Acid Resistant AVT6500

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

Laboratories, Life Sciences, Healthcare

Manufactured in the USA.

AccuValve®

Innovative features for the AVT6500!

- Intuitive Graphical User Interface Dashboard
- Software Selectable I/O
- BACnet® Available
- Bluetooth® Configuration Optional
- AccuNet® High-speed, Room-level Network Optional

Plus, these standard AccuValve features…

- 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 Control Response
- High Accuracy and Turndown
- Optional Remote Airflow Monitor
- ASHRAE 90.1 Compliant – No Additional Hardware
- No Scheduled Maintenance
- Universal Voltage and Current Input/Output

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The Accutrol AccuValve® AVT6000 series 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 AVT6000 series is designed for critical environment airflow control in laboratories, life science and healthcare facilities where fast speed of response and precise airflow measurement is required. The AccuValve's ISO 9001:2015 certified, 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 any other available technology.

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.

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 or complexity. This is unique to the AccuValve for critical environments.

Simple Layout and Installation

All parts of the AccuValve are accessible from the front of the valve simplifying installation requirements.

Intuitive Insight Software

The AVT6500 also incorporates a simple and intuitive graphical user interface which enables the user to configure the valve for their specific requirements. Accutrol's Insight software, provided free of charge, insures that the owner is not required to contact the manufacturer of the airflow control system when changes are required in the field.

BACnet® Option

The optional BACnet® MS/TP allows direct communication to the Building Automation System (BAS) where desired.

AccuNet® Option

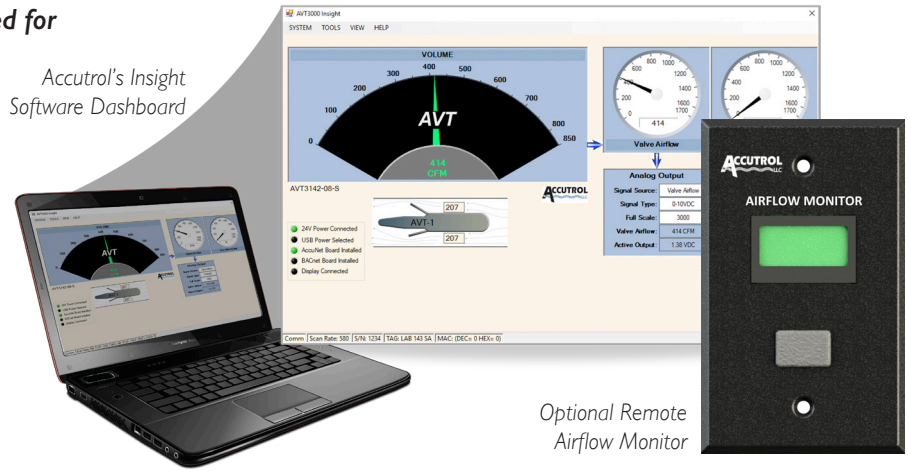
The optional AccuNet high-speed serial bus provides a room level network for summing multiple AccuValve airflow values into a single analog signal representing the total sum of the AccuValve exhaust airflows within the space.

Bluetooth® Configuration Option

The AVT6500 is available with a Bluetooth® configuration option, which alleviates the requirement for a USB connector when accessing the airflow valve via Accutrol's Insight graphical user interface software.

Remote Airflow Monitor Option

The AVT6500 is available with an optional airflow monitor that can be mounted remotely, which displays actual measured airflow.



Accutrol's Insight Software Dashboard

Optional Remote Airflow Monitor

Operating Pressure Selector

Valve Size (mm)	Eng Units	Airflow Range							
		Minimum	Maximum Design Airflow						Maximum
8" (203)	CFM	80	252	367	447	528	589	650	800
	L/S	38	119	173	211	249	278	307	378
	CMH	136	428	624	760	897	1000	1104	1359
10" (254)	CFM	120	428	606	733	860	958	1056	1300
	L/S	57	202	286	346	406	452	498	614
	CMH	204	727	1030	1245	1461	1627	1794	2209
12" (305)	CFM	180	591	840	1016	1192	1326	1461	1790
	L/S	85	279	396	479	563	626	690	845
	CMH	306	1004	1427	1726	2025	2253	2482	3041
14" (356)	CFM	250	979	1364	1624	1884	2079	2275	2750
	L/S	118	462	644	766	889	981	1074	1298
	CMH	425	1663	2317	2759	3201	3533	3865	4672
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

BEST ← GOOD

Optimum Energy Efficiency

* 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 tool for iPhone, iPad and Android devices is also available to assist with AccuValve selections.

Specifications

ACTUATOR ELECTRICAL

Please reference the following Actuator Submittal documents:

Actuator #20-0008 (High-Speed FLP 0-10V)
Actuator #20-0009 (High-Speed FLP 2-10V)
Actuator #20-0010 (High-Speed FSP 0-10V)
Actuator #20-0011 (High-Speed FSP 2-10V)

TRANSMITTER ELECTRICAL

Input Power	24VAC ±20% 50/60Hz, 2.5 VA max.
	24VDC ±20%, 75mA max.
Output Signal	0-10v, 2-10v, 0-5v, 1-5v, 0-20mA or 4-20mA (software configurable)
Electromagnetic Compatibility	2014/30/EU, EMC Directive
	EN61236-1:2013
	2014/53/EU, Radio Equipment Directive
	EN301489-1, V1.9.2:2011
	ETSI EN301489-1, V2.2.0:2017
	ETSI EN301489-3, V1.6.1:2013/V2.1.1:2017
	ETSI EN301489-17, V2.2.1:2012/V3.2.0:2017
Product Safety	2014/35/EU, Low Voltage Directive
	EN61010-1:2010/A1:2019/AC:2019

ELECTRICAL (COM & CONFIGURATION)

Network Com Port 1	EIA 485 2-wire BACnet MS/TP (optional)
	Galvanically isolated
	Data Rates 9600, 19200, 38400, 57600, 76800 and 115200
	Software provided for setting the MAC address
	⅛ Unit load receiver input impedance
	Network bias and EOL termination not provided within the AVT
Network Com Port 2	AccuNet internal LAN (optional)
Configuration Port	USB 2.0, Isolated, "C" type connector
	Optional Bluetooth®

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	< 1.5% 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	-20° to 165° F (-29° to 74° C)
Storage	-40° to 165° F (-40° to 74° C)
Humidity	0% to 90% non-condensing

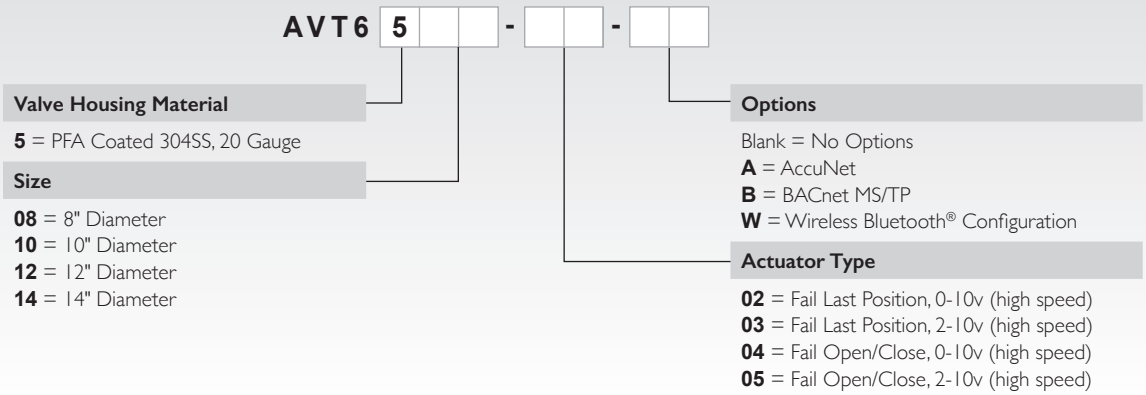
MATERIALS OF CONSTRUCTION

Valve Housing	PFA Coated 304SS (20 Gauge)
Shafts	PFA Coated 316SS
Shaft Bearings	Teflon®
Seals	Viton
Airflow Sensors	Kynar® PVDF

Ordering Guides

Please see the following page for Ordering Guide.

AVT6500 Acid Resistant AccuValve®
Ordering Guide



Your representative is: