

FHC

FUME HOOD CONTROLLER

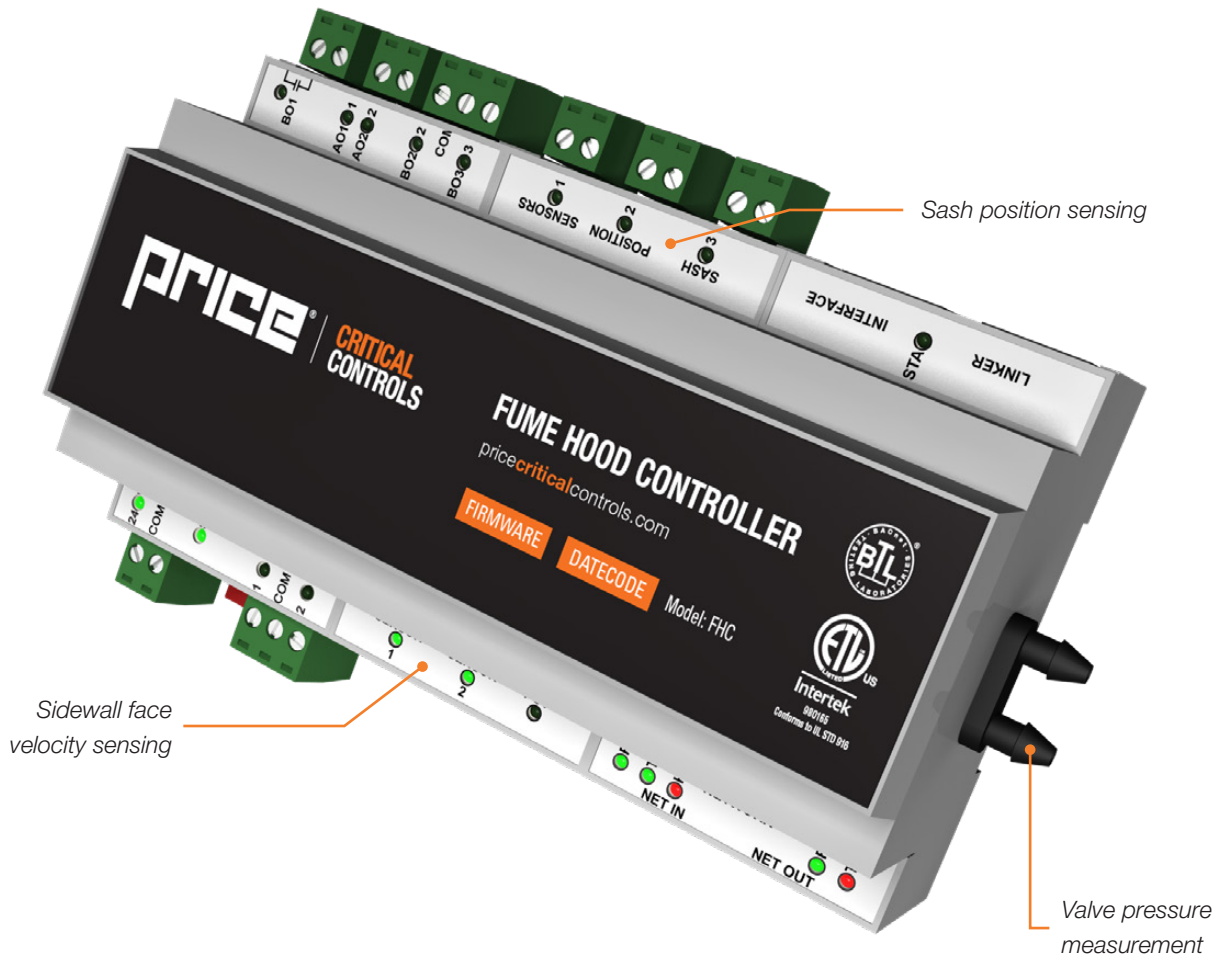


FHC

Fume Hood Controller

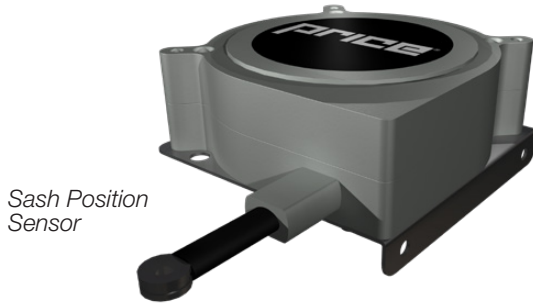
The Price Fume Hood Controller (FHC) is an exceptionally versatile controller for monitoring and controlling fume hood face velocity. Designed specifically to meet the needs of all fume hood types, the FHC provides assurance that required fume hood face velocity is satisfied and the work environment is safe.

The FHC allows for various fume hood control configurations including sash position sensing, sidewall face velocity sensing or hybrid sensing. When the FHC is utilizing a venturi valve to control the fume hood exhaust airflow, the controller measures pressure drop across the valve allowing for duct-system pressure alarms and simplified balancing. Once installed and commissioned, the FHC is maintenance-free allowing for reliable fume hood control and monitoring.



SASH POSITION SENSING

The FHC can deliver fume hood face velocity control through sash position sensing. This control configuration utilizes sash position sensors to calculate and adjust the exhaust airflow based upon the measured sash opening.



SIDEWALL SENSING

An alternative method to sash position face velocity control is sidewall sensing. The FHC can control face velocity by measuring the differential pressure from the fume hood to the laboratory space and adjusting the exhaust airflow to meet the required face velocity.



HYBRID SENSING

Hybrid sensing utilizes both sash position sensing and sidewall sensing technologies to deliver calculated exhaust control with measured face velocity. Once the exhaust flow adjusts for a sash position change, the sidewall sensor monitors face velocity and tracks to meet the required face velocity independent of the sash position sensor.

TYPICAL APPLICATIONS

The FHC provides precise monitoring and control of face velocity on fume hoods. Utilizing sash position sensing, sidewall face velocity sensing or hybrid sensing, the FHC ensures user safety by continuously monitoring face velocity and controlling the exhaust airflow to maintain the required fume hood face velocity.

FEATURES

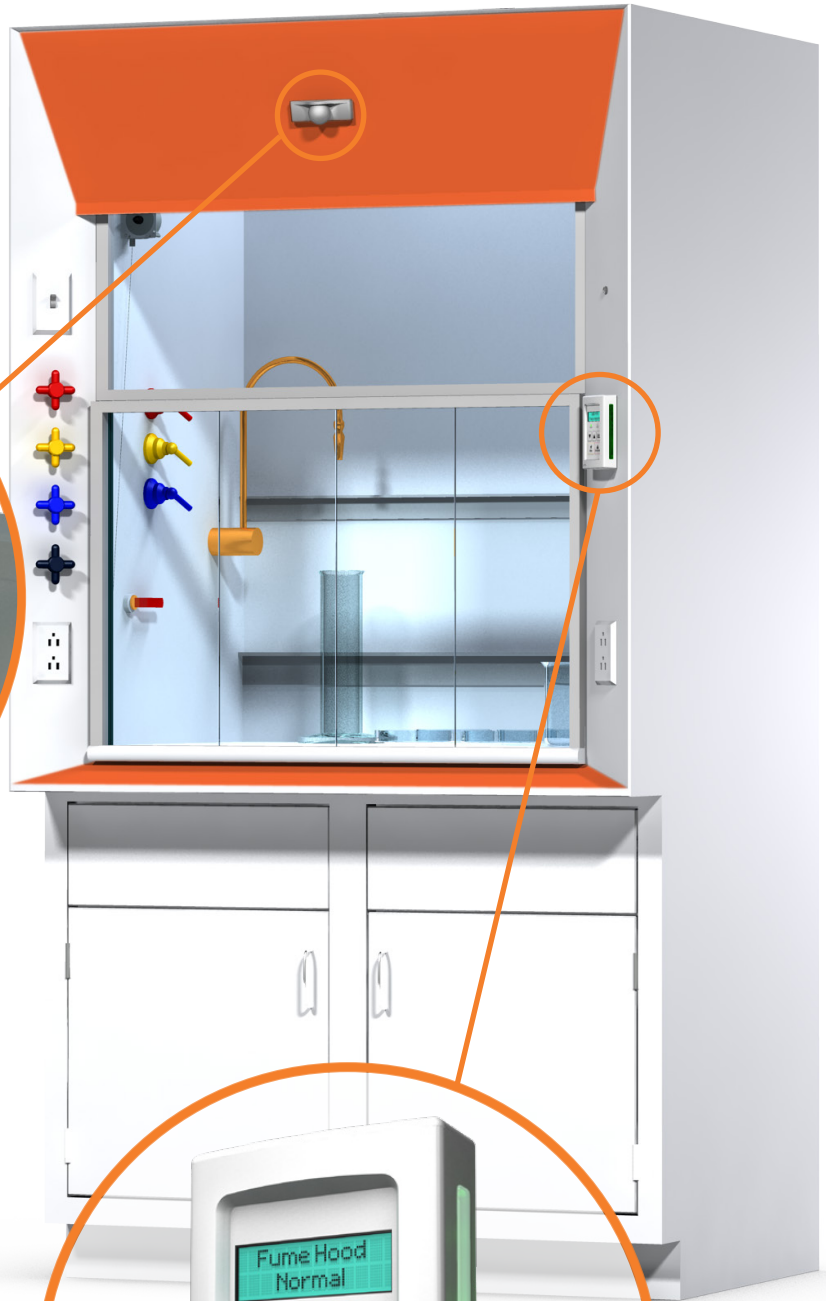
- + Sash position sensing, sidewall face velocity sensing or hybrid control configurations
- + Less than 1 second speed of response as defined by ANSI Z9.5
- + Fume hood interface designed with audible and visual alarms
- + Intuitive startup and balancing software
- + Valve pressure measurement for simplified startup and pressure monitoring
- + Presence sensor available for face velocity setback
- + BACnet MS/TP

STANDARDS & CERTIFICATIONS

- + ASHRAE 110 – Method of Testing Performance of Laboratory Fume Hoods
- + ANSI Z9.5 – American National Standard for Laboratory Ventilation
- + BTL Listed - BACnet Testing Laboratories

USER PRESENCE SENSING

When configured with a presence sensor, the FHC can detect user presence and adjust control to meet application needs. The Price Presence Sensor boasts a low profile while allowing for an adjustable coverage pattern.



SIMPLE FACE VELOCITY INDICATION

The FHC provides fume hood information locally on the fume hood interface. The illuminated display and 180° side-view use recognizable colors to provide a quick visual status. A password-protected menu allows for full setup or simple set-point adjustments right at the fume hood.



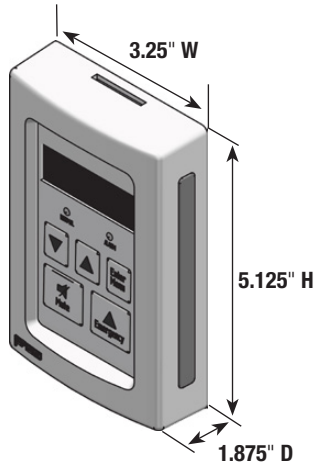
SPECIFICATIONS

| | |
|--------------------------------------|--|
| Input Power | 24 VAC +/- 10%, 50/60 Hz, 15 VA, Class 2 |
| Environmental (operating) | 50°F to 122°F (10°C to 50°C), 5% to 95% R.H. (non-condensing) |
| Environmental (storage) | -22°F to 122°F (-30°C to 50°C), 0% to 95% R.H. (non-condensing) |
| Inputs | 2 binary inputs, 2 sidewall sensor inputs, 3 sash position sensor inputs, Fume Hood Network |
| Outputs | 2 Analog outputs (0-10 VDC, max: 10 mA), 3 dry binary output (max: 24 VAC/VDC, 100 mA) |
| Pressure Sensor | 0.0-5.0 in.w.c. (0-1250 pa) |
| Sash Position Sensor | Enclosure: IP 50 plastic Measuring Cable: nylon-coated stainless steel Connection: 2-wire Full Stroke Range: 0-50 in. (0-1275 mm) or 0-120 in. (0-3275 mm) Output Signal: Voltage divider utilizing 10K POT. Accuracy: ± 0.25% FS |
| Sidewall Face Velocity Sensor | Enclosure: 94V-0 flame retardant plastic Connection: RJ-12 to locking circular connection Range: ±0.1 in.w.c. (25 Pa) Output Signal: Digital Accuracy: 3% of reading |
| Presence Sensor | Input Power: 24 VAC +/- 10% Detection: Doppler Shift Radar Detection Pattern: Selectable, wide or narrow Output Signal: Binary |
| Indicators | LCD Screen, 180° side-view RGB LEDs |
| Communication Protocol | BACnet MS/TP |

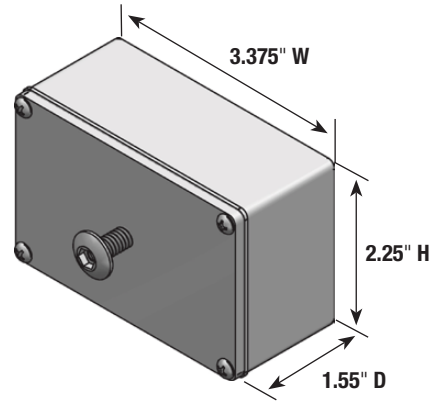
Specifications subject to change without notice

DIMENSIONAL DATA

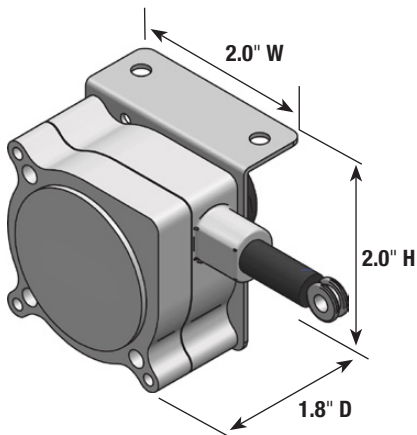
Fume Hood Interface



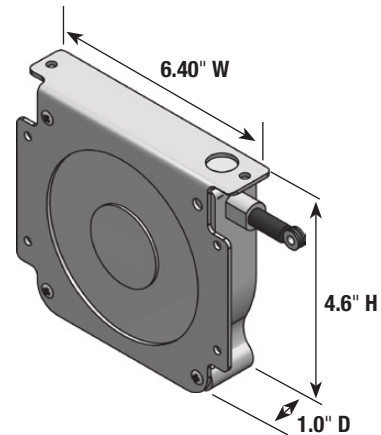
Sidewall Face Velocity Sensor



Sash Position Sensor – 50 inch



Sash Position Sensor – 120 inch



Presence Sensor

