

8. MAINTENANCE, REPAIR

The device does not require routine maintenance. In some instances, however, the sensor may need occasional cleaning to remove surface deposits

9. STORAGE CONDITIONS

Environment temperature: -13 °F to + 140 °F (-25 °C to +60 °C)
Relative humidity: up to 98 %

10. WARRANTY

All *Resonator™* level switches are backed by a full 1-year warranty.

PRINCO will repair or replace, at our option, any instrument that fails under normal use for a full year from the date of purchase.

PRINCO

INSTRUCTION MANUAL

RESONATOR™

**Dual Mode Resonance Sensing
LEVEL SWITCH**

Model L3550



PRINCO

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1. TECHNICAL DATA

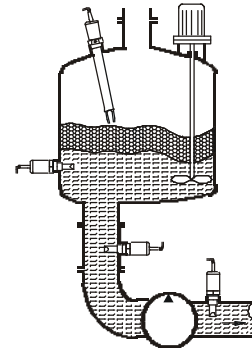
DESCRIPTION		SPEC
Electric connections		Connector (Hirschman)
Mechanical protection		NEMA 4X
Selection of High/low fail safe		Wiring Select
Liquid specific gravity programming		Fixed to S.G. ≥ 0.7
Output		2-wire AC, Serial connection with a load
Supply voltage		20...255 V AC, 50/60 Hz
Voltage drop (switched-on state)		< 10.5 V
Current load	max. continuous	350 mA AC13
	min. continuous	10 mA / 255 V AC; 25 mA / 24 V AC
	max. impulse	1.5 A / 40 ms
Residual current (switched off)		< 6 mA
Weight		17.6 oz
Probe material		316 SS TI
Process connection material		316 SS TI
Probe extension material		316 SS TI
Maximum pressure		588 psi (40 bar)
Medium temperature range		-40 °F to +266 °F
Ambient temperature range		Stainless steel housing -40 °F to +158 °F
Sealing material		VITON
Probe insertion length		< 2.0 inches
Liquid specific gravity		≥ 0.7
Liquid viscosity		≤ 10000 mm ² /s (cSt)
Response time	When immersed	0.5 sec
	When free	≤ 1 sec
Output mode indicator		Bi-color Status LED

2. OPERATION

The *Resonator™* model L3550 is a dual mode resonance sensing point level switch that NEVER needs CALIBRATION. The extremely short tine design enables applications in tight spaces and/or in pipes. The excitation frequency is high enough to ensure interference-free operation even when mounted on high vibration structures.

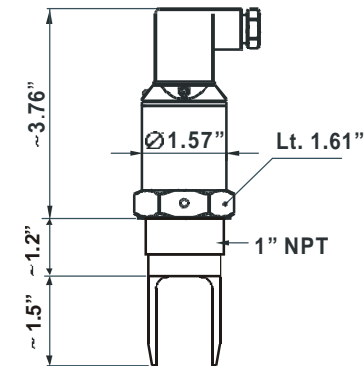
The *Resonator™* incorporates a stainless steel tube housing, visible bicolor output state indication LED and 2-wire AC operation. It can be used in almost any liquid; aggressive (acids, solvents), or high viscosity and it is virtually unaffected by foam, turbulence, and gas content.

3. INSTALLATION



- *Low viscosity* (minimal risk of material clinging to the tines) any of the mounting configuration is acceptable
- *High viscosity* (significant risk of material clinging to the tines) only vertical (top) mounting is acceptable

4. DIMENSIONS



5. WIRING

WARNING

DO NOT POWER UP UNIT WITHOUT CONNECTING A LOAD IN SERIES AND GROUNDING. PERMANENT DAMAGE MAY OCCUR.

