

GL-136 Input level transmitter

Overview

The GL-136 input type liquid level transmitter was developed by introducing NOVO's advanced diffused silicon pressure sensor and IC SENSORS circuit technology. It uses two world-class technologies: silicon etching process and silicon wafer superposition. A high quality static pressure level measuring instrument. It is widely used in liquid level measurement in petroleum, chemical, metallurgy, environmental protection, food, water conservancy, urban water supply, oil field and other industries. The excellent quality of the static pressure liquid level transmitter meets the needs of China's industrial automation and measurement automation of some industries for high-precision liquid level detection instruments.

Characteristics

Good stability, high precision, high performance/price ratio, direct input into the tested medium, easy to install and use, solid structure, no moving parts, high reliability, long service life, from water, oil to viscosity The paste can be measured with high precision, and is not affected by the foaming, deposition and electrical properties of the measured medium. It has no material fatigue and wear, and is

insensitive to
vibration and impact without polarity 4-20mA output.

working principle

Static pressure measurement principle

When the liquid level transmitter is put
into a certain depth in the measured liquid, the pressure on the liquid-
facing

surface of the sensor is $P = \rho \cdot g \cdot h + P_0$

P: The pressure on the

liquid surface of the sensor unit:Pa

ρ : Measured liquid density unit:Kg/m³

g: Local gravity acceleration unit:m/s²

P₀: Atmospheric pressure on the liquid surface

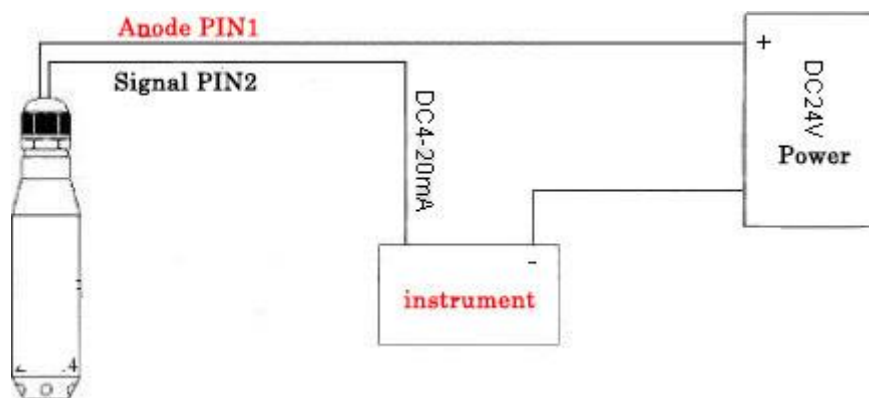
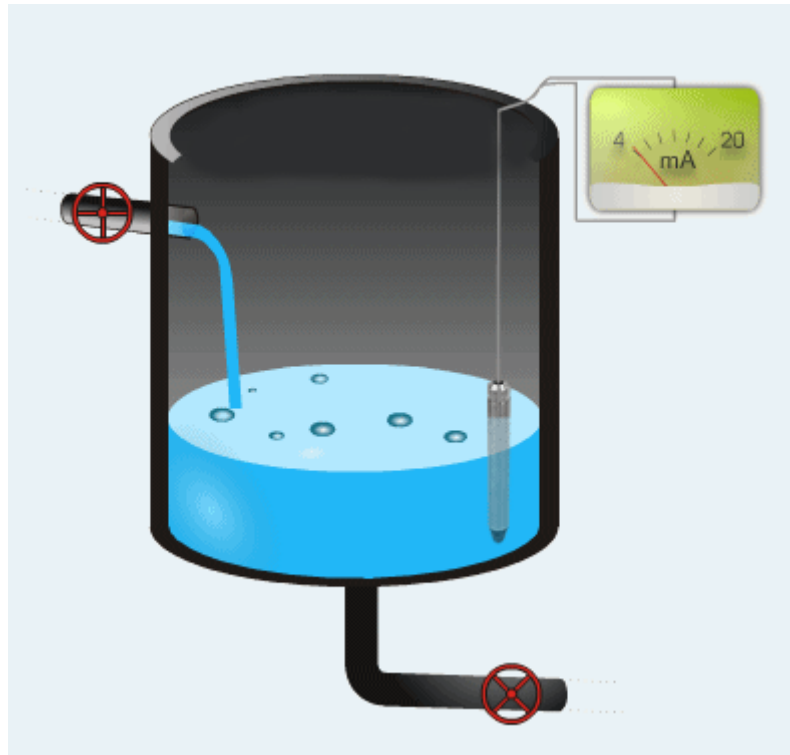
unit:Pa

H: Sensor input liquid unit:m

At the same time, the atmospheric pressure P₀ on the liquid surface is
introduced into the back pressure chamber of the sensor through the
air guiding cable to offset the P₀

of the liquid-facing surface of the sensor, so that the measured pressure
of the sensor is $P = \rho \cdot g \cdot h$. Obviously, by measuring the pressure P, The
liquid level depth H is obtained. The pressure signal sensed by the
sensor is amplified by the circuit, and is compensated and output as a
standard signal.

Note: This model is used for liquid level measurement in open
containers.



Technical parameters

- 1, measuring range: 0-40m
- 2, accuracy: 0.5% F.S
- 3, load: $< 500\Omega$
- 4, the use temperature: $-20-85\text{ }^{\circ}\text{C}$
- 5, humidity: $\leq 95\% \text{ RH}$
- 6, overload capacity: twice the range
- 7, zero temperature drift: $0.03\% \text{ FS} / ^{\circ}\text{C}$ ($\leq 100\text{KPa}$) $0.02\% \text{ FS} / ^{\circ}\text{C}$ ($> 100\text{KPa}$)
Full temperature drift: $0.03\% \text{ FS} / ^{\circ}\text{C}$ ($\leq 100\text{KPa}$) $0.02\% \text{ FS} / ^{\circ}\text{C}$ ($>$

100KPa)

8, working voltage: 12-36VDC