



DC-series



Temperature

Density

Process Density Meter DC-40



Advantages:

- Continuous, online density monitoring
- Density accuracy up to 0.00025 g/cm^3
- Automatic temperature compensation
- Accurately measures viscous liquids
- Rigorous factory calibration and testing
- Can operate in open or pressurised tanks and reactors
- Immersion at any level up to 30 meters
- No moving parts, virtually maintenance-free system
- Hazardous area approvals
- Large offer of standard product configurations
- Flexible data transfer options

Applications:

- Density monitoring in storage tanks
- Petroleum products and LPG
- Concentrations of acids or corrosive chemical
- Food, Dairy & Beverages
- Product identification and consistency
- Concentration and dilution measurement
- Monitoring of reaction end in reactors

■ DC40 series of process liquid density meter is ideal for monitoring and control applications within the oil and gas, petrochemical, chemical, food & beverage and other industries.

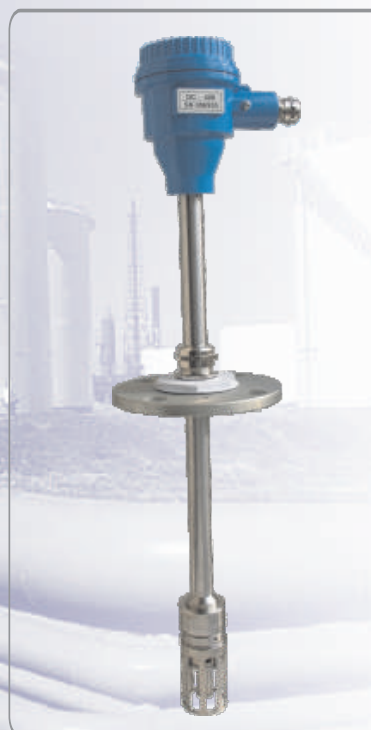
Use the proven vibrating element technique which is widely accepted as the most accurate method of continuous online density measurement, LEMIS Baltic engineers did new step ahead introducing unique proprietary design of resonant tube sensor which allows the high accuracy of measurement and long term calibration stability even in sever operation conditions. It proves insensitive to plant vibration, high variation of temperatures or liquid viscosity.

The DC40 series meters are used in process control where density is the primary control parameter or as an indicator of some other quality control parameter such as %concentration, °Brix, °Baume, specific gravity.

An integral Pt100 temperature sensor provides compensation of the density meter for temperature effect and allows calculation of reference density, API, concentration or specific gravity.

A choice of wetted parts materials: from stainless steel for general industrial use, Ni-SpanC for most demanding applications as fiscal metering, and Hastelloy for applications where ultimate corrosion resistance is required.

■ Calibration of LEMIS Baltic density meters is performed according ISO9001:2000 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 Baltic sensors allows simple, switch-and-go field installation.



DC40 Product configurations

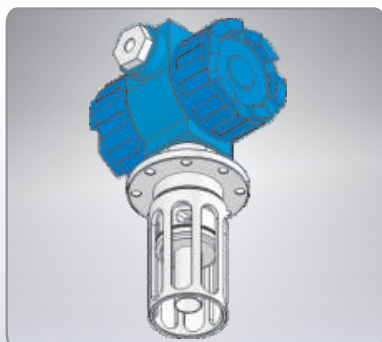


■ Installation packs

Correct installation is a key factor for accurate long-term measurement of density and viscosity of liquids at process conditions. LEMIS Baltic offers a choice of product configurations to fit different applications. Large choice of process connection flanges is available.

Please contact your LEMIS Baltic representative for more information.

Direct insertion mounting



(D-type)

Long Rigid mounting



(R-type)

Long Flexible mounting



(F-type)

■ Specifications

Parameters	Performances
Density Operating Range, kg/m ³	Up to 2000
Factory Calibrated Range, kg/m ³	400 - 700; 600 - 1200; 990 - 1600
Transducer Calibration Accuracy, kg/m ³	Available to ± 0.25 (± 0.00025 g/cc)
Repeatability, kg/m ³	0.1 (± 0.0001 g/cc)
Process Temperature Range	-40°C to +160°C (-40°F to +320°F)
Temperature Measurement	Built-in high accuracy 4-wire PT100 DIN 43760 Class A
Installation types	Direct Insertion, Long rigid or flexible immersion
Process Connections	large selection of flanges available: ANSI; DIN; 1.5" comp; IDF and RJT by installation type
Maximum Operating Pressure	100 bars max or flange rating
Ambient Temperature Range	-40°C to +85°C (-40°F to +185°F)
Weather Rating	IP67
Converter Analog output	Up to 3 x isolated 4 - 20 mA, direct or reverse-acting, configurable
Converter Digital output	User choice of signals and protocols: RS485; RS232; Modbus; etc...
Quality Assurance	ISO 9001:2000, ATEX audited factory
Factory Calibration	Calibration certificates supplied as standard
CE mark	Compliant EN 61326 ; EN5011 ; EN 50082-2
Hazardous area	ATEX II 1/2G Ex Ia IIB T4; IEC Ex Ia IIB T4 Ga /Gb

Due to continuing product improvement, we reserve the right to alter specifications at any time without notice.

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