

Automatic Filter Changer For Engine and Vehicle Testing Applications

Features

- Compact Portable Cabinet
- Covered Flow Compartment
- Adjustable height stand
- PLC based Control System
- Host Control System Interface
- Interfaces to Sierra BG[®]2 or BG[®]3 Partial Flow Samplers
- Positive leak tight seal
- Simple Test Set Up
- Converts from 70 mm to 47 mm filters in less than 10 minutes
- Connects within inches of the exhaust stack
- Optional Cabinet Designs
- Optional temperature controlled cabinet
- Optional heated sample inlet tube



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Your Engine Particulate Emissions Specialist.

Automatic Filter Changer



Description

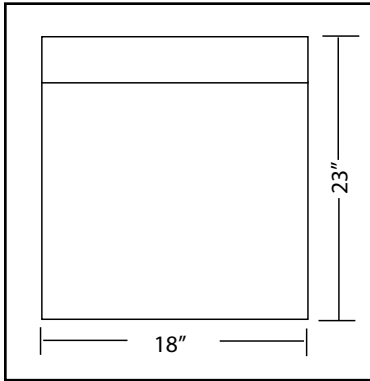
Sierra's Automatic Filter Changer is a compact and portable safety and automation tool that should be a part of every emissions test cell. The system allows the engineer to stay out of the test cell during testing so several tests can be done in succession. The system typically holds either 12 or 15 single or double filter cartridges, but can be made to accommodate as many as 22 cartridges. In addition, the system can be converted in the field from 70mm to 47mm in less than 10 minutes, or vice versa. Typical cycle time between filter stations is only 25 seconds and the system is leak tight to 29"Hg.

Sierra's Automatic Filter Changer was designed to work seamlessly with the BG[®]2 and Model BG[®]3 particulate partial flow sampling systems to fully automate sample collection to greatly improve testing efficiency and testing safety.

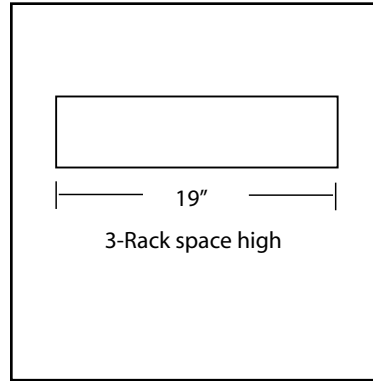
The system meets all Federal Register requirements and was tested at Caterpillar over a 6 month period and proven to be the most rugged and reliable automatic filter changer on the market.

Dimensional Specifications

Auto Changer Dimensions



System Controller Dimensions



Dual Filter 70mm Cassette Assembly



Rack Mounted System Controller

General Specifications

- Filter sizes- 47mm, 70 mm & 90mm
- Capacity- 12 x 70mm 16 x 47mm
- Cassette- single or double 47mm and 70mm
- Leak tight at 29" Hg
- Cycle Time- approximately 25 seconds between stations
- Changer Dimensions-W 18"x D23"x H(adjustable) 20" to 35"
- Changer Weight- 40 lbs
- Controller Dimensions-W 19" x D 20" x H 5.5"(3U)
- Controller weight 15 lbs
- Minimum expected operations>100,000 cycles
- Utilities- Clean Compressedair at 90 psi (610kpa)
- Power- 120, 200,240VAC50/60 Hz
- Remote control cable- 25'
- Meets Federal Register Requirements
- Built in parallel control computer interface



Twelve Station Automatic Filter Changer Tray

System Control

- Standard 19" rack mount chassis
- PLC based control Functions:
 - Advance -Rotates carousel to next position
 - Home- Rotates carousel to start/home position
- Status Indicators:
 - Power, Sampling
 - Cassette cover on/off
 - Sampling cone up/down
 - exhaust cone up/down



BG®3 attached to Automatic Filter Changer