

## Proline Prosonic Flow 93W ultrasonic flowmeter

Device with automatic frequency scan for max. measuring performance with a wide range of outputs



Mais informações e preço atual:

[www.br.endress.com/93W](http://www.br.endress.com/93W)

### Benefícios:

- Low capital investment – cost-effectiveness increases with pipe diameter (up to DN 4000)
- Long-term stable signal - maintenance-free permanent mounting from outside with coupling pads
- Process transparency – diagnostic capability
- Highest performance – extended functionality and diagnostics
- Flexible data transfer options – numerous communication types
- Automatic recovery of data for servicing

### Especificações resumidas

- **Max. measurement error** Volume flow:  $\pm 3\%$  o.r. for DN15  $\pm 2\%$  o.r. for DN25 to 200  $\pm 2\%$  o.r. above DN200
- **Measuring range** 0.3 to 10 m/s (1 to 33 ft/s)
- **Medium temperature range** Clamp-on:  $-20$  to  $+80$  °C ( $-4$  to  $+176$  °F) Insertion version:  $-40$  to  $+80$  °C
- **Max. process pressure** N/A
- **Wetted materials** Clamp on system: Sensor holder 1.4308/CF-8  
Sensor housing 1.4301/304 Strapping bands 1.4301/304

**Campo de aplicação:** The Prosonic Flow W clamp-on sensor was specially designed for water and wastewater applications. Combined with the Prosonic Flow 93 transmitter with touch control, four-line display and extended functionality, Prosonic Flow 93W offers high accuracy in standard applications in the water industry.

### Características e especificações

## Liquids

### Measuring principle

Ultrasonic flow

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### Product headline

Device with automatic frequency scan for max. measuring performance with a wide range of outputs.

Clamp-on flow measurement of process water, salt water, demineralized water, drinking & 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.

Medium temperature: -20 to +80 °C (-4 to +176 °F). Degree of protection IP68 (Type 6P enclosure) for pipes under water. Shock and vibration resistance according to IEC 68-2-6.

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### Transmitter features

Highest performance – extended functionality and diagnostics. Flexible data transfer options – numerous communication types. Automatic recovery of data for servicing.

Aluminium transmitter housing. 4 - line backlit display with touch control. HART, PROFIBUS PA/DP, FOUNDATION Fieldbus.

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### Nominal diameter range

Single channel, 1 or 2 paths : DN15 to 4000 (1/2 to 160")

Dual channel, 1 or 2 paths : DN15 to 4000 (1/2 to 160")

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### Wetted materials

Clamp on system:

Sensor holder 1.4308/CF-8

Sensor housing 1.4301/304

Strapping bands 1.4301/304

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### Measured variables

Volume flow channel 1&2, average volume flow, volume flow difference, sound velocity, flow velocity, totalizer

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**Liquids****Max. measurement error**

Volume flow:

±3% o.r. for DN15

±2% o.r. for DN25 to 200

±2% o.r. above DN200

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**Measuring range**0.3 to 10 m/s (1 to 33 ft/s)

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**Max. process pressure**N/A

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**Medium temperature range**

Clamp-on: -20 to +80 °C (-4 to +176 °F)

Insertion version: -40 to +80 °C

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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: powder-coated die-cast aluminum

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**Degree of protection**

IP67, type 4X for transmitter, IP68 (option)

IP67 type 4X for sensors

IP68 type 6P for sensors (option). Transmitter: IP67, type 4X enclosure

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**Display/Operation**4 lines backlit display with three optical keys

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**Outputs**

1x 4-20 mA HART

1x Pulse/frequency/switch output (passive)

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**Inputs**N/A

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## Liquids

### Digital communication

HART, PROFIBUS PA, PROFIBUS DP, FOUNDATION Fieldbus

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### Power supply

AC 85 to 260 V

AC 20 to 55 V

DC 16 to 62 V

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### Hazardous area approvals

ATEX, FM, CSA

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### Other approvals and certificates

Flowmeter verification for DN15, 25, 40, 50, 100, 250, 400 only

Marine certificate

EAC marking

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### Product safety

CE, C-Tick, EAC marking

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### Metrological approvals and certificates

Flowmeter verification for DN15, 25, 40, 50, 100, 250, 400 only

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### Marine approvals and certificates

Marine certificate

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