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GLP2881 liquid Level Transmitter

I : Overview:

GLP2881 liquid level transmitter had developed by introduce advanced U.S. NoVa company diffusion silicon pressure sensor and IC Sensors circuit technology, and its application with two world advanced technology of the silicon fine corrosion process and silicon wafer composite, it is a high quality of static pressure type level measurement instrument and be widely used in petroleum, chemical industry, metallurgy, environmental protection, food, water, urban water supply, oil field industries such as level measurement.

GLP2881 liquid level transmitter with excellent quality, a variety of installation convenient for field installation process, special occasions can be specially designed. Meet some needs of the industrial automation in China and the industry of the measurement precision of liquid level instrumentation.

Submersion Type Liquid Level Transmitter

II: Features:

- Have good stability, high precision and high performance/price.
- Solid structure, no moving parts, high reliability, long life service.
- It can be high precision measurement from water, oil, and to the larger paste viscosity and not be affected by foaming measured medium, deposition, the influence of the electric property without material fatigue wear, it is not sensitive to vibration and impact
- Wide range of temperature compensation
- It protects from power reverse polarity protection and overload current limit.

Guide rod Type Liquid Level Transmitter

Anti-corrosion Type Liquid Level Transmitter

III: principle

Using the principle of static pressure measurement, when the liquid level transmitter into the liquid to be tested in a certain depth, sensor to meet the pressure on liquid level for: P =ρ.g. H + Po type:

P：pressure of the sensor meet liquid level l, unit：Pa

ρ：Liquid density unit：kg/m^3

g：the local acceleration of gravity unit：m/s^2

P0：Atmospheric pressure of liquid surface unit：Pa

H：the depth of the sensor in liquid or height of installation position to liquid surface unit：m

At the same time, it can introduce surface of the liquid atmospheric pressure P0 into the sensor back pressure cavity by gas leading cable, to offset the P0 sensor to meet the liquid surface, the measured pressure sensor for: P =ρ.g. H (limit of the sensor at the bottom of the back pressure cavity with atmosphere is same)

Obviously, it can get liquid depth H by measured pressure P, Pressure sensor sensing signal is amplified by circuit transformation and compensation in a standard signal output.

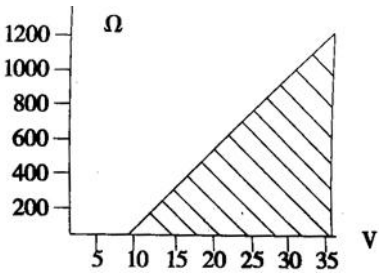
Note: this model is suitable for level measurement of open container

Air-tight container adopts GLP3351DP or GLP3351LT differential pressure for device or some other type of measurement.

IV: Basic technical parameters:

- medium ：immersion type: it is suitable for 316ss , nitrile rubber, PVC coexistence medium，

  flange type : it can measure Strong corrosive medium.
- measurement range ： 0~1m to 0~600m
- accuracy ： 0.5%；0.25%；0.1%
- working temperature：-20~+80℃(No crystallization medium)it can take pressure at the bottom of using thread and flange type with isolator
- Storage temperature：-40~+125℃
- Zero temperature coefficient：±0.015% range /℃
- Range temperature coefficient：±0.015% range /℃
- Long term stability：±0.1% range /year
- Voltage：12-36VDC standard 24VDC
- Output ： two wire 4~20mA DC、0~10V
- Load characteristic：see picture 1，standard 24VDC，Load resistance≤600Ω



- Allow overload：3 times as much as standard range
- Current limiting protection：Under the condition of overload, the power limit nominal of 26mA
- Protection：IP68（P1、P3） IP65（P2、P4）
- Explosion-proof grade：EXia II CT5

V、structure and material ：

- Transmitter box：Cast aluminum，100×68×110， shell material: Epoxy resin coating.
- Probe ： 1Cr18Ni9Ti, Φ29×150，Anti-corrosion type Φ44×140，The hole should be greater than probe diameter over 5mm.
- gas leading cable： Φ 7 \ 6 core polyurethane cables and anti-corrosion cable sheath is PTFE
- Weight （not contain gas leading cable）：almost 0.6kg