



Online Liquid Density analyzer D300



Description

The on-line liquid density analyzer D300 of Coliy Technology GmbH is the world's most advanced product for measuring density with characteristics of sturdiness and durability. It can detect density of all flow liquids on line. It is easy to calibrate and operate and free of maintenance with high degree of accuracy and a wide range of applications representing a quantum leap in measurement methods.

The on-line liquid density analyzer D300 utilizes oscillating U-tube principals to analyze the density of liquids based on an electronic measurement of the frequency of oscillation from which the density value is calculated.: It lets an excitation current

pulse run through a drive coil beside the oscillating U-tube and it causes an oscillation of u-tube owing to magnetic effect from the drive coil; There is another detection coil placed close to the u-tube to collect current at the same oscillating frequency as the u-tube. As the oscillating frequency of the u-tube is affected by the quality of liquid flowing through the U-tube i.e the density of the liquid the frequency changes of current signal detected represent changes in density value of the liquid. D300 could be used to detect general liquid and liquid at a temperature of 110°C or pressure of 15MPa .

The accuracy of on-line liquid density analyzer D300 can attain 0.0001 g/ cm³. Its oscillating tube is made of Hastelloy which is corrosion resistant. We welcome further contact so as to customize production design based on your special requirements.

The on-line liquid density analyzer D300 utilizes patented circuitry a sensor with build-in temperature sensor and unique dynamic calibration software to automatically calibrate and compensate temperature through simple operation. Main body and accessories of D300 has CE certification.

Practical Applications

It is utilized for online detection of liquid density. It could be applied for density detection in various industries including chemical plants household chemicals organic chemicals pharmaceutical chemicals food brewing industry etc for density detection of various liquids e.g. Saline density, slurry density, hydrochloric acid density, alcohol density, oil density, milk density, ink density, pulp density.

Features

- Advance principals utilized
- High reliability
- High resolution
- Auto compensation to temperature
- No need for calibration
- Flexible installation approach
- Originally manufactured in Germany
- No ray source inside
- Durable and maintenance free
- Arbitrary ranges to choose
- Manufactured in ISO 9000 standard
- Adapt to a wide range of liquids.

Diagram of probe installation

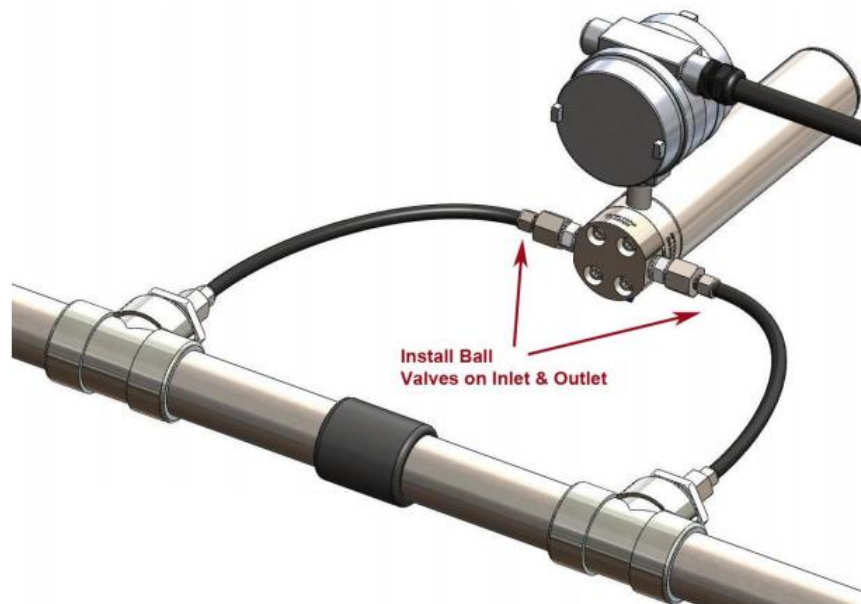


Table 1 for Probe installation for liquid density analyzer D300

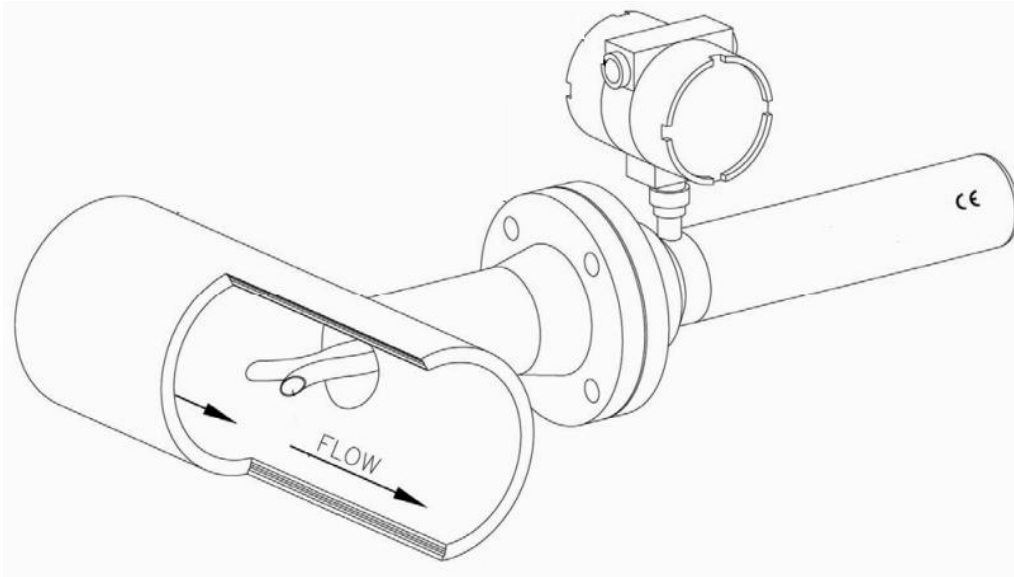


Table 1 for Probe installation for liquid density analyzer D300



Optional accessory for installation of differential pressure

Specifications

Range measurable

0.4g-3g/cm³

Maximum range

0.7 g/cm³ (density)

Accuracy

0.0001 g/cm³

Linearity

0.01%

Temperature sensor

Pt100

Weight	7kg
Tolerance of temperature and pressure	<110°C,<15.0MPa
Temperature compensation	Auto-compensation
Material	316 stainless steel or Hastelloy
Explosion proof	NEC/CSA Class 1 Div. 1 Group C & D
Output	2 x 4-20mA 1 route RS-232
Power	18-32VDC

Calibration
 Pre-calibrate in factory. No need for calibration on site. No need re-calibrate even after changing liquid detected.

Note:

The product specifications are subject to change without notice along with new technology progress.

Table of options

D300	-A	-B	-C	-D	-E	-F	-G	
	-A Range(arbitrary choices) Default: 0.7g-1.4g/cm ³ 4: 0.4g-1.0g/cm ³ X: Other ranges customer required							
		-B Pressure Default: 10Mpa 15: 15Mpa						
			-C Temperature Default: <60°C HT: <110°C					
				-D Mode of connection Default: screw thread F: Flange				

-E Probe Material Default: 316 stainless steel HA: Hastelloy TI: Titanium

-F Default: non-explosion proof EX: Explosion proof

-G Suffix

D300	-A	-B	-C	-D	-E	-F	-G
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For example: D300 - 4 - 15 - HT – HA - EX