Model LV35 Liquid Level Transducers and Transmitters for Tank Applications in Chemical Industry



Description

Based on silicon piezoresistive technology, model LV35 submersible Liquid level transmitter is designed for use in applications where the pressure is created by corrosive pressure media. The pressure diaphragm is made from tantalum and the housing is made from PVDF. LV35 level transmitters are designed for gauge pressure measurements.

The LV35 level transmitters are made of a Wheatstone bridge circuit. Various output signals are available, including millivolts signal ($\geqslant 15 \text{mV/V}$), amplified signals (4~20mA, 1~5V or 0~5V), and digital signal (I^2C). The measuring accuracy is up to 0.25%fs.

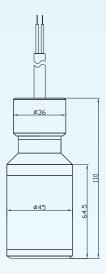
Features

- for alkali corrosive medium
- wide measuring ranges: 0~1mH₂O, ..., ~200mH₂O
- various output signals:

transducers: full scale output \geq 15mV/V transmitters: 4~20mA, 1~5V, 0~5V, 1²C

- accuracy: 0.25%fs (standard), 0.5%fs
- · materials: tantalum (pressure membrane); PVDF (housing)
- housing environment protection: IP68

Dimensions



Technical Data

measuring media			liquids which are compatible with PVDF
measuring ranges		mH ₂ O	0~1, ~2, ~3, ~5, ~10, ~20, ~50, ~100, ~200 (for transducer, min range = ~1)
overload pressure		%fs	150
output signal	transducers	mV	≥ 15mV/V
	transmitters		4~20mA (standard), 1~5V, 0~5V, I ² C
power supply	transmitters	Vdc	18,, 36
	transducers	V	5,, 10
accuracy		%fs	$\leqslant \pm 0.25$ (standard), $\leqslant \pm 0.5$ (0~1mH2O can only have 0.5%fs accuracy)
long-term stability		%fs/year	≤ ±0.5
response time		ms	< 1 (10%~90% of leading edge)
input resistance	transducers	Ω	2000~8000
output resistance	transducers	Ω	3500~6000
load resistance	transmitters	Ω	250~1150
insulation resistance		ΜΩ	> 500 @100Vdc (transducer only)
storage temperature range		°C	-40~+100
operating temperature range		°C	0~80
compensated temperature range		°C	0~50
temperature coefficient of span		%fso/°C	≤±0.03
temperature coefficient of zero		%fso/°C	≤±0.03
process connection			submersible in liquid
electrical connection			4-core, Φ7.6mm shielded cable with vent hose which is mechanically strong enough for deep submersible liquid level measurements
pressure membrane material			tantalum
housing material			PVDF
environment protection		IP rating	IP68
weight		gram	200 (probe head) + the weight of cable

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The listed specifications and dimensions are subject to change without prior notice.

How to order: model-range-output-accuracy-cable length-customer specific requests ordering code example: LV35-5mH₂O-4/20mA-0.25%fs-5m



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