Proline Prosonic Flow 92F ultrasonic flowmeter

Highly accurate, loop-powered flowmeter with innovative parallel path design for minimum inlet runs

More information and current pricing:
www.ca.endress.com/92F

Benefits:

- Safe design for process industries – international hazardous area approvals
- No additional pressure loss – full-bore design
- Process transparency – diagnostic capability
- Easy installation and reduced installation costs – loop-powered transmitter
- Fully industry compliant – IEC/ATEX/FM/CSA/JPN/NEPSI
- Automatic recovery of data for servicing

Specs at a glance

- **Max. measurement error** Volume flow (standard): - ±0.5 % o.r. for 0.5 to 10 m/s (1.6 to 33 ft/s) Volume flow (option): - ±0.3 % o.r. for 0.5 to 10 m/s (1.6 to 33 ft/s)
- **Measuring range** 0.5 to 10 m/s (1.6 to 33 ft/s)
- **Medium temperature range** -40 to +150 °C (-40 to +302 °F) -40 to +200 °C (-40 to +392 °F) optional
- **Max. process pressure** PN 40 / ASME Cl. 300 / JIS 20K
- **Wetted materials** Sensor: A351-CF3M (DN25 to 100) 1.4404/ TP316/TP316L or A106 GrB (DN150 to 300) Transducer: 1.4404/316/316L Flanges : 1.4404/316/316L or A105/1.0432

Field of application: Prosonic Flow F is the inline sensor with rugged industrial design for Ultrasonic fluid measurement. Combined with the loop-powered Prosonic Flow 92 transmitter, the device offers easy system integration and accuracy at an attractive price. Prosonic Flow 92F is ideally suited for the chemical and petrochemical industries.

Features and specifications

Liquids

Measuring principle

Ultrasonic flow

Product headline

Higly accurate, loop-powered flowmeter with innovative parallel path design for minimum inlet runs.
Inline device for homogeneous conductive and non-conductive liquids in the chemical and petrochemical industry.

Sensor features

Safe design for process industries – international hazardous area approvals. No additional pressure loss – full-bore design. Process transparency – diagnostic capability.
Full compliance according to NACE MR0175 and MR010. Nominal diameter: DN 25 to 300 (1 to 12"). Medium temperature: –40 to 200 °C (–40 to 392 °F).

Transmitter features

Easy installation and reduced installation costs – loop-powered transmitter. Fully industry compliant – IEC/ATEX/FM/CSA/JPN/NEPSI. Automatic recovery of data for servicing.
Device as compact or remote version. 2-line backlit display with push buttons. HART, PROFIBUS PA, FOUNDATION Fieldbus.

Nominal diameter range

2 path version: DN80 to 300 (3 to12")
3 path version: DN25 to 50 (1 to 2")
4 path version: DN 80 to 300 (3 to 12")

Wetted materials

Sensor:
A351-CF3M (DN25 to 100)
1.4404/TP316/TP316L or A106 GrB (DN150 to 300)
Transducer: 1.4404/316/316L
Flanges : 1.4404/316/316L or A105/1.0432

Liquids

Measured variables

Volume flow, calculated mass flow, sound velocity, flow velocity, signal strength

Max. measurement error

Volume flow (standard):
- ±0.5 % o.r. for 0.5 to 10 m/s (1.6 to 33 ft/s)

Volume flow (option):
- ±0.3 % o.r. for 0.5 to 10 m/s (1.6 to 33 ft/s)

Measuring range

0.5 to 10 m/s (1.6 to 33 ft/s)

Max. process pressure

PN 40 / ASME Cl. 300 / JIS 20K

Medium temperature range

-40 to +150 °C (-40 to +302 °F)
-40 to +200 °C (-40 to +392 °F) optional

Ambient temperature range

-40 to +60 °C (-40 to +140 °F) compact
-40 to +80 °C (-40 to +176 °F) remote sensor
-40 to +60 °C (-40 to +140 °F) remote transmitter

Transmitter housing material

AlSi10Mg, coated

Degree of protection

IP67, type 4X enclosure
IP68 type 6P enclosure (option for remote)

Display/Operation

2 lines backlit display with 3 push buttons

Outputs

1x 4-20 mA HART
1x Pulse/frequency/switch output (passive)

Liquids

Inputs
N/A

Digital communication
HART, Profibus PA, FOUNDATION Fieldbus

Power supply
2 wire loop powered

Hazardous area approvals
ATEX,FM, CSA, JPN

Other approvals and certificates
3.1 material (wetted parts), calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), CRN, AD2000
PED, EAC marking

Product safety
EAC marking

Metrological approvals and certificates
calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Pressure approvals and certificates
CRN, PED, AD2000

Material certificates
3.1 material (wetted parts)

More information **www.ca.endress.com/92F**