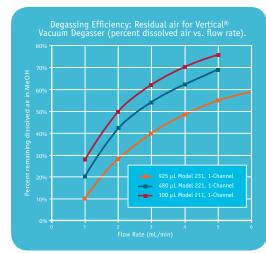
# Degassers

# **Vertical® Vacuum Degassers**

- Ultra-high degassing efficiency
- Low volume, easy to prime
- Eliminates baseline fluctuations
- Up to 4 Channels
- Inert flow path
- 4 years warranty



The Vertical<sup>®</sup> Stand Alone vacuum degassing system for HPLC is a high efficiency in line module that removes dissolved gasses from HPLC mobile phases. Its unique design assures reliable continuous operation and the highest level of continuous performance available without the need for helium degassing. Up to four solvent lines may be degassed simultaneously by one unit.



Plot shows remaining dissolved air in methanol using a selection of Vertical®Degassers. \* Water and Methanol mixtures between 30% and 70% methanol will outgas when more than 38% dissolved air remains in each of the solvents. Other water and organic mobile phases being mixed using a low pressure gradient system will undergo similar outgassing.

# **Built-in Test Diagnostics**

Microcontroller self-test vacuum sensor validation power-up Continuous vacuum system monitoring to ensure optimum operational conditions are maintained Vacuum system fault detection and shutdown function indicators

#### **Teflon AF Membrane**

Flow-through vacuum degassing chamber with a single amorphous perfluorinated copolymer degassing membrane (Teflon AF), enabling degassing efficiency 50 times that of PTFE.

### **Continueous Run Vacuum Pump**

Continueous Run Vacuum Pump employs a closed-loop, micro-stepping RPM control strategy permitting the pump to run with continuously variable speed, providing quick pull-down at high RPM, and then sustaining a consistent vacuum level at low RPM.

Fluctuations in detector baseline due to changes in vacuum level are eliminated by not having to repeatedly stop and start a single-speed pump. This also greatly reduces wear and noise.

# Validation Output

The validation output records vacuum level to compile ISO and system validation requirement.

Specifications	Serries 100	Serries 200
Teflon AF Memebrane	•	•
Continueous-Run	•	•
Self-adjustable speed		•
Low-Permeation Tubing	•	•
Vacuum Sensor		•
Validation output		•
Warranty/year	1	4
Gradient Flow Range*/Internal volume		
Capillary : 0-0.5mL/min/(100µL)	•	•
Analytical : 0-2mL/min/(480µL)	•	•
Semi-Prep : 0-5mL/min/(920µL)	•	•
Prep : 0-20mL/min/(8.4mL)	•	•
Universal Power Supply	•	•
Dimension 13x8x25cmHWD	•	•

 $^{\ast}$  The flow rates given are for a gradient mixture of 50/50 MeOH/H  $_{2}$  0, with a typical low pressure gradient mixing valve. Higher flow rates are possible with high pressure mixing.

Ordering Information		
Description	QTY	Part No.
Vacuum Degassers, Serries 100		
Model 112, Capillary Flow, 2 Channel	1	05AF-3011
Model 114, Capillary Flow, 4 Channel	1	05AF-3021
Model 121, Analytical Flow, 1 Channel	1	05AF-3031
Model 122, Analytical Flow, 2 Channel	1	05AF-3041
Model 123, Analytical Flow, 3 Channel	1	05AF-3051
Model 124, Analytical Flow, 4 Channel	1	05AF-3061
Model 132, Semi-Prep Flow, 2 Channel	1	05AF-3071
Model 133, Semi-Prep Flow, 3 Channel	1	05AF-3081
Model 134, Semi-Prep Flow, 4 Channel	1	05AF-3091
Model 141, Prep Flow, 1 Channel	1	05AF-3101
Model 142, Prep Flow, 2 Channel	1	05AF-3111
Vacuum Degassers, Serries 200		
Model 212, Capillary Flow, 2 Channel	1	05AF-3121
Model 214, Capillary Flow, 4 Channel	1	05AF-3131
Model 221, Analytical Flow, 1 Channel	1	05AF-3141
Model 222, Analytical Flow, 2 Channel	1	05AF-3151
Model 223, Analytical Flow, 3 Channel	1	05AF-3161
Model 224, Analytical Flow, 4 Channel	1	05AF-3171
Model 232, Semi-Prep Flow, 2 Channel	1	05AF-3181
Model 233, Semi-Prep Flow, 3 Channel	1	05AF-3191
Model 234, Semi-Prep Flow, 4 Channel	1	05AF-3201
Model 241, Prep Flow, 1 Channel	1	05AF-3211
Model 242, Prep Flow, 2 Channel	1	05AF-3221