

# High Performance Fine Bubble Membrane Diffuser For Waste Water Treatment Aeration - POLYFLEX™ & POLYPOR™

Environmental  
Protection



## ADVANTAGES

- High oxygen transfer efficiency
- Self cleaning operation
- Fine bubble formation
- Non - clog operation
- Intermittent operation without water back flow
- Easy & quick to install
- No moving part - assures safety
- Material resistant to waste water
- Unbreakable, light weight & Heavy duty membrane to withstand high pressure
- Low pressure loss across diffuser
- Economic operation due to low investment & operation cost
- Through intermixing of water and sludge components & uniform concentration of oxygen throughout the tank
- Negligible emission, odour, aerosols & noise
- Enormous power saving
- High resistance to fouling

A Very Low Cost Product  
Compared To Others

**Blinex**™  
Since 1975

**BLINEX FILTER - COAT PVT. LTD.**

**DIFFUSED AERATION**

Diffused Aeration is a process of Oxygen transfer by Molecular Diffusion through the interface film between the air and liquid which increase in proportion to the interfaced area

**COMPARISON**

FINE BUBBLE MEMBRANE DIFFUSERS	FIXED AERATOR	FLOATING AERATOR
SOTE 5.0 - 7.6 Kg O2 / kwh	1.2 - 3.1 Kg O2 / kwh	1.2 - 2.2 Kg O2 / kwh
50% Power Savings	Power consumption is high	Power consumption is high
Trouble free operation	Regular maintenance	Regular maintenance

**UNIQUE DESIGN**

Blinex's Polyflex<sup>TM</sup> & Polypor<sup>TM</sup> unique open-end tube design diffuser allows water to completely fill the diffuser support tube, thus eliminating diffuser buoyancy and not allow diffuser to bounce during operation and there is not breakage / failure of nipple end connection.

**TECHNICAL FEATURES - POLYFLEX<sup>TM</sup>**

Membrane sleeve with precision perforated "I" slits expands to produce fine bubbles then contracts immediately itself when air supply is stopped. This feature dramatically reduces the chance for back flow or solids to clog the diffuser.

TYPES	SIZES (MM)	MOC		SIZE OF BUBBLE (MM)	SERVICE TEMP. (°C)	AIR FLOW RATE
		MEMBRANE	SUPPORT			
TUBE	Ø 70 x 500 / 620 / 1000	EPDM / Polyurethane	PVC	1.0 - 2.0	80 - 120	10 M <sup>3</sup> / Hr / Feet
	Ø 95 x 620 / 1000	EPDM / Polyurethane	PVC	1.0 - 2.0	80 - 120	20 M <sup>3</sup> / Hr / Feet
DISC	Ø 300	EPDM / Polyurethane	PVC	1.0 - 2.0	80 - 120	14

**TECHNICAL FEATURES - POLYPOR<sup>TM</sup> (AVAILABLE IN FINE, MEDIUM & COARSE MATERIAL WITH BLACK, WHITE & BLUE COLOURS)**

TYPES	SIZES (MM)	MOC		SIZE OF BUBBLE (MM)	SERVICE TEMP. (°C)	AIR FLOW RATE
		MEMBRANE	SUPPORT			
TUBE	Ø 70 x 500 / 1000	Porous Plastic HDPE / Teflon / P.T.F.E.	HDPE / P.T.F.E.	1.0 - 3.0	70 / 200	10 / 20 M <sup>3</sup> / Hr / Feet
	Ø 95 x 500 / 1000	Porous Plastic HDPE / Teflon / P.T.F.E.	HDPE / P.T.F.E.	1.0 - 3.0	70 / 200	18 M <sup>3</sup> / Hr / Feet
DISC	Ø 300	Porous Plastic HDPE / Teflon / P.T.F.E.	HDPE / P.T.F.E.	1.0 - 3.0	70 / 200	18

POLYFLEX <sup>TM</sup>	POLYPOR <sup>TM</sup>	APPLICATIONS
		<ul style="list-style-type: none"> <li>• Bio - logical waste water treatment</li> <li>• Used in streams &amp; fish ponds (Aquaculture)</li> <li>• Activated sludge waste water aeration</li> <li>• Industrial waste water treatment plant</li> <li>• Municipal waste water treatment plant</li> <li>• Waste water ozone diffusion</li> <li>• Oxygenation for sludge stabilization</li> <li>• Recarbonation, Nitrification, Grit tanks, Grease removal and Floc-Agglomeration</li> <li>• Contact aeration system</li> <li>• Sequencing batch reactor (SBR)</li> <li>• Lagoons &amp; Channels</li> </ul>

POLYFLEX<sup>TM</sup>, POLYPOR<sup>TM</sup> & BLINEX<sup>TM</sup> - Registered Trademark of Blinex Filter-Coat Pvt. Ltd., Mumbai 400 093. Teflon<sup>®</sup> Trademark of DuPont. USA