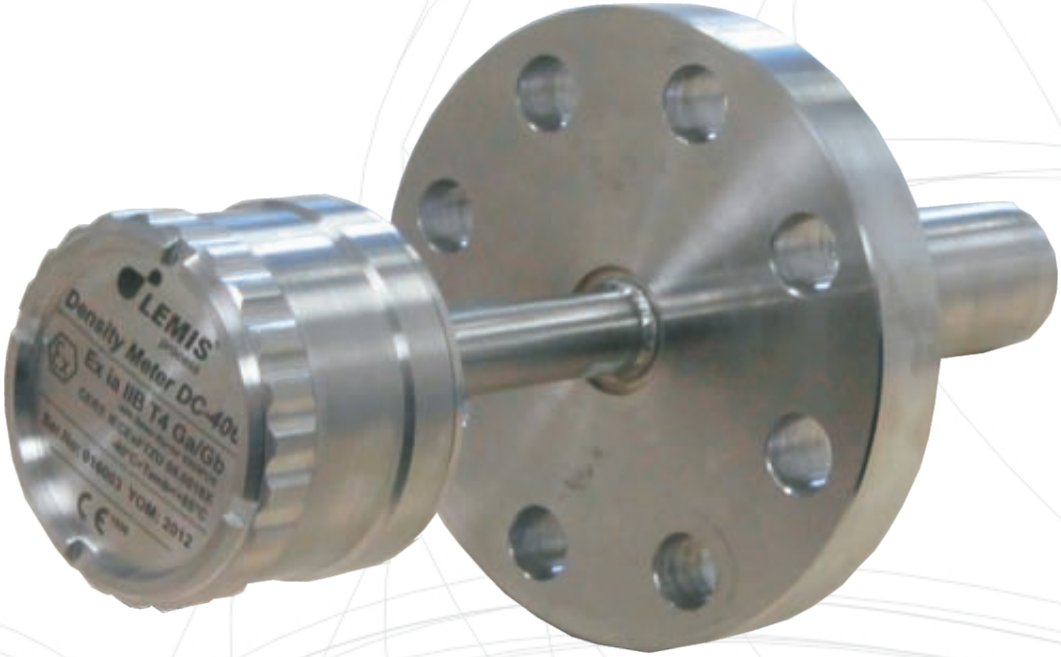
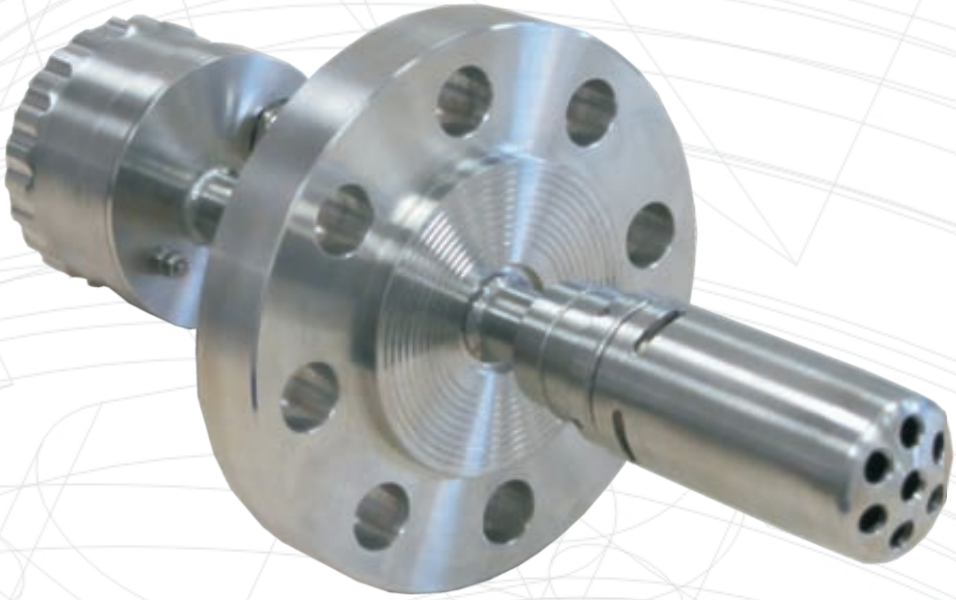
LEMIS® process

40 SERIES



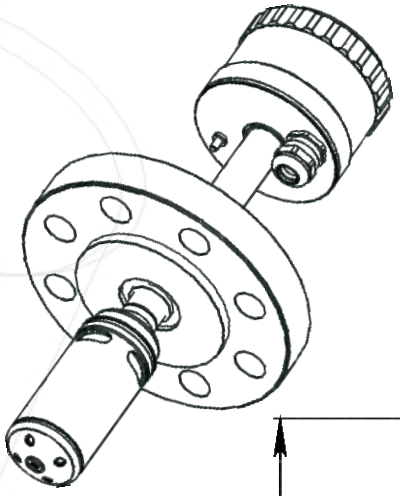


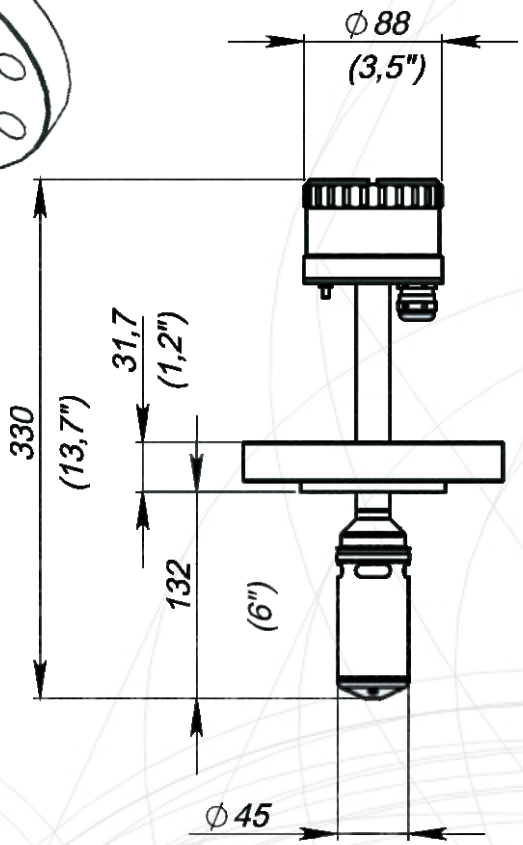
DENSITY METER

DC-40

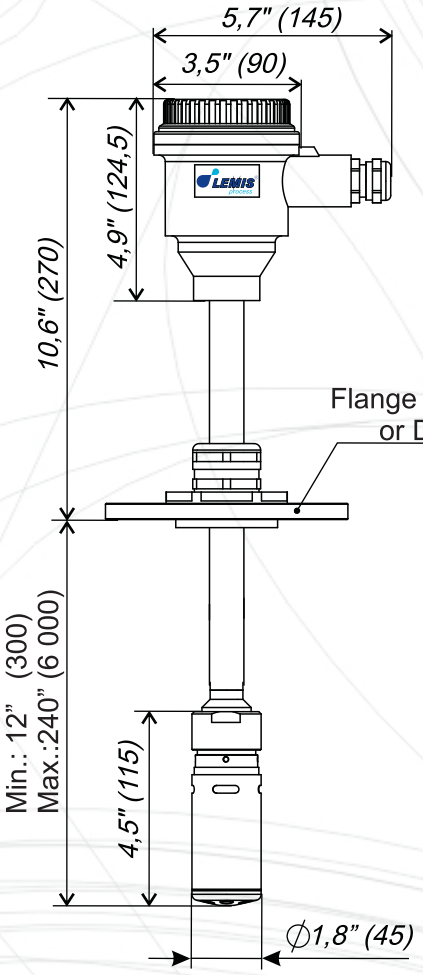
IN PROCESS TO EXCELLENCE

D-type



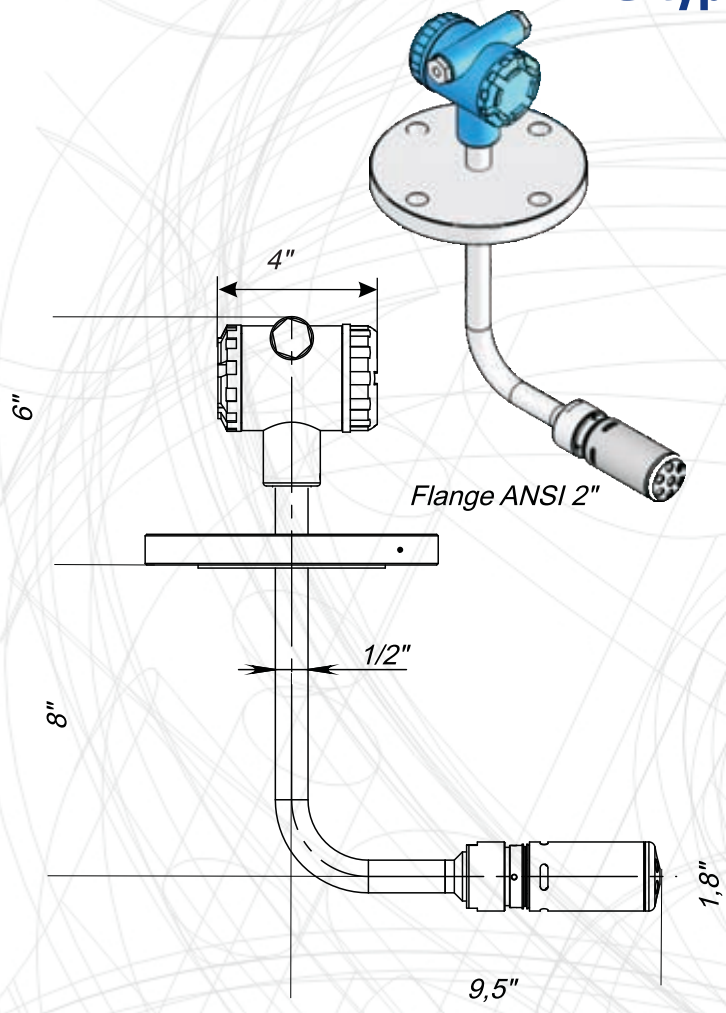


R-type

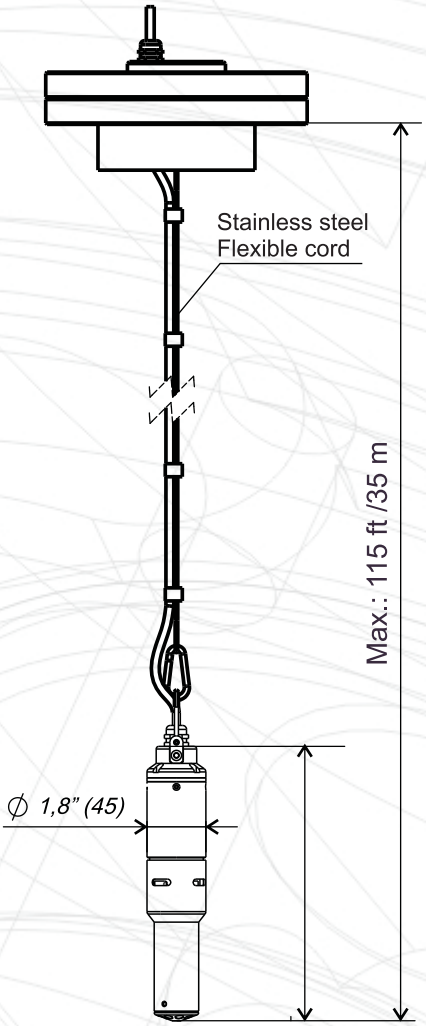




G-type



F-type





Specifications

Measuring range:	
Density	0… 2 g/cm³ (0… 2000 kg/m³)
Density Standard calibration	0.6… 1.2 g/cm³ (600… 1200 kg/m³)
Temperature	-40… +85°C (-40... +185°F)
Accuracy:	
Density	±0.00025 g/cm³ (±0.25 kg/m³)
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
Repeatability:	
Density	±0.0001 g/cm³ (±0.1 kg/m³)
Temperature	±0.1°C (±0.2°F)
Resolution:	
Density	0.0001 g/cm³ (0.1 kg/m³)
Temperature	0.01°C (0.02°F)
Supported measuring units	Real Density: g/cm³, kg/m³, lb/gal, lb/ft³; API; SG Referred Density: at 15°C, 20°C, 60°F; API60; SG60 Tables ASTM D 1250 Temperature in °C or °F Alcohol tables
Temperature compensation	Automatic
Viscosity compensation	Automatic
Maximum Pressure	100 bar (10 MPa)
Installation types:	
D-type	Direct insertion
R-type	Long rigid immersion
F-type	Flexible
Process Connections	Large selection of flanges available
Ambient temperature	-40… +50°C (-40... +122°F)
Weather rating	IP67 for sensor and IP 55 fo Terminal box
Materials:	
Sensor	Stainless steel SS 316 L; NiSpan C; Hastelloy C22; Teflon; Titanium
Other Wetted Parts	Stainless steel SS316 L 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:	
Sensor	Line density and temperature digital signals
Analog	Up to 3x isolated 4-20 mA, direct or reverse-acting, configurable
Digital	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



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





ADVANTAGES

- Continuous, online density monitoring at process conditions
- Accurately measures density of liquids with viscosity up 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

Able to connect device to PC;
Multifunctional software allows to proceed the measurements results in user-convenient form;
Compatible for a Windows XP/Vista/7/8/10.





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 specified 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

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

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

INDIA
LEMIS India PVT LTD
504,Bhumiraj Costarica,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