

Systemec® Stand Alone MINI

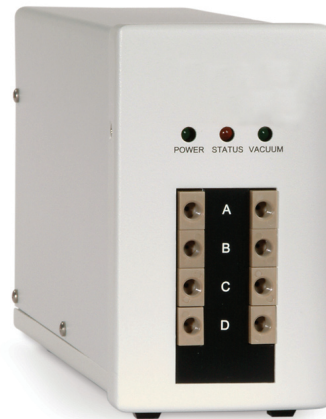
Vacuum Degassing System

The Systemec Stand Alone MINI HPLC 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 five solvent lines may be degassed simultaneously by one unit.

- ▶ Ultra-high degassing efficiency
- ▶ Low volume, easy to prime
- ▶ Patented control eliminates baseline fluctuations
- ▶ Single lumen design for consistent degassing
- ▶ Inert flow path
- ▶ 5+ year lifetime

ZHCR® Control with Built-in Test Diagnostics

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



Systemec AF / ZHCR Degassing Technology

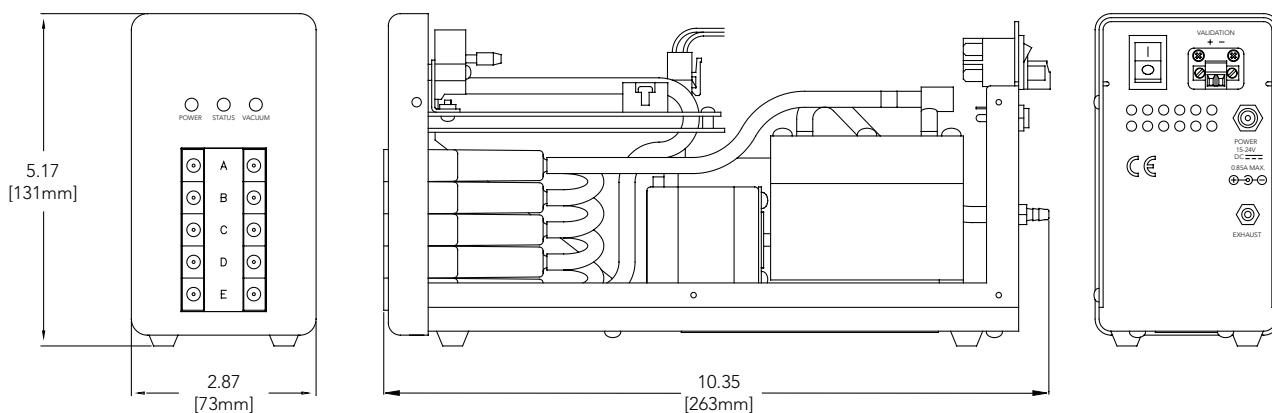
Flow-through vacuum degassing chamber with a single amorphous perfluorinated copolymer (Systemec AF) degassing membrane, enabling degassing efficiency 50 times that of PTFE.

The ZHCR (Zero Hysteresis / Constant Run) vacuum pump employs a patented 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.

The brush-less motor enables quiet operation and is appropriate for environments where solvent vapors may be present.

Overall Dimensions



Available Configurations^A

Systec Part Number	Number of Channels	Channel Volume (µL)	Max HPLC Gradient Flow Capability ^B (mL/min)	Pressure Drop ^C (kPa/mL/min)	Degassing Flow Path ID (mm/inches)
0001-6352	2	480	2.0	0.18	1.14/0.45
0001-6353	3	480	2.0	0.18	1.14/0.45
0001-6354	4	480	2.0	0.18	1.14/0.45
0001-6355	5	480	2.0	0.18	1.14/0.45
0001-6622 ^D	2	480	2.0	0.18	1.14/0.45
0001-6624 ^D	4	480	2.0	0.18	1.14/0.45

A. Custom configurations are available. Consult us for your own OEM solution to your specific application.

B. The flow rates given are for a gradient mixture of 50/50 MeOH/H₂O, with a typical low pressure gradient mixing valve. Higher flow rates are possible with high pressure mixing.

C. Estimated tubing pressure per unit change in flow assuming laminar flow with a viscosity of 1.0 cP.

D. For GPC applications.

Validation Output

A 2-pin rear panel receptacle labeled "Validation" with mating screw-lock plug is provided to allow a validation signal from the control circuit to be sent to a computer or data system. This validation output indicates vacuum level.

Signal:

- ▶ 5mV DC 0.13 kPa (1 mmHg) / absolute from 2.7 to 106.7 kPa (20 to 800 mmHg) (0.100 V DC at 2.7 kPa (20 mmHg); 4.000V DC at 1.067 kPa (800 mmHg))

Accuracy:

- ▶ ±1.0% of reading ±0.010V DC from 2.7 to 106.7 kPa (20 to 80 mmHg)

Power Requirement

Input Power required with AC Adapter (included):

- ▶ 100 to 240V AC (±10%), 1A, 50 to 60 Hz (±3 Hz)

Four interchangeable wall sockets are supplied with the AC Adapter: North America/Japan, U.K., Continental Europe, Australia.

CE Certification

This product has been certified under the following CE testing standards: EN61326-1; EN55011; EN61300-3-2; EN61300-3-3 & EN61010-1.

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Systec AF™ is a trademark of IDEX Health & Science LLC.

U.S. Patents 5,340,384; 6,248,157 & 6,494,938.

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