

# Model LV37

## Liquid Level Transmitters with Display



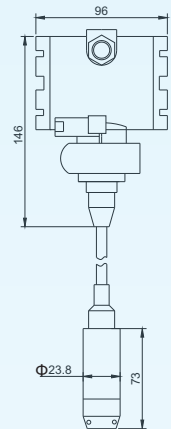
Based on BCM piezoresistive technology, model LV37 liquid level transmitters are designed to measure liquid level by submerged into the measuring liquid with gauge (relative) pressure reference. The model is developed from model LV36 which features the flush diaphragm, so the LV37 is suitable to measure viscous media or media with small particles. And the rigid and robust housing makes this model capable to be used in harsh environment.

The LV37 can be provided with amplified analogue output signals of 0~5V, 1~5V, or 4~20mA with or without HART, or digital output of I<sup>2</sup>C. These transmitters can also be equipped with a 4½ digits LCD field display. The measuring accuracy of model LV37 is up to 0.25%fs (fs = full scale).

### Features:

- measuring ranges: 0~1mH<sub>2</sub>O, ..., 0~200mH<sub>2</sub>O
- output signal: 4~20mA, option with HART protocol; or 0.5~5V amplified output signal
- accuracy: 0.25%fs (standard), 0.5%fs
- compensated temperature ranges: 0~50°C
- materials: 316L (pressure membrane), 316 (probe housing)
- construction: integrated construction, rigid and robust
- probe and cable protection: IP68
- housing environment protection: IP65.

### Dimensions:



### Specifications:

measuring media		liquids compatible with 316L SS
measuring ranges	mH <sub>2</sub> O*	0~1, ~2, ~5, ~10, ~20, ~50, ~100, ~200
overload pressure	%fs	150
output signal	mA	4~20 (standard) , 4~20 with HART
	V	0~5, 1~5
accuracy	digital	I <sup>2</sup> C
	%fs	≤ ±0.25 (standard), ≤ ±0.5 (0~1mH <sub>2</sub> O can only have 0.5%fs accuracy)
long-term stability	%fs/year	< ±0.5
response time	ms	<1 (10% ~ 90% of leading edge)
load resistance	Ω	250~1150 (for 4~20mA output signal)
	Ω	> 5000 (for 0.5~5V output signal)
supply voltage	Vdc	24 (recommended), 12, ..., 30
storage temperature range	°C	-40~+85
operating temperature range	°C	-20~+80
compensated temperature range	°C	0~+50
temperature coefficient of span	%fso/°C	≤ ±0.02
temperature coefficient of zero	%fso/°C	≤ ±0.02
process application		submersible in liquid
electrical connection		M20X1.5
display		4½ digits LCD display (standard), no display
pressure membrane material		316L SS
material of probe housing		316 SS
material of electronics housing		aluminum
environment protection	probe and cable	IP68
	housing	IP65
weight	gram	200 (probe head) + the weight of cable + 1200 (housing)

\*: 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-field display-customer specific requests

ordering code example: LV37-0/20mH<sub>2</sub>O-4/20mA-0.25%fs-5m-LCDdisplay

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