

EBA AIR VALVE

- Accurate
 - Reliable
 - Variable or constant volume
 - Pressure independent or pressure dependent

EB AIR
Control Inc.



EB AIR CONTROL INC.

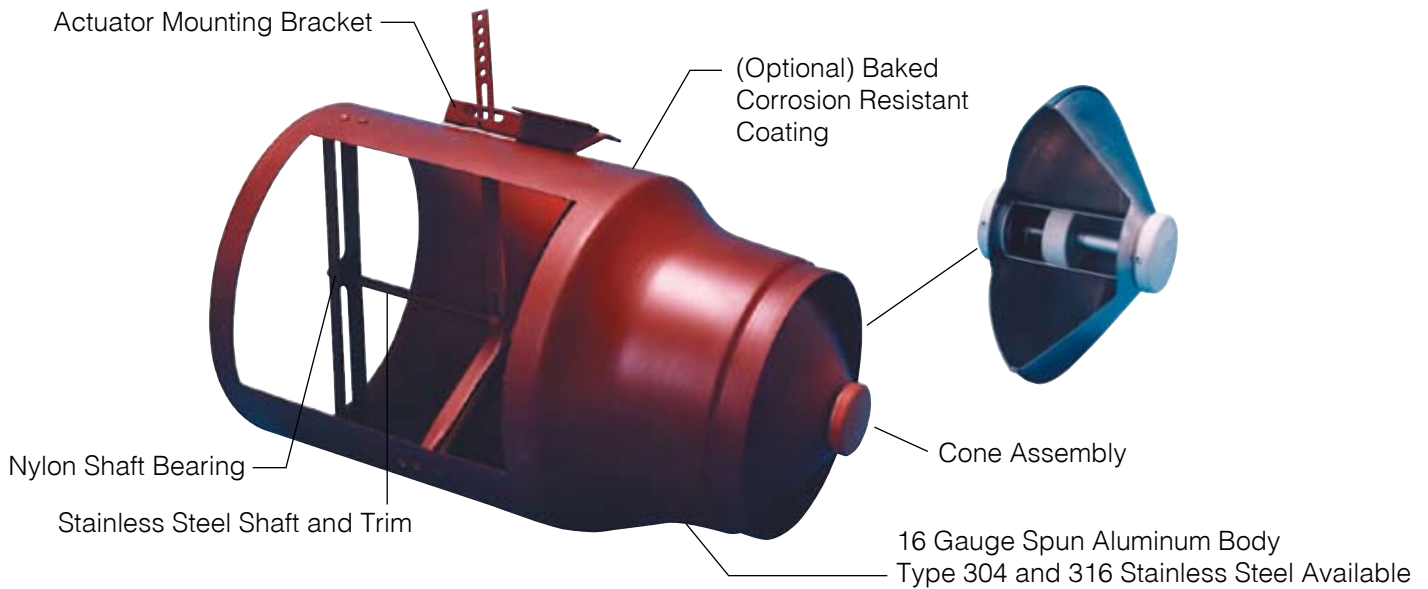
MANUFACTURERS OF INNOVATIVE HVAC PRODUCTS

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ISO 9001:2000 Certified
KTA 1401 Certified
(Nuclear Safety Standards)

CONSTRUCTION DETAILS



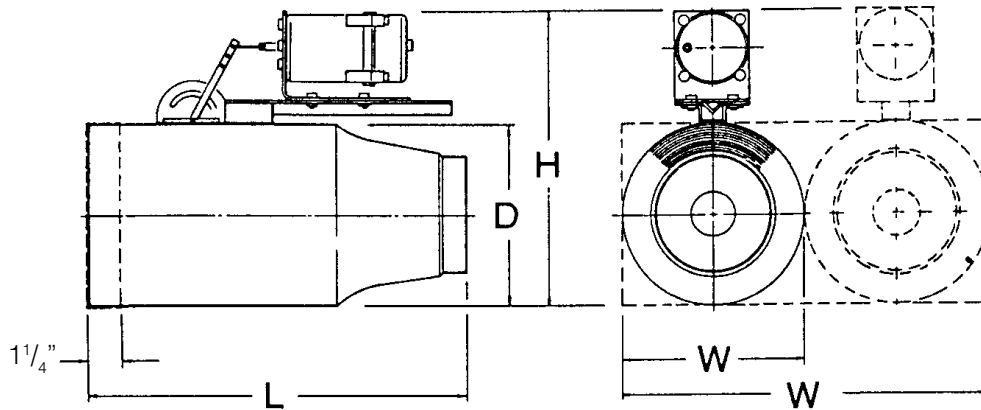
FEATURES:

- Three models available: Pressure independent in either constant volume or variable volume (two positions or modulating); Pressure dependent with integral flow measurement.
- Fully pressure independent to within 5% of set-points between 0.6" and 3.0" WG pressure drop across the valve. (Special valves are available that can operate as low as 0.3" WG pressure differential. Consult factory for details).
- Pressure dependent models with integral flow measuring station having a measurement accuracy of 2%, providing a true closed loop system.
- Fail safe operations per NFPA-45. Normally open (NO) valves (fails in open position) are standard. Field convertible from fail open, closed or at one of the preset min/max CFM positions.
- Dependable pneumatic or electronic operators.
- All valves have shut-off capability. Less than 1% leakage rate when fully closed.
- Construction: Rugged, seamless 16GA spun aluminum valve body and cone.
 - 304 stainless steel shaft and lever arm.
 - Nylon bearings.
 - Valox cone plugs.
 - Heavy gauge aluminum support leg.
- Sound power levels below ASHRAE recommended levels for hospital private rooms.
- 10:1 turndown up to 100:1 depending on application.

OPTIONS:

- Available in type 304 or 316 spun stainless steel, or application specific corrosion resistant coating.
- Spring return and/or modulating electronic actuators.
- Teflon bearings.
- Flow measuring station.
- Flanges at inlet and outlet connections.
- Matching media-free (Packless) silencers.
- Integral heating coils.
- Factory mounting of controls.





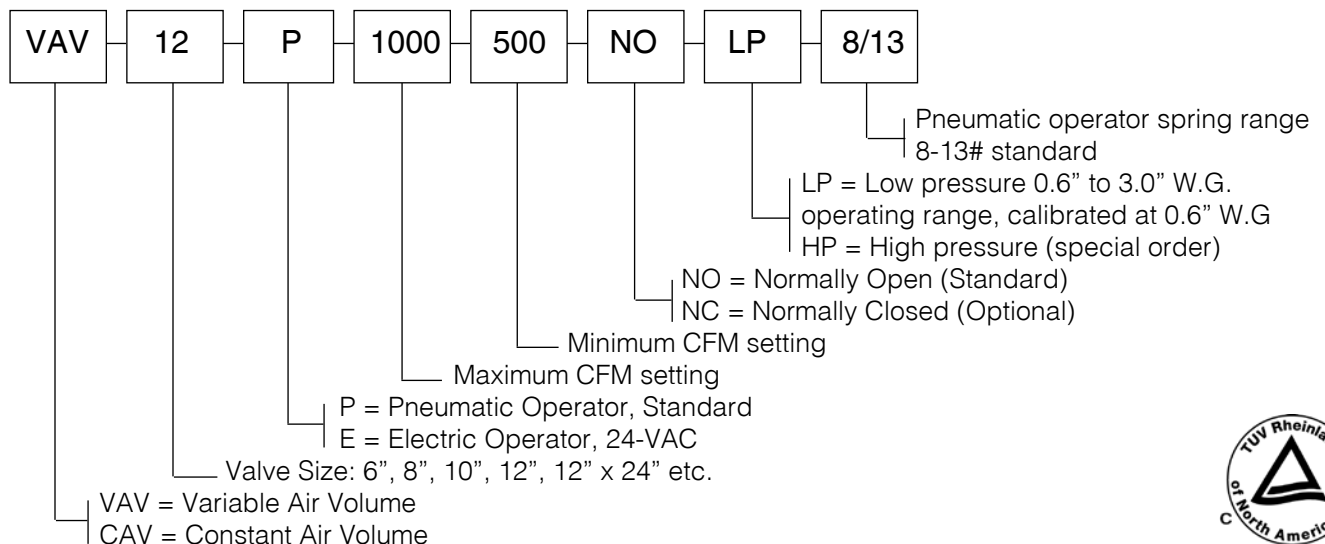
**TABLE ONE
PHYSICAL
DATA**

Valve Size	Dimensions in inches				Approx. Wt. In lbs.
	H	L	D	W	
SINGLE MODULE UNITS					
6"	11	15 ⁵ / ₈	5 ⁷ / ₈	5 ⁷ / ₈	11
8"	13 ¹ / ₄	17 ¹ / ₈	7 ⁷ / ₈	7 ⁷ / ₈	12
10"	15 ¹ / ₂	17 ⁵ / ₈	9 ⁷ / ₈	9 ⁷ / ₈	15
12"	17 ³ / ₄	18 ⁷ / ₈	11 ⁷ / ₈	11 ⁷ / ₈	18
MULTIPLE MODULE UNITS					
10" x 20"	15 ¹ / ₂	19 ³ / ₈	9 ⁷ / ₈	20	30
12" x 24"	17 ³ / ₄	20 ⁵ / ₈	11 ⁷ / ₈	24	36
12" x 36"	17 ³ / ₄	20 ⁵ / ₈	11 ⁷ / ₈	36	54
12" x 48"	17 ³ / ₄	20 ⁵ / ₈	11 ⁷ / ₈	48	72
24" x 48"	35 ¹ / ₂	20 ⁵ / ₈	11 ⁷ / ₈	48	144

**TABLE TWO
FLOW
RATINGS**

Size	No of Modules	Pressure Independent Values	Pressure Dependent Values (@ 2" WG)
SINGLE MODULE MODELS			
6"	1	270 CFM	400 CFM
8"	1	520 CFM	800 CFM
10"	1	800 CFM	1,300 CFM
12"	1	1,200 CFM	2,000 CFM
MULTIPLE MODULE UNITS			
10" x 20"	2	1,600 CFM	2,600 CFM
12" x 24"	2	2,400 CFM	4,000 CFM
12" x 36"	3	3,600 CFM	6,000 CFM
12" x 48" or 24" x 24"	4	4,800 CFM	8,000 CFM
24" x 36"	6	7,200 CFM	12,000 CFM
24" X 48"	8	9,600 CFM	16,000 CFM

HOW TO SELECT EBA AIR VALVE



GUIDE SPECIFICATIONS

Furnish and install Air Valves of the type, capacity, and quantity as shown on the drawings and/or schedules. The basis of design is EB Air Control.

Valves shall be a venturi shape and so designed to provide linear air flow to operator stroke relationship for a precise control of air delivery. Valves shall have a tubular shock absorber to prevent chattering or bouncing that may occur due to aerodynamic instability of the air system or its components. Valves shall be equipped with a mechanical means of pressure independence and shall maintain settings within $\pm 5\%$ from 0.3" w.g. to 3" w.g. operating static pressure across the valve. Response to changes in duct static pressure shall be instantaneous.

Maximum and minimum settings shall be factory calibrated and valves shall be individually tagged with specific calibration data. For maximum flexibility settings shall be field adjustable using standard tools. Factory calibration equipment shall be accurate to $\pm 1\%$ of actual airflow and shall be N.I.S.T. traceable.

Valve housings shall be spun from minimum 16 gauge aluminum and shall be a formed single piece housing without welds. Valves for fume hood and other indicated service shall be either 304 S.S., 316 S.S., or aluminum with baked enamel, epoxy, anodized or heresite coating. When a coated finish is supplied the manufacturer shall field repair any scratches or other damage to the coating. Valve cones and support legs shall be made of the same material as the valve housings. Valve shafts shall be of 304 stainless steel for all housing constructions. Valve cone shock absorber shall be machined or stamped from heavy gauge aluminum; bearings shall be of self-aligning nylon or teflon. Lever arms shall be of 304 stainless steel with one pivot point and shall directly connect to cone and actuator shafts without the use of "S" links, for reliable, repeatable, trouble-free operation. All valves shall be originally supplied with the necessary hardware to allow field change from normally open to normally closed and back.

All valves shall be capable of complete close-off with guaranteed leak rates not to exceed 1% of maximum valve air flow rating @ 3" w.g. operating static pressure. Provide separate shutoff dampers to meet this requirement if valve close-off rating exceeds 1%. Variable volume air valves shall provide a minimum 10:1 turndown.

Supply valves shall be normally closed and exhaust valves normally open. Supply valves shall fail to (minimum scheduled air flow/closed/last safe position) and exhaust valves shall fail to (maximum scheduled air flow/open/last safe position).

Each valve shall be factory tested and calibrated using actual air flow tests.

**DUE TO EBA's POLICY OF CONTINUOUS DESIGN IMPROVEMENTS,
ENCLOSED DATA IS SUBJECT TO CHANGE WITHOUT NOTICE.**

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Your local representative:
