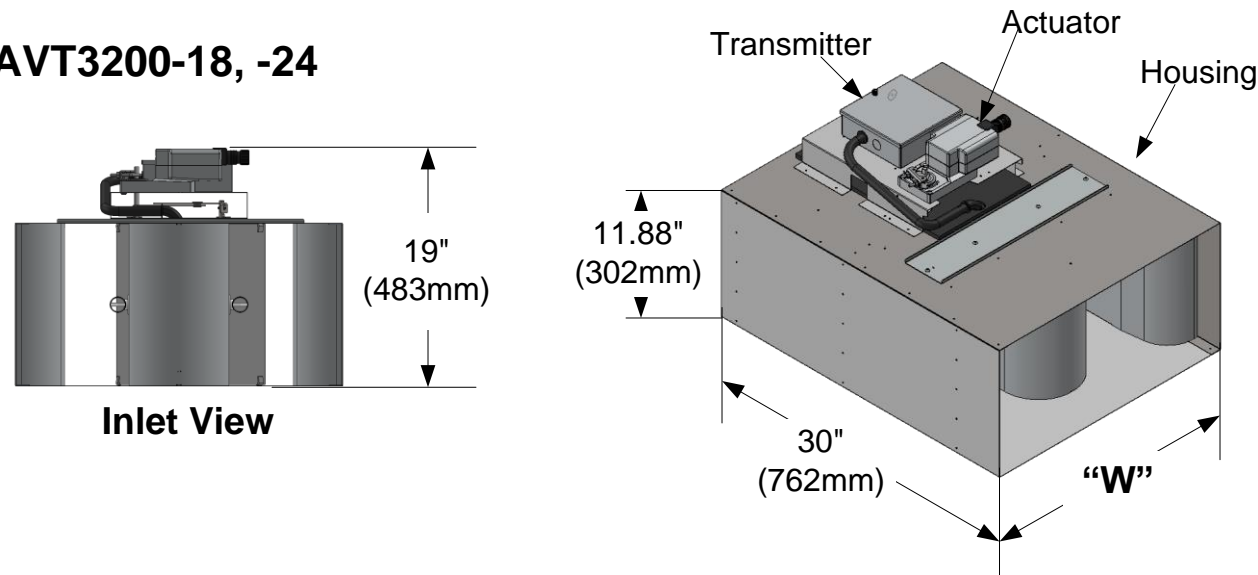
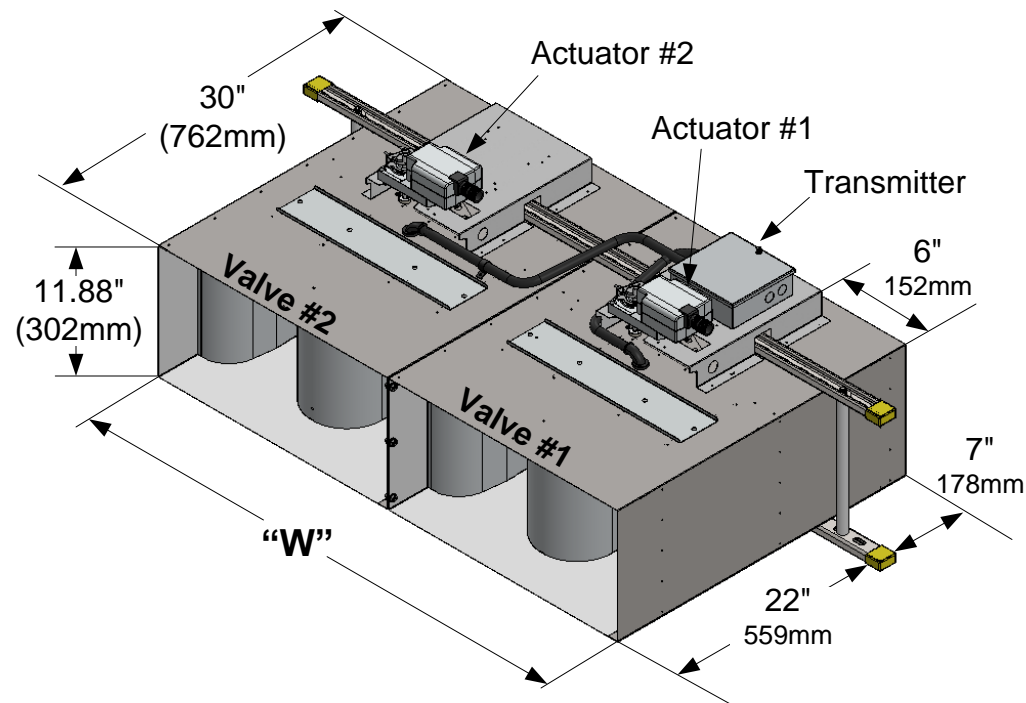


# FIGURES

**AVT3200-18, -24**



**AVT3200-36, -48**



# MODEL CODE

AVT3 2 - - - - -

- SHAPE**  
2 = RECTANGULAR
- VALVE HOUSING MATERIAL**  
2 = 304SS, 20 GAUGE  
3 = 316SS, 20 GAUGE  
4 = ALUMINUM, 16 GAUGE  
6 = HIGH TEMP 304SS, 20 GAUGE
- ACTUATOR**  
2 = FAIL LAST POSITION, 0-10V  
3 = FAIL LAST POSITION, 2-10V  
4 = FAIL OPEN/CLOSED, 0-10V  
5 = FAIL OPEN/CLOSED, 2-10V

- OPTIONS**  
BLANK = NO OPTIONS  
A = ACCUNET  
B = BACnet MS/TP  
F = FLANGES (REF NOTE 2)  
I = INSULATION (REF NOTE 3)  
S = TIGHT SHUT-OFF
- SIZE**  
18 = 12" h x 18" w  
24 = 12" h x 24" w  
36 = 12" h x 36" w  
48 = 12" h x 48" w

NOT FOR USE WITH PERCHLORIC ACID

**NOTES:**

- 1) Factory Defaults: Transmitter Output: 0-10V unless otherwise specified. Actuator Options 4&5 set to Fail Open.
- 2) Reference Accutrol Rectangular Valve Flange Detail Submittal Drawing.
- 3) Insulation is not available on High Temperature AccuValve.

# MATERIALS

MODEL CODE MATERIAL DESIGNATOR	MATERIALS EXPOSED TO AIRSTREAM			
	(2) 304SS	(3) 316SS	(4) ALUMINUM	(6) HIGH TEMP 304SS
<b>HOUSING</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	AL. ALLOY 5052-H32	304 STAINLESS STEEL
<b>COMPRESSION SECTION</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	AL. ALLOY 5052-H32	304 STAINLESS STEEL
<b>STATIC REGAIN SECTION</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	AL. ALLOY 5052-H32	304 STAINLESS STEEL
<b>END PLATE</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	GALVANIZED STEEL	304 STAINLESS STEEL
<b>BLADES</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	GALVANIZED STEEL	304 STAINLESS STEEL
<b>SHAFTS</b>	316 STAINLESS STEEL	316 STAINLESS STEEL	316 STAINLESS STEEL	316 STAINLESS STEEL
<b>SHAFT BEARINGS</b>	TEFLON®	TEFLON®	TEFLON®	TEFLON®
<b>VORTEX SENSORS</b>	POLYCARBONATE, UL94-VO	POLYCARBONATE WITH PARYLENE COATING	POLYCARBONATE, UL94-VO	303 STAINLESS STEEL
<b>SENSOR TUBING</b>	POLYURETHANE	POLYURETHANE	POLYURETHANE	VITON RUBBER
<b>COMPRESSION SEALS</b>	VITON RUBBER	VITON RUBBER	EPDM RUBBER	VITON RUBBER
<b>MACHINE SCREWS</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	304 STAINLESS STEEL	304 STAINLESS STEEL
<b>RIVETS</b>	304 STAINLESS STEEL	316 STAINLESS STEEL	304 STAINLESS STEEL	304 STAINLESS STEEL
<b>BLADE SEALS (OPTIONAL)</b>	SILICONE & EPDM RUBBER	SILICONE & EPDM RUBBER	SILICONE & EPDM RUBBER	SILICONE & EPDM RUBBER

# OPERATING RANGE

Valve Model	Min. Flow Measured			Full Scale Range		
	CFM	L/S	CMH	CFM	L/S	CMH
AVT3200-18	260	123	442	3200	1510	5437
AVT3200-24	350	165	595	4000	1888	6796
AVT3200-36	520	245	883	6400	3020	10874
AVT3200-48	700	330	1189	8000	3775	13592

# SIZE & WEIGHT

Valve Model	Valve Width "W"		Weight			
	Ref Diagram		Stainless Steel		Aluminum	
	in.	mm	Lbs.	kg	Lbs.	kg
AVT3200-18	17.88	454	43	19.5	26	11.8
AVT3200-24	23.88	607	49	22.2	29	13.2
AVT3200-36	35.88	911	97	44	59	26.8
AVT3200-48	47.88	1216	109	49.2	69	31.3



Accutrol Representative:

# SUBMITTAL DRAWING

## Rectangular AccuValve® Model AVT3200

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THIS DOCUMENT OR THE CONTENTS THEREOF SHALL NOT BE MODIFIED WITHOUT PRIOR WRITTEN PERMISSION BY ACCUTROL LLC.

DWG. NO:	AVT3200 SUBMITTAL DWG		
REVISION:	B	ECN:	2339
REV. DATE:	2-6-17	SHEET:	1 OF 3

# VALVE INSTALLATION INSTRUCTIONS

1. Read all instructions completely before installing the valve.

**! WARNING:** Wear eye protection, protective gloves and clothing suitable for working with sheet metal which may have sharp edges.

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

3. Select optimum mounting location for the valve.

**NOTE:** The AccuValve® does not require straight inlet duct runs to operate properly, however it's always best to locate any duct device away from transitions and bends to minimize impact on system static pressure.

4. Allow a minimum clearance of 14 inches (356 mm) unobstructed access to the transmitter, actuator and valve access cover.

**NOTE:** Rectangular valves are normally installed with the "access side" facing downwards for easy access. However, The AccuValve® is not position sensitive. It can be installed in any plane or rotational axis without having impact on the factory calibration.

5. To support the weight of the valve, install duct hangers within 12 inches (305 mm) of valve connections. The 12"x36" and 12"x48" valves include an integral mounting bracket which shall be used to support valve in addition to the duct hangers. Reference Sheet 1 for valve weights.

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

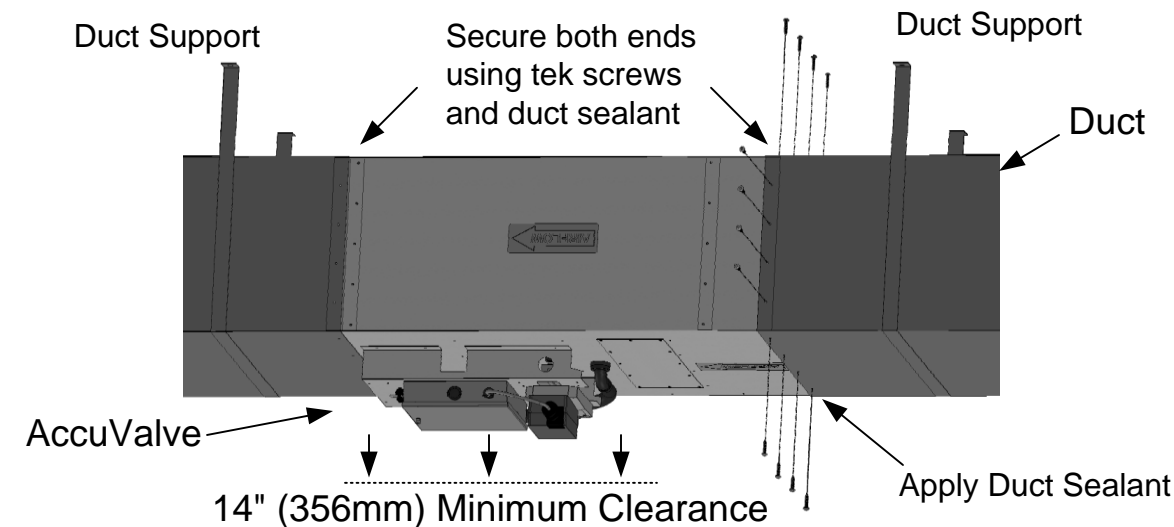
6. After the duct section is properly supported to carry the weight of the valve, install valve into the duct in accordance with the Airflow Direction Label located on the valve. Position valve so the transmitter, actuator and access cover are easily accessible. For 12x36" and 12x48" valves, attach the integral mounting bracket to threaded rod or duct hangers capable of supporting valve weight.

7. Reference the appropriate diagram to the right for installation details.

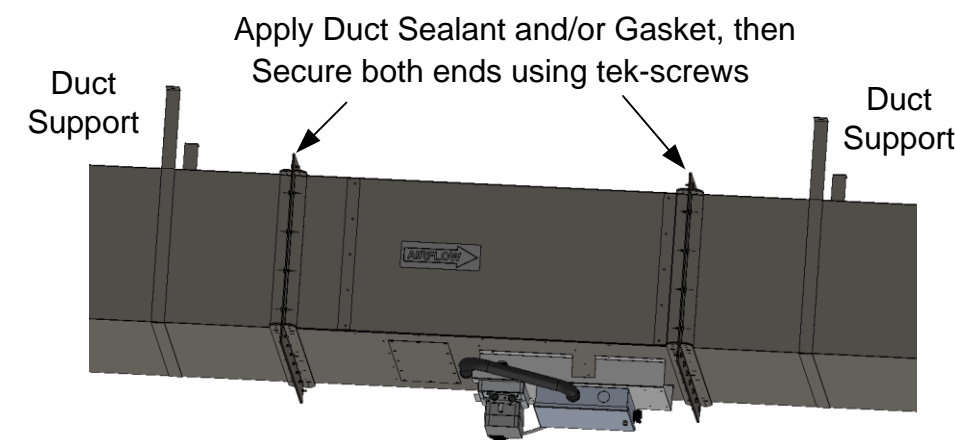
**NOTE:** Screws, nuts, fasteners, duct sealant, hangers, companion flanges and gaskets are not provided by Accutrol LLC.

# INSTALLATION DIAGRAMS

**Figure 1**  
Standard Slip-fit Valve Using Tek Screws

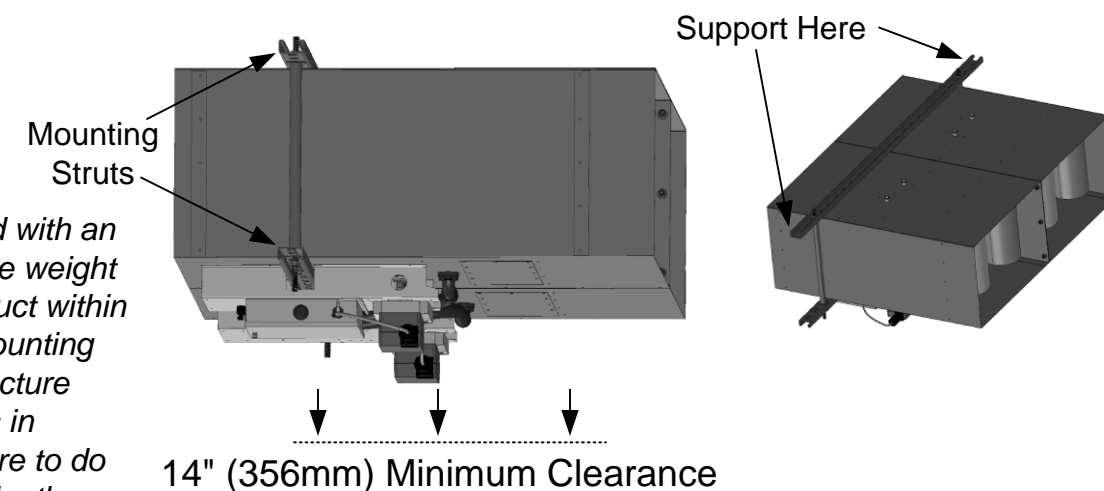


**Figure 2**  
Flanged Valve "Option F" Using Companion Flanges

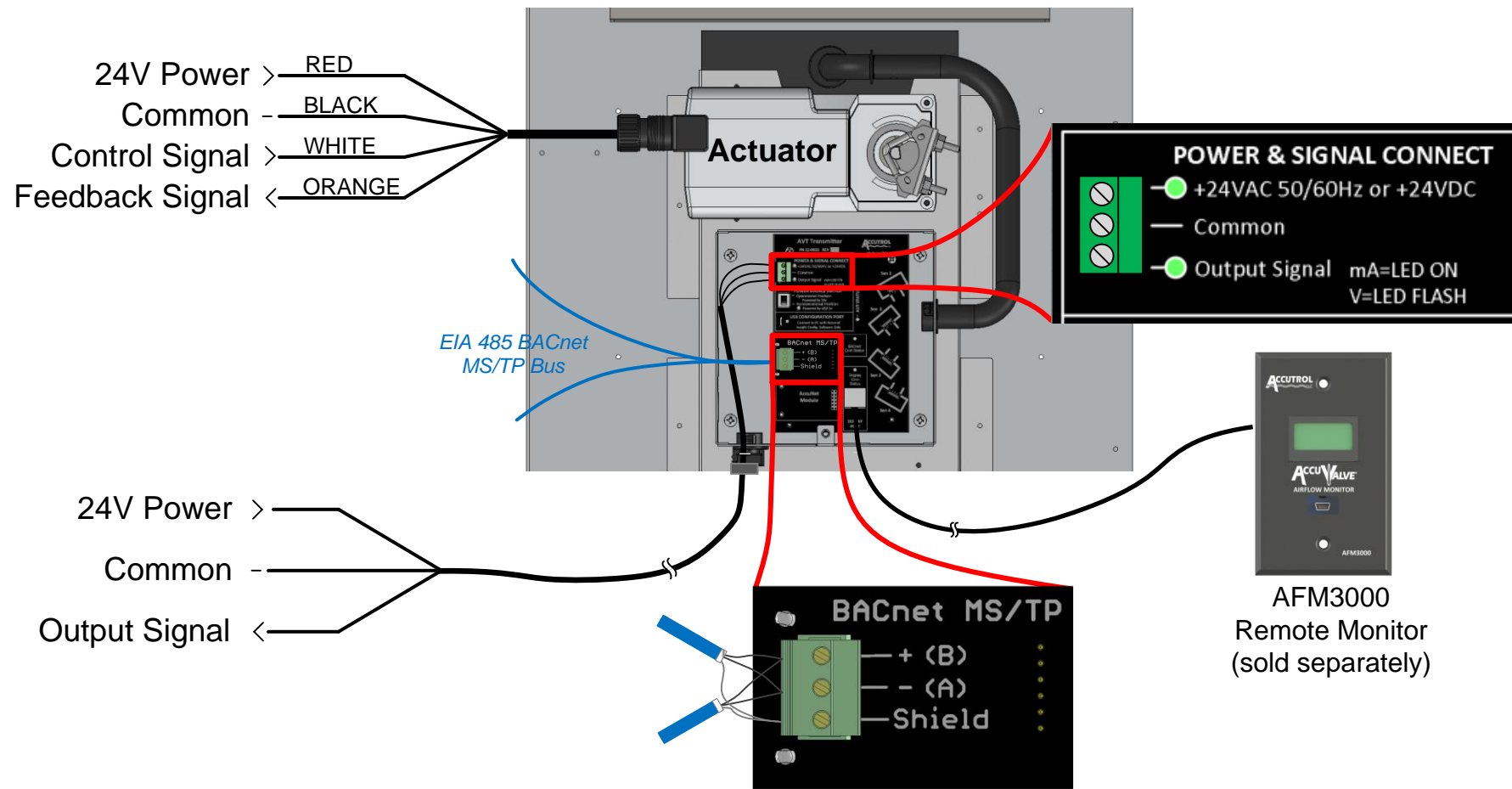


**Figure 3**  
12x36" and 12x48" Valves

**! WARNING:** Dual valves are provided with an integral mounting bracket to help support the weight of the valve. In addition to supporting the duct within 12" of the valve, each end of the integral mounting bracket shall be secured to the building structure using properly rated hardware and methods in accordance with local building codes. Failure to do so may result in serious personal injury or death.



# WIRING INSTRUCTIONS



## Transmitter and Actuator

Connect the power and signal wires to the Actuator and Transmitter per the diagram. Valve models AV3200-36 and -48 have two actuators, therefore the power source must be sized accordingly and the control signals shall be wired in parallel to ensure both actuators operate in unison. For more details on the actuator, reference the actuator submittal drawing.

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

**CAUTION:** Do not use the transmitter enclosure as a junction box. The only wires entering the transmitter enclosure shall be wires connected to the transmitter otherwise equipment may be damaged.

## Optional BACnet MS/TP Module

Connect the 2-wire EIA 485 BACnet MS/TP bus to the AVT3000 transmitter per the diagram. Network bias and EOL termination are not provided by the AVT3000.

## Remote Monitor AFM3000 (Sold Separately)

Plug one end of the factory cable into the back of the remote monitor and plug the other end into the AVT3000 Display Port.

# TRANSMITTER ELECTRICAL SPECIFICATIONS

**Power Supply:** 24 VAC +/- 20% 50/60 Hz, 4 VA max (8.5 VA max with remote monitor)  
24 VDC +/- 10% 1.5 W max (3.5 W max with remote display)

**Output Signal:** 0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, or 1-5V (Software Config.)  
12-bit Resolution  
Capable of driving 1K-ohm load

**Configuration Port:** USB 2.0, Isolated, Micro B Connector

**Power Source Switch:** Selects alternate power source for configuration when main power is not available by drawing 5V from PC connected to USB config. port.

**BACnet MS/TP (Optional):** EIA 485 2-wire BACnet MS/TP, Galvanically Isolated  
Data Rates 9600, 19200, 38400, 57600, 76800 and 115200  
1/8 Unit Load Receiver Input Impedance  
Network bias and EOL Termination not provided within the Transmitter

**Remote Monitor (Sold Separately):** LCD, 2 lines x 8 characters with white LED backlight  
Includes USB Configuration Port and Factory Cable

**Terminal Plugs:** 3-position, vertical pluggable, screw on top, wire size 12-30 AWG

**WARNING:** During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. This work shall be performed by a licensed electrician or qualified individual who has been properly trained in handling live electrical equipment. Failure to follow all electrical safety precautions when exposed to live electrical components may result in serious injury or death.

# ACTUATOR ELECTRICAL SPECIFICATIONS

For actuator specifications, reference the Actuator Drawing per table below.

AVT3200 Model	Actuator Type	Actuator Drawing #
AVT32x2-xx	0-10V, Fail Last Position	20-0008
AVT32x3-xx	2-10V, Fail Last Position	20-0009
AVT32x4-xx	0-10V, Fail Open or Closed	20-0010
AVT32x5-xx	2-10V, Fail Open or Closed	20-0011