



High Temperature AV3000

US Patents 6,991,177 & 7,543,759

Specially Made for High Temperature Applications



- Exceptionally Low Pressure Drop
 - Design System Pressure – as low as 0.05" (12.5 Pa)
- Fast Speed of Response
- True Airflow Feedback
- No Straight Run Requirements
- Linear Response
- High Accuracy and Turndown
- Can be Mounted in Any Position
- ASHRAE 90.1 Compliant – No Additional Hardware
- No Scheduled Maintenance
- Universal Voltage and Current Input/Output
- 5-Year Manufacturer Warranty

Manufactured in the USA.



The Accutrol AccuValve® AV3000 represents the first truly new design in airflow control valves in decades.

The revolutionary design of the AccuValve created for sustainable laboratory and critical environments maximizes turndown while maintaining exceptionally low pressure drop. The features and benefits of the AccuValve make it the choice of many of the world's most prestigious and demanding clients.

Features & Benefits

The High Temperature AV3000 is specifically designed for high temperature applications in critical environments where fast speed of response and precise airflow measurement is required. The AccuValve's award winning design incorporates:

Exceptionally Low Pressure Drop

AccuValve's award winning design incorporates a streamlined compression section and a carefully designed static regain section. These features provide lower pressure drop, lower noise level and better flow measurement conditions than all other available technologies.

True Airflow Measurement

The integral high accuracy vortex airflow sensing provides high turndown while maintaining accuracies of 5% of reading over the flow range, ensuring precise airflow control.

No Straight Run Requirements

There are no straight duct runs required before or after the valve, making application of the valve very simple. The air compression in the valve provides laminar airflow throughout the airflow range providing repeatable airflow measurement regardless of inlet or outlet conditions.

Simple Layout and Installation

All parts of the AccuValve are accessible from the front of the valve simplifying installation requirements. In addition, the actuator can be completely inverted should field conditions require such.

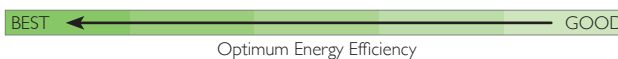
ASHRAE Standard 90.1

Compliant without need for additional hardware

ASHRAE Standard 90.1 calls for the reset of the static pressure setpoint in VAV systems equipped with DDC controls. The AccuValve design allows the Building Automation System to provide this benefit to the owner without the requirement of any additional hardware cost. This is unique to the AccuValve for critical environments.

Operating Pressure Selector

Valve Size (mm)	Eng Units	Airflow Range							Transmitter Range	
		Minimum	Maximum Design Airflow					Maximum		
6" (152)	CFM	30	99	143	174	206	230	254	315	0-330
	L/S	14	47	67	82	97	108	120	149	0-156
	CMH	51	168	243	296	350	391	432	535	0-561
8" (203)	CFM	80	252	367	447	528	589	650	800	0-850
	L/S	38	119	173	211	249	278	307	378	0-401
	CMH	136	428	624	760	897	1000	1104	1359	0-1444
10" (254)	CFM	120	428	606	733	860	958	1056	1300	0-1370
	L/S	57	202	286	346	406	452	498	614	0-647
	CMH	204	727	1030	1245	1461	1627	1794	2209	0-2328
12" (305)	CFM	180	591	840	1016	1192	1326	1461	1790	0-1900
	L/S	85	279	396	479	563	626	690	845	0-897
	CMH	306	1004	1427	1726	2025	2253	2482	3041	0-3228
14" (356)	CFM	250	979	1364	1624	1884	2079	2275	2750	0-3000
	L/S	118	462	644	766	889	981	1074	1298	0-1416
	CMH	425	1663	2317	2759	3201	3533	3865	4672	0-5097
12"x18" (305x457)	CFM	260	1003	1437	1761	2086	2341	2596	3200	0-3400
	L/S	123	473	678	831	984	1104	1225	1510	0-1605
	CMH	442	1704	2441	2992	3544	3977	4411	5437	0-5777
12"x24" (305x610)	CFM	350	1261	1812	2213	2614	2925	3237	4000	0-4200
	L/S	165	595	855	1044	1234	1381	1528	1888	0-1982
	CMH	595	2142	3079	3760	4441	4970	5500	6796	0-7136
12"x36" (305x915)	CFM	520	2005	2875	3523	4172	4681	5191	6400	0-6800
	L/S	245	946	1357	1663	1969	2209	2450	3020	0-3209
	CMH	883	3407	4885	5986	7088	7954	8820	10874	0-11553
12"x48" (305x1220)	CFM	700	2522	3625	4426	5228	5850	6473	8000	0-8400
	L/S	330	1190	1711	2089	2467	2761	3055	3776	0-3964
	CMH	1189	4285	6159	7520	8882	9940	10998	13592	0-14272
Operating Pressure	"W.C.	< 0.01	0.05	0.1	0.15	0.2	0.25	0.3	0.45	
	Pa	< 2.5	12.5	25	37.5	50	62.5	75	112.5	



* Minimum operating pressure when tested in accordance with ANSI/ASHRAE 130-2008

For further assistance in making your AccuValve selections, please refer to the *AccuValve Selection Guide for Operating Pressure*. An AccuValve selection guide for iPhone and iPad application is also available to assist with AccuValve selections.



Specifications

ACTUATOR ELECTRICAL

Input Power	24VAC ±20% 50/60Hz 24VA max. for round, 12"x18" and 12"x24" 48VA max. for 12"x36" and 12"x48"
	24VDC ±10% 12W max. for round, 12"x18" and 12"x24" 24W max. for 12"x36" and 12"x48"
Control Inputs	2-10VDC Standard, 0-10VDC available (4-20mA using a 500 ohm ¼ W resistor)

TRANSMITTER ELECTRICAL

Input Power	24VAC ±20% 50/60Hz, 2.5 VA max. 24VDC ±20%, 75mA max.
Output Signal	0-10 VDC, 2-10 VDC, 0-20mA or 4-20mA (jumper selectable)
Electromagnetic Compatibility	EMC Directive 2004/108/EC Low Voltage Directive 2004/108/EEC EN61326-1-2006 FCC Part 15
Product Safety	IEC/EN/UL/CSA 61010:2001 CAN/CSA-C22.2 No. 61010-1

PERFORMANCE

Accuracy	±5% of reading or 5 CFM (2 L/S; 8 CMH), whichever is greater
Speed of Response	< 1 second
Shut-off Leakage Rate @ 3"wc valve DP	Standard round valves (model AV316x-xx) <1.5% FS max. Round valves with blade seals (model AV316x-xx-S) <0.5% FS max. Standard rectangular valves (model AV326x-xx) <2% FS max. Rectangular valves with blade seals (model AV326x-xx-S) <1% FS max.
Max. Operating Pressure	3"wc differential pressure across valve
Failure Mode	Fail Last Position or Fail Open/Closed (selectable by model code)

ENVIRONMENTAL

Temperature	
Operating	0° to 350° F (-18° to 177° C)
Storage	-40° to 150° F (-40° to 66° C)
Humidity	0% to 90% non-condensing

MATERIALS OF CONSTRUCTION

Valve Housing	304SS (20 Gauge)
Shafts	316SS
Shaft Bearings	Teflon®
Seals	Viton
Airflow Sensors	303SS

AV3000 High Temperature AccuValve® Ordering Guide

AV 3 6 - -

Shape
1 = Round
2 = Rectangular

Valve Housing Material
6 = High Temperature, 304SS,
20 Gauge

Actuator Type
2 = Fail Last Position, 0-10v
3 = Fail Last Position, 2-10v
4 = Fail Open/Close, 0-10v
5 = Fail Open/Close, 2-10v

Size
06 = 6" Diameter
08 = 8" Diameter
10 = 10" Diameter
12 = 12" Diameter
14 = 14" Diameter
18 = 12"h x 18"w
24 = 12"h x 24"w
36 = 12"h x 36"w
48 = 12"h x 48"w

Options
Blank = No Options
F = Flanges
S = Tight Shut-off*

* Blade seals are standard on all 6" valves

Your representative is:

