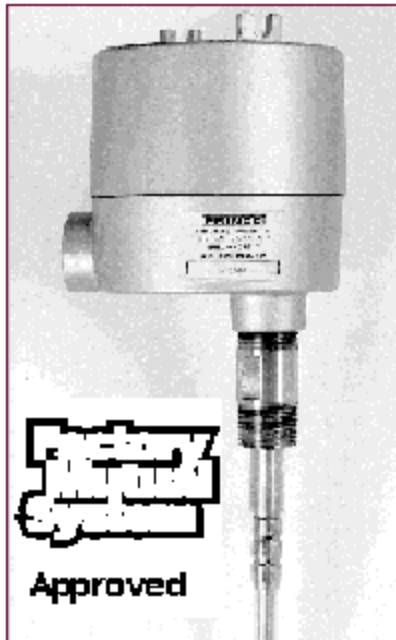


*Instrumentation designed
with the user in mind.*



Self-Monitoring NULL-KOTE™ RF Impedance, High-Perform-X™ Level Controller

LEVEL-SENTRY's outstanding combination of performance and features makes it ideal for any area where an extra measure of protection is important

Performance

- ❑ **High Sensitivity** – Extremely sensitive yet has a very high turn-down capability: 0.15 pF to 1000 pF.
- ❑ **Excellent Temperature Stability** – Less than 0.1 pF thermal drift per 20°F (less than 1.0 pF/200°F of ambient temperature change).
- ❑ **Wide Temperature Ranges** – Ambient temperature -40 to 150°F (-40 to 66°C); process temperature -300 to 500°F (-184 to 260°C).
- ❑ **Designed to Survive** – RF immune and vibration-proof. All circuit boards are conformally coated (tropocalized) for extra protection – at no extra cost.
- ❑ **ROLLOCK™ PROBES** – 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. No retightening of seals required.

Features

- ❑ **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** – Makes the sensor immune to adverse effects from conductive coating build-up.
- ❑ **Heavy Duty Relay** – 10A, 115 Vac (resistive) control contacts.
- ❑ **High or Low Fail-Safe** – Field selectable.
- ❑ **Easy-On Probe Connection** – Automatically provides simple, fast installation and reliable operation without wires, connectors, or terminal strips. Simply screw probe into the housing.
- ❑ **Time-Delay Included** – 0-30 second delay at no extra charge.
- ❑ **Ten-Year Warranty** – The only level instruments available with this unique assurance of quality.
- ❑ **Unique Status Indicator** – (two color) Shows presence or absence of material and also indicates power "on".
- ❑ **Factory Mutual System Approved** – Class I, II, III, Div. 1, Groups C, D, E, F, & G/NEMA4.

Description

The **High-Perform-X™** Model L3522 incorporates a feature known as "Level Sentry", an electronic system that self tests the internal electronic circuits for possible failure. The "Level Sentry" system automatically places the L3522 into self-test mode approximately once every minute. In test mode the "Level Sentry" system checks and tests virtually all L3522 internal electronic circuits. If any portion of the L3522 internal electronic circuitry malfunctions, a failure condition is reported in the form of a red Test LED and an alarmed (de-energized) output relay. If the unit functions properly, then a passed condition is reported, the Test LED remains green, and the output relay remains non-alarmed (energized).

In many process control installations, a point level switch could go for extended periods of time without ever

being required to detect and report an alarm condition. The Princo L3522 with "Level Sentry" ensures the user of reliable operation when the unit is called upon to detect an alarm condition.

The L3522 "Level-Sentry" is extremely easy to install and set up. Princo's Easy-On probe provides reliable probe-to-electronics connection. LED indicators help setup and operation by showing presence or absence of material on the probe and proper operation of the self-check function.

The Princo Model L3522 Level Sentry can be used to detect the presence or absence of virtually any process material, from electrical insulators (i.e., low dielectric materials such as refined oils, petrochemicals, or dry granulars), to electrical conductors (i.e., water

based mixtures, acids, or caustics). The mechanical nature of these materials can range from dry powders or granulars to liquid materials with virtually any consistency—even thick viscous materials that severely coat the sensor probe.

The L3522's standard features such as Null-Kote™ circuitry, 10 amp DPDT relay, 0-30 second time delay, field selectable high/low fail-safe, explosion-proof/weatherproof enclosure, ROLLOCK™ probes and conformally coated circuit boards are often either extra cost items on competitor's units or are simply not available from them.

In millions of installations, spanning more than 85 years of experience, PRINCO process instruments have provided accurate, dependable, long lived service for all types of industries.

L3522 Specifications

Type

Self-monitoring point (on/off) level control, radio frequency (RF), impedance sensing, NULL-KOTE™ circuitry.

Sensitivity

0.15 pF to 1000 pF capacitance.

Operating Temperature

-40 to 150°F (-40 to 66°C).

Temperature Stability

Less than .1 pF/20°F.

Relay Contacts

DPDT (2 form C) rated at 10A, 115 Vac or 26 Vdc resistive.

Delay Time/Mode

0 to 30 second/delay on and off.

Fail-Safe Mode

Fail-Safe low level or high level. Field changeable.

Dead Band

10:1 adjustable range to 1000 pF maximum.

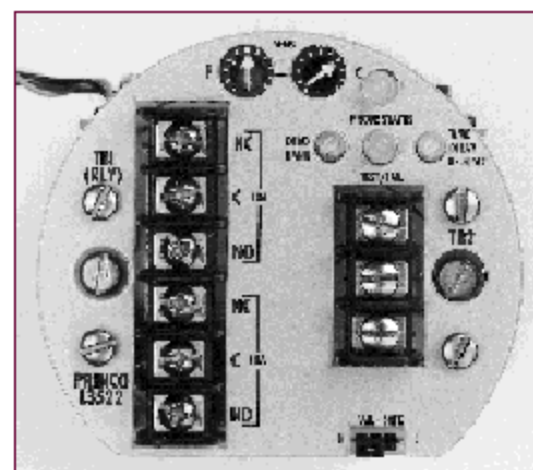
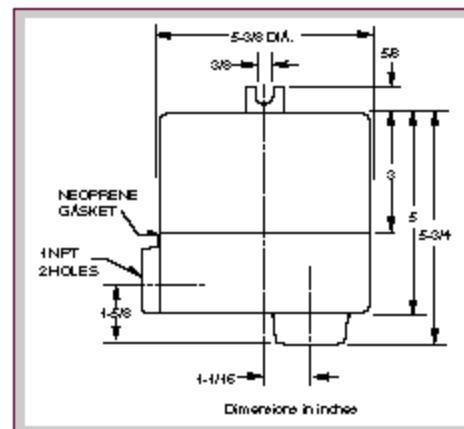
Power Requirements

Standard Models:
95/135 Vac, 50-60 Hz, 1.3 watts
12/34 Vdc, <1 watt

Optional Model:
230 Vac

Electronics Housing

Explosion-proof Class I, II, III, Div. 1, Groups C, D, E, F, & G/NEMA4.



10-YEAR WARRANTY

All PRINCO 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 for up to 10 years after purchase.

NOTE:

Explosion-proof cases must be installed to satisfy National Electrical Code, Section 501, and applicable local codes.

NULL-KOTE™ Point Level Probes

Model L853, L854, L855, L857, L861, L862, and L863 probes are Factory Mutual Approved Explosion-proof Class I, II, & III, Division 1, Groups A, B, C, D, E, F, & G.

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®.

All PRINCO L800 Series point level probes use PRINCO's pioneering 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. No retightening of seals required.

Operating Temperature

Teflon: -300 to 500°F (-184 to 260°C),
Kynar: -40 to 300°F (-40 to 149°C).

See PRINCO's Point Level Probe Bulletin for complete information.

All PRINCO level instruments are designed and manufactured in the UNITED STATES OF AMERICA



PRINCO

PRINCO INSTRUMENTS, INC.
1020 Industrial Highway
Southampton, PA 18966-4095, U.S.A.
800-221-9237
(215) 355-1500 FAX (215) 355-7766

Bulletin L-97-11

NULL-KOTE and ROLLOCK are trademarks of PRINCO. Other trademarks or registered trademarks in this text are the property of their respective holders.