

Feature and Application

- Built-in 32 Bits Microprocessor
- Measuring Range 0~2 g/cm³, 0~3 g/cm³
- Temperature Range 0~100 °C
- High Accuracy 0.001 g/cm³
- 16 x 2 Backlit Graphic LCD Local Display
- Resolution 0.0005 g/cm³
- 16~30 VDC Input Power Supply (Recommended 24VDC)
- 4~20 mA + HART Protocol
- Explosion-Proof Exd IIC T6

[Main Application for Density Measurement]

- 1). Petroleum, Natural Gas, Mining Salt Oil Refining, Detection of Oil and Water Interface in Petrochemical Industry
- 2). Grape Juice, Tomato Juice, Fruit Syrup, Vegetable Oil, Wine Alcohol and Soft Drink Processing in Food and Dairy Industry
- 3). Black Pulp, Green Pulp, White Pulp and Alkali Solution in the Paper and Pulp Industry
- 4) Urea, Detergent, Ethylene Glycol, Lubricating Oil, Acid Solution and Polymer ... and many more



General Description

The Model MDT301 series online liquid level densitometer can be used for online density measurement of various liquid and liquid and liquid mixture. It is widely applied to the petrochemical, food industry, dairy industry, paper industry, chemical industry and other production sites.

[Features]

- 1) Integrated structure transmitter with 2-wire, no moving parts and maintain easily.
- 2) Four and half digital LCD display
- 3) Easy to install and use, display the digital as long as it is inserted into the liquid.
- 4) For use in fluid or stationary liquid, and suitable for internal installation of pipes and tank
- 5) Two parameters (temperature and density) can be alternately displayed , for easy conversion of industry standard density.
- 6) Continuous online measurement of liquid density during non-interrupted process can be directly used in the process control of production
- 7) Stainless steel wetted components, safe and reliable
- 8) Safe type for use in hazardous environments, hygienic type for use in food production site

Performance Specification

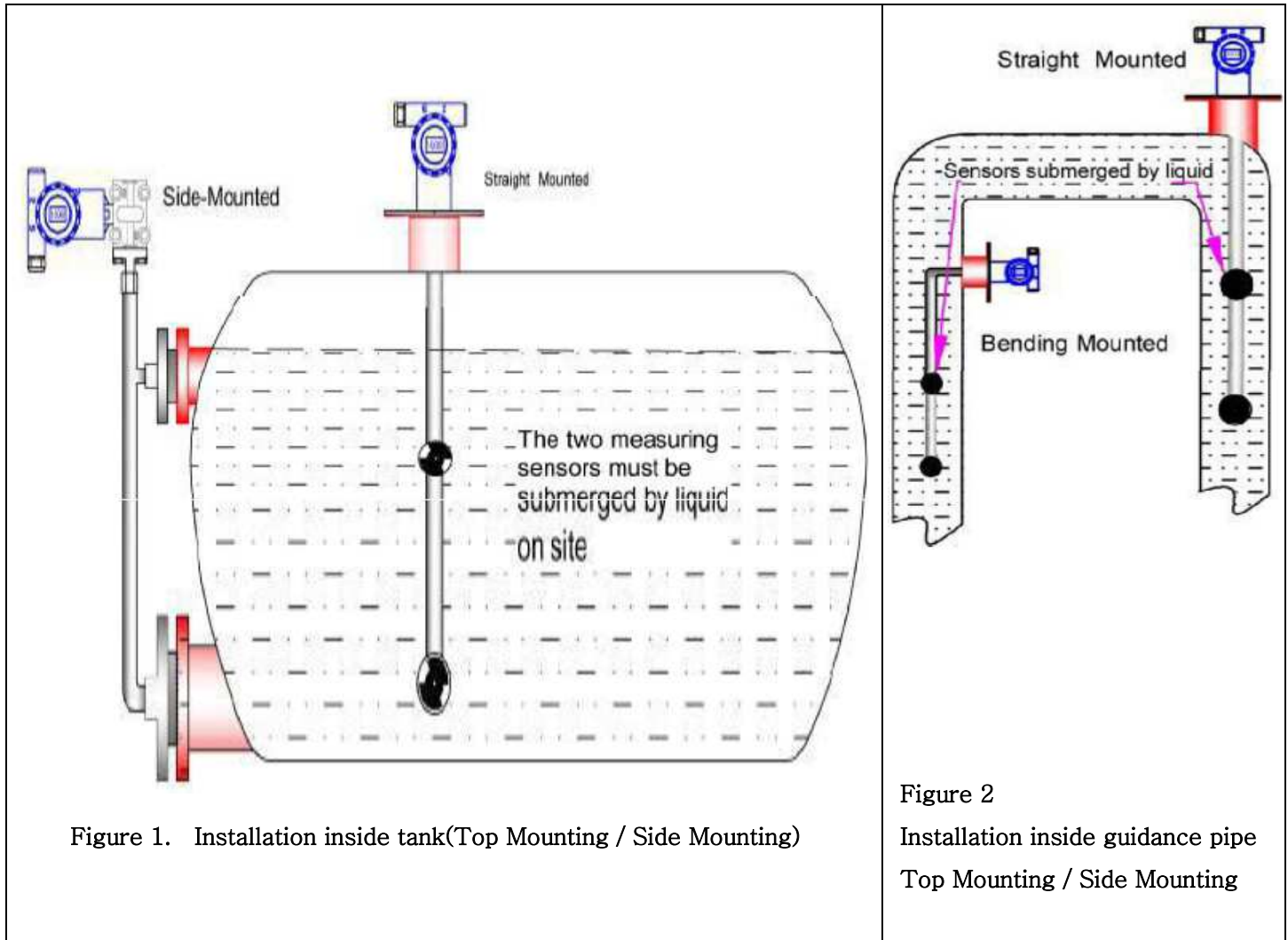
- 1) Output4~20 mA DC
- 2) Digital Signal HART Protocol
- 3) Power Supply 16~30 VDC (recommended 24VDC)
- 4) Density Range 0~2 g/cm³, 0~3 g/cm³
- 5) Accuracy 0.001 g/cm³
- 6) Resolution 0.0005 g/cm³
- 7) Temperature 0~100 °C
- 8) Temperature Accuracy..... 0.2 °C
- 9) Ambient Temperature -10 ~ 60 °C
- 10) Humidity Range..... 0~90%

- *Remarks : When ordering , please specify the length of body , sensor spacing, the medium, the range And the sitr conditions such as explosion-proof, corrosion, sanitary, general etc..*

Ordering Code

Model	Specific Code	Description
MDT301		On_Line Level Densitometer
Installation and Shape	A	Vertically Mounting (Header Connected with Cylinder)
	B	Vertically Mounting (Square Flange Connected)
	C	Pipe Mounted at Side Type
Sensor Spacing	5	700 mm
	10	1000 mm
	15	Special Requirement
Measuring Range	1	0~1 g/cm ³
	2	0~2 g/cm ³
	3	0~3 g/cm ³
Mounting Flange	H6	DN65
	H8	DN80
	H10	DN100
Typical Model		MDT301-A-5-1-H8
Display Head (Optional)		LCD smart display header (0~100% linear display)
Transport Packing		Wooden Case

Installation



Wiring

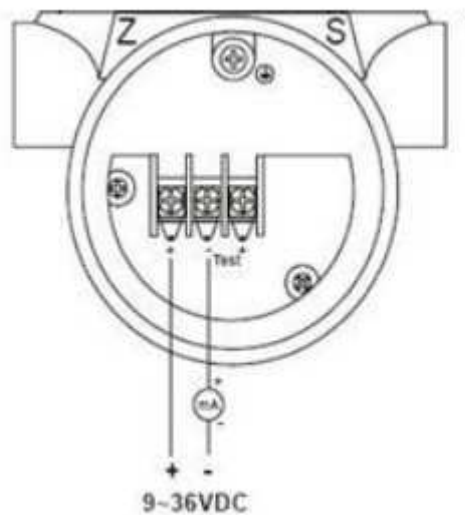


Figure 3 Electrical Wiring

- Notes

- 1) The spacing between two sensors of the online liquid level density meter should be at least 200 mm , and the diameter is 50 mm. Its size on site should not be less than standard. If you select the bending type densitometer please measure the size of flanges and the length of pipes inserted into the Liquid.
- 2) The two measuring sensors must be submerged by liquid on site. Also the spacing between the first sensor and the flange can be selected.
- 3) MDT301 onlinr liquid level densitometer can be theoretically measure the density of different media. Users can convert the density results according to to the situation on site.
- 4) The red parts in the diagrams are mounted matching flange we can installit for users. If necessary, please indicate if the matching flange is needed when ordering.



