

CDI Meters Compressed Air Flowmeter Connection Instructions

For use with HOBO® H22, U12, U30, UX90-001x, UX120-006M, UX120-017x, MX1104, MX1105 and RX3000 data loggers, HOBO ZW data nodes, and Pulse Input Adapters (S-UCC-M00x and S-UCD-M00x)

Applies to these CDI Flowmeters:

Onset Part No.	Output*	Nom. Pipe Size	CDI Part No.
T-CDI-5200-10S	4-20mA representing 0 to 100 scfm of air	1 in.	5200-10S
T-CDI-5400-20S	4-20mA representing 0 to 600 scfm of air	2 in.	5400-20S

This document provides instructions on connecting the CDI Compressed Air Flowmeters listed above to each of the following:

- FlexSmart™ Analog Module and 4-20mA cable used with HOBO H22 series data loggers
- Analog Sensor Port/Module option and 4-20mA cable used with HOBO U30 and RX3000 series data loggers
- Voltage adapter used with U12, UX120-006M, MX1104, and MX1105 data loggers and ZW series data nodes

This also includes wiring details for connecting to a pulse output for the HOBO 4-Channel Pulse Input data logger (UX120-017x), HOBO UX90 state logger (UX90-001x), and Pulse Input Adapters (S-UCC-M00x, S-UCD-M00x, RXW-UCC-xxx, and RXW-UCD-xxx).

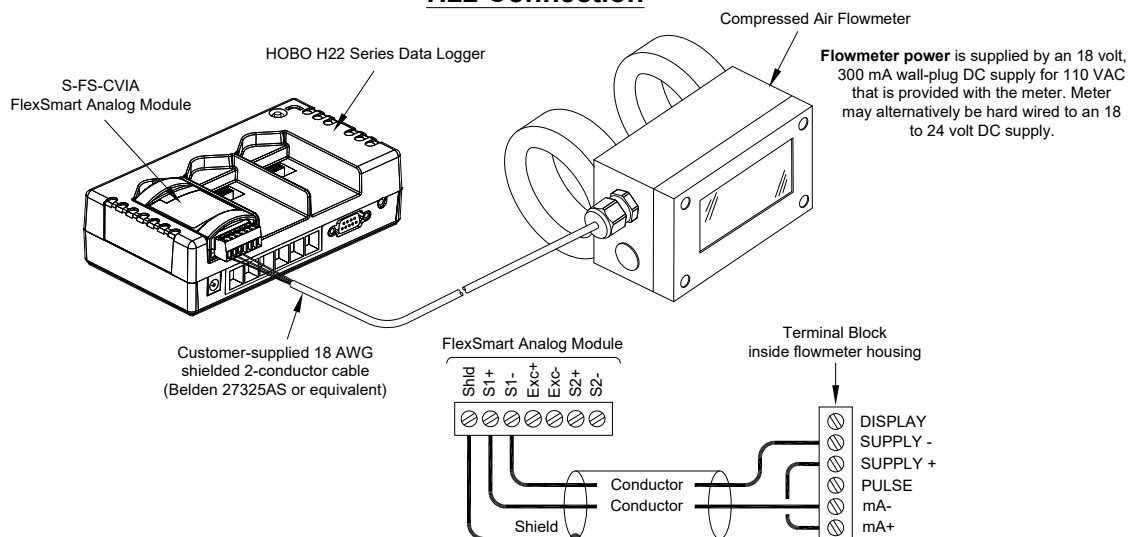
It also lists configuration values used by HOBO software to configure the logger for each flowmeter. **Note:** For flowmeter details, refer to the documentation provided by CDI Meters.

Required

- Selected CDI Flowmeter
- HOBO H22, U12, U30, UX90-001x, UX120-006M, UX120-017x, MX1104, MX1105, or RX3000 data logger, or HOBO ZW data node or Pulse Input Adapter (S-UCC-M00x, S-UCD-M00x, RXW-UCC-xxx, and RXW-UCD-xxx)
- FlexSmart Analog Module, S-FS-CVIA (for H22 series); Analog Sensor Port/Module option (for U30 and RX3000 series); 4-20mA cable, CABLE 4-20mA (for all series) or SD-MA-420 (for MX1104 and MX1105)
- HOBOWare® software, version 2.2.1 or higher for H22 or U12; 2.4.0 or higher for U30 series; 3.6 or higher for UX120-006M; HOBOWare Pro 3.0 or higher for ZW series
- HOBObconnect™ for MX1104 and MX1105
- HOBOblink® for RX3000 series data loggers
- Customer-supplied length of 18 AWG, shielded, 2-conductor cable (Belden 27325AS or equivalent recommended)

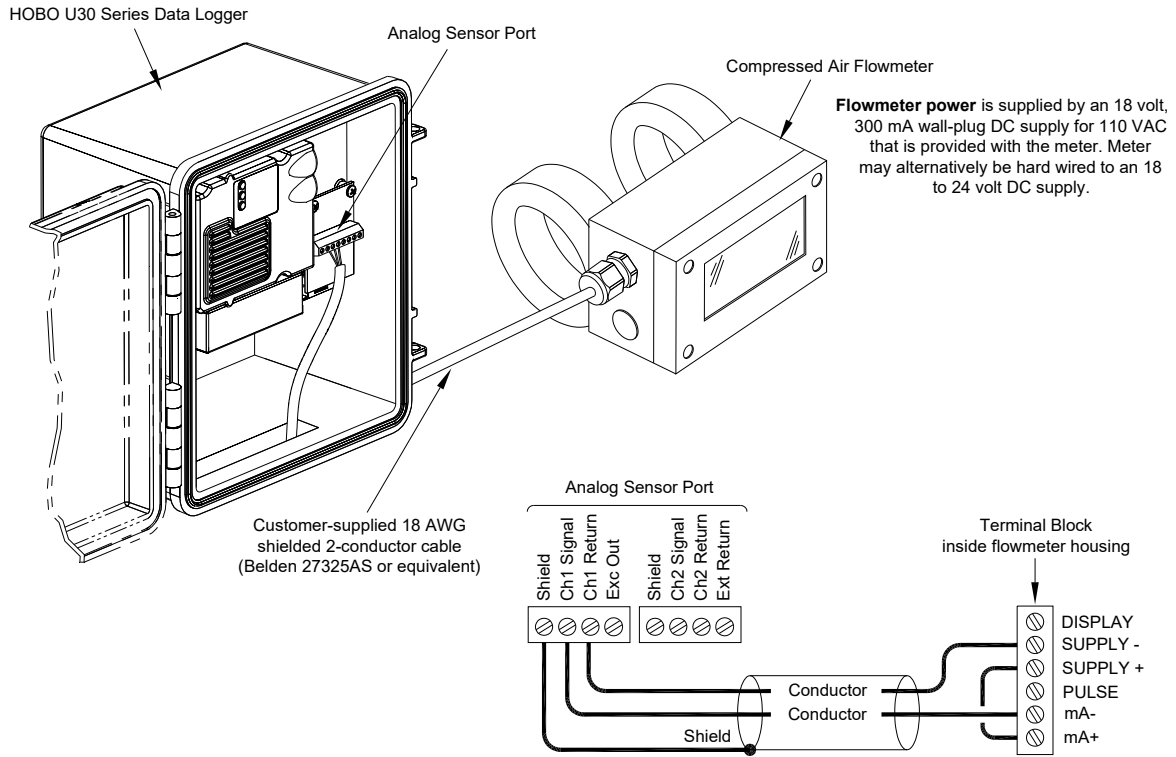
Connecting the Flowmeter to the Analog Module or Port

H22 Connection

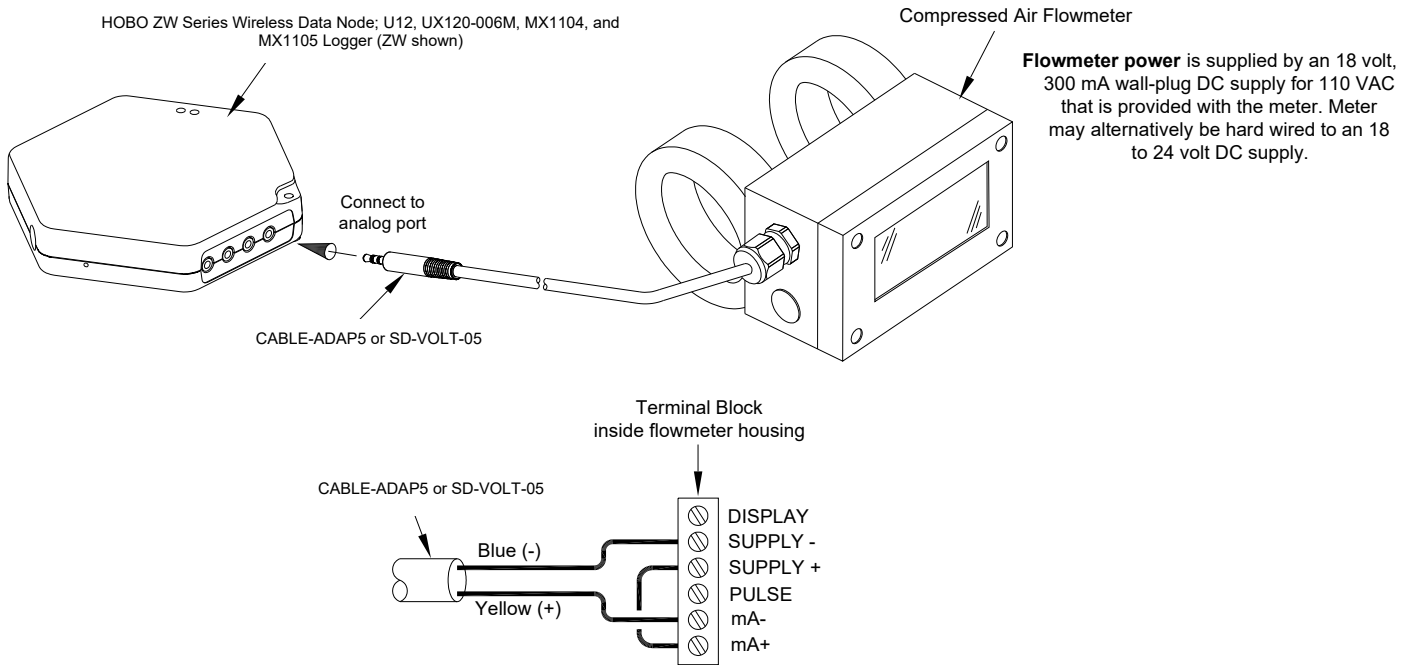


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U30 or RX3000 Connection (U30 Shown)



ZW, U12, UX120-006M, MX1104, and MX1105 Connection



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Configuring the Logger or Data Node for the Flowmeter using HOBO Software

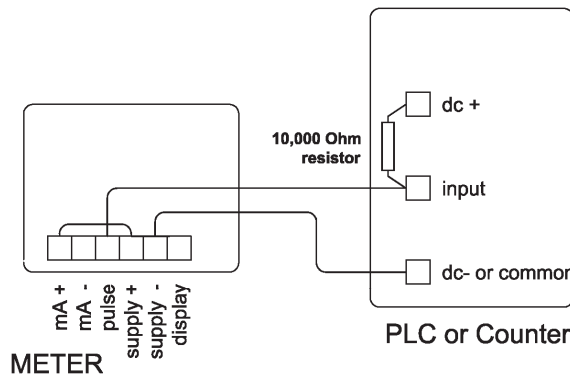
Use the following recommended scaling values in the software:

Onset Part Nos.	Channel Name	Measurement Type	Raw Value 1	Raw Value 2	Raw Units	Scaled Value 1*	Scaled Value 2*		Scaled Units
T-CDI-5200-10S	Air Flow	Current	4	20	mA	0	200		scfm
T-CDI-5400-20S	Air Flow	Current	4	20	mA	0	600		scfm

* 4-20-mA output represents ranges shown. *Calibrated* ranges are 1 to 80 scfm for T-CDI-5200-10S and 3 to 350 scfm for T-CDI-5400-20S. Accuracy will be reduced when flow is outside of calibrated range. Refer to the software documentation for more details on setting up scaling.

Connecting the Flowmeter to Pulse Output

Use this wiring diagram when connecting a CDI Flowmeter to a logger or sensor with pulse output, including the HOBO 4-Channel Pulse Input Data Logger (UX120-017x), HOBO UX90 State Logger (UX90-001x), and Pulse Input Adapters (S-UCC-M00x, S-UCD-M00x, RXW-UCC-xxx, and RXW-UCD-xxx).



Note that the supply- terminal is normally grounded to the pipe on which the meter is mounted.

WIRING FOR PULSE OUTPUT

CDI Meters, Inc.
June 1, 2005

When using HOBOWare to launch a HOBO 4-Channel Pulse Input Data Logger (UX120-017x) or HOBO UX90 State Logger (UX90-001x) connected to a CDI Flowmeter, select Raw Pulse > Counts > Raw Pulse for the sensor in the Launch Logger window. For these two loggers or the S-UCC-M00x and S-UCD-M00x Pulse Input Adapters, click the Scaling button in the Launch Logger window. Choose the Pulse Scaling Assistant, and enter your scaling factor.