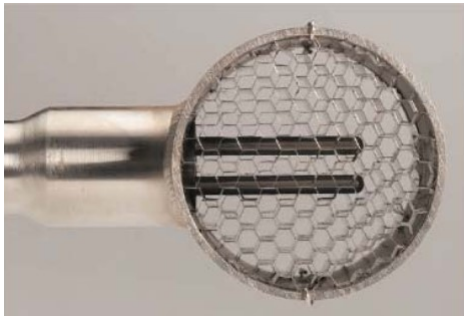


RHEOTHERM®

FLOW INSTRUMENTS

Rheovec™ Sensor Heads



- Measure true gas mass flow in ducts and pipes
- Obtain accurate velocity profiles in highly turbulent and swirling flow streams
- Reliably measure flow at lower cost than averaging arrays

The problem:

Flow rates in large air and gas ducts are notoriously difficult to reliably measure, particularly when there is limited room upstream for adequate straight-run or flow conditioning. Single point measurements can be noisy and inaccurate. Averaging multiple point measurements may help, but can be costly.

The solution:

Bionetics' answer combines reliable *Rheotherm* flow metering technology with the unique Rheovec™ sensor head to improve repeatability and accuracy in difficult duct flows. The Rheovec head enables extraction of the actual velocity transport vector to give a more accurate reading of the total mass or volume flow rate.

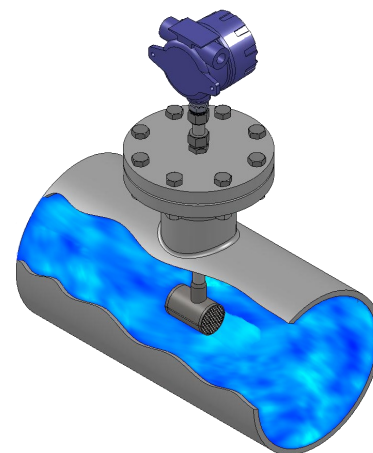
An additional option:

If desired, the probes can be ordered with an adjustable insertion depth. During initial use, flow rate readings at multiple insertion depths can be obtained and averaged, allowing the user to determine a final installation depth that provides a reading close to the average flow in the duct.

How It works:

The measurement is made using the time-tested technology of *Rheotherm* thermal flow meters. The Rheovec sensor head is used on an insertion probe when the installation involves a duct that has little or no straight-run or flow straightening. The Rheovec head features a unique honeycomb structure around the probe tips that eliminates inaccuracies due to the off-axis velocities in the poorly conditioned flow stream. This allows more accurate measurement of the actual gas transport in the duct.

These flow sensors typically come with *Rheotherm* Model 210 electronics for advanced signal processing, output signal and optional displays. See Bulletin M210 for further details.



Other sensor details:

- Line sizes: 4" and larger
- Line connection: 4" flange (plate flange for low pressure or a higher pressure rated flange.)
- Service: air and most other gases
- Wetted surface: stainless steel (other materials available)
- Hazardous service options: Yes. See Bulletin #FM.

For assistance with any flow application, contact an application engineer at Bionetics, *the leader in precision thermal flow metering*. Call **888-LOW FLOW** (569-3569).

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