Degree Controls Air Velocity Sensor Connection Instructions

For use with HOBO® H22, U12, U30, and UX120-006M data loggers and HOBO ZW data nodes

Applies to these Degree Controls Air Velocity Sensors:

Onset Part No.	Output	Degree Controls Part No.
T-DCI-F900-S-O	0-4 VDC representing 0 to 5 m/s (0 to 985 fpm)	F900-O-10-0 (standard short tube body type)
T-DCI-F900-L-O	0-4 VDC representing 0 to 5 m/s (0 to 985 fpm)	F900-O-10-1-4-2 (remote sensor long tube body type)
T-DCI-F900-S-P	0-4 VDC representing 0 to 10 m/s (0 to 1969 fpm)	F900-P-10-0 (standard short tube body type)
T-DCI-F900-L-P	0-4 VDC representing 0 to 10 m/s (0 to 1969 fpm)	F900-P-10-1-4-2 (remote sensor long tube body type)

This document provides instructions on connecting the Degree Controls Air Velocity Sensors listed above to each of the following:

- FlexSmart™ Analog Module used with HOBO H22 series data loggers
- Analog Sensor Port used with HOBO U30 series data loggers
- Voltage adapter used with the U12 and UX120-006M data loggers and ZW series data nodes

It also lists configuration values used by HOBOware® Pro software to configure the logger for each sensor. **Note:** For sensor details, refer to the documentation provided by Degree Controls. Be sure to remove the connector on the sensor before attaching it to the logger.

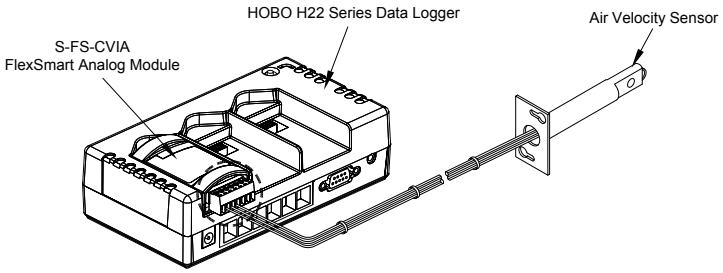
Degree Controls Air Velocity Sensor
(Onset Part No. T-DCI-F900-S-x shown)

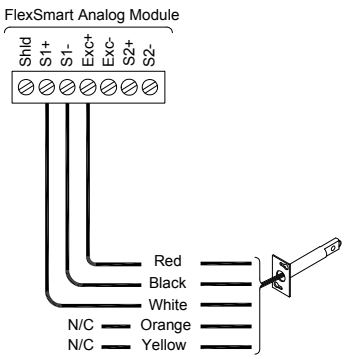
Required:

- Selected Degree Controls Air Velocity sensor
- HOBO H22, U12, U30, or UX120-006M series data logger, or HOBO ZW data node
- FlexSmart Analog Module, Onset Part No. S-FS-CVIA (for H22 series); Analog Sensor Port option (for U30 series); voltage adapter, Onset Part No. CABLE-ADAP5 (for U12, UX120-006M ,or ZW series)
- HOBOware Pro Software, version 2.2.1 or higher (2.4.0 or higher for U30 series; 3.0 or higher for ZW series; 3.6 or higher for UX120-006M)

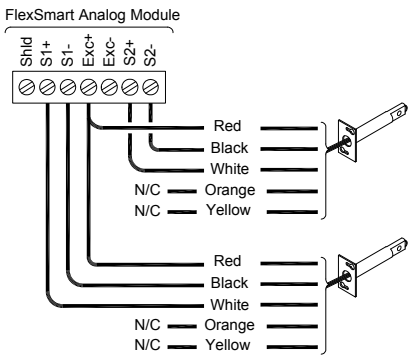
Connecting the Air Velocity Sensor to the Analog Module or Port:

H22 Connection





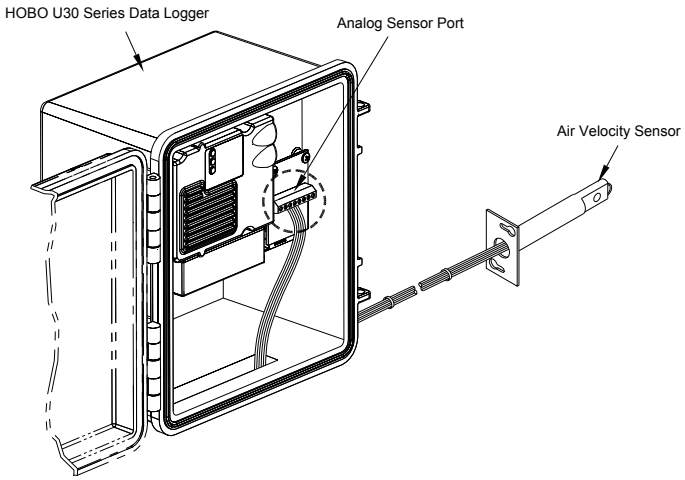
for single air velocity sensor

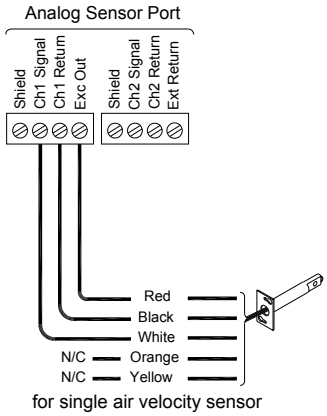


for two air velocity sensors

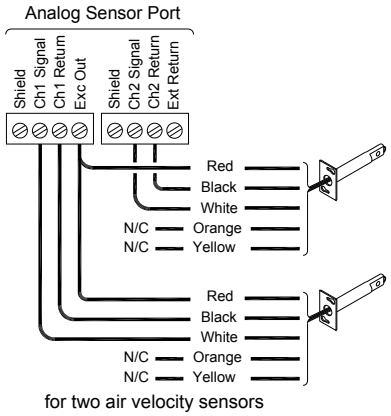
Degree Controls Air Velocity Sensor Connection Instructions

U30 Connection



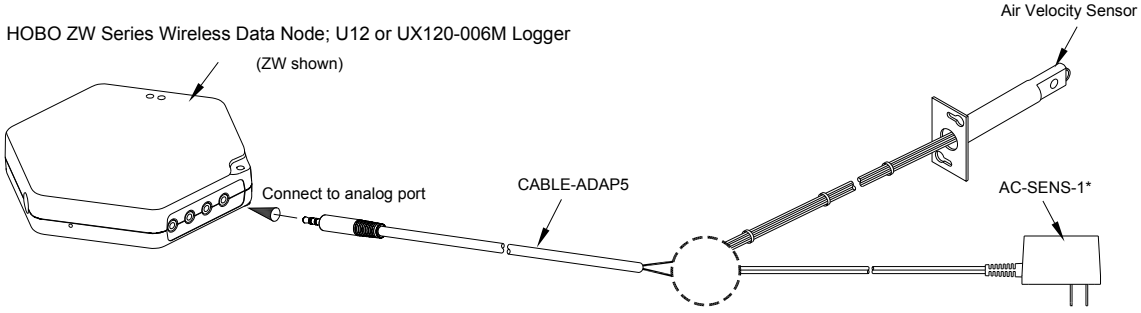


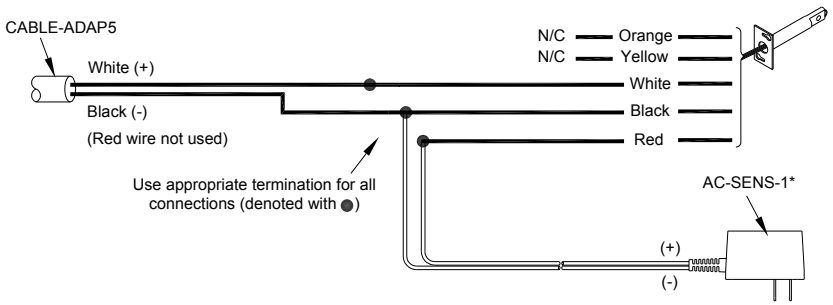
for single air velocity sensor



for two air velocity sensors

ZW, U12, and UX120-006M Connection





*__CAUTION:__ Polarity is very important! **Before** plugging AC-SENS-1 into AC power, **make sure** the correct polarity lead connections to device are made as shown!

Configuring the Data Logger for the Air Velocity Sensor, using HOBOware Pro Software:

HOBOware Pro software provides configuration files for the sensors. The table below lists the recommended configuration values that these files contain. For information on loading configuration files, refer to the software documentation.

Onset Part Nos.	Channel Name	Warm-Up*	Measurement Type	Raw Value 1	Raw Value 2	Raw Units	Scaled Value 1	Scaled Value 2	Scaled Units
T-DCI-F900-S-O and T-DCI-F900-L-O	Velocity	5 sec	Voltage	0	4	V	0 **or** 30	5 **or** 985	m/s **or** fpm
T-DCI-F900-S-P and T-DCI-F900-L-P	Velocity	5 sec	Voltage	0	4	V	0 **or** 30	10 **or** 1969	m/s **or** fpm

***** Excitation power provided by the FlexSmart Analog Module (Onset Part No. S-FS-CVIA) with H22; by the Analog Sensor Port with U30; and by power adapter (Onset Part No. AC-SENS-1) with ZW, U12, or UX120-006M.