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solutions

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**VSE**.flow®

Helical screw flow meter RS10



# RS10 – new size of the micro flow meter



Micro flow meters RS5 and RS10

With the RS10, VSE is expanding the RS series with another micro flow meter, introducing a new compact size to the market following the RS5. To ensure easy integration into a wide range of applications, the connection units are based on the established design of the standard RS series\*.

The special rotor design extends the measuring range from 0.5 ml/min to 10 l/min\*\*. Compared to the RS5, the RS10 can withstand operating pressures of up to 250 bar thanks to its larger housing. For data acquisition, the series uses a non-contact pick-up system, which ensures reliable measurement results even under demanding conditions.

\* starting from size RS40  
\*\* depending on viscosity

## Applications

Thanks to its high resolution, the RS10 is ideal for precise flow and volume measurements – especially in dynamic processes involving viscous, pasty, or filled media with viscosities starting from 800 mPas. Its compact design makes the RS10 the perfect solution for systems with limited installation space and for use in combination with progressive cavity pumps.

The micro flow meter also delivers accurate results in multi-component applications and complex ratio measurements. Bi-directional events such as pulsations or backflows are detected, further enhancing the accuracy of the measurement results.

## Advantages

- Extended measuring range from 0.5 ml/min to 10 l/min
- Suitable for operating pressures up to 250 bar
- Designed for medium to high-viscosity liquids, including single-component adhesives
- Low-resistance, highly precise, pulsation-free, and gentle measurement with minimal pressure curves

## Technical specifications

Material	1.4305 (housing)/1.2379 (rotors)
Dimensions (L x W x H)	108 x 50 x 62 mm
Weight	1,5 kg
Bearings	Ceramic plain bearings
Connection	G ½
Seal material	Viton or PTFE
Flow rate	0,5 ml/min to 10 l/min
Max. operating pressure	250 bar
Frequency	up to 120 kHz
Viscosity	≥ 800 mPas
Medium temperature	-30°C up to +80°C
Installation position	Any
Interpolation factor IPF	256,512 (standard), 1,024*
K-Factor	~360.000 1/l (at IPF 512)
Measurement accuracy	± 2% ≥ 800 mPas
Repeatability	± 0,5% (under the same working conditions)

\*expandable

## Electrotechnical data

### Supply voltage

6 to 26 V DC

### Output signal form

2-channel HTL  
quadrature signals

### Signal output current

300 mA per channel

### Connection type

4 pin M5x0.5 (male)

## Connection diagram

### PIN 3

Power supply GND  
Ub = 0 V

### PIN 2

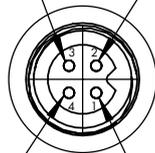
Digital signal  
channel 1

### PIN 4

Digital signal  
channel 2

### PIN 1

Voltage supply  
Ub = 6 - 26 V DC



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