

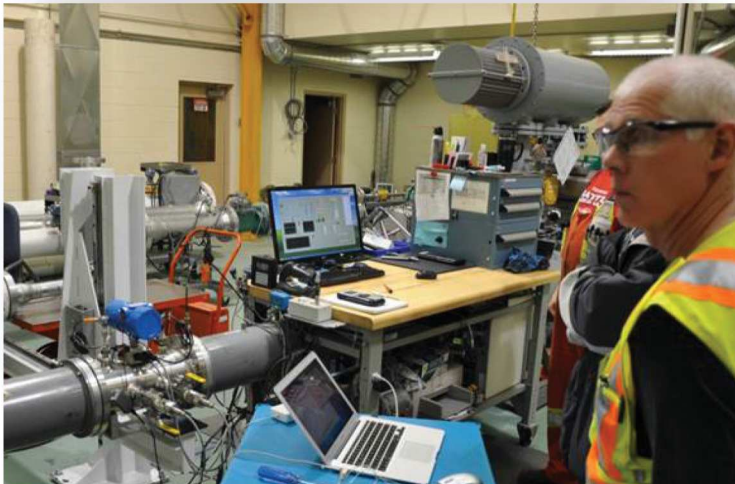
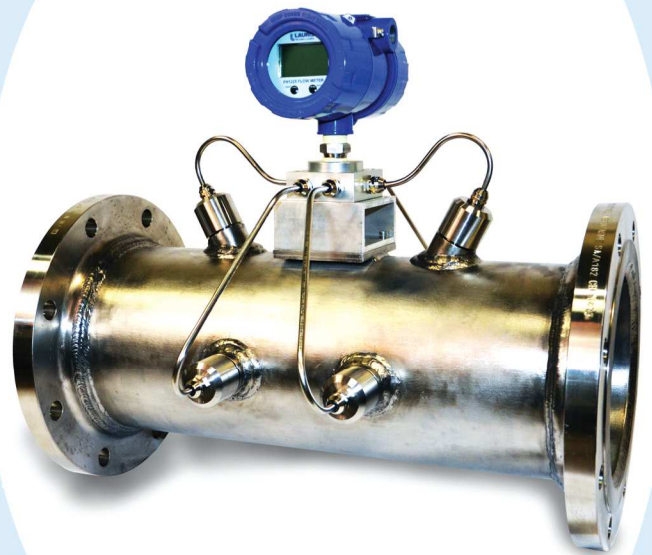
FH1225 Ultrasonic Gas Flow Meter

Description

The FH1225 gas flow meter combines advantages of two complimentary ultrasonic flow metering methods: transit-time and transit phase.

This results in unprecedented turn-down ratio, starting from the minimum velocity of 0.02m/s to the maximum gas velocity of 175m/s. The meter is insensitive to entrained liquids and clogging of transducers with heavy hydrocarbons and paraffins.

Applications include flare gas measurement in small and medium pipes and associated gas flow measurement at wellheads.



Features

- Highest turn-down ratio from $V_{min}=0.02\text{m/s}$ to $V_{max}=175\text{m/s}$ in one device
- No pressure drop
- Volumetric and molecular & mass flow measurement

FH1225

Ultrasonic Gas Flow Meter



Specifications

Transducer Type	Ultrasonic, wetted, non-intrusive, in-line
Operating Principle	Transit-time and transit-phase measurement
Transducer Material	SS 316
Cable Length	10m (30ft)
Performance Characteristics	
Velocity Range	0.02 m/s to 175 m/s (0.06 ft/s to 585 ft/s)
Accuracy	±1.5% to ±3%
Repeatability	Better than 1%
Measurement Parameters	Standard and actual volume flow, totalized volume flow, molecular weight, mass flow, pressure, temperature, gas velocity
Operating Conditions	
Pipe Diameter	5 cm to 100 cm (2" to 40")
Minimum Pipe Length	8D (upstream) & 4D (downstream)
Process Temperature	-40°C to +135°C (-40°F to 275°F)
Process Pressure	0.8 barA to 20 barA (10 psiA to 300 psiA)
Presence of Liquids	Not affected
Mechanical Characteristics	
Design	Spool type, flanges ANSI 150, pipe Sc.40, material SS316
Transducer Mount	Retractable, one-by-one
Length	60cm to 120cm depending on pipe diameter
Electrical Characteristics	
Supply Voltage	24VDC (20-32 VDC)
Power Consumption	5W (max)
Inputs	Two 4-20 mA for external pressure and temperature sensors
Outputs	Digital-ModBUs, two analog 4-20mA, pulse-frequency
Hazardous Area Approval	CSA/UL Class 1, Div.1, Group ABCD T4