Proline Prosonic Flow 92F ultrasonic flowmeter

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

F L E X

More information and current pricing:

www.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 ℃ (-40 to +302 ℉) -40 to +200 ℃ (-40 to +392 ℉) 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.

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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 ℃ (−40 to 392 ℉).

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 ℃ (-40 to +302 ℉)
-40 to +200 ℃ (-40 to +392 ℉) optional

Ambient temperature range

-40 to +60 ℃ (-40 to +140 ℉) compact
-40 to +80 ℃ (-40 to +176 ℉) remote sensor
-40 to +60 ℃ (-40 to +140 ℉) 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.endress.com/92F**