

### LF1000 -Vibrating Fork Level Switch

- ▶ No moving parts
- ▶ Measuring unaffected by medium density or electrical parameters
- ▶ Stainless steel wetted parts
- ▶ Relay output
- ▶ NC / NO programmable
- ▶ Applicable to the liquid or solid

The LF1000 is based on the principle of a tuning fork. A piezo-electric crystal oscillates the forks at their natural frequency. The frequency of the vibrating fork sensor changes depending on the medium in which it is immersed, this change is monitored and converted to standard electrical signals. Operating is unaffected by medium conductivity, turbulence, stirring, bubbles and vibrating. No moving parts enables it to be used in most tough applications.



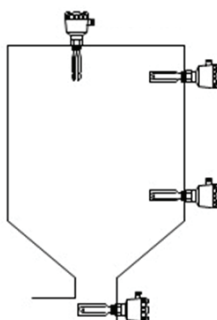
### Specifications

<b>Applicable Medium</b>	Liquid or bulk-solid
<b>Medium Density</b>	$\geq 0.6 \text{ g/cm}^3$
<b>Pressure Rating</b>	20bar
<b>Adjustable Delay</b>	1...20s(only for rugged model)
<b>Response Time</b>	1s
<b>Power Supply</b>	
DC powered type	$24 \pm 10\% \text{ Vdc}$
<b>Power Consumption</b>	$\leq 1 \text{ W}$
<b>Switching Output</b>	
Output	Relay (NC/NOprogrammable)
Load	AC220V (110V) /3A, DC 30V/3A
<b>Wiring Protection</b>	Reverse polarity
<b>Temperature</b>	
Operating	$-20 \dots 85^\circ \text{C}$
Medium	$-20 \dots 85^\circ \text{C}$
<b>Material</b>	
Compact Housing	304 stainless steel
Fork	316 stainless steel
<b>Protection Class</b>	IP65
<b>Electrical Connection</b>	
Compact Housing	Solenoid plug
<b>Process Connection</b>	G male thread

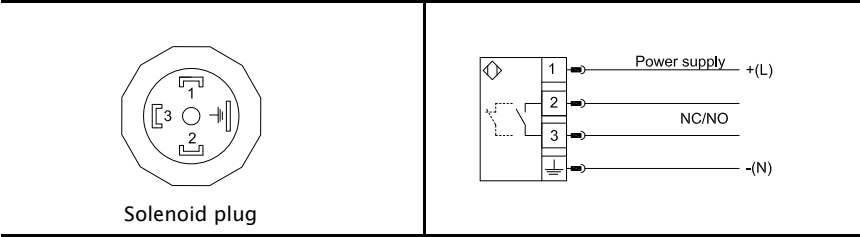
### Applications

- ▶ Hydraulic/Lubrication system
- ▶ Pump protection
- ▶ Cooling system
- ▶ Paper making
- ▶ Water treatment
- ▶ Food/beverage industry

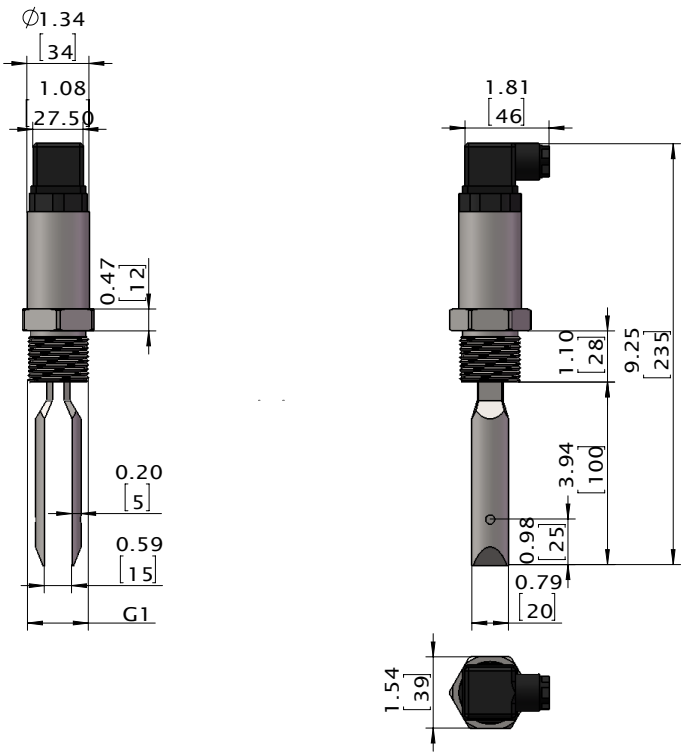
### Installation



Wiring



Dimensions in inches (mm)



Model Number

LF :

Vibrating fork level switch

1000 :

Serial Number

024 :

24V DC power supply

110 :

110V AC power supply

220 :

220V AC power supply

G1 :

G1Male thread

R1 :

R1Male thread

1"NPT :

1"NPT Male thread

LF	1000/	024	G1	C	S	M100	/
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C :

Compact housing R:

Fastening explosion-proof

S :

Standard tuning fork

E :

Extended tuning fork

MXXX :

Probe length without thread

EXXX :

Probe length with thread

Note: M100 means the probe is 100mm long without threads;  
E100 means the probe is 100mm long with threads.

Reserved bit

Providing Special Requirements