

AERATION PRODUCTS BROCHURE




MADE IN ITALY
Since 1983



All our diffusers are manufactured at our factory, located in Bergamo (north Italy). Our diffusers are on the market more than 40 years, Geotierre is actually a reference worldwide for many prestigious clients.

Our customers are: consortia of sewage treatment, design studios, municipal WWTP and prestigious private companies.

Our values: sustainability, quality, innovation, cleanliness, flexibility.



MISSION

To create sustainable aeration solution in the waste water treatment sectors. This is achieved by combining innovative technologies and high quality materials to produce our disc and tube diffusers.

OUR GOAL

The use of eco-sustainable materials and technologies and constant innovation are the principles that guide our daily activities, enabling us to offer our customers excellent products and services at competitive prices.

VISION

Following a philosophy of craftsmanship we will develop a sustainable production system with the focus on continuous innovation and quality.

WHAT WE DO

We select top-quality raw materials from major European groups, which we use to manufacture *Tierre Technologie dei reflui* and *Pfleiderer Water-system* brand products that have been tried and tested on the market for decades.

Operating in accordance with the ISO 9001:2015 quality standard, we guarantee products of excellence in the sector.

Newair[®] Tape



NEWAIR[®] TAPE SPECIAL HDPE OPERATING RANGE

Model	Pore size µm	Range flow rate min-max	Optimal flow rate	Perforated area	Standard connection	Max temperature	Peak Air Flow
Newair Tape 500	fine	4-12 (Nm ³ /h) 2,5-7,5 (scfm)	7 (Nm ³ /h) 4,4 (scfm)	0,06 m ² 0,65 ft ²	1" F	80°C 176°F	15 (Nm ³ /h) 9 (scfm)
Newair Tape 750	fine	6-18 (Nm ³ /h) 3,7-11,2 (scfm)	14 (Nm ³ /h) 8,7 (scfm)	0,09 m ² 0,97 ft ²	1" F	80°C 176°F	23 (Nm ³ /h) 14 (scfm)
Newair Tape 1000	fine	8-24 (Nm ³ /h) 5-15 (scfm)	21 (Nm ³ /h) 13 (scfm)	0,12 m ² 1,3 ft ²	1" F	80°C 176°F	31 (Nm ³ /h) 19 (scfm)

XS9"

12"

XL14"

SILICONE

EPDM



ECOFLEX® XS DISC DIFFUSER SERIES 9" EPDM

OPERATING RANGE

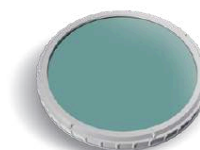
Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECOXS50D	60	1-7 (Nm ³ /h) 0,6-4,4 (scfm)	4 (Nm ³ /h) 2,5 (scfm)	3/4" M	130°C 266°F	9 (Nm ³ /h) 5 (scfm)	Aeration tank
ECOXS100D	100	1,5-8 (Nm ³ /h) 0,9-5 (scfm)	6 (Nm ³ /h) 3,7 (scfm)	3/4" M	130°C 266°F	10 (Nm ³ /h) 6 (scfm)	Aeration tank, anaerobic sludge digestion
ECOXS150D	150	1,8-10 (Nm ³ /h) 1,1-6,2 (scfm)	8 (Nm ³ /h) 5 (scfm)	3/4" M	130°C 266°F	13 (Nm ³ /h) 8 (scfm)	Aeration tank, anaerobic sludge digestion

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

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex® XS EXTRA SMART	93 mm 3,6 in	240 mm 9,5 in	200 mm 7,9 in	73 mm 2,9 in	0,03 m ² 0,32 ft ²	0,7 kg 1,54 lb

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



ECOFLEX® XS DISC DIFFUSER SERIES 9" SILICONE

OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECOXS50S	60	1-7 (Nm ³ /h) 0,6-4,4 (scfm)	4 (Nm ³ /h) 2,5 (scfm)	3/4" M	230°C 446°F	9 (Nm ³ /h) 5 (scfm)	Aeration tank
ECOXS100S	100	1,5-8 (Nm ³ /h) 0,9-5 (scfm)	6 (Nm ³ /h) 3,7 (scfm)	3/4" M	230°C 446°F	10 (Nm ³ /h) 6 (scfm)	Aeration tank, anaerobic sludge digestion
ECOXS150S	150	1,8-10 (Nm ³ /h) 1,1-6,2 (scfm)	8 (Nm ³ /h) 5 (scfm)	3/4" M	230°C 446°F	13 (Nm ³ /h) 8 (scfm)	Aeration tank, anaerobic sludge digestion

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

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex® XS EXTRA SMART	93 mm 3,6 in	240 mm 9,5 in	200 mm 7,9 in	73 mm 2,9 in	0,03 m ² 0,32 ft ²	0,7 kg 1,54 lb

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



ECOFLEX® DISC DIFFUSER SERIES 12" EPDM

OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECO50D	60	2-8 (Nm ³ /h) 1,3-5 (scfm)	5 (Nm ³ /h) 3,1 (scfm)	1" M	130°C 266°F	10 (Nm ³ /h) 6 (scfm)	Aeration tank
ECO100D	100	3-10 (Nm ³ /h) 1,9-6,2 (scfm)	6 (Nm ³ /h) 3,7 (scfm)	1" M	130°C 266°F	13 (Nm ³ /h) 8 (scfm)	Aeration tank, anaerobic sludge digestion
ECO150D	150	3-14 (Nm ³ /h) 1,9-8,7 (scfm)	8 (Nm ³ /h) 5 (scfm)	1" M	130°C 266°F	18 (Nm ³ /h) 11 (scfm)	Aeration tank, anaerobic sludge digestion

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

ECO50D HE	60	2-9 (Nm ³ /h) 1,3-5,6 (scfm)	5 (Nm ³ /h) 3,1 (scfm)	1" M	130°C 266°F	11 (Nm ³ /h) 7 (scfm)	Aeration tank
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DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex®	93 mm 3,6 in	300 mm 11,8 in	240 mm 9,5 in	68 mm 2,7 in	0,05 m ² 0,53 ft ²	1,1 kg 2,43 lb

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



ECOFLEX® DISC DIFFUSER SERIES 12" SILICONE

OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECO50S	60	2-8 (Nm ³ /h) 1,3-5 (scfm)	5 (Nm ³ /h) 3,1 (scfm)	1" M	230°C 446°F	10 (Nm ³ /h) 6 (scfm)	Aeration tank
ECO100S	100	3-10 (Nm ³ /h) 1,9-6,2 (scfm)	6 (Nm ³ /h) 3,7 (scfm)	1" M	230°C 446°F	13 (Nm ³ /h) 8 (scfm)	Aeration tank, anaerobic sludge digestion
ECO150S	150	3-14 (Nm ³ /h) 1,9-8,7 (scfm)	8 (Nm ³ /h) 5 (scfm)	1" M	230°C 446°F	18 (Nm ³ /h) 11 (scfm)	Aeration tank, anaerobic sludge digestion

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

ECO50S HE	60	2-9 (Nm ³ /h) 1,3-5,6 (scfm)	5 (Nm ³ /h) 3,1 (scfm)	1" M	230°C 446°F	11 (Nm ³ /h) 7 (scfm)	Aeration tank
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DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex®	93 mm 3,6 in	300 mm 11,8 in	240 mm 9,5 in	68 mm 2,7 in	0,05 m ² 0,53 ft ²	1,1 kg 2,43 lb

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



ECOFLEX® XL DISC DIFFUSER SERIES 14" EPDM OPERATING RANGE

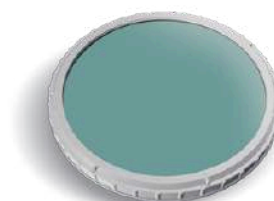
Model	Pore size µm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECOXL50D	60	3-15 (Nm ³ /h) 1,9-9,4 (scfm)	9 (Nm ³ /h) 5,6 (scfm)	1" M	130°C 266°F	19 (Nm ³ /h) 12 (scfm)	Aeration tank
ECOXL100D	100	4-18 (Nm ³ /h) 2,5-11,2 (scfm)	10 (Nm ³ /h) 6,2 (scfm)	1" M	130°C 266°F	23 (Nm ³ /h) 14 (scfm)	Aeration tank, anaerobic sludge digestion
ECOXL150D	150	4,5-22 (Nm ³ /h) 2,8-13,7 (scfm)	12 (Nm ³ /h) 7,5 (scfm)	1" M	130°C 266°F	28 (Nm ³ /h) 17 (scfm)	Aeration tank, anaerobic sludge digestion

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

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex® XL EXTRA LARGE	93 mm 3,6 in	360 mm 14,2 in	310 mm 12,2 in	68 mm 2,7 in	0,075 m ² 0,81 ft ²	1,6 kg 3,54 lb

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



ECOFLEX® XL DISC DIFFUSER SERIES 14" SILICONE OPERATING RANGE

Model	Pore size µm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
ECOXL50S	60	3-15 (Nm ³ /h) 1,9-9,4 (scfm)	9 (Nm ³ /h) 5,6 (scfm)	1" M	230°C 446°F	19 (Nm ³ /h) 12 (scfm)	Aeration tank
ECOXL100S	100	4-18 (Nm ³ /h) 2,5-11,2 (scfm)	10 (Nm ³ /h) 6,2 (scfm)	1" M	230°C 446°F	23 (Nm ³ /h) 14 (scfm)	Aeration tank, anaerobic sludge digestion
ECOXL150S	150	4,5-22 (Nm ³ /h) 2,8-13,7 (scfm)	12 (Nm ³ /h) 7,5 (scfm)	1" M	230°C 446°F	28 (Nm ³ /h) 17 (scfm)	Aeration tank, anaerobic sludge digestion

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

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoflex® XL EXTRA LARGE	93 mm 3,6 in	360 mm 14,2 in	310 mm 12,2 in	68 mm 2,7 in	0,075 m ² 0,81 ft ²	1,6 kg 3,54 lb

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

Newair[®] Disc



XS9''



12''



XL14''

NEWAIR[®] XS DISC DIFFUSER SERIES 9'' SPECIAL HDPE OPERATING RANGE



Model	Pore size µm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
NWD XS9''	fine	1,5-8 (Nm ³ /h) 0,9-5 (scfm)	4 (Nm ³ /h) 2,5 (scfm)	3/4" M	80°C 176°F	10 (Nm ³ /h) 6 (scfm)	Aeration tank

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
NWD XS9''	93 mm 3,6 in	240 mm 9,5 in	200 mm 7,9 in	73 mm 2,9 in	0,03 m ² 0,32 ft ²	0,8 kg 1,76 lb

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



NEWAIR® DISC DIFFUSER SERIES 12" SPECIAL HDPE

OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
NWD280	fine	4-12 (Nm^3/h) 2,5-7,5 (scfm)	6 (Nm^3/h) 3,7 (scfm)	1" M	80°C 176°F	15 (Nm^3/h) 9 (scfm)	Aeration tank

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Fixed porous membrane	Total weight
NWD280	93 mm 3,6 in	300 mm 11,8 in	240 mm 9,5 in	68 mm 2,7 in	0,05 m^2 0,54 ft^2	HDPE	1,35 kg 2,98 lb

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



NEWAIR® XL DISC DIFFUSER SERIES 14" SPECIAL HDPE

OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection *	Max temperature	Peak Air Flow	Application
NWD XL14"	fine	5-18 (Nm^3/h) 3,1-11,2 (scfm)	10 (Nm^3/h) 6,2 (scfm)	1" M	80°C 176°F	23 (Nm^3/h) 14 (scfm)	Aeration tank

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
NWD XL14"	93 mm 3,6 in	360 mm 14,2 in	310 mm 12,2 in	68 mm 2,7 in	0,075 m^2 0,81 ft^2	1,7 kg 3,75 lb

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

Ecoquarz[®]



Tuboflex[®]



Newair[®] Tube



Newpond[®]





ECOQUARZ® DISC DIFFUSER SERIES, OPERATING RANGE

Model	Pore size μm	Range flow rate min-max	Optimal flow rate	Standard connection	Max temperature	Peak Air Flow	Application
ECO250-50	60	3-10 (Nm ³ /h) 1,9-6,2 (scfm)	6 (Nm ³ /h) 3,7 (scfm)	1" M	80°C 176°F	13 (Nm ³ /h) 8 (scfm)	Aeration tank
ECO250-100	100	5-12 (Nm ³ /h) 3,1-7,5 (scfm)	8 (Nm ³ /h) 5 (scfm)	1" M	80°C 176°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank
ECO250-250	250	7-15 (Nm ³ /h) 4,4-9,3 (scfm)	11 (Nm ³ /h) 6,8 (scfm)	1" M	80°C 176°F	19 (Nm ³ /h) 12 (scfm)	Grit chamber tank

DIMENSION

Type	Total height	Diameter total	Diameter effective	Over all height above air distributor	Perforated area	Total weight
Ecoquarz Disc	93 mm 3,6 in	300 mm 11,8 in	240 mm 9,5 in	68 mm 2,7 in	0,05 m ² 0,54 ft ²	1,5 kg 2,98 lb



ECOQUARZ® TUBE DIFFUSER, OPERATING RANGE

Model	Pore size μm	Range flow rate min-max x linear meter	Optimal flow rate x linear meter	Assembling mode	Max temperature	Peak Air Flow x linear meter	Application
ECO500-50	60	5-18 (Nm ³ /h) 3,1-11,2 (scfm)	11(Nm ³ /h) 6,9 (scfm)	Tie rod	80°C 176°F	23 (Nm ³ /h) 14 (scfm)	Aeration tank
ECO500-100	100	10-25 (Nm ³ /h) 6,2-15,6 (scfm)	17 (Nm ³ /h) 10,6 (scfm)	Tie rod	80°C 176°F	32 (Nm ³ /h) 20 (scfm)	Aeration tank
ECO500-250	250	15-30 (Nm ³ /h) 9,3-18,7 (scfm)	22 (Nm ³ /h) 13,7 (scfm)	Tie rod	80°C 176°F	39 (Nm ³ /h) 24 (scfm)	Grit chamber tank

DIMENSION

Type	Perforation length	Total length	Tube diameter	Wall thickness	Perforated area	Total weight
ECO500-50	2x250 mm 0,078x9,84 in	630 mm 24,8 in	70 mm 2,76 in	15 mm 0,59 in	0,11 m ² 1,18 ft ²	4,9 kg 10,8 lb
ECO500-100	2x500 mm 0,078x19,7 in	1130 mm 44,5 in	70 mm 2,76 in	15 mm 0,59 in	0,22 m ² 2,36 ft ²	5,7 kg 12,57 lb
ECO500-250	2x750 mm 0,078x29,5 in	1630 mm 64,2 in	70 mm 2,76 in	15 mm 0,59 in	0,33 m ² 3,55 ft ²	6,4 kg 14,11 lb



TUBOFLEX® EPDM TUBE DIFFUSER, OPERATING RANGE

Model	Pore size µm	Range flow rate min-max x linear meter	Optimal flow rate x linear meter	Standard Thread connection*	Max temperature	Peak Air Flow x linear meter	Application
TBA500D50	60	3-12 (Nm ³ /h) 1,9-7,5 (scfm)	7(Nm ³ /h) 4,4 (scfm)	3/4" F	130°C 266°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank
TBA500D100	100	5-18 (Nm ³ /h) 3,1-11,2 (scfm)	11 (Nm ³ /h) 6,9 (scfm)	3/4" F	130°C 266°F	23 (Nm ³ /h) 14 (scfm)	Aeration tank
TBA500D150	150	7-25 (Nm ³ /h) 4,4-15,6 (scfm)	15 (Nm ³ /h) 9,3 (scfm)	3/4" F	130°C 266°F	32 (Nm ³ /h) 20 (scfm)	Anaerobic sludge digestion

DIMENSION

Type	Perforation length	Total length	Tube diameter	Wall thickness	Perforated area	Total weight
TBA500	500 mm 19,7 in	530 mm 20,87 in	63 mm 2,48 in	4,7 mm 0,19 in	0,105 m ² 1,13 ft ²	0,85 kg 1,87 lb
TBA750	750 mm 29,53 in	780 mm 30,71 in	63 mm 2,48 in	4,7 mm 0,19 in	0,157 m ² 1,69 ft ²	1,15 kg 2,54 lb
TBA1000	1000 mm 39,37 in	1030 mm 40,55 in	63 mm 2,48 in	4,7 mm 0,19 in	0,210 m ² 2,26 ft ²	1,4 kg 3,09 lb

*1" and other up on request



TUBOFLEX® SILICONE TUBE DIFFUSER, OPERATING RANGE

Model	Pore size µm	Range flow rate min-max x linear meter	Optimal flow rate x linear meter	Standard Thread connection*	Max temperature	Peak Air Flow x linear meter	Application
TBA500S50	60	3-12 (Nm ³ /h) 1,9-7,5 (scfm)	7(Nm ³ /h) 4,4(scfm)	3/4" F	230°C 446°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank
TBA500S100	100	5-18 (Nm ³ /h) 3,1-11,2 (scfm)	11 (Nm ³ /h) 6,9 (scfm)	3/4" F	230°C 446°F	23 (Nm ³ /h) 14 (scfm)	Aeration tank, Anaerobic sludge digestion
TBA500S150	150	7-25 (Nm ³ /h) 4,4-15,6 (scfm)	15 (Nm ³ /h) 9,3 (scfm)	3/4" F	230°C 446°F	32 (Nm ³ /h) 20 (scfm)	Anaerobic sludge digestion

DIMENSION

Type	Perforation length	Total length	Tube diameter	Wall thickness	Perforated area	Total weight
TBA500	500 mm 19,7 in	530 mm 20,87 in	63 mm 2,48 in	4,7 mm 0,19 in	0,105 m ² 1,13 ft ²	0,85 kg 1,87 lb
TBA750	750 mm 29,53 in	780 mm 30,71 in	63 mm 2,48 in	4,7 mm 0,19 in	0,157 m ² 1,69 ft ²	1,15 kg 2,54 lb
TBA1000	1000 mm 39,37 in	1030 mm 40,55 in	63 mm 2,48 in	4,7 mm 0,19 in	0,210 m ² 2,26 ft ²	1,45 kg 3,08 lb

*1" and other up on request



NEWAIR® TUBE DIFFUSER, OPERATING RANGE

Model	Pore size variable	Range flow rate min-max x linear meter	Optimal flow rate x linear meter	Standard Thread connection*	Max temperature	Peak Air Flow x linear meter	Application
NWA500	fine	6-12 (Nm ³ /h) 3,7-7,5 (scfm)	8 (Nm ³ /h) 5 (scfm)	3/4" F	80°C 176°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank
NWA750	fine	6-12 (Nm ³ /h) 3,7-7,5 (scfm)	8 (Nm ³ /h) 5 (scfm)	3/4" F	80°C 176°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank
NWA1000	fine	6-12 (Nm ³ /h) 3,7-7,5 (scfm)	8 (Nm ³ /h) 5 (scfm)	3/4" F	80°C 176°F	15 (Nm ³ /h) 9 (scfm)	Aeration tank

STANDARD DIMENSIONS

Aerator length	Total length	Tube diameter	Aeration area	Adapter	Total weight
500	580 mm 22,83 in	72 mm 2,83 in	0,11 m ² 1,18 ft ²	¾ female thread	570 g 1,26 lb
750	830 mm 32,68 in	72 mm 2,83 in	0,17 m ² 1,83 ft ²	¾ female thread	760 g 1,68 lb
1000	1080 mm 42,52 in	72 mm 2,83 in	0,23 m ² 2,48 ft ²	¾ female thread	950 g 2,09 lb

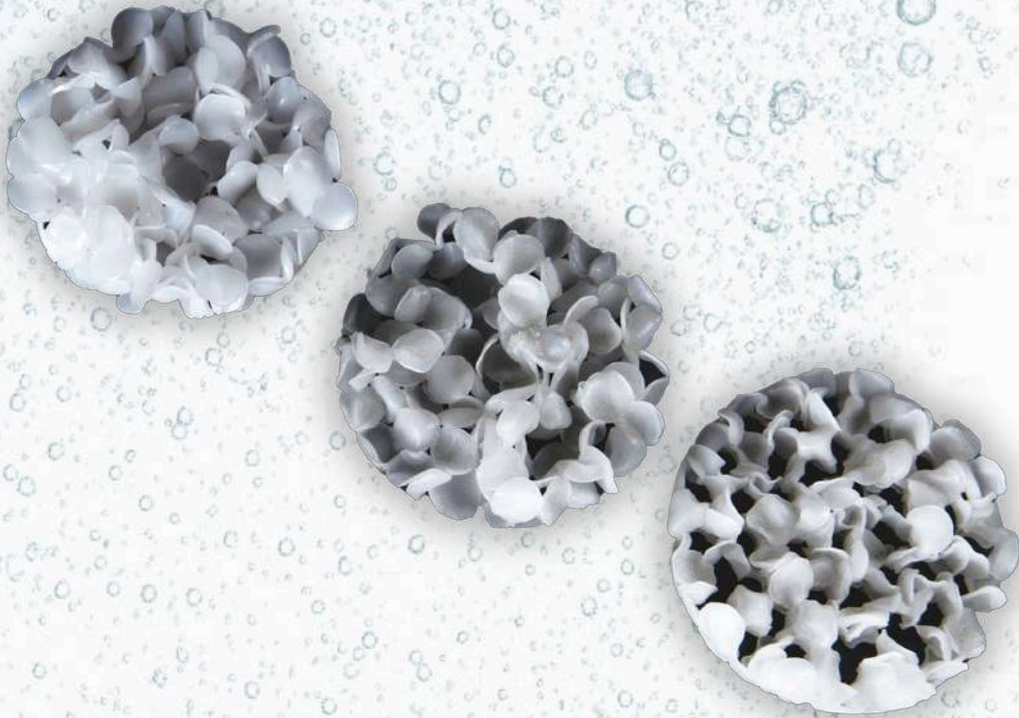
SPECIAL DIMENSIONS

Possible lengths	100 - 1000 mm / 3,93 - 39,37 in
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*Possible adapter forms

½, ¾, 1, 1 ¼, 2" female thread and on request

Newpond[®]



NEWPOND[®] BACTERIA CARRIER MATERIAL

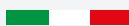
Material	special HDPE	
Diameter	20 or 50 mm	0,79 or 2,17 in
Specific surface	500 m ² /m ³	152 ft ² /ft ³
Bulk density	200 g/l	12,5 lb/ft ³
Material density	0.95 kg/l	59,3 lb/ft ³
Max. Temperature	80 °C	176 °F

Product properties

- large usable surface
- high efficiency
- low abrasion of adherent bacteria due to the stream
- easy cleaning and simple handling
- resistant and pH-neutral
- high chemical resistance



Since 1983 your partner for wastewater treatment products.
Proudly Made in Italy.



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

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Azienda con sistema
di gestione qualità
certificato secondo la
Norma ISO9001:2015

Italia

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