**degreeC™**
DEGREE CONTROLS, INC.

Thank you for purchasing the **F500 BACnet air velocity & temperature sensor**. Please consider all of our airflow sensing, monitoring, and control products, at www.degreeC.com.

Setup

F500 BACnet sensors feature BACnet® MS/TP communication, allowing sensors to be connected directly to building automation and control networks.

- Determine the mounting location, and note the direction of airflow marked on the sensor head.
- Mount the sensor using the included °C Clamp, and make wiring connections. Apply power to the sensor.
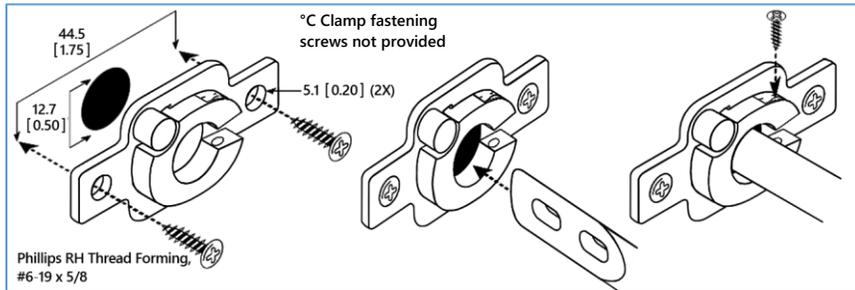
Wire Color (for flying leads)	Post Number (for wiring box)	Description
Red	1	Power
Black	2	Ground
Green	3	A
White	4	B

Input voltage	22 – 26 VAC/VDC
Current consumption	<100mA

BACnet® MS/TP Communication

Feature	Instance	Units	Range	Definition	Default
***Read-Write**, Analog Values*					
MAC Address	0	-	1 - 255	MAC Address	**125**
MAC ID	1	-	1 - 254	MAC ID	**103**
Sample Time	2	sec	0 - 10	Determines the sample time used to calculate the rolling average velocity. Value range is 0 to10, and results in sample times of 0.4 sec to 10.0 sec. *Examples*: 0 = 0.4 sec, 1 = 1.0 sec, 2 = 2.0 sec, 3 = 3.0 sec, 5 = 5.0 sec, 10 = 10.0 sec.	3
BACnet Baud	4	-	0 - 6	Sensor baud rate: 1 = 9600, 2 = 19200, 3 = 38400, 4 = 57600, 5 = 76800, 6 = 115200 bps	3
***Read Only**, Analog Inputs*					
Serial Number	6	-	-	ID Data, sensor serial number	NA
Calibration Date	7	-	-	CAL Data, date code	NA
Velocity Low Range	8	mm/s	*	Starting point of calibrated velocity range. *Configuration-dependent, velocity range is selected at time of order.	NA
Velocity High Range	9	mm/s	*	Upper limit of calibrated velocity range. *Configuration-dependent, velocity range is selected at time of order.	NA
Firmware Version	10	m/s	-	Current revision	NA
Status	11	NA	0, 2, 8, 16	0 indicates a normal state for the sensor. A nonzero value indicates a sensor issue. Status is represented as decimal: bit 1 = Flow bead control error, bit 3 = Ambient temperature sensor error, bit 4 = Air flow temperature sensor error	0
Velocity	12	mm/s	-	Velocity measured over the sample time period	NA
T Ambient Average	13	°C * 100	-	Temperature measured from the last conversion cycle. *Example*: A temperature of 31.2°C would be represented as 3120.	NA
T Flow Temperature	14	°C * 100	-	Temperature of the flow thermistor	NA
Power Average	15	mw * 100	-	Calculated power to maintain T Flow setpoint. *Example*: A power value 28.62 mw would be represented as 2862.	NA

Note: **F500 BACnet Client Application** software provides an interface to evaluate F500 BACnet air velocity & temperature sensors from a Windows PC and prepare sensors for installation into a building network. For more detailed information, see Application Note ANS-SD14 and the product manual on our website.

Contact Degree Controls at 1-877-degreeC, or visit our website at www.degreeC.com. Email sales inquiries to sales@degreec.com.   BACnet is a trademark of ASHRAE.

ISO 9001 Certified

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