

## DuPont™ Ligasep™ Degasification Modules

Models LDM-120-HS, LDM-120-LS

### Description

Ligasep™ Degasification Modules use a proprietary Polymethylpentene (PMP) hollow fiber membrane that provides an efficient transfer of gases between a liquid and a gas. These modules are ideal for deoxygenation, decarbonation, and gas control of liquids.

Ligasep™ Degasification Modules have the following features:

- Utilizes a hollow fiber membrane with a skin layer that reduces the passage of water vapor through the membrane. Low water vapor passage across the membrane allows blowers and other vacuum pump technologies to be used on the gas side of the membrane.
- The membrane offers a barrier that prevents mixing between the gas and the liquid, hence avoiding any cross-contamination between both fluids.
- Provides a stable and efficient contact area, allowing the modules to achieve low dissolved gas levels at outlet.
- Immediate transfer of gas allows for a rapid start-up.
- Low pressure drop across the module eliminates the need for a booster pump, reducing energy consumption.
- Inline installation ensures continuous operation and improving process reliability.



“LS” fiber is typically used in applications with gases with lower solubility in water, such as oxygen, and where high levels of removal are required.

“HS” fiber is designed for more efficient contact between the sweep gas and the liquid, which is ideal for gases that have a high solubility in water, such as CO<sub>2</sub>, H<sub>2</sub>S, and NH<sub>3</sub>.

### Applications

- Boiler feedwater
- Ultrapure water
- Deionized water

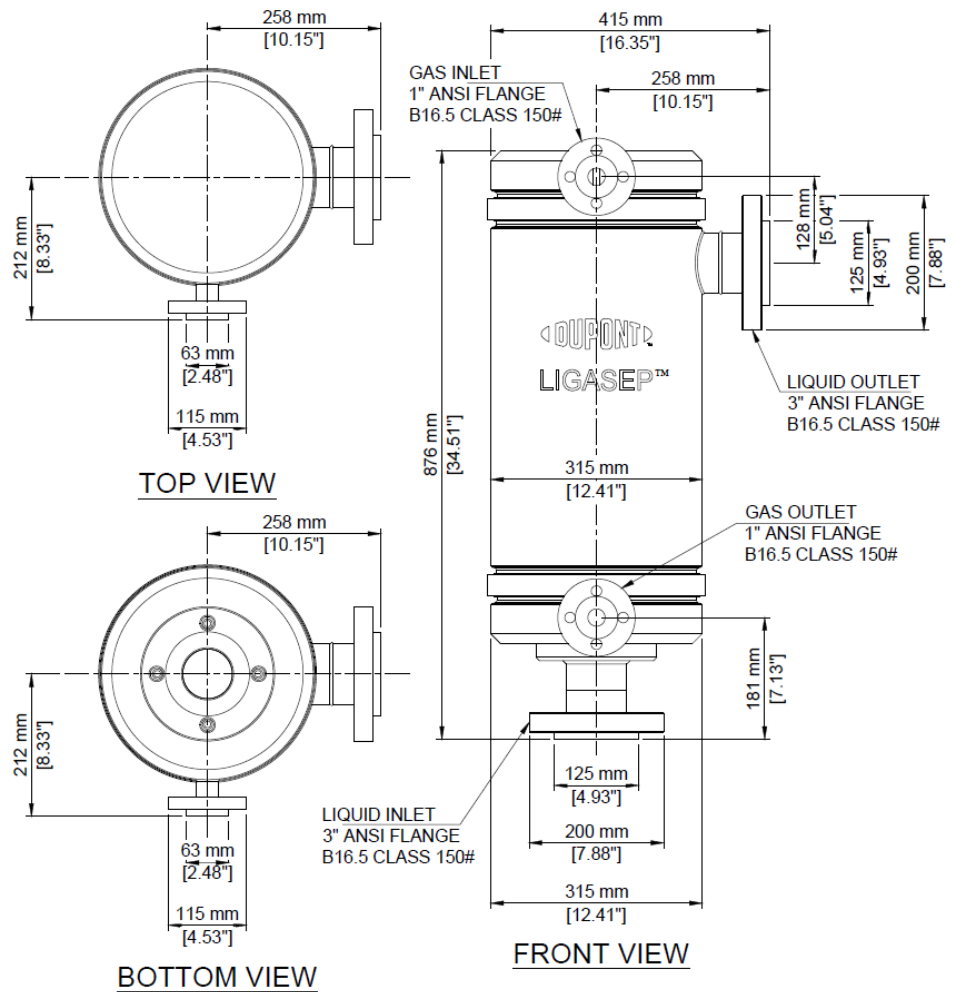
### Industries

- Industrial water treatment
- Power
- Beverage
- Oil & Gas
- Microelectronics
- Pharmaceutical

## Product Properties

<b>Configuration</b>	
Flow Structure	External Flow
Connection Type	
Liquid	3" ANSI B16.5 class 150
Gas	1" ANSI B16.5 class 150
<b>Physical Properties</b>	
Volume (liquid phase)	18 L (4.8 gal)
Height (including flanges)	876 mm (34.5 in)
Diameter	315 mm (12.4 in)
Weight	
Empty	35 kg (77.2 lb)
Full	52 kg (114.7 lb)
<b>Materials of Construction</b>	
Hollow Fiber Membrane	Polymethylpentene (PMP)
Housing	Polypropylene
Cap	Polypropylene
Pipe	Polypropylene
Sealing Resin	Epoxy resin
O-ring	EPDM
<b>Suggested Operating Conditions</b>	
Water Flowrate	5 – 50 m <sup>3</sup> /h (22 – 220 gpm)
Temperature Range	5 – 50°C (41 – 122°F)
Water Pressure	
5 – 25°C (41 – 77°F)	8 bar (116 psig)
25 – 40°C (77 – 104°F)	6 bar (87 psig)
40 – 50°C (104 – 122°F)	5 bar (72.5 psig)
Operating Vacuum Level	10 – 760 mmHg (Torr)
Feedwater Characteristics	
Total Suspended Solids	< 1 ppm
Total Dissolved Solids	Under saturation limits
Total Organic Carbon	< 1 ppm
Oil & Grease	< 0.1 ppm
Free Chlorine	< 0.1 ppm
Oxidizer	Not detectable
pH Range	1 – 13
Turbidity	< 0.5 NTU
SDI <sub>15</sub>	< 3

## Dimensions



## Product Stewardship

DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

## Customer Notice

DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont personnel are available to answer your questions and to provide reasonable technical support. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont.

All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from infringement of any patent or trademark owned by DuPont or others is to be inferred.

© 2020 DuPont. DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours Inc., unless otherwise noted.

**LENNTECH**  
WATER TREATMENT SOLUTIONS

info@lennotech.com Tel. +31-152-610-900  
www.lennotech.com Fax. +31-152-616-289

