



ALL HEATED 2-POINT PreFilter®/SAMPLE SEQUENCER MODEL VE 222



Gas analyzers for emissions measurement are often exposed to heavy soot and dust contamination. Therefore it is necessary to filter the sample gas stream.

The J.U.M. Engineering PreFilter® is an efficient, all heated and low pressure drop sample interface for removing solids from two gaseous sample streams. The Model VE 222 utilizes two independent all stainless steel 2µm mesh filters and two independent all stainless steel sample valves in a thermostatically controlled oven to prevent the loss of high molecular weight hydrocarbons or condensation of water.

The permanent sample filters are regenerated in a matter of seconds by back purging them with air or nitrogen

The Model VE 222 can be installed in the system, or directly at the sampling spot and, with its backpurge system for the two sample filters, offers extended up times at comparatively low maintenance.

A calibration gas inlet offers the ability to test and calibrate a complete sample train that may include the heated sample lines. Our special rear adapter-plate system allows cold-spot free coupling of three heated sample lines inside the heated oven (2 x sample in, 1 x sample out) without the need of special tools.

Additionally the Model VE 222 offers five regular sample outputs under ambient pressure for connecting various analyzers to the unit making it the perfect centerpiece for a sequencing multi component sampling system.

Features

- Two sample inlets, one main sample outlet with capability to couple heated sample lines inside the heated oven
- Five additional regular sample outlets @ ambient pressure to connect other gas analyzers to the same sample source
- All sample wetted components inside the heated chamber
- Oven temperature 190°C (374°F)
- Two permanent heated stainless steel sample filter, 2 µm mesh
- Sample filter backpurge system, allows sample filters to be cleaned independently without dismantling
- Programmable automatic sample filter backpurge system optional
- Remote control for valve operations sample, calibrate and filter backpurge is standard
- Integrated heated sample pump w. up to 25 l/min capacity (unrestricted flow)

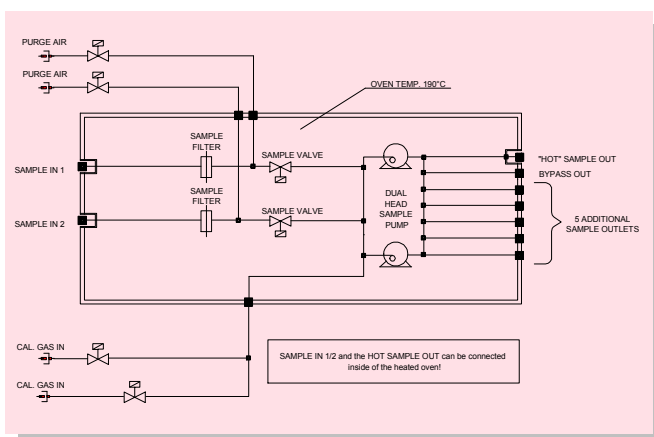
Major Applications

- Sample Interface for continuous gas emissions monitoring systems at two sampling points, for example before and after a thermal or catalytic oxidizer
- Diesel raw exhaust analysis before and after catalyst and/ or soot filter
- Gasoline raw exhaust Analysis before and after catalyst
- Stationary diesel engines two point exhaust analysis
- Removing particles from a gaseous sample where condensation of heavy hydrocarbons is not desirable

Technical Data	
Sample filter material	All stainless steel
Filter pore size	2µm
Sample valves	All stainless steel/Viton®
Purge air valve	All brass
Calibration gas valve	All brass, or to be specified
Sample pump	All stainless steel/Viton® diaphragm
Sample pump Capacity (standard)	12 l/min, unrestricted flow
Oven Temperature	190°C (374°F), electronic temperature controller
Oven Temperature Output	0-5 VDC @ 10mV/°C
Power Requirements	230VAC/50Hz, 1250W (115VAC/60Hz, 850W)
Ambient Temperature	5-43°C (41-110°F)
Dimensions (width x depth x height)	19" (483 mm) x 460 mm x 5 HE (221 mm)
Weight	28 kg (60 lbs)
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Available Options	
EPC 11	Remote control for sample pump. Pump can be switched on and off externally if Instrument is in external mode.
PP 15	Internal heated sample pump, capacity 15 liters/minute unrestricted flow @ operating temperature
PP 25	Internal heated sample pump, capacity 25 liters/minute unrestricted flow @ operating temperature
TPR 22	Built in temperature controller for J.U.M. heated sample lines Model TJ 100 and TJ 100A

The VE 222 is the ideal and most economical „All in One“ sampling solution for alternating stack emissions applications. Only the sample cooler is needed for „cold“ analyzers, Add your extracting „hot & wet“ analyzers direct, and sample cooler and extracting „cold“ analyzers to one each of the existing sample outlets to get a complete heated Continuous Emissions Monitoring System. No stack probe filters needed.



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