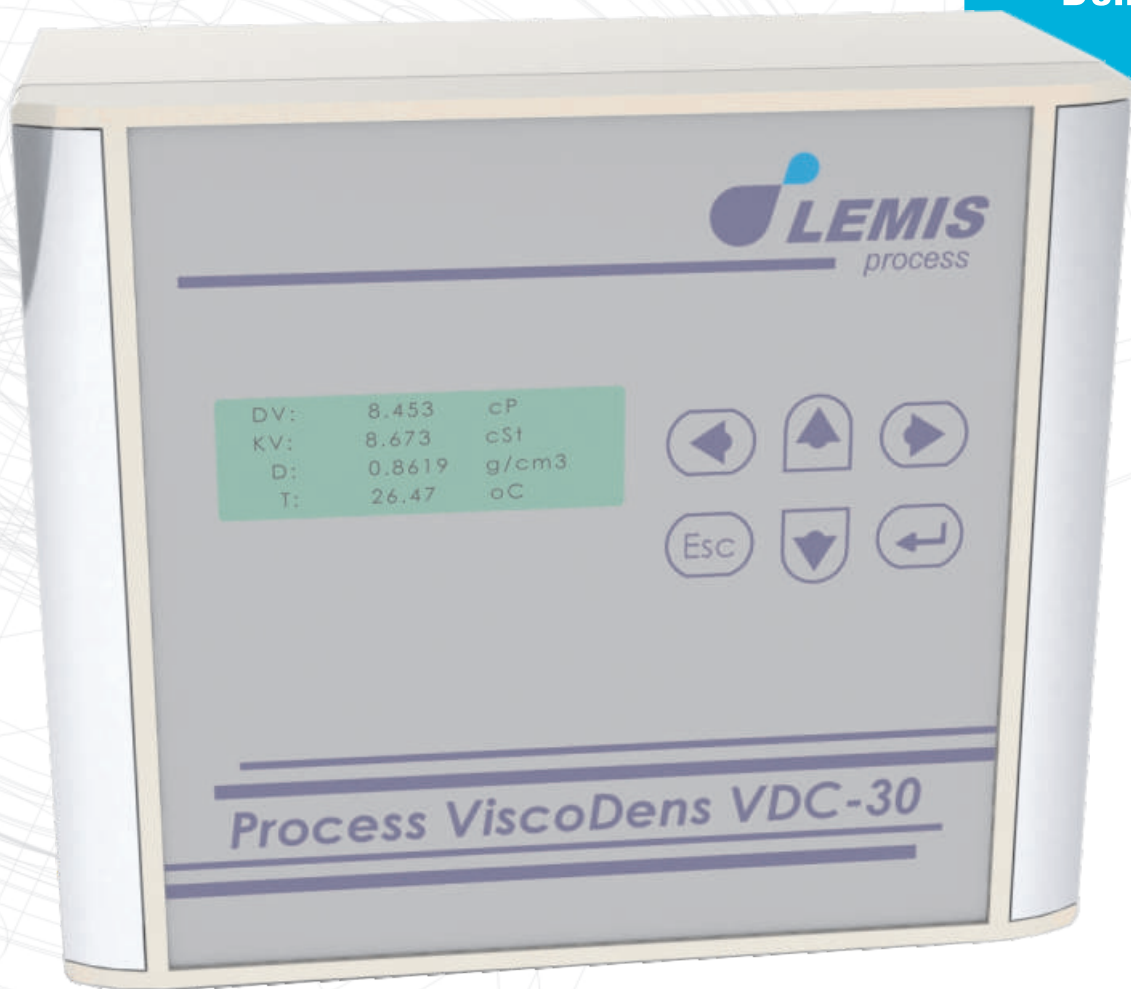


**Kinematic  
Viscosity**

**Dynamic  
Viscosity**

**Density**



# PROCESS VISCOMETER

**FOR LOW FLOW RATE**

**VDC-30**

**IN PROCESS TO EXCELLENCE**

# Specifications

<b>Measuring range:</b>	
Dynamic Viscosity	0.2 to 2000 mPa·s (0.2 to 2000 cP)
Density Range	0.5 to 2 g/cm <sup>3</sup>
Temperature	-20°C to +100°C (-4°F to +212°F)
<b>Accuracy:</b>	
Density	Up to ±0.0002 g/cm <sup>3</sup> (up to ±0.2 kg/m <sup>3</sup> ) Up to ±0.0005 g/cm <sup>3</sup> (up to ±0.5 kg/m <sup>3</sup> ) Up to ±0.001 g/cm <sup>3</sup> (up to ±0.1 kg/m <sup>3</sup> )
Dynamic Viscosity	±1% of span
Temperature	±0.1°C (±0.2°F)
<b>Repeatability:</b>	
Density	Up to ±0.0001 g/cm <sup>3</sup> (up to ±0.125 kg/m <sup>3</sup> ) Up to ±0.00025 g/cm <sup>3</sup> (up to ±0.25 kg/m <sup>3</sup> ) Up to ±0.0005 g/cm <sup>3</sup> (up to ±0.5 kg/m <sup>3</sup> )
Dynamic Viscosity	±0.5% of span
Temperature	±0.1°C (±0.2°F)
<b>Resolution:</b>	
Density	0.0001 g/cm <sup>3</sup> (0.1 kg/m <sup>3</sup> )
Viscosity	0.1 cP
Temperature	0.01°C (0.02°F)
Flow Range	10 to 100 L/h
Supported measuring units	Real density: g/cm <sup>3</sup> , kg/m <sup>3</sup> , lb/gal, lb/ft <sup>3</sup> ; API; SG Referred density: at 15°C, 20°C, 60°F; API60; SG60 Tables ASTM D1250 Alcohol tables Temperature in °C or °F
Ambient temperature	-20°C to +50°C (-4°F to +122°F)
Operating pressure	Up to 10 Bar (Up to 145 psi)
<b>Materials:</b>	
Sensor	Stainless steel SS 316 L; NiSpan C; Hastelloy C22
Weather rating	IP65
Power supply	24V AC
Digital output	Standard: RS485, Modbus, Analog 4-20mA
Analog output	4-20 mA
<b>Dimensions, weight</b>	
Housing Dimensions	200 x 174 x 91 mm (7,9 x 6,9 x 3,6 in)
Weight	approx. 3 kg (approx. 6,6 lb)
Process connection	Swage nipple PN 06HB02 VA 1/8"-6
Temperature compensation	Automatic
Viscosity compensation	Automatic
Data Handling	Black lighted LCD 4x20
CE mark	Compliant EN 61326 ; EN 5011 ; EN 50082-2
Quality Assurance	ISO 9001:2000
Factory calibration	Calibration certificates supplied as standard

## Principle of quality

VDC-30 principle of operation is based on the changing of frequency characteristics of the sensitive element in the measured liquid. Device measures continuously Dynamic Viscosity and Real Density to calculate Kinematic Viscosity of the liquid. Usually all the industrial measuring systems operate with dynamic viscosity unlike most of laboratories measure kinematic viscosity via capillary viscometers. So it is critically important to compare laboratory measurements with measurements made by process meters and evaluate measuring system`s performance.

## Advantages

- Continuous measurements
- Easy cleaning
- High accuracy
- Simple installation
- Suitable for very viscous liquids
- Wide range of applications
- Rigorous factory calibration
- Automatic temperature compensation
- Compact design

## Applications

- Marine
- Military applications
- Pharmaceutical and cosmetic industries
- Petroleum industry
- Food & Beverages



**For more information please visit [www.lemis-process.com](http://www.lemis-process.com)**



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