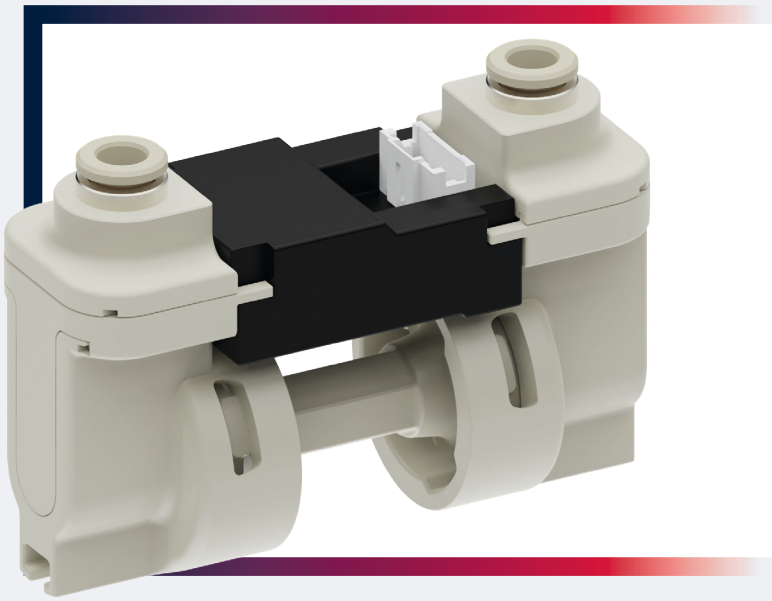
Precisely measuring flow rates: Contactless and hygienic

The flow sensors from AVS Römer are characterised by their hygienic, maintenance-free and contactless measurement. They are versatile and can be used for various media such as water, milk and syrup. The sensors provide precise and reproducible measurement results and ensure exact dosage in the application.



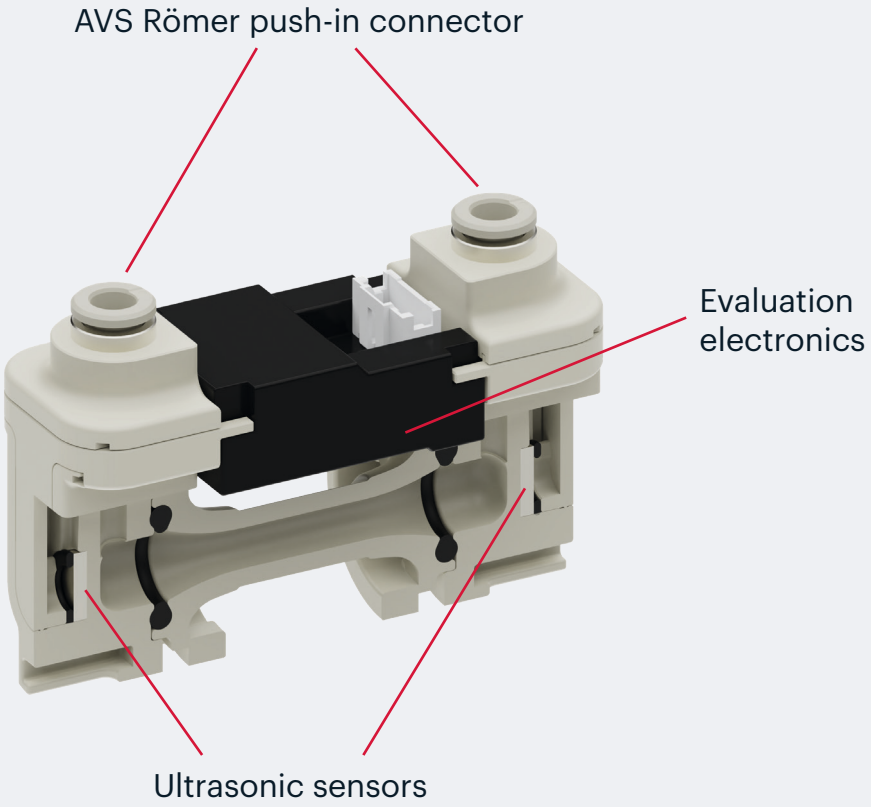
AVS Römer ultrasonic flow sensor

Type IFS

- **Hygienic**
  Contactless measurement guarantees the highest standard for hygiene.
- **Versatile**
  Suitable for a variety of media such as water, milk and syrup as well as high temperature ranges.
- **Highly precise**
  Very accurate and reproducible results even with minimal flow rates.
- **High-performing**
  Maintenance-free with no moving parts in the sensor for full flow.
- **Safe**
  Maximum system stability by recognising minimal deviations and flow rates.
- **Individual**
  Variants or custom solutions are possible.

More information:
www.avs-roemer.com

The ultrasonic flow sensor type IFS:
exact measurement and ideal flow rate



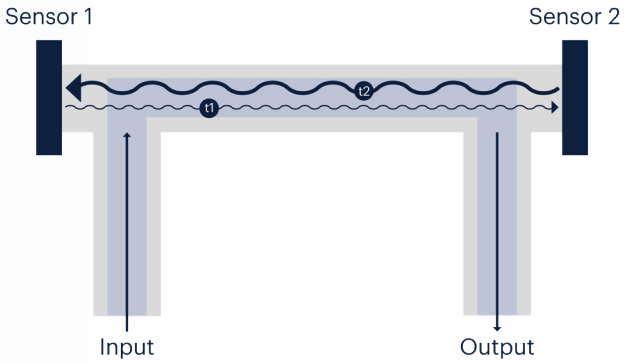
Functional principle

The ultrasonic flow sensors from AVS Römer measure the flow rate of liquids using the transit time difference method:
vm= (c2 /2 • L) • (1/t1 - 1/t2)

vm = mean flow velocity
c = sound velocity
L = length of the measuring distance between the sensors
t1 = time from sensor 1 to sensor 2
t2 = time from sensor 2 to sensor 1

The product of the mean flow velocity and the flow cross-section A equals the flow rate Q:
Q = vm • A

Measurements are taken without contact to the liquid.



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