ACCUVALVE® MODEL AVC6500 SUBMITTAL

MODEL CODE

⚠ ***WARNING:*** *NOT FOR USE WITH PERCHLORIC ACID*

AVC6 **5** ☐☐ - ☐☐ - ☐☐☐☐☐

VALVE HOUSING MATERIAL

5 = PFA COATED 304SS, 20 GAUGE

SIZE

08 = 08" DIAMETER
10 = 10" DIAMETER
12 = 12" DIAMETER
14 = 14" DIAMETER

OPTIONS

BLANK = NO OPTIONS
A = ACCUNET®
W = WIRELESS BLUETOOTH

ACTUATOR

03 = FAIL LAST POSITION (FLP), 2 SEC
05 = FAIL OPEN/CLOSED (FSP), 2 SEC

MODEL CODE NOTES:
1. Actuator Type "5" factory default is set to "fail open".

OPERATING RANGE

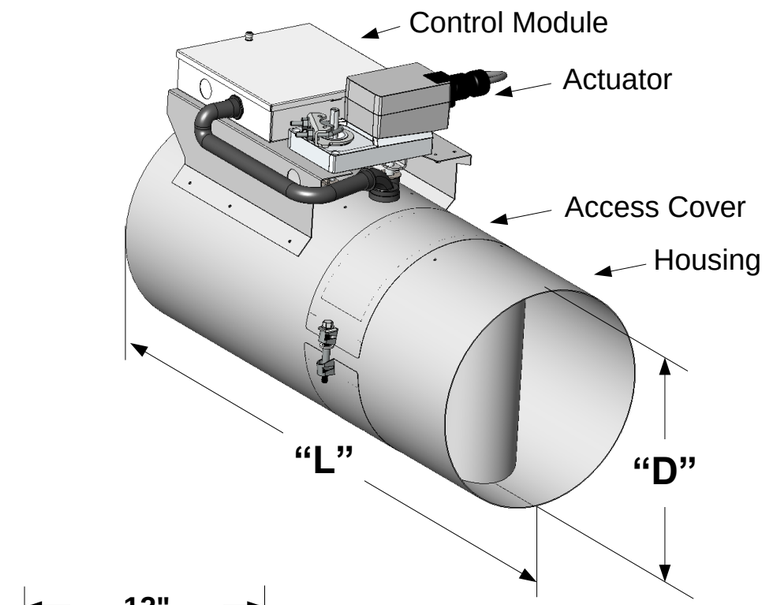
Valve Model	Min. Flow Measured			Full Scale Range		
	CFM	L/S	CMH	**CFM**	L/S	CMH
AVC6508-XX	**80**	38	136	**800**	378	1359
AVC6510-XX	**120**	57	204	**1300**	613	2209
AVC6512-XX	**180**	85	306	**1790**	845	3041
AVC6514-XX	**250**	118	425	**2750**	1298	4672

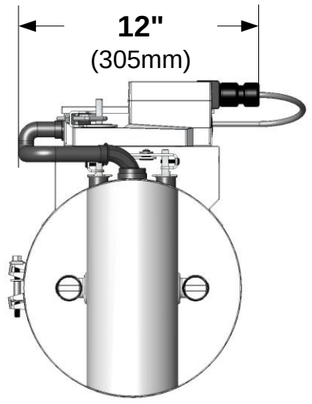
MATERIALS

Materials Exposed to the Airstream	
Housing	PFA Coated, 304 Stainless Steel
Compression Section	PFA Coated, 304 Stainless Steel
Static Regain Section	PFA Coated, 304 Stainless Steel
End Plate	PFA Coated, 304 Stainless Steel
Blades	PFA Coated, 304 Stainless Steel
Shafts	PFA Coated, 316 Stainless Steel
Shaft Bearings	Teflon ®
Vortex Sensors	Kynar® PVDF
Sensor Tubing	Viton Rubber
Compression Seals	Viton Rubber
Machine Screws	PFA Coated, 304 Stainless Steel
Rivets	PFA Coated, 304 Stainless Steel

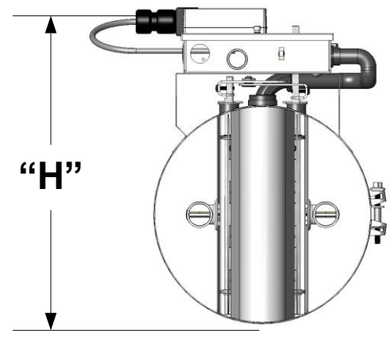
SIZE AND WEIGHT

Valve Model	Valve Dimensions						Weight	
	"D"		"L"		"H"			
	in.	mm	**in.**	mm	**in.**	mm	**Lbs.**	kg
AVC6508-XX	**7.88**	200	**24**	610	**13**	381	**16**	7.3
AVC6510-XX	**9.88**	250	**24**	610	**15**	432	**20**	9.1
AVC6512-XX	**11.88**	300	**27**	686	**17**	483	**26**	11.8
AVC6514-XX	**13.88**	350	**30**	762	**19**	533	**30**	13.6





Inlet



Discharge

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Accutrol Representative:

SUBMITTAL DRAWING
PFA Coated, Round AccuValve®
Model AVC6500

DWG. NO:	AVC6500 SUBMITTAL DWG		
REVISION:	A	ECN:	2399
REV. DATE:	9-13-18	SHEET:	1 OF: 3

INSTALLATION INSTRUCTIONS

WARNING: *Use eye protection, cut-resistant gloves and clothing suitable for working with sheet metal. Failure to do so may result in personal injury.*

1. Read all instructions prior to beginning installation.

2. Verify the tag number located on the valve label matches the HVAC schedule.

3. Locate the duct section which the valve is servicing and select a suitable mounting location for the valve. The recommended mounting position is vertical as shown in Figure 1. If vertical mounting is not possible and the valve is installed in a horizontal duct run, the valve shall be positioned with the controller on the top as shown in Figure 2.

NOTE: *The AccuValve® does not require straight inlet duct runs to operate properly, however it's always best to locate the valve away from transitions and bends to minimize impact on system static pressure. Also be sure to select a location that will provide a minimum clearance of 14 inches (356 mm) unobstructed access to the control module, actuator and valve access cover.*

4. Provide an opening in the selected duct section sized appropriately for the valve being installed.

NOTE: *A slip-fit valve will require an opening approximately 2" (51mm) smaller than the valve length.*

5. Install duct hangers within 12 inches (305 mm) from each end of the valve. Reference Sheet 1 for valve weights.

WARNING: *Use duct hangers and hardware designed to support the total load of valve and associated duct sections. Failure to do so may result in serious personal injury or death.*

6. Install the valve into the duct in accordance with the Airflow Direction Label located on the valve. Position valve for easy access to the control module side and secure to duct per Figure 3.

NOTE: *Screws, nuts, fasteners, duct sealant, and hangers are not provided by Accutrol LLC.*

Figure 1

Install in Vertical Duct

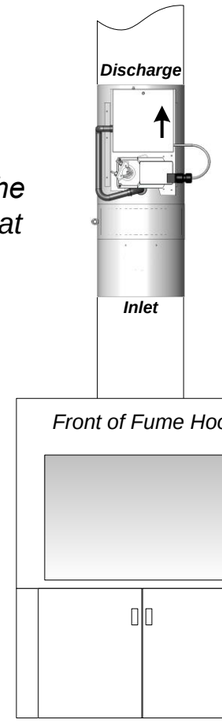
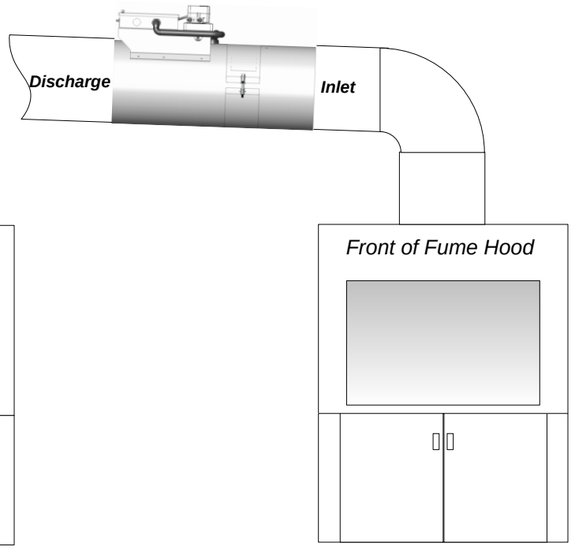


Figure 2

Position AccuValve
with Controller at Top

NOTE: *To reduce the potential for condensation pooling inside the duct or valve, the duct shall be pitched towards the fume hood.*

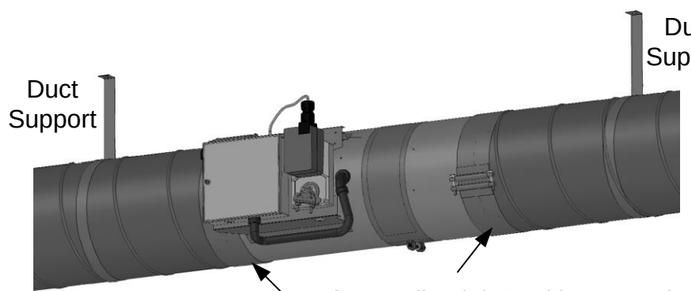


CAUTION: *Handle valve with care. Do not scratch the PFA coating on inside surfaces of valve and do not drive screws through valve housing.*

Figure 3

Standard Slip-fit Valve Secured Using Draw Bands

(Draw Bands are Sold Separately)



NOTE: *Reference Accutrol Drawband Clamp Submittal Drawing for installation details.*

After sealing joints with appropriate type of tape, secure both ends using draw band clamps.

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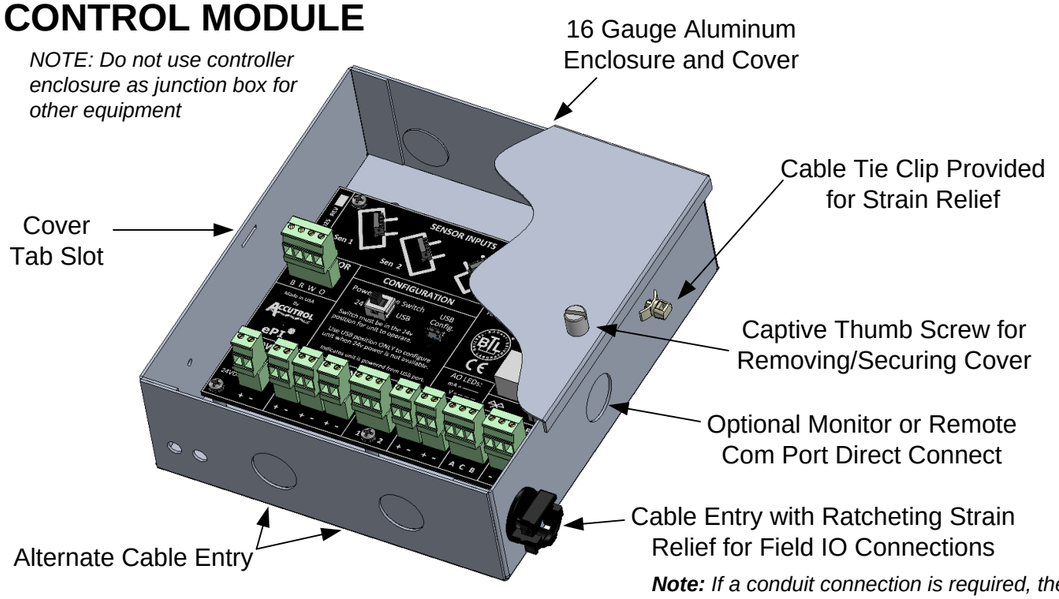
CONTROL MODULE

NOTE: Do not use controller enclosure as junction box for other equipment



***Note:** If a conduit connection is required, the strain relief fitting and bushing can be removed and replaced with a .875" (22mm) conduit fitting. (Provided by Others)*

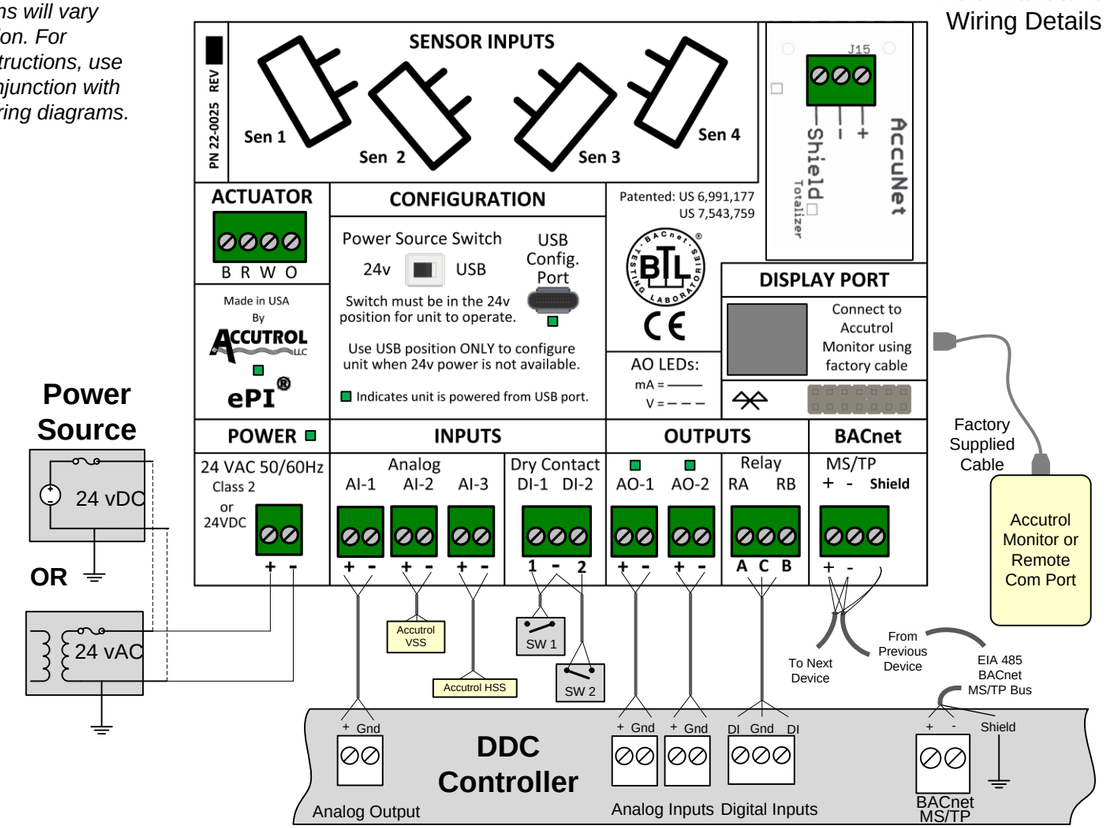
Wiring Instructions

1. Remove cover.
2. Route cables through the strain-relief fitting into the enclosure.
3. Remove terminal block plug(s) and connect wires to the appropriate terminals.
4. Secure terminal screws and reinstall plug(s).
5. Insert the ratcheting strain relief over cable(s) and push down until snug.
6. Reinstall cover and secure thumb screw.

WIRING DIAGRAM

NOTE: Connections will vary based on application. For detailed wiring instructions, use this drawing in conjunction with the job-specific wiring diagrams.

Reference AccNet Field Manual for Wiring Details



CAUTION: Maintain polarity if power source is used to power multiple devices otherwise equipment may be damaged.

ELECTRICAL SPECIFICATIONS

POWER:
24vAC +/-20%, 50/60Hz. (Class 2 Power Source) or 24vDC +/-10%.

Valve sizes 06" through 24"				
Actuator Type	MAX POWER WITH NO MONITOR		MAX POWER WITH FHM1 CONNECTED	
	24 vAC	24 vDC	24 vAC	24 vDC
3	27 VA	14 W	31 VA	16 W
5	28 VA	16 W	32 VA	18 W

Valve sizes 36" and 48"				
Actuator Type	MAX POWER WITH NO MONITOR		MAX POWER WITH FHM1 CONNECTED	
	24 vAC	24 vDC	24 vAC	24 vDC
3	49 VA	25 W	53 VA	27 W
5	51 VA	29 W	55 VA	31 W

INPUTS:

Analog Inputs: AI-1, AI-2 and AI-3 (Software Selectable)
Voltage: 0-10v Range, Input Impedance = 100K ohms
Current: 0-20mA Range, Input Impedance = 500 ohms
Resistance: 0-20K Range, 500uA Internal Current Source

Digital Inputs: 2 dry-contact inputs

OUTPUTS:

Analog Outputs AO-1, AO-2 (software selectable): 0-20mA, 4-20mA, 0-10v, 2-10v, 0-5v or 1-5v
V-out capable of driving 1 K-ohm load @ 10v, I-out capable of driving 1K-ohm load

Alarm Output: DPDT Relay, NC/NO Contacts, 1A @ 30vDC or 0.3A @ 125 vAC

RS-485: EIA 485 BACnet MS/TP 2-wire, Receiver Impedance: ¼ unit load
Note: Network bias and field termination are NOT provided by the AVC Control Module

MONITOR PORT, RJ-45: Connect to Accutrol monitor or remote com port. Connect using factory supplied cable only

CONFIGURATION PORT: USB Type C, Wireless Bluetooth (Optional)

IO TERMINAL PLUGS: 2 & 3 position, vertical pluggable, screw access on top, wire size range 12-30 AWG

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