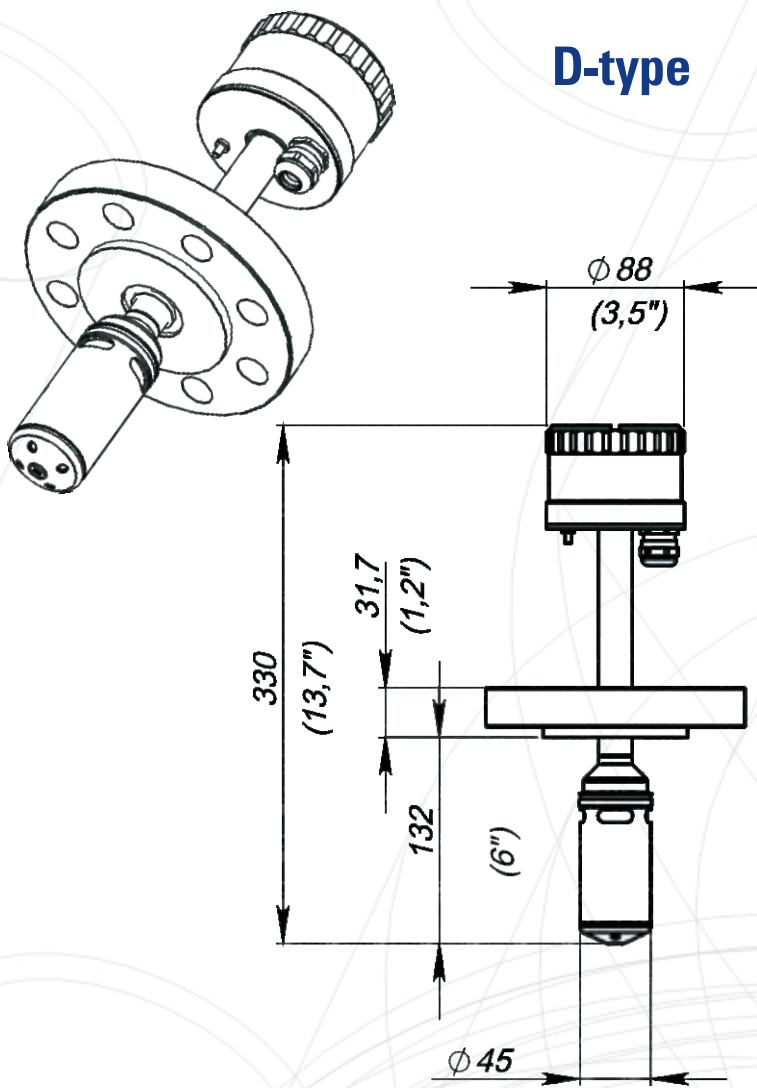


**VISCOMETER**

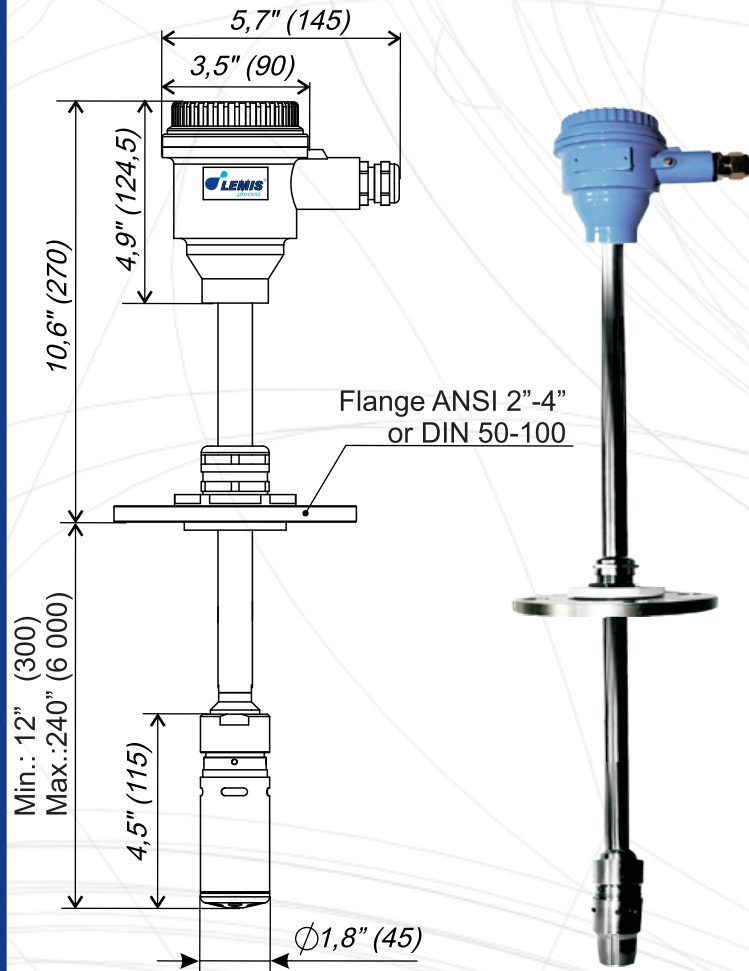
**DC-41**

**IN PROCESS TO EXCELLENCE**

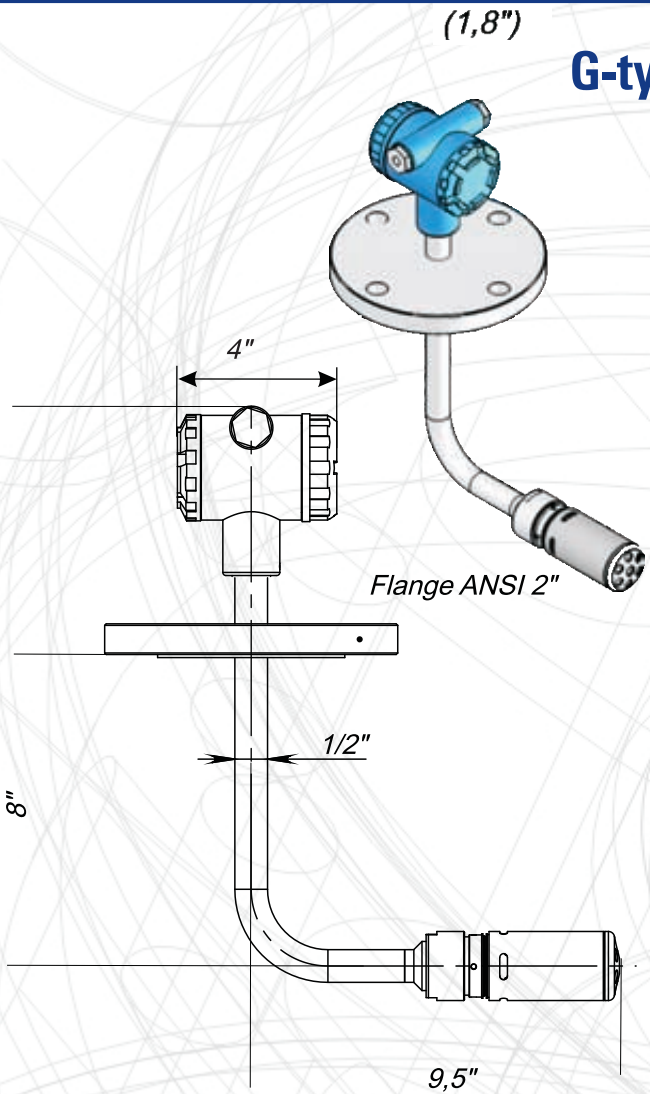
## D-type



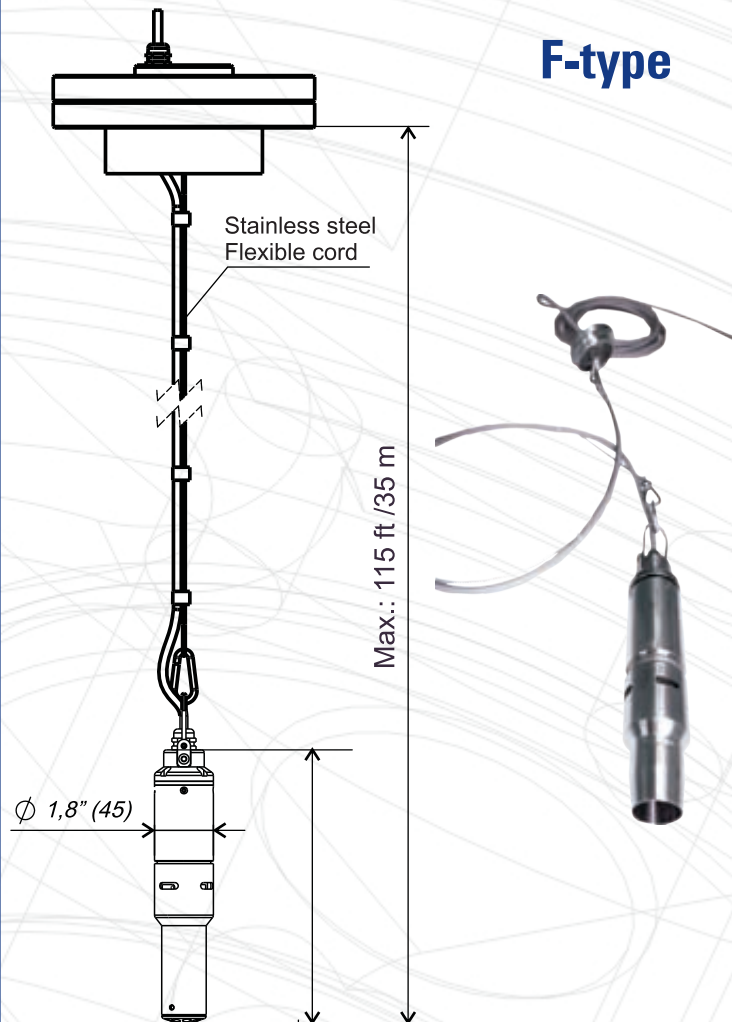
## R-type



## G-type



## F-type



# Specifications

<b>Measuring range:</b>	
Dynamic Viscosity	Up to 2000 mPa·s (up to 2000 cP)
Temperature	-40... +85°C (-40... +185°F)
<b>Accuracy:</b>	
Dynamic Viscosity	±1% of span
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
<b>Repeatability:</b>	
Dynamic Viscosity	±0.5% of span
Temperature	±0.1°C (±0.2°F)
<b>Resolution:</b>	
Dynamic Viscosity	0.1 mPa·s (0.1 cP)
Temperature	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)
<b>Installation types:</b>	
D-type	Direct insertion
R-type	Long rigid immersion
F-type	Flexible
G-type	Angle insertion
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
<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

- Viscosity and temperature monitoring in storage tanks
- Petroleum products, fuels, lubricants
- 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 viscosity monitoring at process conditions
- Accurately measures viscosity of liquids with viscosity up 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



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 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](http://www.lemis-process.com)**

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