

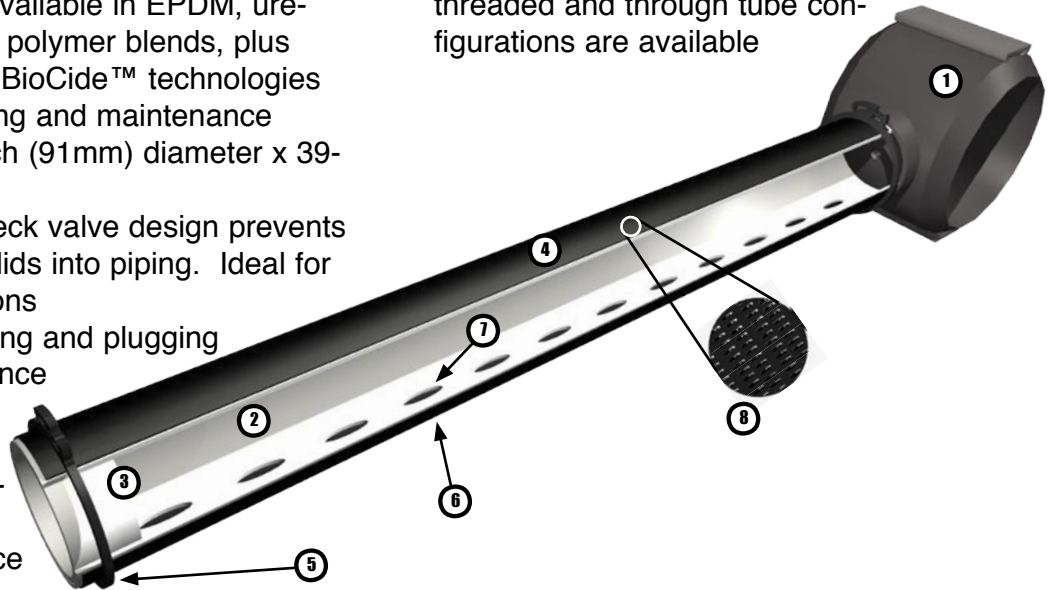
## PRODUCT SPECIFICATION SHEET

# EDI FLEXAIR<sup>®</sup> Magnum Diffuser

## Fine Pore Flexible Membrane Technology

### High Unit Capacity for Demanding Oxygenation and Mixing Applications

- Large perforated area for maximum air handling capacity- 366in<sup>2</sup> (0.236m<sup>2</sup>)
- Efficient geometry supports high density installations of over 65% floor coverage
- Precision die cut openings for high oxygen transfer, uniform air release, and low operating pressure
- Standard and high capacity membrane options engineered for optimized OTE, air handling, and operating pressure requirements
- Advanced technology premium quality membranes available in EPDM, urethane, or special polymer blends, plus BioShield<sup>™</sup> and BioCide<sup>™</sup> technologies for reduced fouling and maintenance
- Nominal 3.75-inch (91mm) diameter x 39-inch length (1m)
- Integral triple check valve design prevents entry of liquid/solids into piping. Ideal for on / off applications
- Resistant to fouling and plugging for low maintenance
- ABS and PVC construction for maximum chemical, temperature, and UV resistance
- Available with Spectrum<sup>™</sup> Saddle Mount for maximum mechanical integrity, ease of installation and maintenance, and ability to relocate or add diffusers for process modifications
- Available in bouyant and non-bouyant models
- Spectrum<sup>™</sup> Saddle Mount mounts on any pipe material (PVC, ABS, CPVC, SS, etc.)
- Available in 4, 6, 8-inch and 110 and 160-mm pipe sizes
- Alternative mounting systems including threaded and through tube configurations are available



1. Spectrum<sup>™</sup> Saddle Mount
2. Diffuser Body
3. Diffuser Plug for Bouyant Unit (Non Bouyant Design Available)
4. Flexible Membrane Media Featuring Full Circumferential Perforation
5. Reuseable, Non-Metallic Membrane Retainer Clamps
6. Check Valve Feature Over Air Inlets
7. Air Inlet to Membrane Along Bottom
8. Die Cut Perforations



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Environmental Dynamics Incorporated

30  
YEARS  
1975-2005

# PRODUCT SPECIFICATION SHEET

EDI FLEXAIR® Magnum a fine pore, flexible membrane diffuser provides maximum operational flexibility and aeration capacity.

The Magnum diffuser features a full circumferential perforation design. This design produces optimum aeration capacity performance. A full 366 in<sup>2</sup> (0.236 m<sup>2</sup>) of perforated area is provided with a single Magnum diffuser. The geometry of the diffuser supports high diffuser density applications over 65% floor coverage when the highest aeration capacity is desired.

Unique to the FLEXAIR product is the ability to configure the Magnum diffuser with a standard or high capacity membrane for optimized aeration capacity and engineered operating pressure performance. All FLEXAIR diffusers are configured with premium quality membranes engineered by the Membrane Technologies division at EDI. Alternate membrane materials and perforation patterns are available for non-standard industrial or municipal applications.

An integral triple check valve feature prevents the backflow of liquid into the diffuser and piping. The FlexAir Magnum diffuser is ideally suited for on/off applications and requires minimal maintenance for long-term performance.

The FLEXAIR Magnum membrane support tube is constructed of PVC for maximum chemical

resistance and mechanical durability. ABS construction is recommended for high temperature applications or where or cold temperature durability is required.

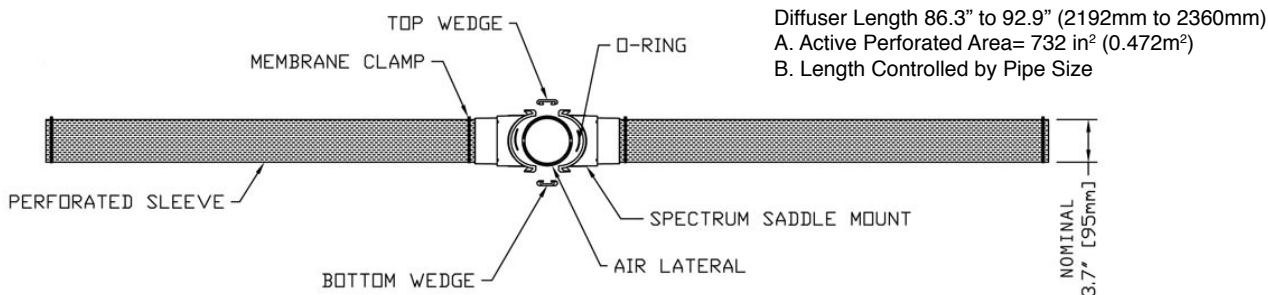
The FLEXAIR Magnum diffuser is ideally suited for a wide variety of aeration and mixing applications including tank and lagoon facilities. For rigid piping applications, the FLEXAIR Magnum diffuser is available with the Spectrum Saddle Mount for maximum mechanical durability and ease of installation and maintenance. Unique to the Spectrum Saddle Mount is the ability to expand, relocate, reconfigure or add diffusers to match process demands.

For EDI Floating or Submerged Lateral piping systems, the FlexAir Magnum diffuser is available in both suspended and floor mounted diffuser configurations.

For additional information on the FlexAir Magnum diffuser or other EDI products, contact EDI, visit our website at [www.wastewater.com](http://www.wastewater.com) or contact a local EDI representative.

This equipment and systems are covered by US and International Patents 5587114, 6543753, 5846412, 4960546, 6497402, 5788847, 7044453, 5133876, 6770200, 7041219, 5032325, 2028914, 02820115.9, 02773737.8, 05103593.0 and Patents Pending.

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Diffuser Length 86.3" to 92.9" (2192mm to 2360mm)  
 A. Active Perforated Area= 732 in<sup>2</sup> (0.472m<sup>2</sup>)  
 B. Length Controlled by Pipe Size

Model	Typical Airflow Continuous *	Typical Airflow Membrane DWP *	Dry Wt Duplex	Operational Wt Duplex
84P	0-20 scfm (0-32 Nm <sup>3</sup> /hr)	10-22.5 in H <sub>2</sub> O (2.5-5.6 kPa)	26 lbs	22.7 lbs**

\* Typical values shown; Special membranes & unit designs available

\*\* Buoyant Configuration only



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