



**KTN**  
**Kunststoff-Technik Neumarkt**  
GmbH

**protecting  
the source of life**

**Components for  
water- and wastewater treatment**

**newair<sup>®</sup>**

**Disc diffuser Ecoflex EPDM**

[www.kt-n.com](http://www.kt-n.com)

## Disc diffuser Ecoflex EPDM

1

### Product properties

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



### Dimensions

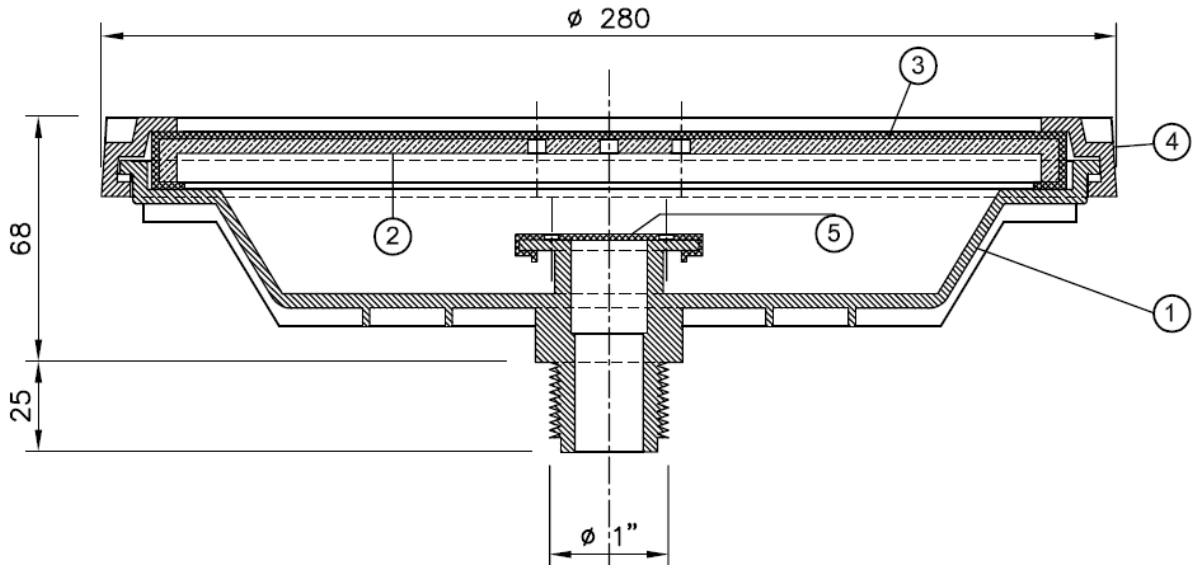
Type	Height [mm]	Diameter total [mm]	Diameter effective [mm]	Over all height above distributor [mm]	Perforated Area [m²]	Total weight [kg]
Ecoflex - 50 D	93	280	240	68	0,05	0,8
Ecoflex - 100 D	93	280	240	68	0,05	0,8
Ecoflex - 150 D	93	280	240	68	0,05	0,8

### Adapter to the air diffuser

Saddle clamps with internal thread	Air diffuser DN	Material	Colour
1" internal thread	63	PVC-U / PP	black
1" internal thread	75	PVC-U / PP	black
1" internal thread	90	PVC-U / PP	black
1" internal thread	110	PVC-U / PP	black

## Disc diffuser Ecoflex EPDM

### Installation drawing



### Material of the single components

Number	Description	Material
1	Diffuser body	PP GF
2	Supporting disc	PP GF
3	Diffuser membrane	EPDM
4	Retaining ring	PP GF
5	Return valve	EPDM

### Air flow

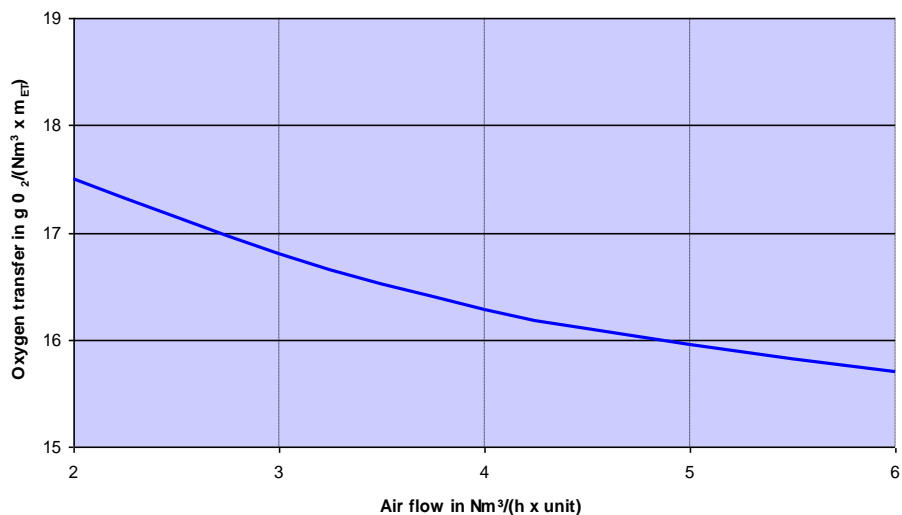
Pore size [µm]	Air flow area [Nm³/(h x unit)]	Optimal air flow [Nm³/(h x unit)]	Operating procedure	Application
60	2 - 6	4,5	continuous intermittent	Aeration tank
100	3 - 10	6	continuous intermittent	Aeration tank, sludge oxidation
150	3 - 14	8	continuous intermittent	Sludge oxidation

All data are approximate data!

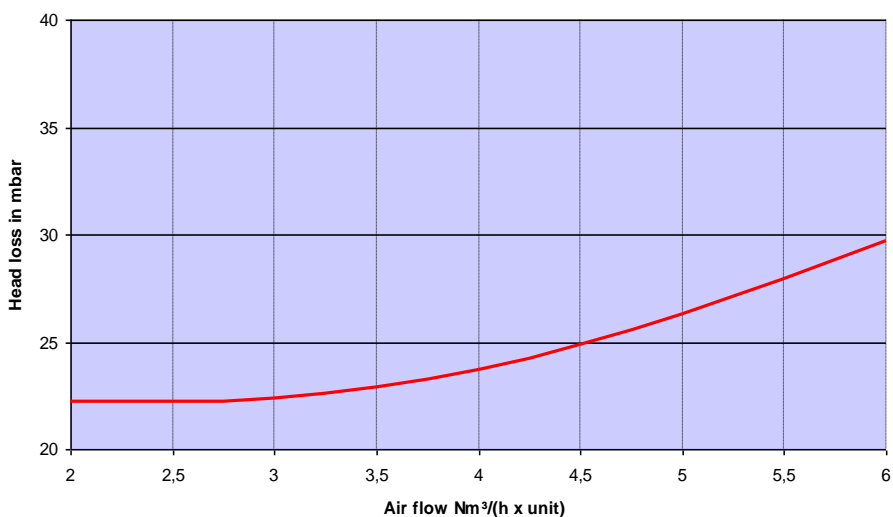
# Disc diffuser Ecoflex EPDM

## Oxygen transfer and head loss

Oxygen transfer disc diffuser Ecoflex 60 μ



Head loss disc diffuser Ecoflex 60 μ



Comparable values can only be obtained with a similar experimental setup and similar conditions. Depending on the tank geometry, disc size, slit chart, material, water depth and planar allocation, the quoted values can change.

## Disc diffuser Ecoflex EPDM

---

### Air flow

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

### Storage

The diffusers as well as all accessories must be stored with their original packing in a dry and aerated room, considering DIN 7716. Frost, heat, solar radiation, dust and work that might lead to damage of the diffusers and their packing have to be avoided. Do not store outdoors! The storage of rubber components up to the installation/start-up should not exceed 1 year. With delivery to a building site, the diffusers must be stored reclined with their original packing. Should they be transported in open receptacles, e.g. lattice boxes, the diffusers have to be covered with a tarpaulin 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.