

Steuma Visco-VP In-line viscosity meter

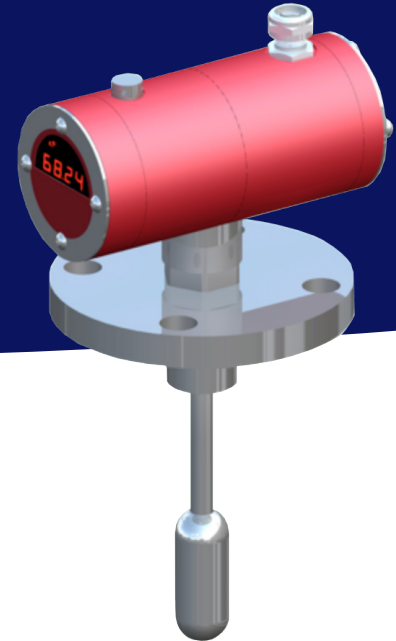


The Steuma VISCO-VP is a new generation in-line viscosity meter. This instrument measures the viscosity continuously on a very accurate scale and direct in the process.

The Steuma VISCO-VP is a torque - oscillating viscosity meter, which measures the drag of a fluid at the surface of the sensor. The sensor oscillates at its resonance frequency, and the amplitude of the vibration is muted as the viscosity increases. The viscosity can be calculated out of the energy required to keep the amplitude constant.

Depending on the process fluid and application there are various models of the Steuma VISCO-VP for the required measurement range and accuracy.

Steuma also has the VISCO-FT: this is a flow-through model, in which the process fluid flows through a straight tube with no bends or restrictions. The sensor can be produced in a variety of materials such as polycoated for aggressive fluids.



Scope

Chemical industry
Petrochemical industry
Pharmaceutical industry
Food industry

Other applications are possible with fluids such as: acrylic fibers, textile fibers, Black liquor, condensed milk, darcon, lycra, galatine, PET, resins poly-isobutyls and printing ink.

Instructions for use

See the manual and www.steuma.com

Advantages

- Proven in many applications and installations
- No moving parts (torque-oscillating)
- Robust, no maintenance required
- Fast and accurate measurement
- Suitable for low and very high viscosity

References

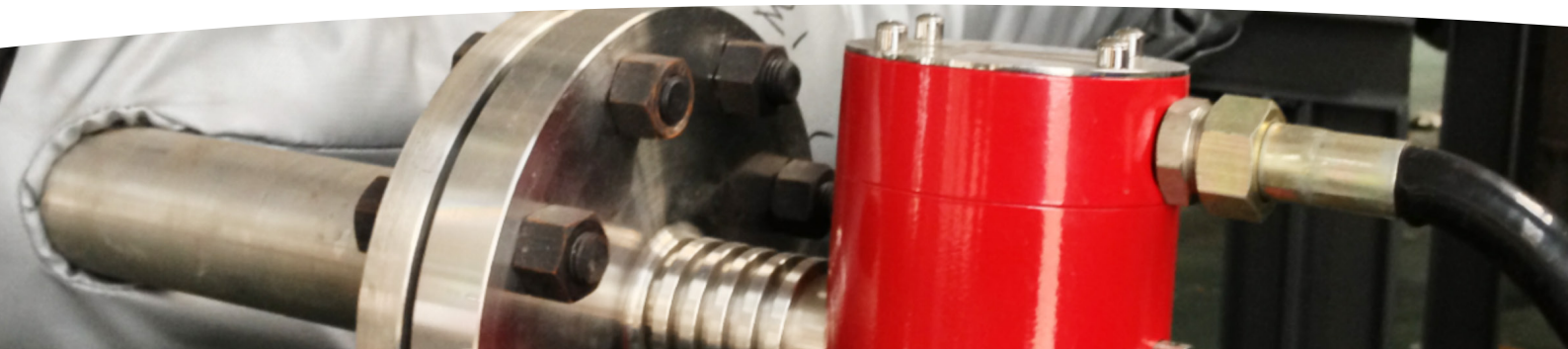
- 3M
- Akzo
- DSM Resins
- Dow chemicals
- Dupont
- BASF
- Bayer
- Domo
- Elf

Safety aspects

See the manual & www.steuma.com

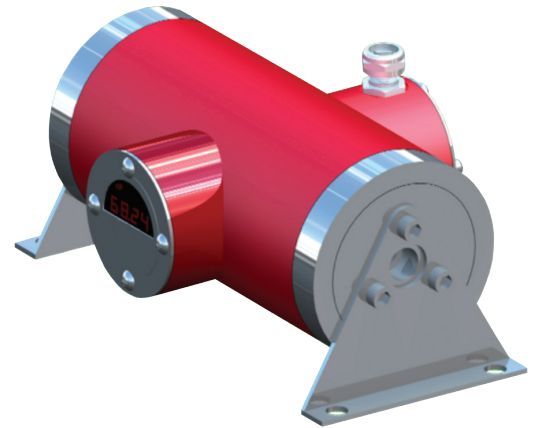
Certificates

ATEX:II ½ G EEx ia IIC T3-T6
CSA International Class I, Div1, Group C and D



The Steuma VISCO-VP has a Direct Digital Drive transmitter with a feed forward control that keeps the amplitude of the sensor at a constant level. A powerful processor makes it possible to determine the resonance frequency accurately. This technology suppresses external disturbing influences such as mechanical vibrations from the process. As a result it is not necessary to filter or compensate for this interference.

The viscosity is calculated using a 3rd order polynomial (cubic spline). The viscosity and temperature are displayed on the LED display of the transmitter. These measures are also available as 4-20mA analog output and as RS232 / 485 digital output.



Technical information

Measuring range Visco-VP

Different versions, depending on range: 0.0 up to 1.000, 0.0 up to 2.500, 0.0 up to 10.000, 0.0 up to 5.000.000 mPa.s * g/cm³

Measuring range Visco-FT

0.0 up to 1.000 mPa.s * g/cm³

Precision

1%

Sensor length

97,120,125,155,150, 185mm

Cable length transmitter

max. 300 meter

Process temperature

<450 °C measured in the sensor

Process connection

NPT, ASME or DN flenzen

Process pressure

up to 19 bar

Power supply

24VDC

Housing

IP65

Materials sensor

SUS316L, Teflon, Hastelloy C22, Duplex SAF 2205

Weight

12 kg

 **AAVOS** International
Your partner in process analyses
More than 20 years of experience

