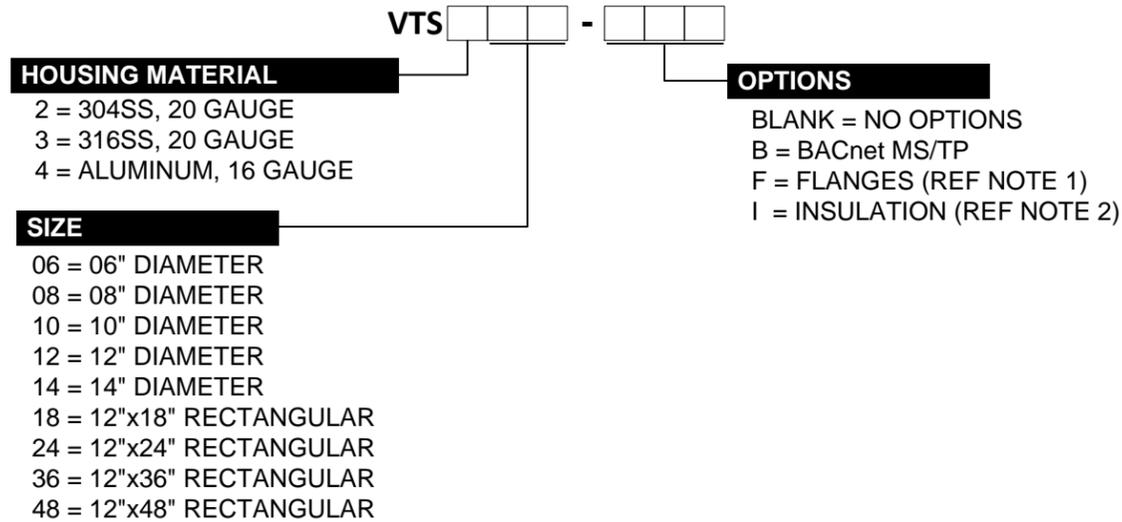


# ACCUSTATION SUBMITTAL

## MODEL CODE

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



**MODEL CODE NOTES:**

- 1) Reference the Vanstone flange detail submittal drawing
- 2) Reference the Insulation detail submittal drawing

## MATERIALS

Materials Exposed to the Airstream			
Model Material Designator	(2) 304SS	(3) 316SS	(4) Aluminum
Housing	304 Stainless Steel	316 Stainless Steel	Al. Alloy 5052-H32
Compression Section	304 Stainless Steel	316 Stainless Steel	Al. Alloy 5052-H32
Static Regain Section	304 Stainless Steel	316 Stainless Steel	Al. Alloy 5052-H32
End Plate	304 Stainless Steel	316 Stainless Steel	Galvanized Steel
Vortex Sensors	Polycarbonate Plastic, UL94-V0	Polycarbonate Plastic, UL94-V0	Polycarbonate Plastic, UL94-V0
Sensor Tubing	Polyurethane, Ether-based	Polyurethane, Ether-based	Polyurethane, Ether-based
Compression Seals	Viton Rubber	Viton Rubber	EPDM Rubber
Rivets	304SS	316SS	304SS

## OPERATING RANGE

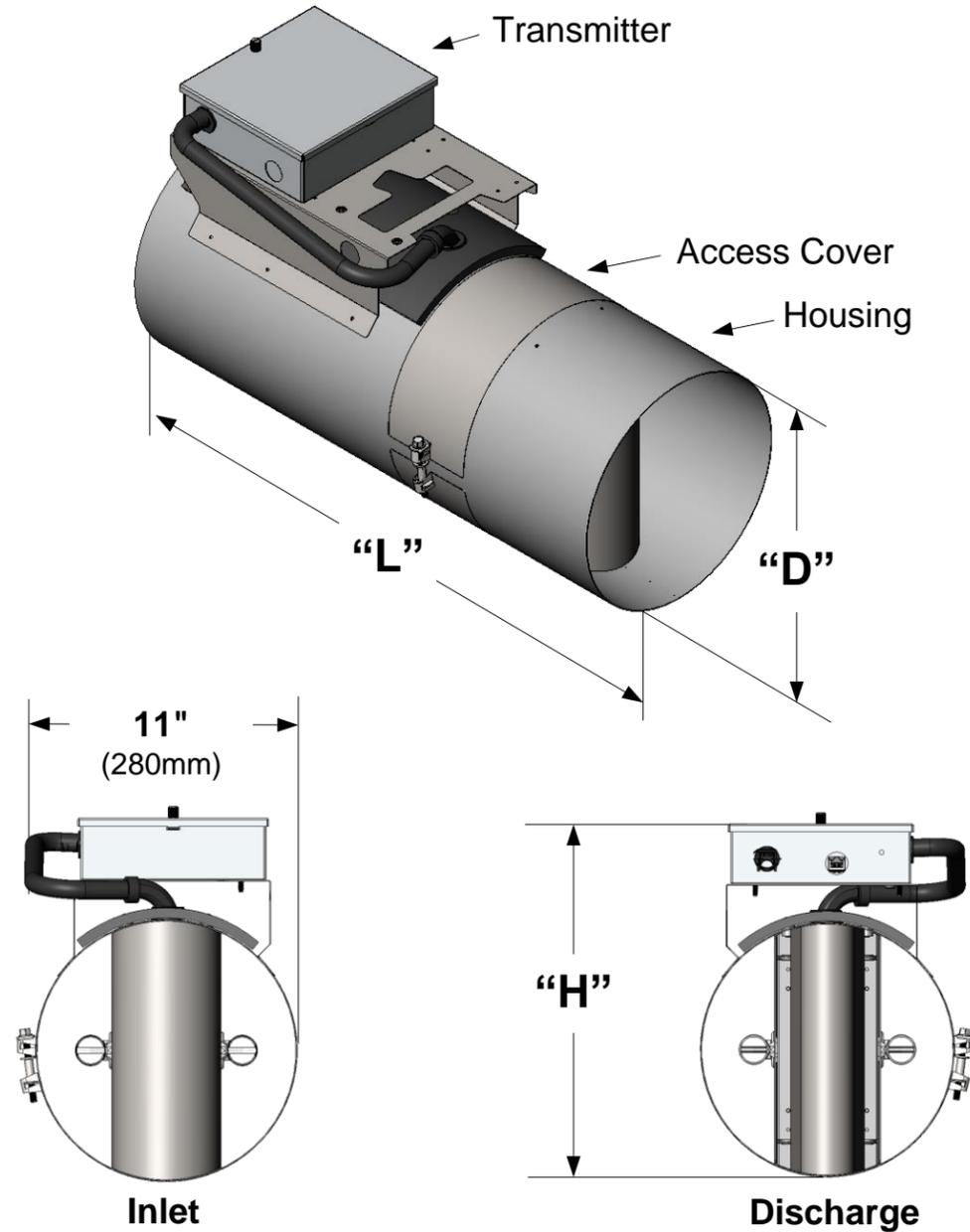
Model Code	Min. Flow Measured			Full Scale Range		
	CFM	L/S	CMH	CFM	L/S	CMH
VTSX06	30	14	51	315	149	535
VTSX08	80	38	136	800	378	1359
VTSX10	120	57	204	1300	613	2209
VTSX12	180	85	306	1790	845	3041
VTSX14	250	118	425	2750	1298	4672
VTSX18	260	123	442	3200	1510	5437
VTSX24	350	165	595	4000	1888	6796
VTSX36	520	245	883	6400	3020	10874
VTSX48	700	330	1189	8000	3775	13592

## SIZE AND WEIGHT

Model Code	Dimensions (Reference Sheet 2)						Weight			
	"D" or "W"		"L"		"H"		Stainless Steel		Aluminum	
	in.	mm	in.	mm	in.	mm	Lbs.	kg	Lbs.	kg
VTSX06	5.88	149	22	559	10	254	11	5.0	7	3.2
VTSX08	7.88	200	24	610	13	330	12	5.4	8	3.6
VTSX10	9.88	250	24	610	15	381	16	7.3	10	4.5
VTSX12	11.88	300	27	686	17	432	22	10.0	12	5.4
VTSX14	13.88	350	30	762	19	483	25	11.3	15	6.8
VTSX18	17.88	454	30	762	19	483	37	16.8	20	9.1
VTSX24	23.88	607	30	762	19	483	43	19.5	23	10.4
VTSX36	35.88	911	30	762	19	483	88	39.9	50	22.7
VTSX48	47.88	1216	30	762	19	483	98	44.5	58	26.3

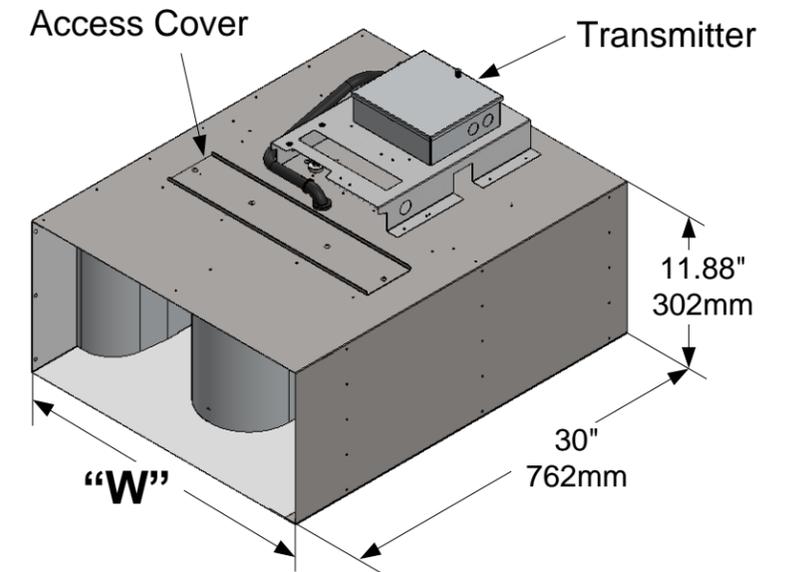
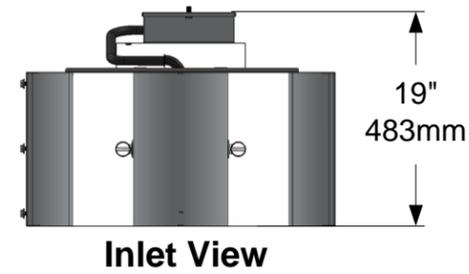
# ROUND AccuStation

VTSX06  
VTSX08  
VTSX10  
VTSX12  
VTSX14

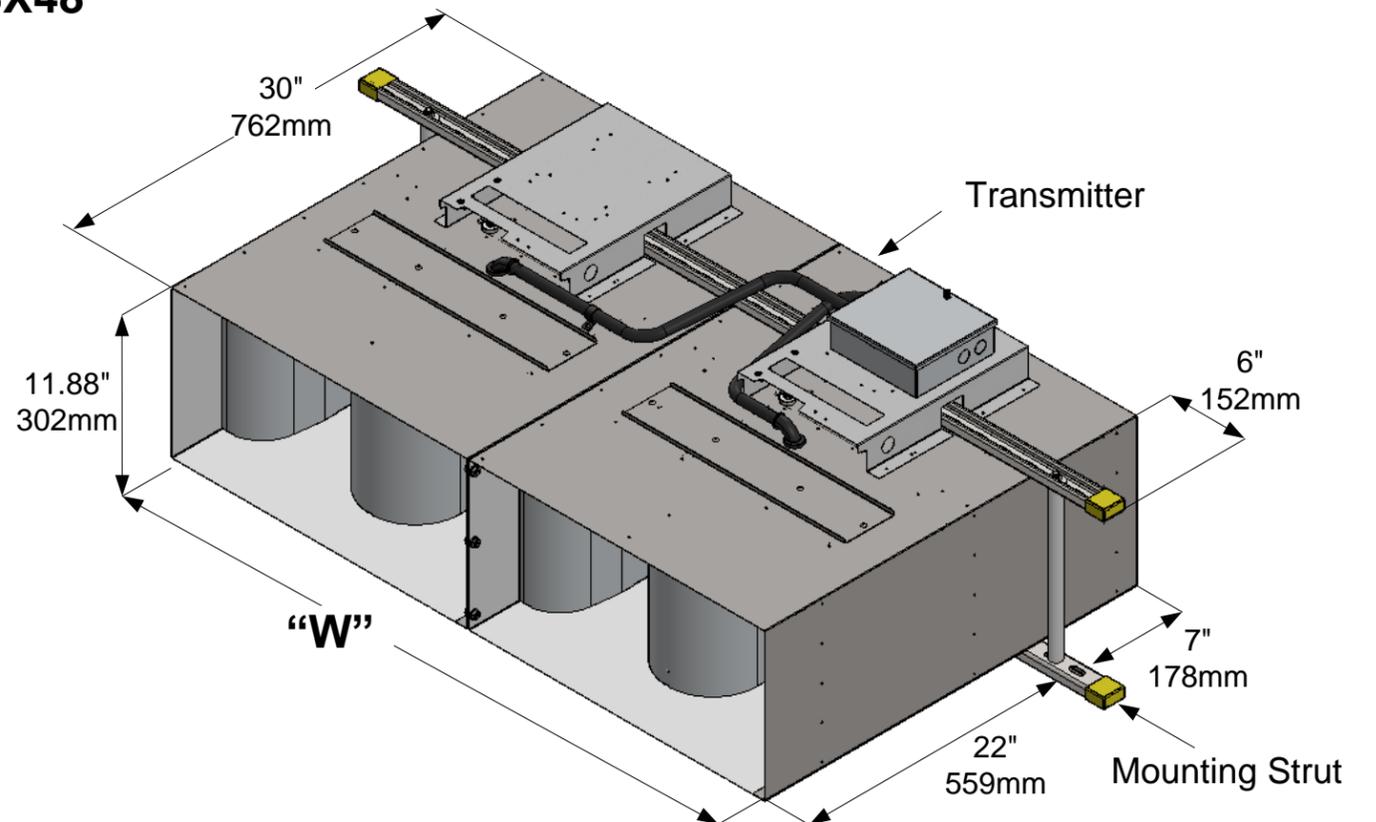


# RECTANGULAR AccuStation

VTSX18  
VTSX24



VTSX36  
VTSX48



# ROUND: INSTALLATION INSTRUCTIONS

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

1. Read all instructions prior to beginning installation.

**NOTE:** For detailed installation instructions, refer to the AccuStation Installation & Operation Manual.

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

3. Locate the duct section which the AccuStation is servicing and select a suitable mounting location for it.

**NOTES:** The AccuStation does not require straight inlet duct runs to operate properly, however it's always best to locate the AccuStation away from transitions and bends to minimize impact on system static pressure. Be sure to select a location that will provide a minimum clearance of 14 inches (356 mm) unobstructed access to the transmitter and access cover. The AccuStation is not position sensitive. It can be installed in any plane or rotational axis without having impact on the performance.

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

**NOTE:** A slip-fit AccuStation will require an opening approximately 2" (50.8 mm) smaller than the AccuStation length, whereas a flanged AccuStation will require an opening the same length as the AccuStation. Reference Sheet 1 for AccuStation dimensions.

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

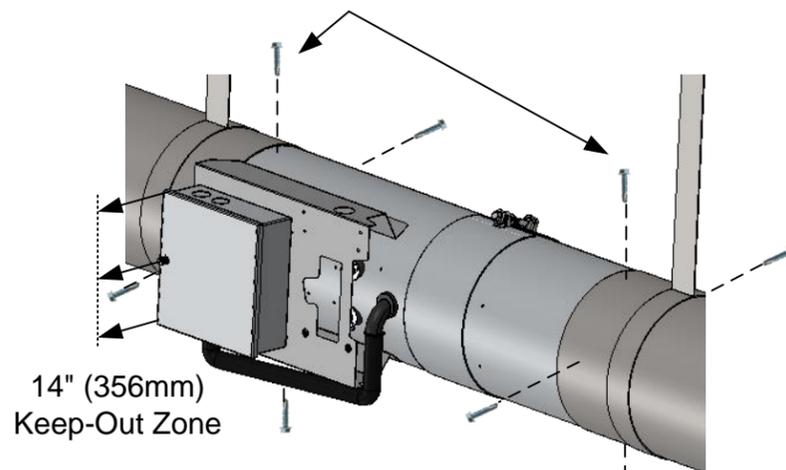
**⚠ WARNING:** Use duct hangers and hardware designed to support the total load of AccuStation and associated duct sections. Failure to do so may result in serious personal injury or death.

6. Install the AccuStation into the duct in accordance with the Airflow Direction Label located on the AccuStation. Position the AccuStation for easy access to the transmitter side then secure to duct per the appropriate Figure below.

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

## Standard Slip-fit AccuStation Secured Using Tek Screws

Seal joints using duct sealant and secure station to duct at both ends using Tek screws.

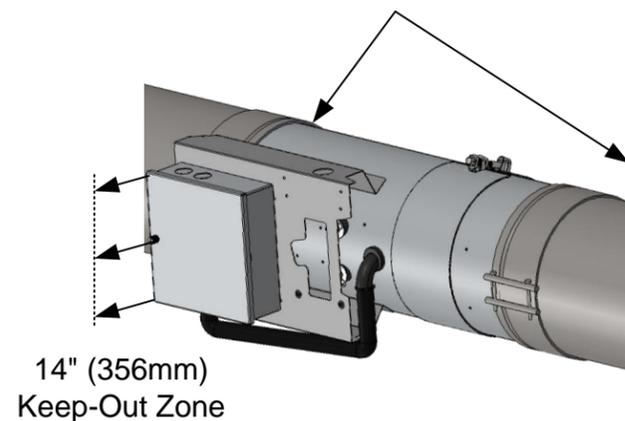


**Figure 1**

## Standard Slip-fit AccuStation Secured Using Draw Bands

(Draw Bands are Sold Separately)

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

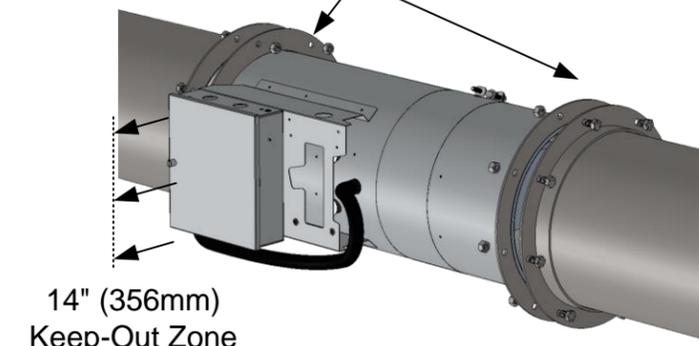


**Figure 2**

## Flanged AccuStation "Option F" Secured Using Companion Flanges

(Companion Flanges are Sold Separately)

Install companion flanges to duct ends and secure to duct. Apply duct sealant and/or gasket to flange face. Install AccuStation and rotate Vanstone flanges to align with bolt holes on the duct flanges. Secure flanges using appropriate hardware.



**Figure 3**

Reference Accutrol Draw Band Clamp Submittal Drawing for Details

Reference Accutrol Vanstone Flange Submittal Drawing for Details



Accutrol Representative:

# SUBMITTAL DRAWING

## ACCUSTATION MODEL VTS

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:	ACCUSTATION SUBMITTAL DWG		
REVISION:	D	ECN:	2542
REV. DATE:	8-20-19	SHEET:	3 OF: 5

## RECTANGULAR: INSTALLATION INSTRUCTIONS

1. Read all instructions completely before installing the AccuStation.

**⚠ 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 AccuStation label matches the HVAC schedule.

3. Select optimum mounting location for the AccuStation.

**NOTE:** The AccuStation 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, and access cover.

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

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

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

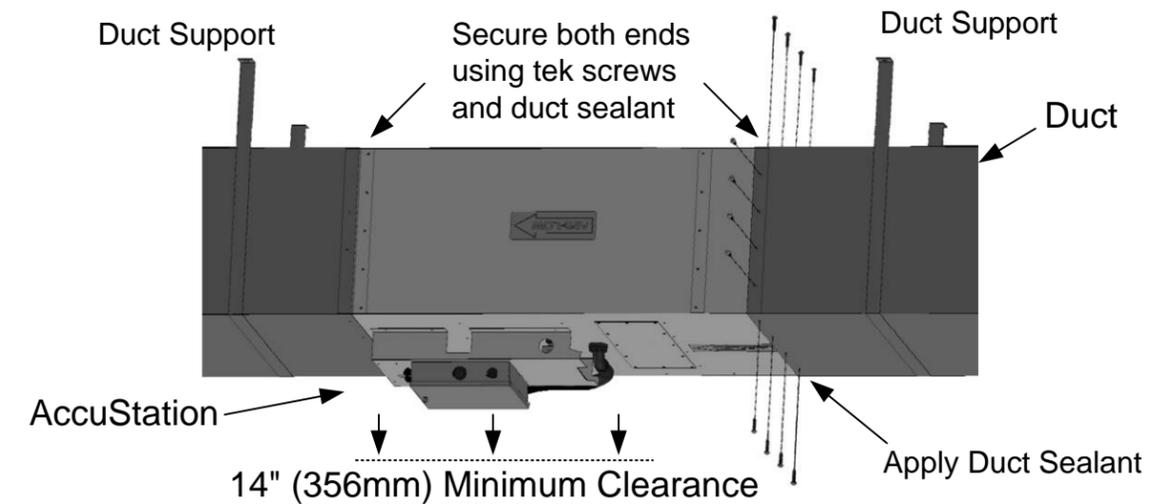
6. After the duct section is properly supported to carry the weight of the AccuStation, install into the duct in accordance with the Airflow Direction Label located on the AccuStation. Position AccuStation so the transmitter, actuator and access cover are easily accessible. For 12x36" and 12x48" AccuStations,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

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

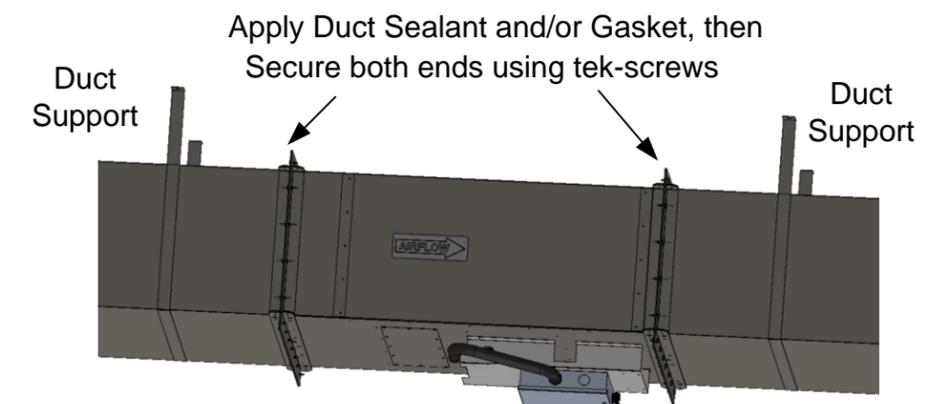
**NOTE:** Screws, nuts, fasteners, duct sealant, hangers, companion flanges and gaskets are not provided by Accutrol LLC.

## RECTANGULAR: INSTALLATION DIAGRAMS

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

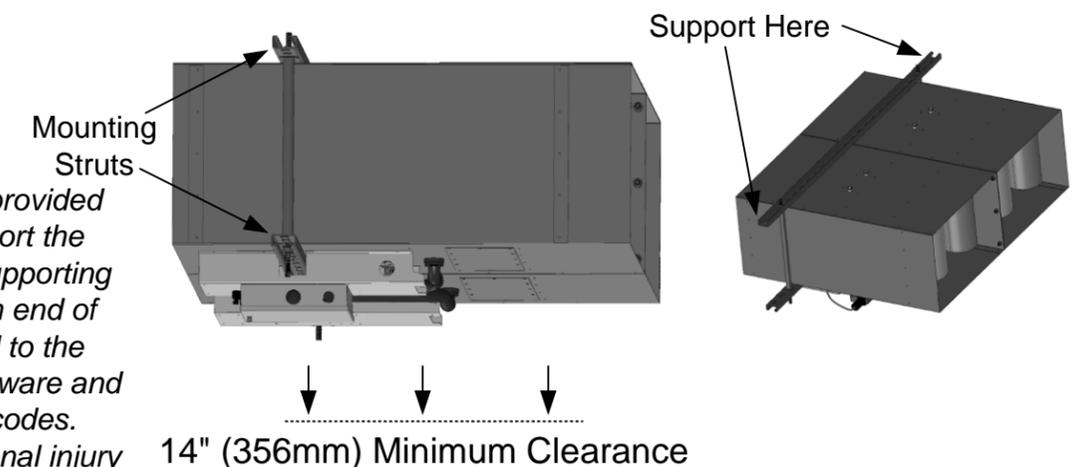


**Figure 2**  
Flanged AccuStation  
"Option F" Using  
Companion Flanges



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

**⚠ WARNING:** Dual AccuStations are provided with an integral mounting strut to help support the weight of the AccuStation. In addition to supporting the duct within 12" of the AccuStation, each end of the integral mounting strut 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.



# TRANSMITTER WIRING INSTRUCTIONS

Connect the power wires to the Transmitter per the diagram.

- ⚠ 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 transmitter per the diagram. Network bias and EOL termination are not provided by the transmitter.

## Remote Monitor VTM (Sold Separately)

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

- ⚠ 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.

# 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 monitor)

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: USB Type C 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

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

