

### **40 SERIES**

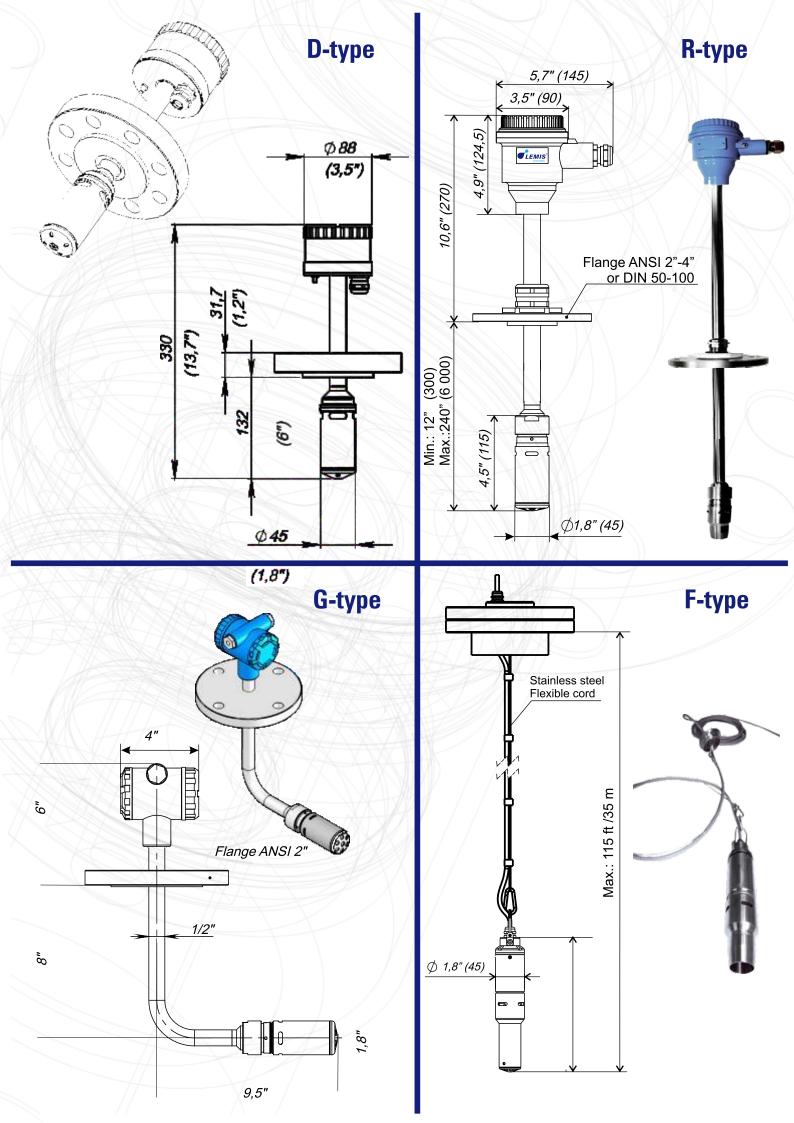




# **VISCOMETER**

**DC-41** 

IN PROCESS TO EXCELLENCE



## **Specifications**

Measuring range:  Dynamic Viscosity  Temperature	Up to 2000 mPa·s (up to 2000 cP) -200 +200°C (-328 +392°F)
Accuracy:	
Dynamic Viscosity Temperature	±1% of span ±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
Repeatability:	
Dynamic Viscosity Temperature	±0.5% of span ±0.1°C (±0.2°F)
Resolution:  Dynamic Viscosity Temperature	0.1 mPa·s (0.1 cP) 0.01°C (0.02°F)
Supported measuring units	Dynamic Viscosity: mPa·s, cP Temperature in °C or °F
Temperature compensation	Automatic
Viscosity compensation	Automatic
Maximum Pressure	100 bar (10 MPa)
Installation types: D-type R-type F-type G-type	Direct insertion Long rigid immersion Flexible Angle insertion
Process Connections	Large selection of flanges available
Ambient temperature	-40 +85°C (-40 +185°F)
Weather rating	IP67 for sensor and IP 55 fo Terminal box
Materials:	
Sensor Other Wetted Parts Electronics Housing	Stainless steel SS 316 L; NiSpan C; Hastelloy C22; Teflon Stainless steel SS316 L or Hastelloy C22 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:	
Sensor	Line density and temperature digital signals
Analog	Up to 3x isolated 4-20 mA,
Digital	direct or reverse-acting, configurable Standard: RS485, Modbus; user choice of signals and protocols
Factory calibration	Calibration certificates supplied as standard
CE mark	Compliant EN 61326; EN 5011; EN 50082-2
Implosion protection marking	ATEX II 1/2G Ex ia IIB T4; IECEx Ex ia IIB T4 Ga /Gb; CCE

#### **APPLICATIONS**

- Viscosity and temperature monitoring in storage tanks
- Petroleum products, fuels, lubricants
- Concentration of acids or corrosive chemicals
- Food, Dairy & Beverages
- Product identification and consistency
- Concentration and dilution measurements
- Monitoring of end reaction in reactors
- In-tank mixing and blending

#### **ADVANTAGES**

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

Able to connect device to PC; Multifunctional software allows to proceed the measurements results in user-convenient form; Compatible for a Windows XP/Vista/7.







Calibration of **LEMIS process** density meters are performed in-house according ISO 9001:2000 quality assurance program and by using calibration materials that are traceable to national standards. In house calibration and testing is performed by using specifically dedicated calibration protocol for every standard model of the sensor. For most applications, on-site calibration is generally not required. **LEMIS process** sensors allows simple switch-and-go field installation.

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

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