

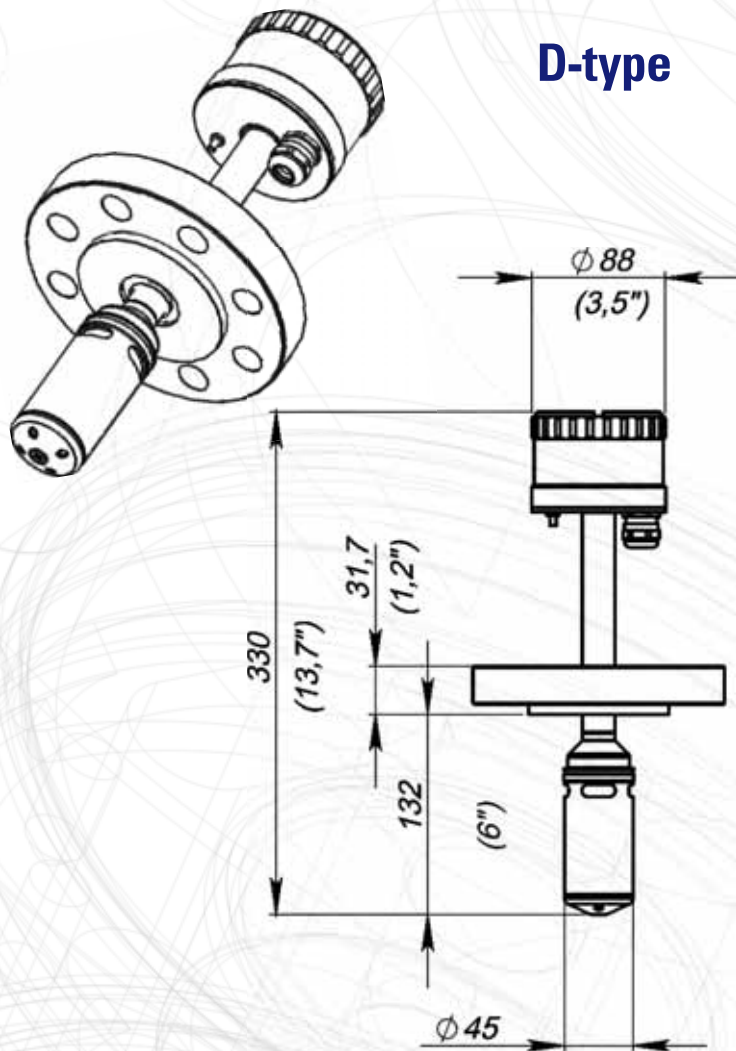


**DENSITY METER**

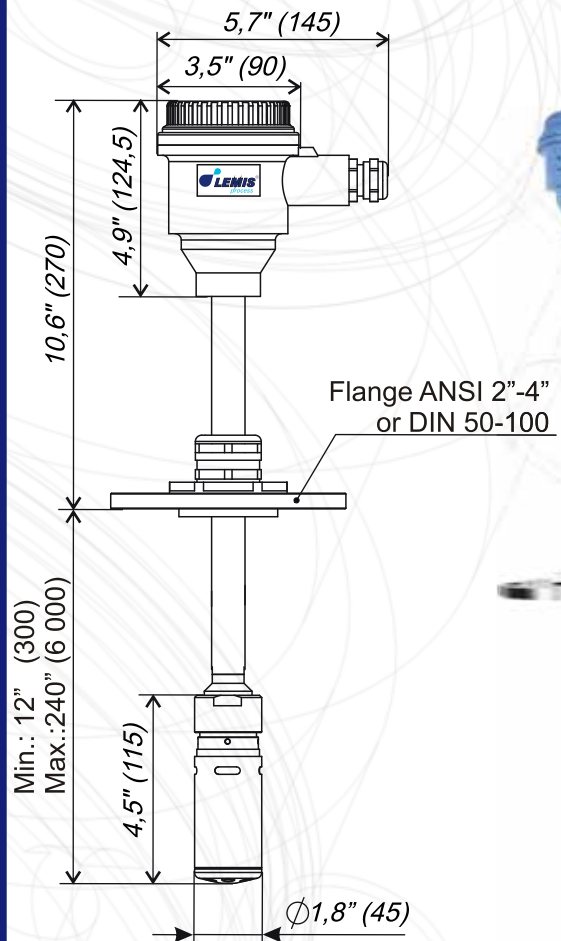
**DC-40**

***IN PROCESS TO EXCELLENCE***

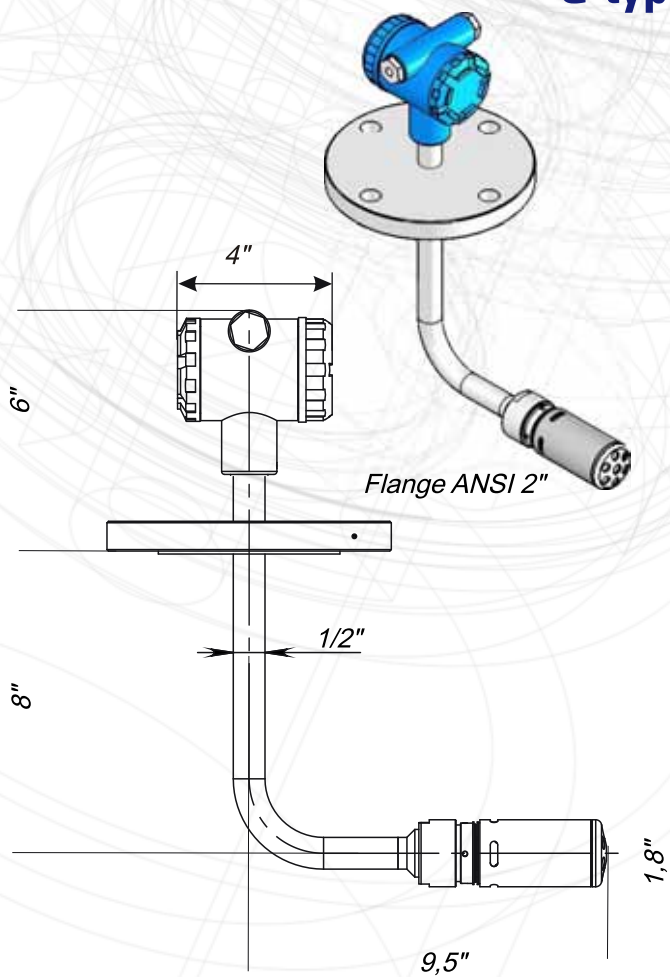
## D-type



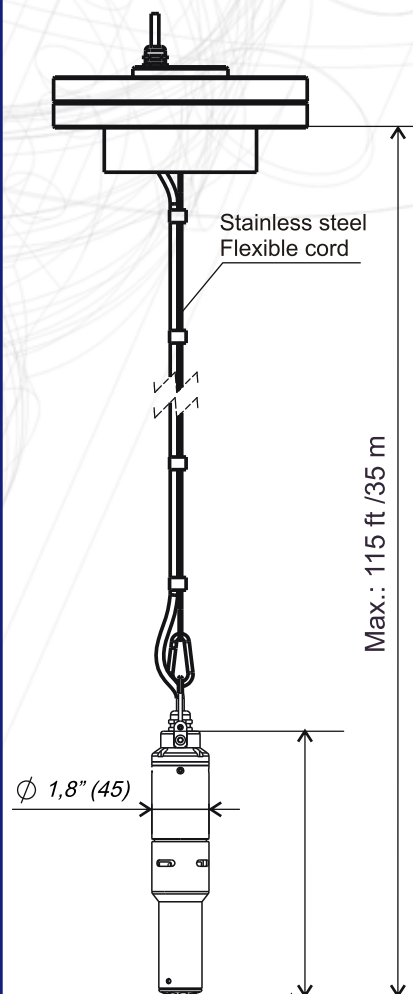
## R-type



## G-type



## F-type



# Specifications

<b>Measuring range:</b>	
Density	0... 3 g/cm <sup>3</sup> (0... 3000 kg/m <sup>3</sup> )
Density Standard calibration	0.6... 1.2 g/cm <sup>3</sup> (600... 1200 kg/m <sup>3</sup> )
Temperature	-200... +200°C (-328... +392°F)
<b>Accuracy:</b>	
Density	±0.00025 g/cm <sup>3</sup> (±0.25 kg/m <sup>3</sup> )
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
<b>Repeatability:</b>	
Density	±0.0001 g/cm <sup>3</sup> (±0.1 kg/m <sup>3</sup> )
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> )
Temperature	0.01°C (0.02°F)
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 D 1250 Temperature in °C or °F Alcohol tables
Temperature compensation	Automatic
Viscosity compensation	Automatic
Maximum Pressure	100 bar (10 MPa)
<b>Installation types:</b>	
D-type	Direct insertion
R-type	Long rigid immersion
F-type	Flexible
Process Connections	Large selection of flanges available
Ambient temperature	-40... +85°C (-40... +185°F)
Weather rating	IP67 for sensor and IP 55 for Terminal box
<b>Materials:</b>	
Sensor	Stainless steel SS 316 L; NiSpan C; Hastelloy C22; Teflon
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)
<b>Output:</b>	
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	<b>ATEX</b> II 1/2G Ex ia IIB T4; <b>IECEx</b> Ex ia IIB T4 Ga /Gb; CCE



## APPLICATIONS

- Density, temperature and concentration monitoring in storage tanks
- Petroleum products, fuels, lubricants, LPG, LNG
- 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

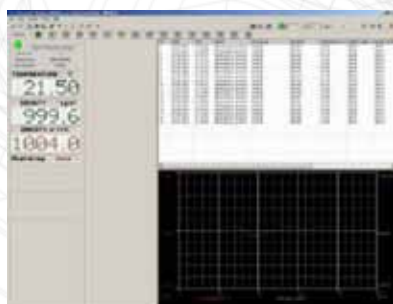


## ADVANTAGES

- Continuous, online density 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](http://www.lemis-process.com)**

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