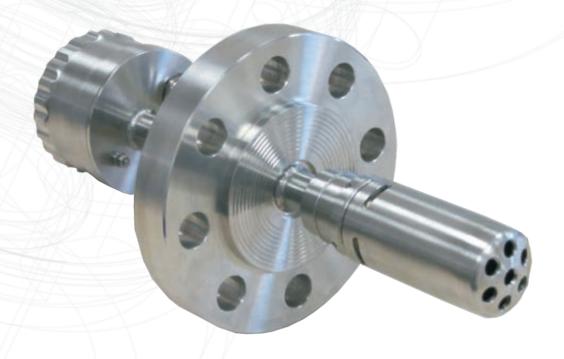


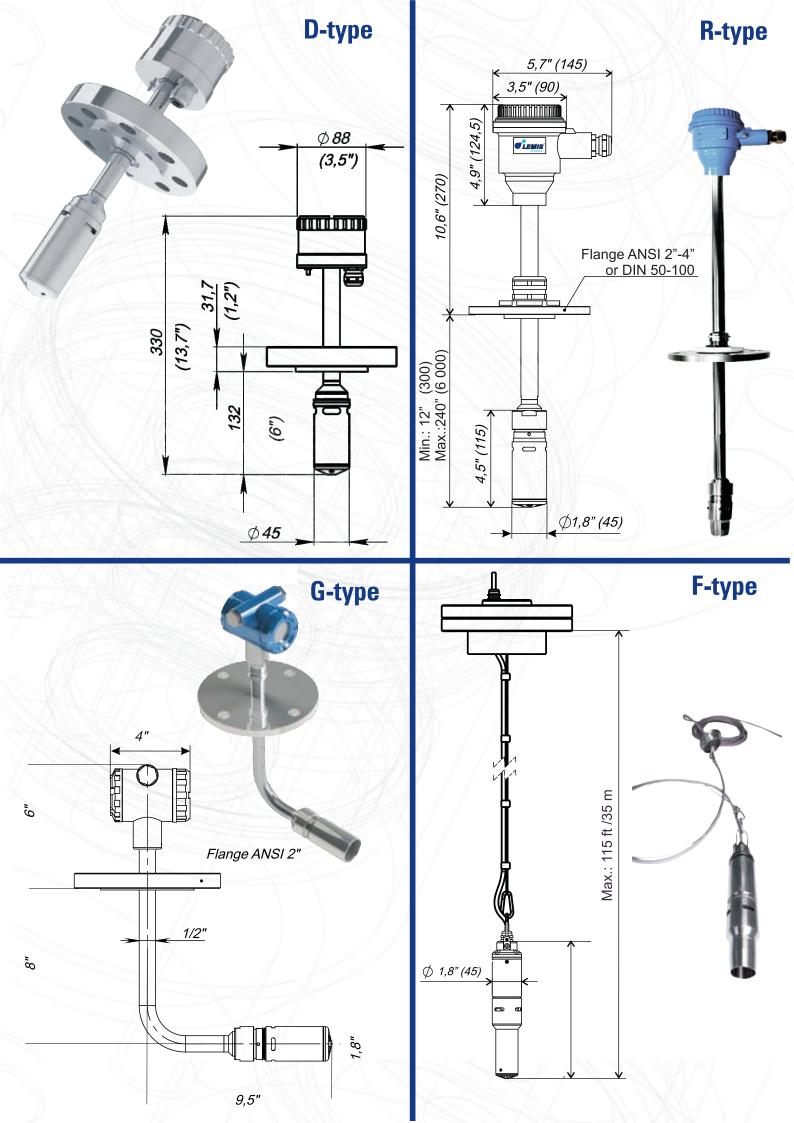
## **40 SERIES**





# Density and Viscosity Meter DC-42

IN PROCESS TO EXCELLENCE



# **Specifications**

Measuring range: Density Density Standard	0 2 g/cm³ (0 2000 kg/m³) 0.6 1.2 g/cm³ (600 1200 kg/m³)
Dynamic Viscosity Temperature	Up to 2000 mPa·s (up to 2000 cP) -40 +85°C (-40 +185°F)
Accuracy:	
Density	Up to ±0.00025 g/cm³ (up to ±0.25 kg/m³)
Dynamic Viscosity Temperature	±1% of span ±0.1°C (±0.4°F)
	±0.1 6 (±0.4 1)
Repeatability: Density	Up to ±0.0001 g/cm³ (up to ±0.1 kg/m³)
Dynamic Viscosity	±0.5% of span
Temperature	±0.1°C (±0.2°F)
Resolution:	
Density	0.0001 g/cm³ (0.1 kg/m³)
Dynamic Viscosity	0.1 mPa·s (0.1 cP)
Temperature	0.01°C (0.02°F)
	Real Density: g/cm³, kg/m³, lb/gal, lb/ft³; API; SG
	Dynamic Viscosity: mPa·s, cP Kinematic Viscosity: mm²/s, cSt
Supported Measuring Units	Referred Density: at 15°C, 20°C, 60°F; API60; SG60
	Tables ASTM D1250
	Alcohol Tables
T	Temperature in °C or °F
Temperature Compensation	Automatic
Viscosity Compensation	Automatic
Operating Pressure	Up to 100 Bar (up to 1450 psi)
Resolution:	Direct insertion
D-type R-type	Long rigid immersion
F-type	Flexible
Ambient Temperature	-40 +50°C (-40 +122°F)
Weather Rating	IP67 for sensor and IP55 for Termnal Box
Power voltage:	
Sensor	Stainless steel SS316L; NiSpan C; Hastelloy C22; Teflon
Other Wetted Parts	Stainless steel SS316L or Hastelloy C22
Electronics Housing	Aluminum, blue epoxy finish
Electrical Connections	Screw Terminals; Cable entry: 2 x 3/4" NPT
Power Supply	6-12 VDC 30 mA (60 mA pick)
Output:	Line density and temperature digital signals
Sensor Analog	Line density and temperature digital signals  up to 3x 4-20 mA, direct or reverse-acting, configurable
Digital	Standard: RS485, Modbus; user choice of signals and protocols
9	Calibration certificates supplied as standard

#### **APPLICATIONS**

- Density, viscosity, temperature and concentration monitoring in storage tanks
- Petroleum products, fuels, lubricants, LPG, LNG
- Concentrations of acids or corrosive chemical
- Food, Dairy & Beverages
- Products identification and consistency
- Concentration and dilution measurements
- Monitoring of reaction end in reactors
- In-tank mixing and blending





Calibration of **LEMIS process** density and

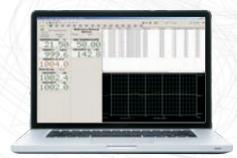
viscosity meters is performed in-house according

#### **ADVANTAGES**

- Continuous, online viscosity monitoring at process conditions
- Accurately measures density and viscosity of liquids with viscosity uo to 2000 cSt
- Rigorous factory calibration and testing of the transducer
- · Can operate in pressurized tanks
- Immersion in the tanks up to 30 meters
- No moving parts, virtually maintenance free system
- We also can tune system specification for your specific requirements
- Hazardous area approvals
- Insensitive to liquid level, mix or turbulence
- Large offer of standard product configurations and installation available using calibration materials that are traceable to



ISO 9001:2015 quality assurance program and by using calibration materials that are traceable to national standards. In-house calibration and testing is performed with rigorous quality protocol for every standard model of the sensor. **LEMIS process** installation packs allow simple, switch-and-go field installation. When ordered with **LEMIS process** installation pack, the sensor has mounted at factory, tested and calibrated already fitted assuring best performance and eliminating the need for in-situ calibration for most of applications. The sensors has no moving parts and virtually maintenance-free.



Multifunctional software allows to proceed the measurements results in use-convenient form;
Compatible for a Windows 7/8/10\*

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



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