

Model LV35

Liquid Level Transducers and Transmitters for Tank Applications in Chemical Industry



Description

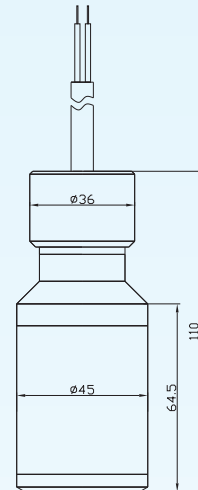
Based on silicon piezoresistive technology, model LV35 submersible Liquid level transmitter is designed for use in applications where the pressure is created by corrosive pressure media. The pressure diaphragm is made from 96%Al₂O₃ and the housing is made from PTFE. LV35 level transmitters are designed for gauge pressure measurements.

The LV35 level transmitters are made of a Wheatstone bridge circuit. Various output signals are available, including millivolts signal ($\geq 2.5\text{mV/V}$), amplified signals (4~20mA, 1~5V or 0~5V), and digital signal (I²C) . The measuring accuracy is up to 0.25%fs.

Features

- for alkali corrosive medium
- wide measuring ranges: 0~1mHzO, ..., ~200mHzO
- various output signals:
 - transducers: full scale output $\geq 15\text{mV/V}$
 - transmitters: 4~20mA, 1~5V, 0~5V, I²C
- accuracy: 0.25%fs (standard), 0.5%fs
- materials: 96%Al₂O₃ (pressure membrane); Polytetrafluoroethylene (PTFE) (housing)
- housing environment protection: IP68

Dimensions



Technical Data

measuring media		liquids which are compatible with PVDF
measuring ranges	mHzO*	0~1, ~2, ~3, ~5, ~10, ~20, ~50, ~100, ~200 (for transducer, min range = ~1)
overload pressure	%fs	150
output signal	transducers	mV $\geq 2.5\text{mV/V}$
	transmitters	4~20mA (standard), 1~5V, 0~5V, I ² C
power supply	transmitters	Vdc 18, ..., 36
	transducers	V 5, ..., 10
accuracy	%fs	$\leq \pm 0.25$ (standard), $\leq \pm 0.5$ (0~1mHzO can only have 0.5%fs accuracy)
long-term stability	%fs/year	$\leq \pm 0.5$
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	M Ω	> 500 @100Vdc (transducer only)
storage temperature range	$^{\circ}\text{C}$	-40~+100
operating temperature range	$^{\circ}\text{C}$	0~80
compensated temperature range	$^{\circ}\text{C}$	0~50
temperature coefficient of span	%fso/ $^{\circ}\text{C}$	$\leq \pm 0.03$
temperature coefficient of zero	%fso/ $^{\circ}\text{C}$	$\leq \pm 0.03$
process connection		submersible in liquid
electrical connection		4-core, $\Phi 7.6\text{mm}$ shielded cable with vent hose which is mechanically strong enough for deep submersible liquid level measurements
pressure membrane material		96%Al ₂ O ₃
housing material		PTFE
environment protection	IP rating	IP68
weight	gram	200 (probe head) + the weight of cable

*: If in your applications the measured medium has different density than water, please inform BCM about the density.

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: LV35-5mHzO-4/20mA-0.25%fs-5m

