

Description

PRINCO point level probes are as versatile as the Princo controllers with which they are used. Designed to be dependable, rugged and economical, they serve in a wide variety of applications.

Each probe listed incorporates Princo's unique NULL-KOTE™ design. The NULL-KOTE feature incorporates a three-element assembly consisting of a bare sensor rod, guard section, and NPT mounting hub. All wetted metal parts are type 316 stainless steel. The elements are insulated from one another with Teflon.

The guard section, in conjunction with the NULL-KOTE circuitry, provides immunity to conductive build-up and assures accurate, repeatable operation.

Additionally, each probe incorporates our unique ROLLOCK™ construction. Featuring rolled seals and welded assembly, this design locks all elements of the probe in position and ensures that no part of the probe can fall into the process or be blown from the mounting.

Applications



Point level control is a requirement found in all areas of the process industry. Such applications may include liquids, slurries, interfaces, powders, and granulars.

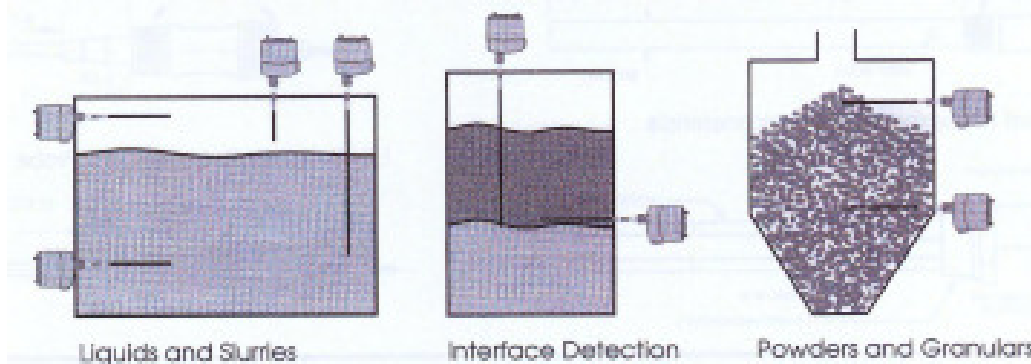
For non-conductive liquids and slurries, horizontal installation is recommended. Vertical installations, depending on the proximity of the ground reference, may require up to six inches of probe immersion before a stable trip point is achieved. The L854 probe is ideal for vertical installation in non-conductive, low viscosity liquids.

In conductive liquids, slurries or for interface detection, either vertical or horizontal installation is recommended. Vertical installations will be tip-sensitive. Probes for powders and granulars should be installed horizontally.

Installation

A ground reference element is required in most installations. In most cases, a metal vessel wall serves this purpose. In other cases, a metal ground pipe, structural element, or ground rod, which extends to a point that is equal to or greater than the lowest point of the sensor is used. There must be less than one ohm of resistance between the ground reference element and the probe mounting hub or the case ground of the controller.

When mounting a NULL-KOTE point level probe through a nozzle or standpipe, or when mounting in a tank where heavy product build-up is possible on the inside walls or top, the guard element must be long enough to extend at least two inches beyond any such build-up.



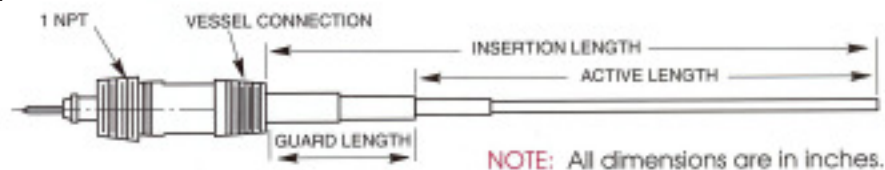
Materials of Construction

All wetted metal parts are made from type 316 stainless steel. Insulation and seals are Teflon.

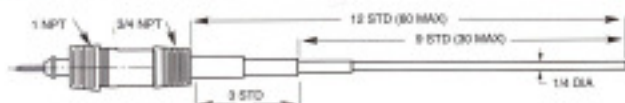
For probes constructed from special materials or with all wetted surfaces of Teflon or Kynar, please consult factory.

Ordering Information

1. Vessel connection sizes are as follows: L850 Series - 3/4" NPT; L860 Series - 1" NPT; L870 Series - 1-1/2" NPT.
2. Insertion length is total length of probe below probe hub.
3. Guard length is length of metal guard below probe hub.
4. Active length is length of sensor below metal guard.



L853: Standard Probe



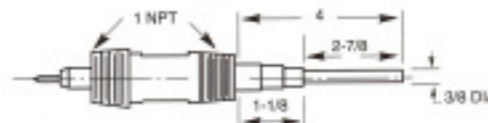
L861: Fly Ash Probe, cold side



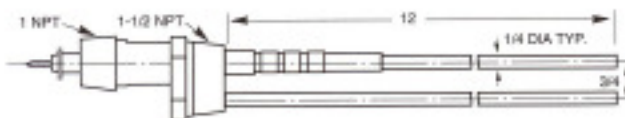
L854: Probe for non-conductive, low-viscosity liquids



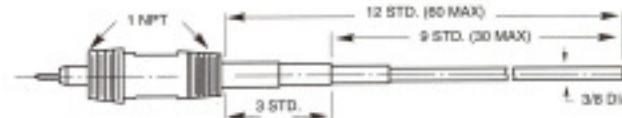
L862: Short Probe for rugged service



L870: Dual Probe for low dielectric materials



L863: Heavy Duty Standard Probe



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 in Teflon or Kynar are also available.		
VESSEL CONNECTION SIZE	L850 Series: 3/4" NPT;	L860 Series: 1" NPT;	L870 Series: 1 1/2" NPT
PRESSURE / TEMPERATURE RATINGS			
PSI	Temp (°F)		
1000 @	-300	Note: All probes described in this bulletin, which are to be used in explosion-proof applications, must be installed to satisfy National Electric Code, Section 501, and applicable local codes.	
1000 @	100		
450 @	300		
350 @	400		
0 @	500		

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.