Remote Meters
With 4-20mA Output

Reliably and affordably measuring and monitoring the actual gas flow through a vacuum feed system has always been a challenge—until now. Hydro Instruments' innovative approach to this process has seen the development of the industry's first variable area gas flow meter with a 4-20mA analog output.

The remote meter visually indicates the gas feed rate as well as outputs a 4-20mA signal proportional from zero to full scale. The analog output is representative of the actual gas feed rate based on the physical location of the float in the graduated glass tube.

Features

- 4-20mA output for remote feed rate monitoring
- No calibration needed—ever!
- Chemical never touches electronic components
- Excellent accuracy and repeatability
- Includes feed rate valve for manual adjustment of gas feed
- Can be used with automatic control valves
- Rugged design with solid machined parts for durability and long life
- Available for Chlorine or Sulfur Dioxide

Operation

Hydro Instruments' remote meters with 4-20mA output work like any other variable area gas flow meter, but incorporate technology that allows the remote monitoring of gas feed without the complications that other flow measurement methods are prone to.

The principal operation of a variable area gas flow meter is that as gas flow increases or decreases it applies a certain amount of force to the float inside the meter tube lifting it up or allowing it to fall, changing the area between it and the glass wall of the meter tube until enough gas can get around the float and an equilibrium is reached. The flow rate can then be determined based on calibrated markings on the glass meter tube.

Hydro Instruments has taken this concept and incorporated magnetic fields. A neodymium magnet of appropriate size and weight is placed inside the meter tube float and behind the meter tube itself are sensors able to detect the magnetic field. As the magnet passes these sensors the floats physical location in the meter tube can be determined and a mA current generated based on its position.

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US Toll Free: (888) 38-HYDRO ● www.hydroinstruments.com ● sales@hydroinstruments.com

Specifications

Capacities & Connections:

500 PPD (10 kg/hr)
6in. meter tube
1/2in. FPT inlet/outlet

1000 PPD (20 kg/hr) & 2000 PPD (40 kg/hr)
12in. meter tube
1in. PVC unions inlet/outlet

4000 PPD (80 Kg/h), 6000 PPD (120 Kg/h) & 8000 PPD (160 kg/hr)
20in. meter tube
1.5in. unions inlet/outlet

Note: All meters have a 1/4in FPT port for connecting a vacuum gauge or differential pressure regulator

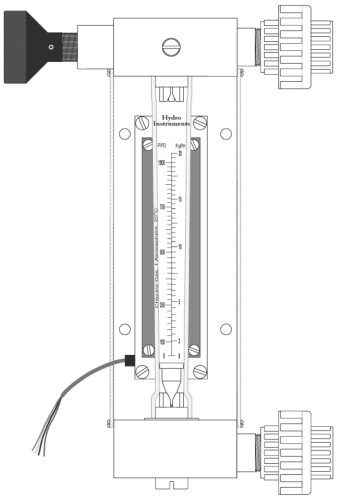
Accuracy: 5% of scale

Power: 12-24V DC, 2-wire

Output: 4-20mA DC, 2-wire

Feed Control: Manual feed rate valve included

Warranty: 1 year limited



Output (4-20mA)		**Input** (12-24VDC)	
GREEN	WHITE	BLACK	RED
AO+	AO-	V-	V+

Ordering Information

Model: RMH—A—B—C—D—E

Position	Feature	Description
A. Capacity	1000	1000 PPD (20 Kg/h) 12” Remote Meter Panel
	2000	2000 PPD (40 Kg/h) 12” Remote Meter Panel
	4000	4000 PPD (80 Kg/h) 20” Remote Meter Panel
	6000	6000 PPD (120 Kg/h) 20” Remote Meter Panel
	8000	8000 PPD (160 Kg/h) 20” Remote Meter Panel
B. Gas	CL2	Chlorine (Cl_2)
	SO2	Sulfur Dioxide (SO_2)
C. Output	420MA	4-20mA output
D. Power	1	None included
	2	12 VDC Power Supply (In stand alone, panel mounted enclosure)
E. Wall Panel Mounting	1	None included
	2	Wall panel mounted

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