ALL HEATED SAMPLE FILTER & INTERFACE
PreFilter® **MODEL VE 112**

Gas analyzers for emissions measurement are typically exposed to heavy soot dust and condensed hydrocarbon 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 filter for removing solids from a gaseous sample. The Model VE 112 utilizes an all stainless steel 2µm mesh filter and an all stainless steel valve in a thermostatically controlled oven to prevent the loss of high molecular weight hydrocarbons or condensation of water.

The Model VE 112 can be installed as a complete sample interface directly in the analyzer rack. With its backpurge system for the permanent installed sample filter the VE 112 offers extended up times at comparatively low maintenance cost. The sample probe and sample line is automatically cleaned from dust and condensed hydrocarbons which every filter backpurge cycle. In most cases, a stack probe filter is no longer needed.

A calibration gas inlet offers the capability to test and calibrate the complete analyzer circuit.

Our proprietary rear panel adapter plate system allows cold-spot free coupling of a heated sample line inside the heated oven without the need of special tools.

The Model VE 112 is also available as a wall or panel mount instrument for easier installation in an outdoor cabinet, or in a purged cabinet for zoned areas.

Features

- One sample inlet, one cold spot free main sample outlet with capability to couple heated sample lines inside the heated oven
- Five additional regular sample outlets
- All sample wetted components inside the heated chamber
- Oven temperature 190°C (374°F)
- Permanent heated stainless steel sample filter, 2 µm mesh
- Sample filter backpurge system, allows sample filters to be cleaned 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 (two capacity alternatives for Model VE 112)

Major Applications

The VE 112 is a Complete Sample Interface Solution

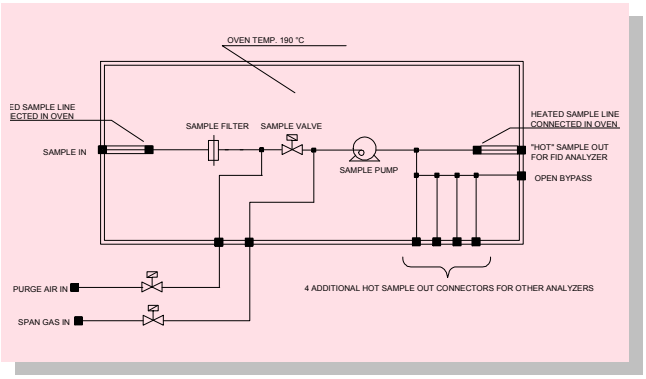
- for continuous stack gas emissions monitoring systems for one THC monitor, one sample conditioner with all NDIR monitors and four more monitors or sensors
- Stationary or transportable CEMs for stack analysis
- Diesel or Gasoline raw exhaust analysis and Stationary diesel engines exhaust analysis
- Removing particles from a gaseous sample where condensation of heavy hydrocarbons is not desirable

Product Brochure,
PreFilter® Model VE 112, english

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	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 221 mm (h = 132 mm for VE 112A)
Weight	25 kg (55 lb.)
	Viton® is a registered trademark of DuPont Dow elastomers

Available Options	
APO 11	Built in automatic programmable backpurge timer for the sample filter; EXTERNAL MODULE ONLY ON VE 112A!
COS 11	Overflow calibration system for EPA CFR 40, Method 25A, TA-Luft & 13.BImSchV TÜV approved
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; NOT AVAILABLE ON VE 112A!
PP 25	Internal heated sample pump, capacity 25 liters/minute unrestricted flow @ operating temperature; NOT AVAILABLE ON VE 112A!
TPR 11	Built in temperature controller for J.U.M. heated sample lines Model TJ 100 and TJ 100A; EXTERNAL MODULE ONLY ON VE 112A!

J.U.M. Engineering is offering a wide variety of stationary heated sample filters and filter/sequencers which can be tailored to your specifications.



The VE 112 is the ideal and most economical „All in One“ sampling solution for stack emissions applications. Only the sample cooler is needed for „cold“ analyzers, Add your analyzers and sample cooler and your extracting analyzers to one of the existing sample outlets to get a complete heated Continuous Emissions Monitoring System No stack probe filter needed.

J.U.M.® Engineering G.m.b.H.
Manufacturing, R&D, Distribution & Service

Gauss-Str. 5
D-85757 Karlsfeld, Germany
Tel.: 49-(0)8131-50416, Fax: 49-(0)8131-98894
E-mail: info@jum.com, Internet: http://www.jum.com

Represented By: