

HORIZON



PRODUCT OVERVIEW

The Horizon air valve, utilizing CRC's patented CLV air valve technology, provides a linearized analog output signal proportional to airflow volume (CFM) and accepts an analog input signal for precise airflow modulation. Operating as a standalone device, it delivers highly accurate and reliable control by leveraging the venturi effect. Engineered for optimal performance, it features minimal pressure drop and an industry-leading turndown ratio, ensuring exceptional efficiency and responsiveness.



VENTURI VALVE DESIGN

The Horizon Venturi Valve incorporates CRC's patented CLV air valve technology, providing precise airflow measurement through indirect static pressure sensing via dedicated inlet and throat manifolds. This advanced design ensures exceptional measurement accuracy and reliable performance, even in contaminated or particulate-laden airstreams.

ENERGY EFFICIENT – LOW PRESSURE DROP

Engineered for exceptional efficiency, the Horizon operates with minimal pressure drop, requiring only 0.25" max static pressure, making it the most efficient air valve in the industry while delivering substantial energy savings.

HIGH-CAPACITY AIRFLOW PERFORMANCE

- Single-unit capacity: Up to 4,200 CFM
- Dual-unit capacity: Up to 7,800 CFM
- Highest airflow-to-size ratio compared to alternatives

VERSATILE BUILD AND ACTUATION OPTIONS

Compatible with both corrosive and non-corrosive environments, the Horizon supports high-speed, standard-speed, fail-safe, and fail-in-place actuation configurations for diverse applications.

FLEXIBLE INSTALLATION – NO DUCT RESTRICTIONS

Designed for installation in any orientation, the Horizon requires no straight duct runs at the inlet or outlet, allowing for maximum flexibility in system design.

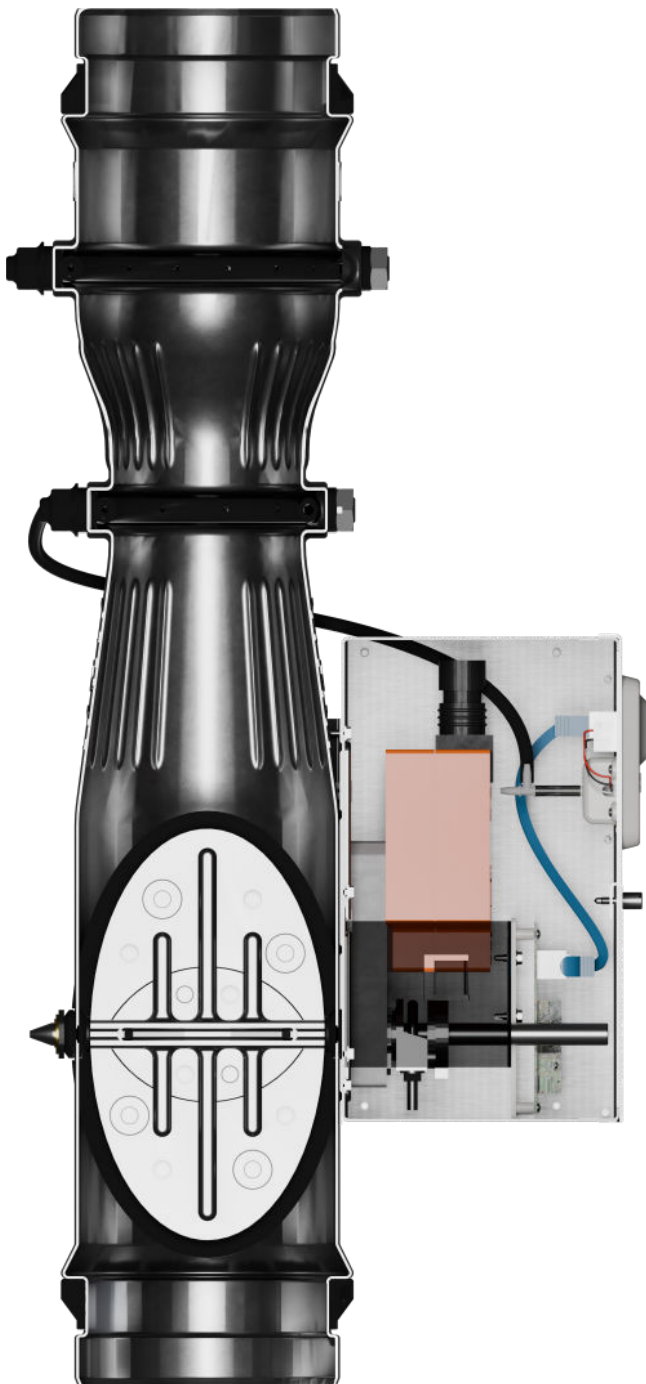
LOW MAINTENANCE & OPERATION COSTS

Utilizing proven, contamination-resistant technology, the Horizon requires no scheduled maintenance, ensuring long-term reliability and lower operational costs.

PRECISION AIRFLOW MEASUREMENT

The Horizon Air Valve is a standalone, high-precision airflow control device designed for seamless integration with third-party control systems. Utilizing CRC's patented CLV air valve technology, it delivers maintenance-free, highly accurate airflow management by leveraging the Venturi effect for consistent and repeatable performance.

The valve provides a linearized analog output signal proportional to airflow volume (CFM) and accepts an analog input signal for precise modulation. Engineered for optimal efficiency, it features minimal pressure drop and an industry-leading turndown ratio, ensuring superior responsiveness and energy savings in critical airflow applications.



KEY FEATURES

- **Commissioned Accuracy:** Airflow accuracy of less than $\pm 5\%$ with a minimum of 10 to 1 turndown.
- **Energy Efficient:** Low-pressure-drop design supports static pressures as low as 0.25 inches WC, reducing operating costs.
- **Patented Indirect Sensing Technology:** Maintains unobstructed airflow paths, resistant to duct-borne contaminants.
- **Flexible Installation:** No inlet/outlet restrictions, with unrestricted mounting orientation and axis installation options.
- **Advanced Damper Design:** Engineered for precise airflow control and superior damper authority, with the capability for full closure
- **Long-Term Repeatability:** Delivers consistent performance with no scheduled maintenance required.
- **High-Capacity Airflow Range:** Supports airflow rates from 0 to 7,800 CFM.
- **Durable Construction:** Built for both corrosive and non-corrosive environments, with stainless steel construction and optional protective coatings for extreme conditions.
- **High-Speed Actuation:** Compatible with both Fail-Safe and Fail-In-Place operation modes for rapid response.
- **Multiple Actuation Options:** Configurable for high-speed actuation to meet various control needs.
- **Fail-Safe & Fail-In-Place Modes:** Provides dependable operation under diverse conditions.

APPLICATIONS

- Hospitals
- Laboratories
- Manufacturing facilities
- Vivariums
- Supply air
- Exhaust air
- Snorkel and canopy hood exhaust
- Corrosive environments
- Anywhere maintenance free precision airflow control is required



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