

Instrumentation designed with the user in mind

# Models L2740

NULL-KOTE<sup>™</sup> RF Impedance, Zone & Multi-Point Versa-Point<sup>™</sup> Remotely Adjustable Level Controller

## **Description**



### **Applications**

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

PRINCO's L2740 Versa-Point™ gives you the safety and convenience of remote mounting plus the flexibility of either four independent set points or zone control with two additional set points.

Remote adjustability minimizes the need for personnel to climb high tanks, silos, bins, or enter other hazardlous locations.

The distance between the sensor assembly and the control unit can be as great as 3000 feet. The control panel and sensor assembly are connected by ordinary three-conductor cable.

When set up as a four-point level controller, it is an ideal multiple point level alarm for applications requiring high alarm, high-high alarm, low alarm, and low-low alarm, all operating from a single probe.

As a zone control with two additional level points, it is ideal for lift stations, batching operations, and industrial sumps.

Both set points, which define the zone as well as the two level points, are independently adjustable.

Mode of operation for zone control may be selected for either pump-up or pump-down. Likewise, the level points, whether high or low, may always be operated fail-safe.

The zone may occupy virtually any portion of the overall range, from 1 to 100 percent. Location of the level points may also be anywhere in the overall range, outside or inside the zone.

All set points and zone limits may be independently set for either high or low fail-safe.

### **Features**

- Remote Adjustment and Control Minimizes the need to work in high places, inaccessible or hazardous locations, and inclement weather. Adjustment of control functions can be made up to 3000 feet away from sensor assembly.
   Connections are made with ordinary 3-conductor cable no fragile, difficult-to-install coaxial cable.
- Wide Range of Applications— The ideal multiple-point controller. It operates in conjunction with process products
  which range from electrically insulating materials, such as refined oils, to conductive slurries; even sticky materials
  that tend to cling to the probe.
- NULL-KOTE™ Circuitry Makes the sensor immune to adverse effects of conductive coating build up.
- **Designed to Survive** RF immune, vibration-proof, and conformally coated (tropicalized) circuit boards for additional protection at no extra cost.
- High or Low Fail Safe Field selectable for each point.
- Flexibility Each point and zone can be adjusted for any point on the probe.
- Unique (two color) Status LED Indicates presence or absence of material.
- Easy to Install Probe and electronics install as single unit. No cable, delicate connectors, or separate enclosure.
- Wide Temperature Range Standard process temperature: -300 to 500°F (-184 to 260°C).
- Quick Calibration Easy, rapid set up and adjustment. Factory precalibration available.
- Easy-On Probe Connection Automatically provides simple, fast installation and reliable operation without wires, connectors, or terminal strips. Simply screw probe into the housing.
- Ten-Year Warranty The only level instruments available with this unique assurance of quality.

#### L100 Series Continuous Level Probes

Probes used with the L2740 are designated as the L100 Series.

A variety of types and construction materials are available: flexible (cable type) or rigid, heavy or light duty Teflon<sup>TM</sup> or Kynar<sup>TM</sup> sheathing, NPT hub or flanged mounted, single or dual construction.

All probes are manufactured to the exact length required.

MODEL NO.	ELEMENT CONFIGURATION	TYPE	VESSEL CONNECTION	INSULATION OPTIONS	
L101	Single	Rigid	1" NPT	B, KP, KS, TP, TS	
L104	Single	Rigid	1", 2", 3" OR 4" TRI-CLAMP™	B, KP, KS, TP, TS	
L102	Dual Concentric	Rigid	11/2" NPT	B, KP, KS, TP, TS	
L107	Dual Concentric	Rigid	1" NPT	B, KS, TP, TS	
L109	Single	Flexible	1" NPT	KW, TW	
L113	Dual Parallel	Flexible	1" NPT	KW, TW	
L115	Dual Parallel	Flexible	3" Flange	KW, TW	
L116	Dual Parallel	Flexible	3" Flange	KW, TW	
L127	Dual Parallel	Rigid	3" Flange	B, KP, KS, TP, TS	
L128	Dual Parallel	Rigid	3" Flange	KP, KS, TP, TS	

KP = Kynar® Pipe (60 mil Kynar over carbon steel) KS = Kynar Sheath (17 mil Kynar over 316 SS rod) KW = Kynar Wire (20 mil Kynar over 316 SS wire rope) B = Bare (No insulation)

TP = Teflon® Pipe (60 mil PFA Teflon over 316 SS rod) TS = Teflon Sheath (17 mil Teflon over 316 SS rod)

TW = Teflon Wire (12 mil Teflon over copper wire)

Model	Probe	Pressure Rating (PSI) at Temperature Indicated (°F)							
Number		-300	40	100	250	300	400	500	
L101, L102, L104, L107, L109, L113	Teflon or Bare	1250	1250	1250	550	450	350	0	
	Kynar	N/A	1000	1000	250	0	N/A	N/A	
L115, L116, L127, L128	Teflon or Bare	275	275	275	225	2101	1801	0	
	Kynar	N/A	275	275	225	0	N/A	N/A	

1. Rating of Carbon Steel 150 lb. flange. For higher ratings, consult factory.

#### L2740 Specifications

NULL-KOTE™ RF impedance-sensing, remotely adjustable zone & multiple point level controller. **TYPE** 

ZONE ADJUSTMENT RANGE 1 to 100 % of probe length.

SPAN RANGE From 0.5 to 300 feet typical. Shorter and longer spans available with special probes.

CAPACITANCE RANGE 20pf to 20,000pf.

AMBIENT TEMPERATURE -40 to 150 °F (-40 to 66 °C)

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

**RELAY CONTACTS** SPDT rated 10 A, 115 Vac, resistive

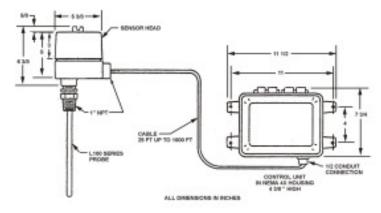
DELAY TIME AND MODE Continuously adjustable 0 to 30 second, independently set for each point.

POWER REQUIREMENTS 95 to 135 Vac, 50 to 60Hz, 5 watts; or 207 to 253 Vac, 5 watts; or 21 to 26 Vdc, 5 watts. **ELECTRONIC HOUSINGS** Sensor Head: Explosion-proof Class I, II, III, Div. 1, Groups C, D, E,F, & G. NEMA4.

Control Unit: Weather-proof and corrosion-resistant: NEMA 4X

### 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.



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1020 Industrial Blvd., Southampton, PA 18966-4095 800-221-9237 215-355-1500

FAX: 215-355-7766 www.PrincoLevelControls.com