

# Proline Prosonic Flow I 400 ultrasonic flowmeter

## Insertion flowmeter with Heartbeat Technology and web server for the water and wastewater industry



More information and current pricing:

[www.cz.endress.com/9I4B](http://www.cz.endress.com/9I4B)

### Benefits:

- Low capital investment – cost-effectiveness increases with pipe diameter (up to DN 4000/160")
- Long-term stable signal – maintenance-free direct installation of the sensor into the medium
- Process transparency – diagnostic capability
- Safe operation – no need to open the device due to display with touch control, background lighting
- Full remote access – web server
- Integrated diagnostics, verification and monitoring – Heartbeat Technology

### Specs at a glance

- **Max. measurement error** Volume flow:  $\pm 2\%$  o.r. above DN200
- **Measuring range** 0 to 15 m/s (0 to 50 ft/s)
- **Medium temperature range**  $-40$  to  $+80$  °C ( $-40$  to  $+176$  °F)
- **Max. process pressure** N/A
- **Wetted materials** Insertion system: Sensor holder 1.4301 (304), 1.4404 (316L) Sensor housing 1.4301 (304), 1.4404 (316L)

**Field of application:** Prosonic Flow I 400 combines insertion sensor technology with the benefits of our Proline 400 transmitters, such as Heartbeat Technology for safe process monitoring and web server access for easy installation and operation. Welded directly into the pipe wall, Prosonic Flow I 400 is especially suitable for large pipelines such as water distribution lines and projects where a fixed device installation is necessary.

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## Features and specifications

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### Liquids

**Measuring principle**

Ultrasonic flow

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**Product headline**

Insertion meter with Heartbeat Technology and web server for the water and wastewater industry.

Bidirectional flow measurement of water and wastewater.

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**Sensor features**

Low capital investment – cost-effectiveness increases with pipe diameter (up to DN 4000/156"). Long-term stable signal – maintenance-free permanent mounting from outside with coupling pads. Process transparency – diagnostic capability.

Supports two parallel measurement paths. For large diameters: DN 200 to 4000 (8 to 160"). Medium temperature: -40 to +80 °C (-40 to +176 °F).

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**Transmitter features**

Safe operation – no need to open the device due to display with touch control, background lighting. Full remote access – web server. Integrated diagnostics, verification and monitoring – Heartbeat Technology.

Transmitter housing made of durable polycarbonate or aluminium. Remote version for wall mounting. Integrated data logger: measured values monitoring.

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**Nominal diameter range**

DN200 to 4000 (8 to 160")

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**Wetted materials**

Insertion system:

Sensor holder 1.4301 (304), 1.4404 (316L)

Sensor housing 1.4301 (304), 1.4404 (316L)

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**Measured variables**

Volume flow, Flow velocity, Sound velocity

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## Liquids

**Max. measurement error**

Volume flow:  $\pm 2\%$  o.r. above DN200

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**Measuring range**

0 to 15 m/s (0 to 50 ft/s)

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**Max. process pressure**

N/A

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**Medium temperature range**

-40 to +80 °C (-40 to +176 °F)

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**Ambient temperature range**

-20 to 60°C (-4 to 140°F)

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**Sensor housing material**

N/A

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**Transmitter housing material**

Wall-mounted housing:  
Polycarbonat; AlSi10Mg, coated

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**Degree of protection**

Transmitter: IP66/67, Type 4X enclosure  
Sensor: IP66/67, Type 4X enclosure, IP68, Type 6P enclosure (optional)

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**Display/Operation**

4-line backlit display with touch control (operation from outside)  
Configuration via local display, web browser and operating tools possible

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**Outputs**

3 outputs:  
4-20 mA/4-20 mA HART (active)  
Pulse/frequency/switch output (passive)  
Pulse/frequency/switch output (passive)

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**Inputs**

Status input

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## Liquids

### Digital communication

HART

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### Power supply

AC 100 to 240 V / AC/DC 24 V

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### Approvals

cCSAus, EAC

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### Other approvals and certificates

Other approvals and certificates

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### Product safety

Product safety

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### Marine approvals and certificates

Marine approvals and certificates

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More information [www.cz.endress.com/9I4B](http://www.cz.endress.com/9I4B)