PRINCO™

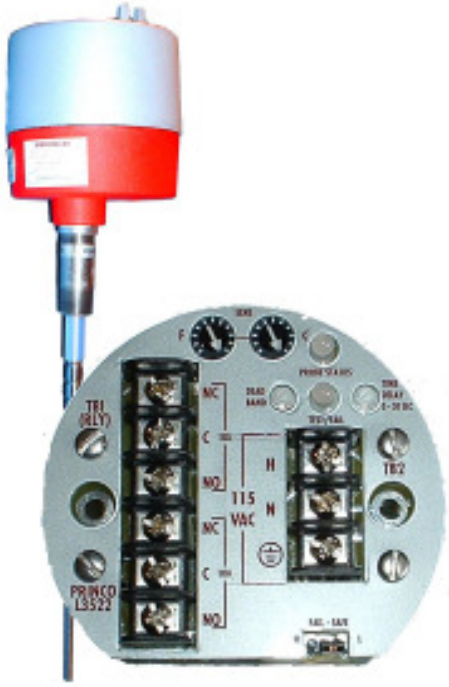
Instrumentation designed with the user in mind

Models L3522

NULL-KOTE™ RF Impedance High-Performance-X™ Point Level Controller with Level-Sentry

Description

PRINCO's Level Sentry L3522 level controller is a microprocessor-based, RF impedance level switch. It incorporates ***Level Sentry***, a unique feature that automatically, once every minute, performs a self-test for a potential circuit failure. In many installations, a point level controller could go for an extended period of time without ever being required to detect an alarm condition. ***Level Sentry*** ensures that when the unit is called upon, it will detect the alarm condition.



PRINCO's High-Perform-X™ L3522 level controller gives you the optimum combination of reliability, sensitivity, features, and cost. Conformally coated electronics, NULL-KOTE™ circuitry, explosion-proof / weatherproof enclosures, ROLLOCK™ probe construction and our unique 10 Year Warranty mean the ultimate in reliability. Excellent sensitivity, coupled with stability of 1 picofarad over the entire operating range, gives you a true set and forget installation. L3522 controllers are used with NULL-KOTE™ probes, available in a wide variety of lengths and designs to fit every application.

Princo, one of the pioneers of RF level sensing technology, has provided accurate, dependable, long lived service for thousands of applications in all types of industries, worldwide for more than 4 decades.

Applications

- Water-based liquids
- Acids
- Hydrocarbons and solvents
- Powders and granulars
- Oils

Features

- **Level Sentry –** Detects any circuit failure within 60 seconds, switches unit to alarm state, LED indicator turns red.
- **Universal –** Wide range of point level applications. Detects the level of powders, granules, conductive or non-conductive liquids … even the sticky ones.
- **NULL-KOTE™ Circuitry –** Negates effects of coating build-up.
- **High Sensitivity and Temperature Stability** – For critical low response applications.
- **Designed to Survive** – RF immune, vibration-proof, all circuit boards are conformally coated (tropicalized) for extra protection.
- **Easy-On Probe Connection –** Automatically provides simple, fast installation and reliable operation without wires, connectors, or terminal strips. Simply screw probe into the housing.
- **Unique Status Indicator** – Red / green LED shows presence or absence of material and also indicates power "on".
- **Heavy Duty Relay –** 2 sets of form C contacts rated at 5A, 115 Vac resistive contacts
- **High or Low Fail-Safe** – Field selectable.
- **Wide Temperature Range** – Standard process temperature: -300 to 500°F (-184 to 260°C).
- **ROLLOCK™ PROBES –** No part of the probe can fall into the process or be blown from the mounting. No re-tightening of seals required.
- **Time-Delay** – 0 to 30 second delay minimizes relay chatter
- **Ten-Year Warranty –** The only level instruments available with this unique assurance of quality.

AGT Absolute Gauge Technologies™

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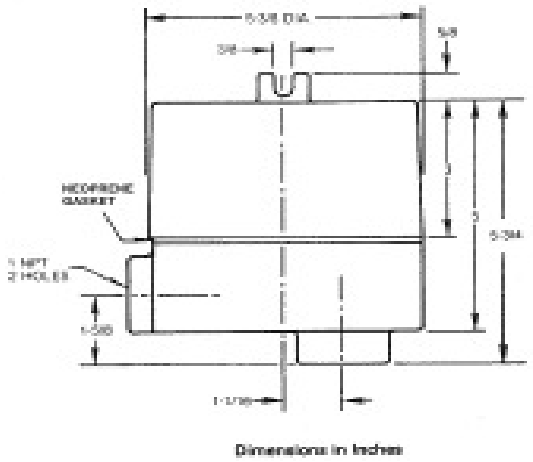
NULL-Kote Level Probes

Model L853, L854, L855, L857, L861, L862, and L863 probes are used with with all L3500 series controllers.

These probes are three element devices, which employ a bare sensor rod, guard section, and NPT mounting hub. All wetted parts are type 316 stainless steel or Teflon®. L800 Series point level probes use PRINCO's unique ROLLOCK™ construction. Featuring rolled seals and welded assembly, the ingenious ROLLOCK™ design locks all elements of the probe in position and insures that no part of the probe can fall into the process or be blown from the mounting.



Dimensions in Inches

L3522 Specifications

TYPE	Point type (on/off), solid state electronic, RF impedance-sensing, levelcontroller.
POWER REQUIREMENTS	95 to 135 Vac, 50 to 60Hz or 205 to 250 Vac, 1.3 watts; or 12/34 Vdc, <1 Watt.
AMBIENT TEMPERATURE	-40 to 150 °F (-40 to 66 °C)
SENSITIVITY	Senses capacitance as low as 0.15pF. May be decreased to approximately 1000pF.
TEMPERATURE STABILITY	Less than 1.0 pF typical (-40 °F to 150 °F).
ALARM TYPE	Selectable as either High Acting or Low Acting.
ALARM ACTION	Fail Safe Alarm : Control relay de-energizes (drops out) upon alarm.
CONTROL RELAY CONTACTS	Two sets of form C contacts, rated at 10 amperes, 115 Vac or 26 Vdc, resistive load.
TIME DELAY	Adjustable from 0 to 30 seconds. Standard mode is delay alarm both on and off. Consult the factory for optional times and modes.
DEAD BAND	Adjustable over range of 1.3pF for low values of process capacitance. Adjustment range increases up to approximately 1000pF, for high values of process capacitance.
SELF TEST	All functional circuitry is automatically self-tested every 60 seconds. In event of a failure, relays are switched to alarm state and LED indicator turns red.
ELECTRONIC HOUSING	Heavy duty, cast aluminum.
	Explosion-proof for: Class I, groups C & D; Class II, groups E, F & G.
	Weather proof: NEMA 4.

L850, L860 & L870 Series Probe Specifications

TYPE	Point level, single or dual element.
WETTED SURFACES	Teflon and 316 Stainless Steel are standard. Probes fully sheathed inTeflon or Kynar are also available.
VESSEL CONNECTION SIZE	L850 Series: 3/4" NPT; L860 Series: 1" NPT; L870 Series: 1½" NPT
PHYSICAL DIMENSIONS	Refer to Princo's Point Level Probe Bulletin for complete information.
PRESSURE / TEMPERATURE	1000 PSI @ -300°F, 1000 PSI @ 100°F, 350 PSI @ 400°F, 0 PSI @ 500°F

10 Year Warranty

All PRINCO RF impedance level control instruments are backed by a 10-year warranty. PRINCO will repair or replace, at our option, any instrument that fails under normal use up to 10 years after purchase.