



KTN
Kunststoff-Technik Neumarkt
GmbH

protecting
the source of life

**Components for
water- and wastewater treatment**

newair[®]

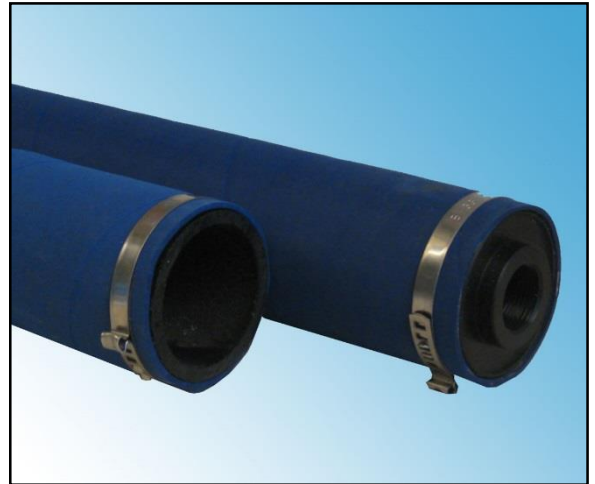
Tube diffuser Tuboflex EPDM

www.kt-n.com

Tube diffuser Tuboflex EPDM

Product properties

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



Dimensions

Type	Perforation length [mm]	Total length [mm]	Tube diameter [mm]	Wall thickness [mm]	Perforated area [m²]	Total weight [kg]
TBA - 500	450	490	63	9,4	0,09	0,8
TBA - 750	700	735	63	9,4	0,14	1,1
TBA - 1000	1000	1025	63	9,4	0,19	1,4

Connection	Double nipple for square pipe 80 x 80 mm	Double nipple for square pipe 100 x 100 mm
¾" internal thread	130 mm	150 mm
1" internal thread	130 mm	150 mm

TBA - 1001
TBA - 1501
TBA - 2001

TBA - 1002
TBA - 1502
TBA - 2002

TBA - 1003
TBA - 1503
TBA - 2003

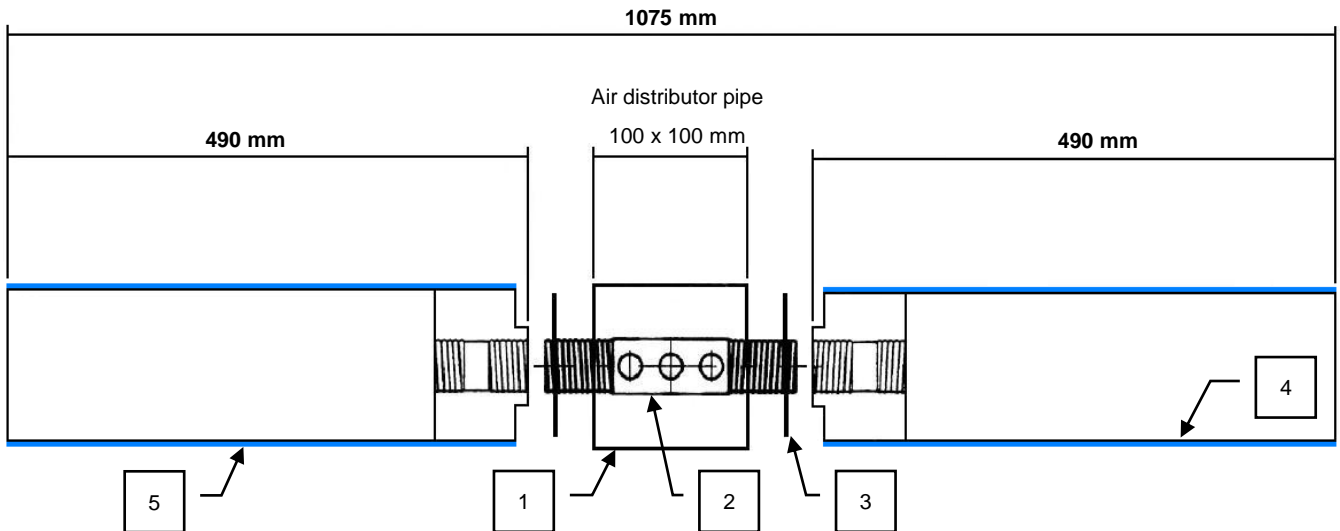
TBA - 1004
TBA - 1504
TBA - 2004

TBA - 1005
TBA - 1505
TBA - 2005



Tube diffuser Tuboflex EPDM

Installation drawing



Material of the single components

No	Description	Material
1	Air distributor square pipe 100 x 100 mm	V4A material: 1.4571
2	Double nipple 3/4" external thread	V4A material: 1.4571
3	Gasket	EPDM
4	Support tube	PE
5	Membrane	EPDM

Air flow

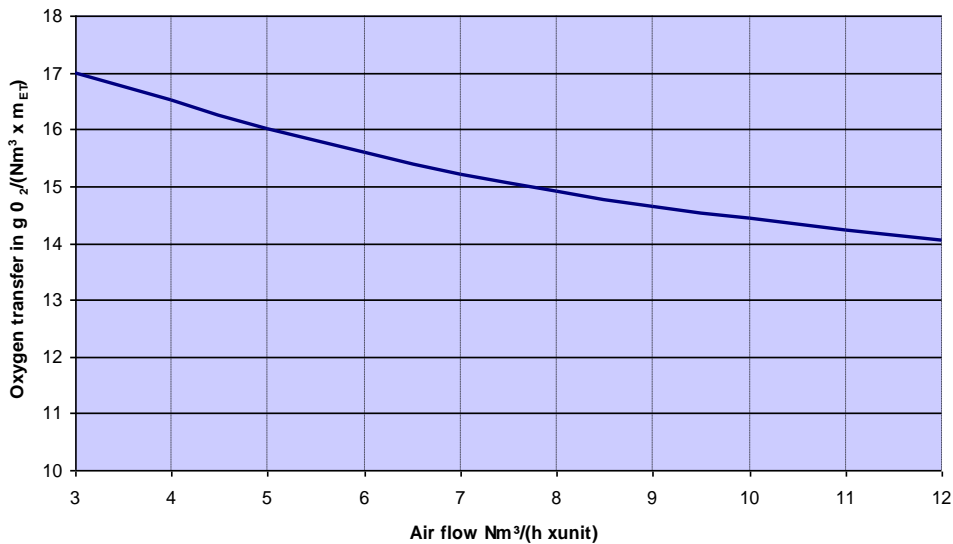
Pore size [µm]	Air flow area [Nm ³ /h x m unit]	Optimal air flow [Nm ³ /h x m unit]	Operating procedure	Application
60	3 - 12	7	continuous intermittent	Aeration tank
100	5 - 18	11	continuous Intermittent	Aeration tank
150	7 - 25	15	continuous Intermittent	Aeration tank

All data are approximate data !

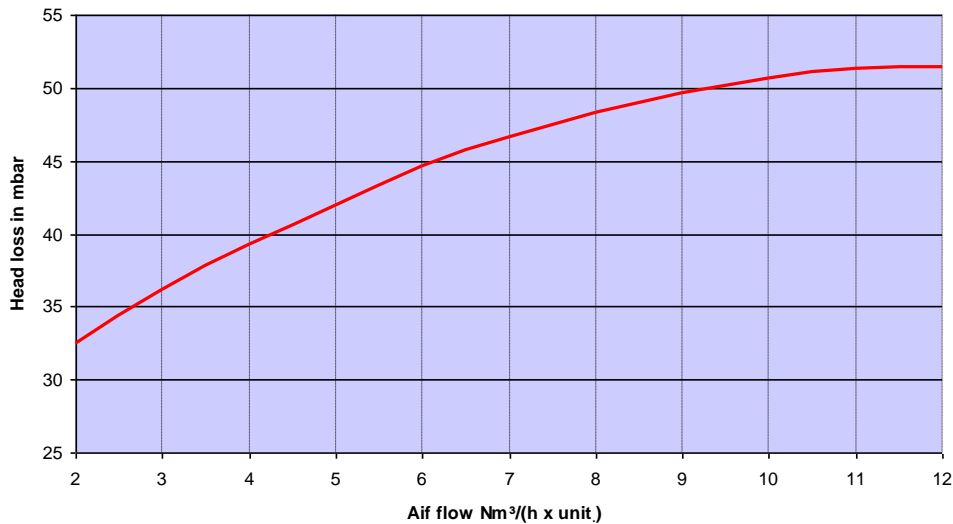
Tube diffuser Tuboflex EPDM

Oxygen transfer and head loss

Oxygen transfer tube diffuser Tuboflex EPDM 60 µm



Head loss tube diffuser Tuboflex EPDM 60 µm



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

Tube diffuser Tuboflex EPDM

Air flow

The **optimal air flow area** of tube diffuser Tuboflex EPDM ranges from **3 und 25 Nm³/(h x unit)** depending on the perforation.

Storage

Diffuser and/or rubber sleeves must be stored factory-packed in a dark, dry, ventilated and dust-free storage space according to DIN 7716. Avoid frost, heat, UV-radiation, dust and working which can cause damage of diffuser and/or packing. Do not store outdoors! The storage of rubber parts until installation /starting operation should not exceed one year. At on-site delivery, all rubber and plastic parts must be stored in their original packaging. Crates exposed to direct sunlight must be covered with tarpaulin to protect 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, 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 diffuser in good condition for a long time. (refer to Maintenance Manual).

Membrane lifetime

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