

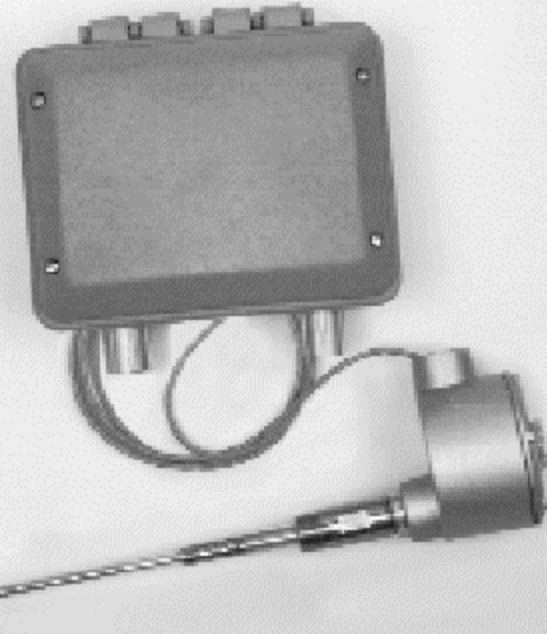
*Instrumentation designed  
with the user in mind.*

## NULL-KOTE™ RF Impedance Remote Point Level Controller

### Features

- **Remote Sensor Mounting** – Eliminates the need to work in high places, hazardous locations or inclement weather. Control unit can be up to 3000 feet from sensor and uses ordinary twisted pair cable.
- **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.
- **High Sensitivity and Stability** – For critical low response applications.
- **Designed to Survive** – RF immune, vibration-proof, with all circuit boards conformally coated (tropicalized) for extra protection - at no extra cost.
- **Ten-Year Warranty** – The only level instruments available with this unique assurance of quality.
- **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** – (two color) Shows presence or absence of material and also indicates power "on".
- **Heavy Duty Relay** – Dual 10A, 115 Vac (resistive) control contacts.
- **Explosion-proof Probe Housing** – Class I, II, III, Div. 1, Groups C, D, E, F, & G/NEMA 4.
- **Weather-proof Electronics Housing (control unit)** – NEMA 4X.

Excellent  
sensitivity  
and stability  
with innovative  
NULL-KOTE™  
circuitry, which  
ignores product  
build-up on the  
probe



- **Wide Temperature Range** – Standard process temperature range: -300 to 500°F (-184 to 260°C).
- **Time-Delay Included** – 0-30 second delay at no extra charge.
- **High or Low Fail-Safe** – Field selectable.

### 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.

### Description

PRINCO's L3541 remote level controller gives you the optimum combination of convenience, reliability, sensitivity, features, and cost.

Conformally coated electronics, NULL-KOTE® circuitry, explosion-proof/weatherproof enclosures, ROLLOCK® probe construction and our unique 10 Year Warranty means 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.

With a remote mounted sensor, 10 amp control relay contacts, 0-30 second time delay, coarse and fine sensitivity adjustments, field selectable hi-lo failsafe, and our exclusive probe status indicator, you get all the features you need at a price which makes the L3541 an outstanding value.

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

# L3541 Specifications

## Type

Point (remote sensor, on/off) level control, radio frequency (RF), impedance sensing, with NULL-KOTE<sup>®</sup> 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.

## 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

NEMA 4X.

## Probe Housing

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

## Test Function

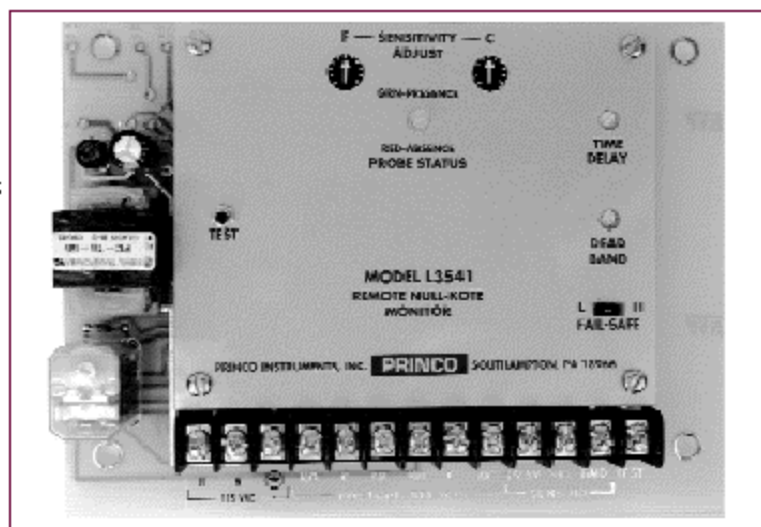
Pushbutton tests control relay.

## Relay Contacts

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

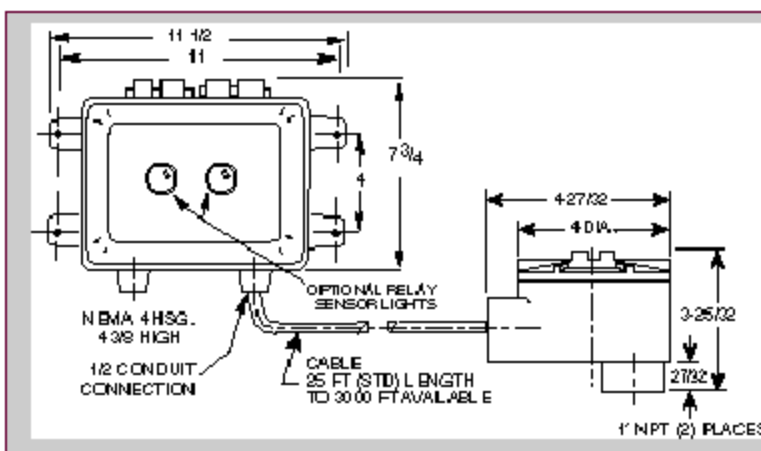
## Relay Status Lights

Optional: Red and Green lights.



### NOTE:

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



## NULL-KOTE<sup>™</sup> 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<sup>®</sup>.

All PRINCO L800 Series point level probes use PRINCO's pioneering ROLLOCK<sup>®</sup> construction. Featuring rolled seals and welded assembly, the ingenious ROLLOCK<sup>®</sup> 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.

## Operating Temperature

-300 to 500°F (-184 to 260°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

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