

מד מפלס הידרוסטטי טבול SCH HL8600

Sch HL8600 series submersible hydrostatic level transmitter is two-wire level transmitter. It consists of a probe and a special, breathing cable containing a capillary pipe and a stress resistant inlet. The probe is a stainless steel cartridge with a membrane at the bottom.

Level metering is based on a measurement of the pressure difference between the hydrostatic pressure of the liquid head above the probe and the actual atmospheric pressure. This difference is converted into a 4 to 20 mA output signal.

Sch HL8600 series submersible hydrostatic level transmitter is applicable to clean or chemically faintly contaminated liquids in boreholes, open reservoirs and tanks. It is easy to install in already existing facilities and is especially recommended for monitoring and controlling of submersible pumps.



- Two wire submersible transmitter
- Stainless steel body
- Up to 200 m range
- Reverse polarity protection
- Optional lightning protection
- Accuracy: 0.5%
- Stability: anniversary drifting amount $<0.2\%F \cdot S$;
- Linear treatment, linear accuracy is better than 0.2%FS;

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Working principle

The tested medium pressure pass through the isolated diaphragm, sealed silicon oil to the spread silicon diaphragm, at the same time, the pressure of the reference point (Atmospheric pressure, absolute pressure, or sealed pressure) act on the other side, so ,the difference of the two pressures of the two sides of the diaphragm make the diaphragm to be one side compress ,one side draws, the resistance value of the emergency resistance on the diaphragm changes, produce the output signal.

The two resistance of the diaphragm forms the Favor Stone electric bridge ,the electric bridge is power supplied by the permanent current supply which with high stability. When power P is acted on the sensor, every resistances of the bridge will change the resistance value ΔR , so the bridge send out the Voltage signal, as the pressure sensor had nonlinear, and will influenced by the environment temperature, so after the linear treatment of the circuit module and temperature compensation module, it gives out an additional current, it work on the electric bridge. The signal after treatment will enlarged and then input to the V/I converter, get an 4- 20mA current signal which has direct proportion to pressure. The temperature adapt circuit system correct all the errors of other systems which resulted from temperature changing, to ensure the whole circuit to work stably under the temperature of $-10\sim+60^{\circ}\text{C}$.

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Accuracy:	0.5%F•S
Measuring range:	0~0.5m up to 200m
Output:	4~20mADC
Linear:	0.2%F•S
Ambient temperature:	-20~+85°C
Medium temperature	-10~+60°C
Temperature drift:	$\leq \pm 0.025\%F \cdot S / ^\circ C$
Long-term stability:	0.2%F•S / year
Power supply:	24VDC
Load:	0~600 Ω
Overload limit:	150% full scale
Storing temperature:	-40~+125°C