



# FF1225-U

## Insertion Ultrasonic Gas Flow Meter

Unprecedented rangeability, and tolerance to gas impurities

### Description

The FF1225-U class of ultrasonic gas flow meters comprise the proven Lauris transit-time FF1225 flow metering technology. The insertion design is tailored towards installation on standard 2" or 3" welded ports, with process pipe diameter starting at 6". The meter comes with a built-in cleanout chamber for removal of sensor assembly under pressure, for periodic inspection and cleaning. Following the fundamental robustness of ultrasonic, the FF1225-U flow meters are not sensitive to presence of solids or moisture in the flow as opposed to other technologies such as optical scintillation or thermal mass flow meters. They also operate under negative pressures which is the "no-go" limit for differential pressure flow meters such Pitot tubes and annubars.

Consult with Lauris engineering team on your specific requirements of your flow measurement.

### Features

- Process temperature as high as 200C
- Built-in cleanout chamber
- Process piping 6" and up
- Operates at negative pressure, high moisture content and dust
- Velocity is low is 0.01m/s
- Process port connection sizes 2" and 3"





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### Specifications

|                                   |  |
|-----------------------------------|--|
| <b>Design</b>                     | Single Path (1-port), Dual Path (2-ports)                            |
| Material:                         | SS316, Monel, Titanium (others available upon request)               |
| Process Connection                | Flange ANSI #150, RF, 2" or 3"                                       |
| Velocity Range                    | 0.01m/s to 100m/s (0.03ft/s to 330ft/s)                              |
| Accuracy                          | 1.0% to 2.5%   |
| Repeatability                     | 0.2%   |
| Cleanout Ports                    | 1/2" NPT   |
| <b>Operating Conditions</b>       |  |
| Pipe Diameter                     | 6" to 48"  |
| Process Temperature               | -40C to +200C (-0F to +392F)   |
| Process Pressure                  | -0.5barg to 19barg (-7psig to 275psig)                               |
| Ambient Temperature               | -45C to +60C (-49F to +140F)   |
| <b>Electrical Characteristics</b> |  |
| Supply Voltage                    | 24VDC or 100-250 VAC   |
| Power Consumption                 | 2.5W (max)   |
| Output                            | 4-20mA, ModBus, HART   |
| LCD Display                       | Standard, can be excluded for low temperature operations             |
| Hazardous Area Approval           | CSA/ULClass 1, Div.1., Group BCD T4<br>ATEX (Zone 1), IECEx (Zone 1) |
| Sunshade                          | Optional   |

**WORKS IN WET AND DIRTY  
PROCESS GASES**

