILICONE
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
ECOXL50S	60	3-15	9	1" M	230°C / 446° F	continous intermittent	Aeration tank
ECOXL100S	100	4-18	10	1" M	230°C / 446° F	continous intermittent	Aeration tank, anaerobic sludge digestion
ECOXL150S	150	4,5-22	12	1" M	230°C / 446° F	continous intermittent	Aeration tank, anaerobic sludge digestion

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

DIMENSION

Type	Total height (mm)	Diameter total (mm)	Diameter effective (mm)	Over all height above air distributer (mm)	Perforated area (m^2)	Total weight (kg)
Ecoflex© XL	93	355	300	68	0,07	1,6

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

ECOFLEX© XL EXTRA LARGE DISC DIFFUSER SERIES 14" EPDM
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
ECOXL50D	60	3-15	9	1" M	130°C / 266° F	continous intermittent	Aeration tank
ECOXL100D	100	4-18	10	1" M	130°C / 266° F	continous intermittent	Aeration tank, anaerobic sludge digestion
ECOXL150D	150	4,5-22	12	1" M	130°C / 266° F	continous intermittent	Aeration tank, anaerobic sludge digestion

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

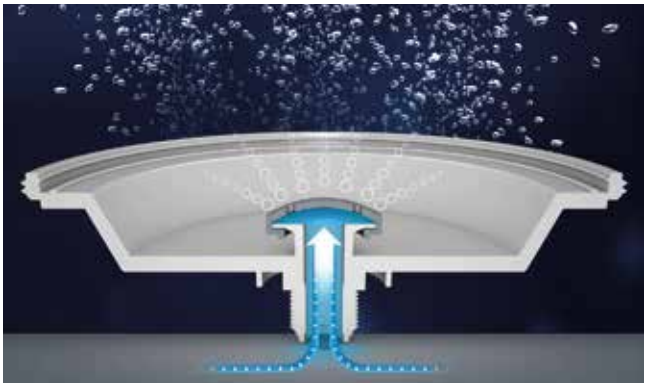
DIMENSION

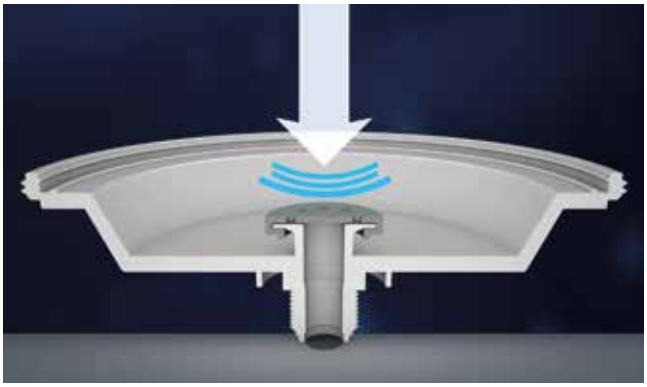
Type	Total height (mm)	Diameter total (mm)	Diameter effective (mm)	Over all height above air distributer (mm)	Perforated area (m^2)	Total weight (kg)
Ecoflex© XL	93	355	300	68	0,075	1,6

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

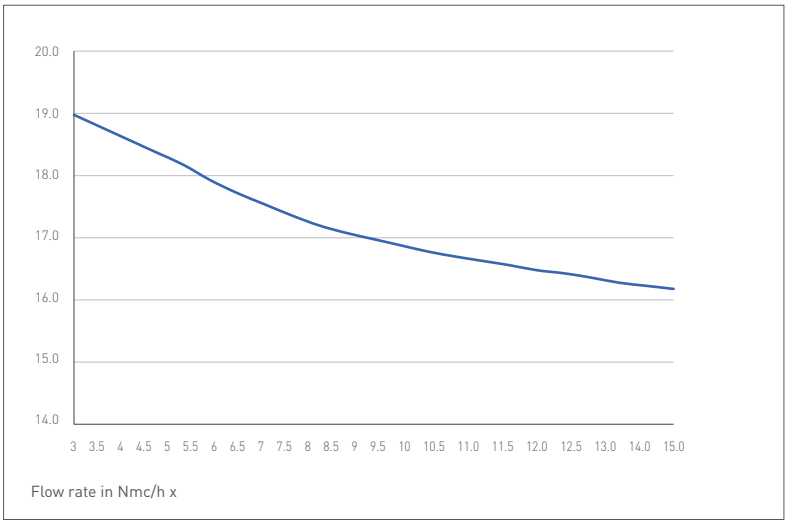
Ecoflex® Silicone/EPDM XL14”

SILICONEμm





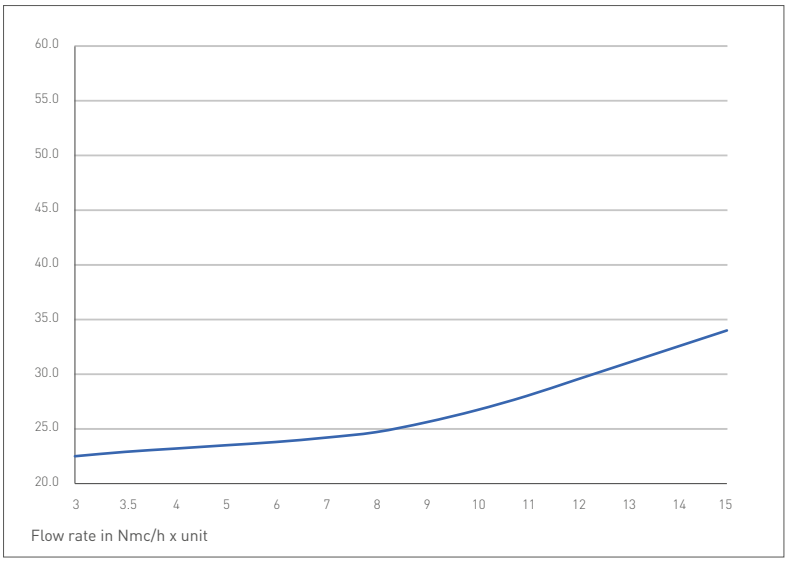
Oscillating non return valve ensures that the non return valve is not blocked with any dirt.



ECOFLEX©
ECO50S/D-XL DISC DIFFUSER
60 MICRO OXYGEN TRANSFER EFFICIENCY

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

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



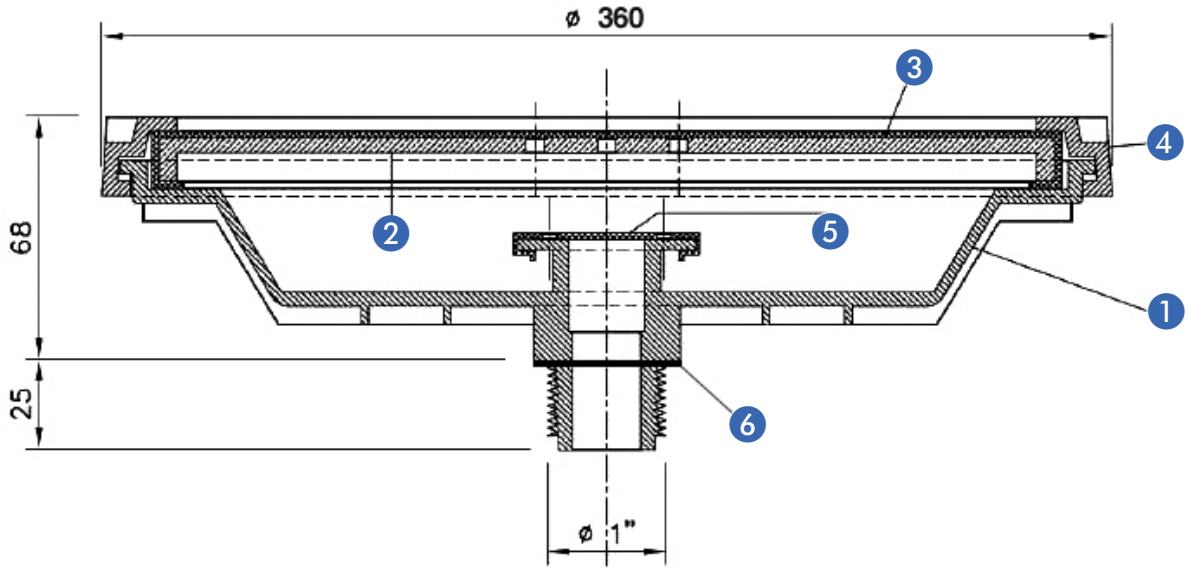
ECOFLEX©
ECOXL50S/D DISC DIFFUSER
60 MICRO HEAD LOSS

— Head loss in mbar

Data are referd 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 data are based on clean water 20°C 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 / EPDM
6	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© XL	93	360	310	68	0,075	1,6

All data are approximate data!

AIR FLOW

The **air flow area** of Ecoflex® Silicone disc diffusers ranges **from 3 to 22 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

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