



PORTABLE ViscoDens

VDM-250.2

IN PROCESS TO EXCELLENCE

VDM-250 is a unique combination of Viscometer and Density meter.

Resonance technology, based on the changes of frequency of vibration element in the measured liquid, allows to receive highly accurate Kinematic Viscosity measurements in seconds.

VDM-250 measures Density and Dynamic Viscosity and calculates Kinematic Viscosity:

$\mu = \eta / \rho$ (μ - Kinematic Viscosity; η - Dynamic Viscosity; ρ - Density)

Specifications

Measuring range:	
Density	0... 3 g/cm ³ (0... 3000 kg/m ³)
Dynamic Viscosity	up to 10000 mPa·s (cP)
Temperature	-40... +85°C (-40... +185°F)
Level	up to 30 m (100 ft.)
Accuracy:	
Density	±0.0003 or ±0.0005 g/cm ³ (±0.3 or ±0.5 kg/m ³)
Dynamic Viscosity	±1% of span
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
Level	±2 mm(±0.008")
Repeatability:	
Density	±0.00015 or ±0.00025 g/cm ³ (±0.15 or ±0.25 kg/m ³)
Dynamic Viscosity	±0,5% of span
Temperature	±0.1°C (±0.2°F)
Level	±1 mm(±1/16")
Supported measuring units	Real Density: g/cm ³ , kg/m ³ , lb/gal, lb/ft ³ ; API; SG Dynamic Viscosity: mPa·s, cP Kinematic Viscosity: mm ² /s, cSt Tables ASTM D 1250 Alcohol Tables Referred Density: at 15°C, 20°C, 60°F; API60; SG60 Temperature in °C or °F
Ambient temperature	-40... +85°C (-40... +185°F)
Depth of submersion	Up to 30 meters (100 ft.)
Sensor:	
Type	Vibrating element (Resonance principle)
Material	Stainless steel SS 316 L; NiSpan C; Hastelloy C22
Intrinsically safe:	
Controller	ATEX II (2G) EEx ib [ia] IIB T4
Sensor	ATEX II 1G EEx ia IIB T4
Power supply	NiMH 3.6V-1500 mAh
Operating time without charging	Appr. 12 hours
Dimensions, weight:	
Controller	180 x 80 x 40 mm (7.1 x 3.2 x 1.6"), 0.6 kg (1.3 lb)
Level block with density/viscosity meter	420 x 245 x 140 mm (16.5 x 9.6 x 5.5"), 4 kg (8.8 lb)
Sensor	220 x ø45 mm (8.7 x ø1.7"), 1 kg (2.2 lb)
Temperature compensation	Automatic
Viscosity compensation	Automatic
Reporting formats	Dynamic viscosity in mPa·s or cP; temperature in °C or °F
Data handling	Backlighted LCD display (2x16)
	Local memory up to 2000 results
	Build in Bluetooth for data transfer to printer or PC
Delivery	Optional Windows - based software
	Delivered in compact carrying case



Advantages

- Direct density and viscosity measurement
- Density, reference density, specific gravity, API, ...
- Automatic temperature compensation
- No sampling required
- ATEX, IEC Hazloc certification
- Safe operation, low maintenance
- At any depths up to 30 meters
- Record level, density and viscosity; average per tank
- Record level of liquid
- Rigid construction for heavy duty outdoor operation
- Local results storage and Bluetooth data transfer

Applications

- Spot density and viscosity or density/viscosity/level profile in storage tanks
- Products consistency and adulteration check
- Density, viscosity and level control at outlets and delivery points
- Level gauge calibration
- In-tank blending and mixing control
- Molasses density control in ethanol production
- Food, milk and dairy products
- % alcohol check in beverage industry
- Petroleum products, fuels, lubricants

Data transmission to PC, pocket PC or portable printer via Bluetooth connection. Compatible for a Windows XP/Vista/7.

For more information please visit www.lemis-process.com



USA
LEMIS USA, Inc.
15556 Summit Park Dr. Suite 601
Montgomery
TX 77356, USA
Ph.: +1 281 465 8441

EUROPE
AS LEMIS Baltic
26 Ganību dambis
Rīga, LV-1005
Latvia, EU
Ph.: +371 6738 3223
Fax: +371 6738 3270

INDIA
LEMIS India PVT LTD
504, Bhumi Raj Costa Rica, 5th floor
Plot 1&2, Sector 18, Sanpada
Navi Mumbai-400705, INDIA
Ph.: +91 22 6721 5655
Fax: +91 22 6794 2666

E-mail: info@lemis-process.com