

# Systemec<sup>®</sup>

## High-Flow Degasser

IDEX Health & Science's Systemec<sup>®</sup> High-Flow Degasser is a non-porous, air-permeable membrane activated by a controlled vacuum source capable of removing dissolved air from liquids at a rate of up to one liter per minute in OEM instruments. The High-Flow Degasser is designed to degas liquids in high-throughput applications such as clinical chemistry analyzers to prevent bubble formation and improve dispense precision.

Accommodating a broad range of fluids including aqueous salts, organics, detergents, and sterilizing agents, the High-Flow Degasser incorporates the longest-life pump available on the market with membrane materials chosen to reduce maintenance and provide the lowest total cost of ownership.

### Dispense Precision, Long Life

- ▶ Removes dissolved gases and bubbles from fluidic lines to improve dispense precision
- ▶ Longest lifetime pump and membrane materials are selected to reduce maintenance and provide best TCO
- ▶ Compatible with broad range of fluids including aqueous salts, organics, detergents and sterilizing agents (pH range: 2–13)
- ▶ Highest efficiency membrane reduces unit size, which increases available benchtop space
- ▶ Tested and calibrated assembly is ready for installation

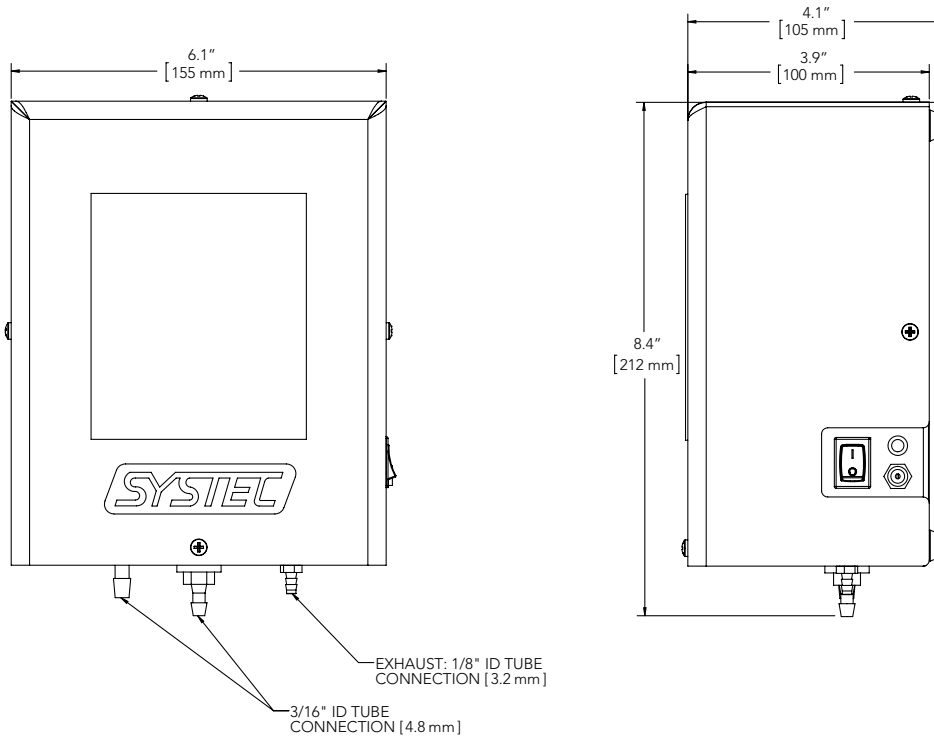


### Technical Data

Part Number	0001-6673	0001-6676
Operational flow rate (mL/min)	0–500	0–1,000
Pressure Drop (at 20 °C and max flow)	< 1 kPa	< 12 kPa
Internal Volume	45 mL	30 mL
Degassing Efficiency (removed O <sub>2</sub> % in DI water at max flow)	< 60 %	< 60 %
Number of Channels	1	1
Maximum Operating Pressure	1 bar (15 psi)	1 bar (15 psi)
Maximum Temperature	40 °C	40 °C
Wetted Materials (membrane)	Polysulfone, silicone rubber, polypropylene, Tygon™ S-50-HL, medical grade adhesives	
External Fluidic Ports	3/16 inch (4.8 mm) ID barb fittings	
Expected Lifetime*	> 6 years (continuous run at 100 rpm 12 hours/day 365 days/year)	

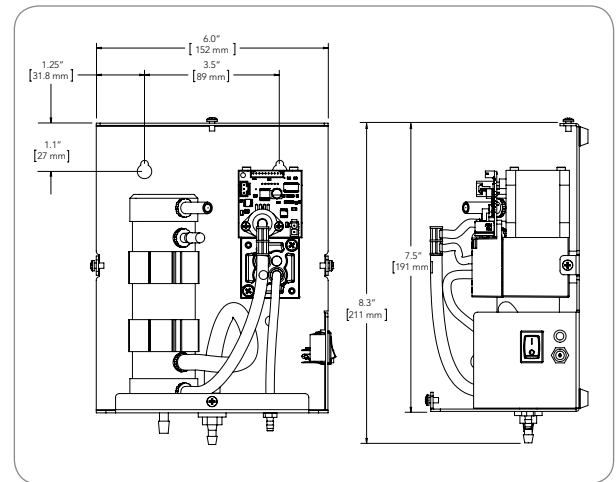
\*Please contact factory for additional pump/lifetime options.

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## Pump Control Specifications

<b>Power Requirements</b>	24 VDC at 0.85 amp max. (0.5 amp typical)
<b>International Power Adapter Included</b>	<b>AC adapter:</b> 100–240 V AC, 1A, 50–60 Hz (for North America, UK, continental Europe, Japan, Australia)
<b>Vacuum Sensor Calibration Accuracy</b>	±5 mm Hg absolute over an ambient operating temperature range of 10–35 °C (NIST traceable)
<b>Closed-Loop Control Setpoint</b>	120 mm Hg absolute (pump runs at high rpm until near setpoint, then speed is varied to maintain a value of 120 mm Hg absolute — load independent)
<b>LED Indicators</b> Single Bi-Color	<b>Green - Blinking</b> Vacuum reaches upper control range
	<b>Green - Solid</b> Vacuum reaches control set point
	<b>Amber - Blinking</b> Power on, vacuum operating normally
	<b>Amber - Solid</b> Error condition, shutdown
<b>Errors Detected</b>	<b>1 - Pumpdown</b> Unable to reach 120 mm Hg (16 kPa) in 10 minutes
	<b>2 - High Vacuum</b> Vacuum > 200 mm Hg (26.7 kPa) for > 10 minutes
	<b>3 - Sensor Signal</b> Sensor > 800 mm Hg (106.7 kPa) or < 10 mm Hg (1.3 kPa)



Internal structure

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