

API-Cecomp Group *n'fo*

Technical & Application Note C131

Application: Monitor negative pressure on fume hood

Type Of company: Pharmaceutical Company

Location: Illinois

Problem: The customer is a pharmaceutical company that produces drugs and chemicals for many different applications and uses fume hoods in all of the development and testing labs. A fume hood is a large piece of scientific equipment common to laboratories designed to limit a person's exposure to hazardous and/or unpleasant fumes. They are generally set back against the walls and are often fitted with in fills above, to cover up the exhaust ductwork. The front is a movable sash, usually in glass, able to move up and down on a counterbalance mechanism. The hood works with sash positioning controls to let the HVAC system know how much the sash is being opened. The controls then let the system know to reduce or increase the fan speed and thus the volume of air that needs to be exhausted.

Note: for additional information on this process see http://en.wikipedia.org/wiki/Fume_hood

The customer used a mercury manometer to monitor the pressure for glass experimental bottles and beakers in the fume hood but many times when changing or removing experiments/tests the mercury manometer would get knocked over or broken. The problem is that it is against EPA regulations to allow mercury into a drain system which discharges into a sewage treatment plant. The customer required an portable, cost effective accurate electronic manometer that had no mercury that does not require an electrician to install.

Solution: The customer will use a ARM760AD (Absolute Reference Manometer) to monitor negative pressure (vacuum) inside the fume hood. The special connector on the wall mount power supply does not require an electrician to install.



ARM760AD

Digital Absolute Reference Manometer



Benefits of API's solution:

±0.25% Test Gauge Accuracy

Ease of installation

0.5" digit height on Display for ease of reading

Repeatability of reading

Cecomp Unique Feature



Simple Installation

The ARM760AD includes 6 feet of cable with a female connector and a 115VAC/12VDC adapter with 6 feet of cable with plug. After the gauge is installed using a wrench on the hex fitting, route the wires away from heat sources and moving equipment and connect the AC adapter's plug to the gauge cable connector. Lastly, plug the AC adapter into a 115 VAC outlet.

To find your local representative:
www.api-usa.com/api_rep_map.php

FREE FACTORY APPLICATION ASSISTANCE
Contact  Customer Service
Where People Answer The Phone
www.api-usa.com
800-942-0315



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