

# Model LS100

Compact tuning fork level switch for liquids  
Vibronic

**Materontek**  
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Model LS100 is compact tuning fork liquid level switch. It is designed with a lightweight compact structure with the fork body 38 mm long. It can be applied to the level measurement for vessels, containers and storage tanks.

It can tolerate foam, air bubbles, higher viscosity and vibration disturbance. Particularly it is a better choice for small containers or tanks within constricted space. It is also based on the principle that the vibrating frequency changes when the fork body is immersed into the measured medium. The measurable density can be as low as 0.7g/cm<sup>3</sup>.

## Application

Application in non-explosive environment or confined space.



## Technical data

Applicable liquids	Density	>0.7g/cm <sup>3</sup>
	Viscosity	1~10000mPa.s
	Flow Velocity	max 6m/s
Probe data	Vibrating frequency	~1200Hz
	Fork length	38mm
Accuracy	Measurement error	±1mm
	Hysteresis	3.0±0.5mm
	Repeatability	0.5mm
Switching delay	When immersed	0.5s
	When laid bare	1s
Power supply	Relay output	85~253V AC (0.5A/125V AC) 10~35V DC (1A/24V DC)
	Transistor PNP	10~35VDC
	Power consumption	V AC: < 3.8mA; V DC: < 825mW
Working environment	Process pressure	-1~40bar
	Process temperature	-50~100°C, -50~150°C
	Ambient temperature	-40~70°C
	Storage temperature	-40~80°C
Overvoltage protection	Relay output	Category III, class I
	Transistor PNP	Category III, class II
Approvals	Protection rating	DIN43650: IP65 M12x1: IP66
Materials	External Housing	316L
	Process fitting	316L
	Process seal	Klingsil C-4400

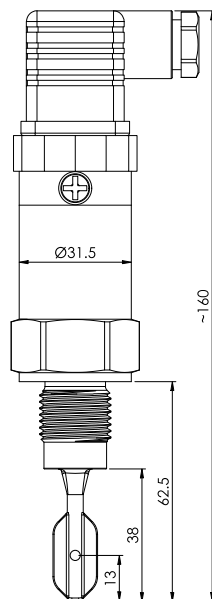
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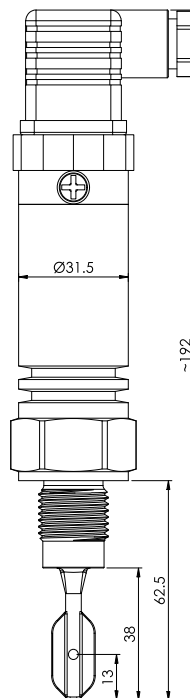
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## Dimensions (All dimensions in mm)

Process temperature range  
-50~100°C  
Code L



Process temperature range  
-50~150°C  
Code H



## Ordering code

Model	Process temperature range	Output / Power supply	Electrical Connection	Process Connecton
LS100	L -50~100°C	1 Realy / 10~30V DC	F DIN43650	P1 G1/2"
	H -50~150°C	2 Realy / 85~253V AC	P M12x1	P2 1/2"NPT
		3 PNP / 10~35V DC		P3 G3/4"
				P4 3/4"NPT
				P5 G1"
				P6 1"NPT
				Px Customized