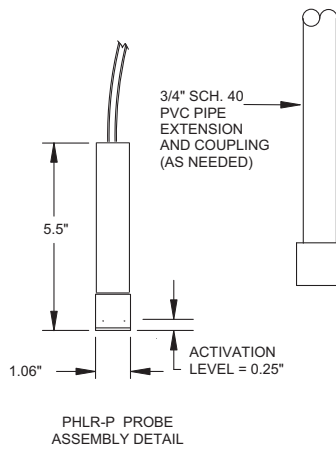
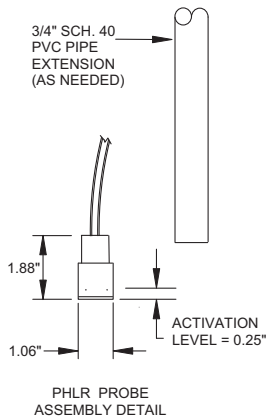
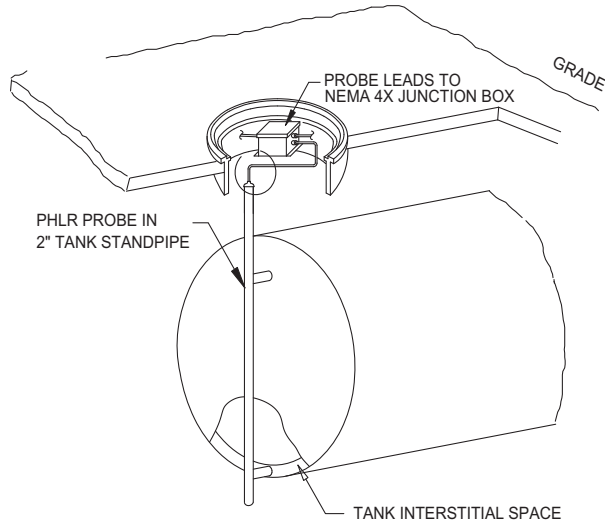




### Double-Wall Tank Application



### Typical PHLR Response Times

Liquid*	Response Time (@ 70°F)
1, 1, 1, Trichlorethane Acetone MEK Xylene Naptha Gasoline	<1 minute
Diesel fuel Kerosene Jet fuel Crude oil	<5 minutes**
Alcohols	not detected

\* Long exposure to some aggressive solvents like acetone or xylene may soften the epoxy sealing the probe, requiring probe replacement.  
 \*\* Response time at room temperature. Response times will be longer for lower temperatures.

## PHLR

The PHLR series probe is a resettable hydrocarbon probe that detects hydrocarbon liquids in interstitial spaces of tanks and pipes, sumps and other containment areas where hydrocarbon liquid can accumulate to a depth of 1/4" or more.

The probes will detect liquid fuels (gasoline, diesel fuel, jet fuel, crude oil, etc.) and many hydrocarbon solvents, but ignore vapors, thus eliminating false alarms due to vapors.

The unique design of the probe employs reusable sensor elements which swell upon exposure to hydrocarbon liquids and activate a sealed switch. The sensor elements can be easily removed, cleaned and reused numerous times after exposure. This enables the system to be quickly reset after testing.

The standard PHLR probe is designed for non-pressurized applications.

The PHLR-P probe is available for pressurized locations. This probe is ideal for typical sealed, containment piping systems which are maintained under pressure with a nitrogen or air blanket.

**Easy installation** - The PHLR probe slips into the end of a 3/4" Schedule 40 PVC pipe. The PHLR-P probe slips into a 3/4" PVC coupling. The pipe can then be mounted in any orientation - horizontal or vertical.

A PHLR series is available for the PAL-AT® or LiquidWatch® systems:

The PHLR series can easily be connected into a PAL-AT cable "sensing string" providing increased utilization of the PAL-AT capabilities. Each probe assembly for PAL-AT includes a probe integrator with 60 ft (18 m) of jumper cable to connect to the sensing string, and 20 ft (6 m) of lead cable to attach the probe to the integrator.

The PHLR series for LiquidWatch includes the probe adapter that is installed in the 20 ft (6 m) long probe lead wire. Additional lead wire is used if necessary.

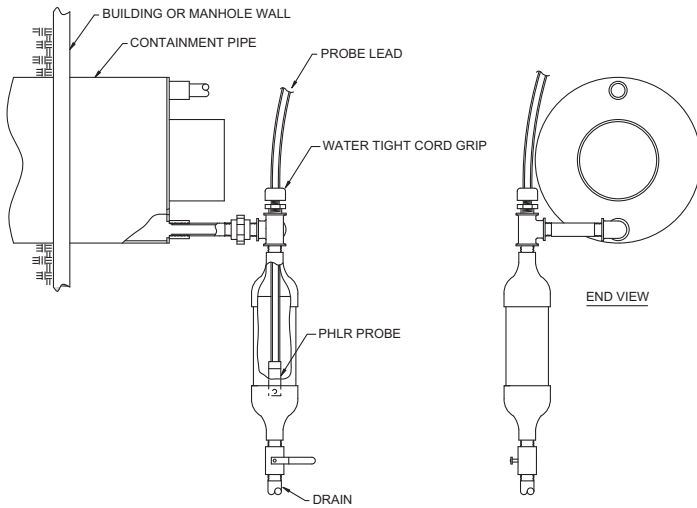
### PAL-AT NOTE:

A "-S" probe must be connected in the first 5,000 ft (1,500 m) of the sensing string.

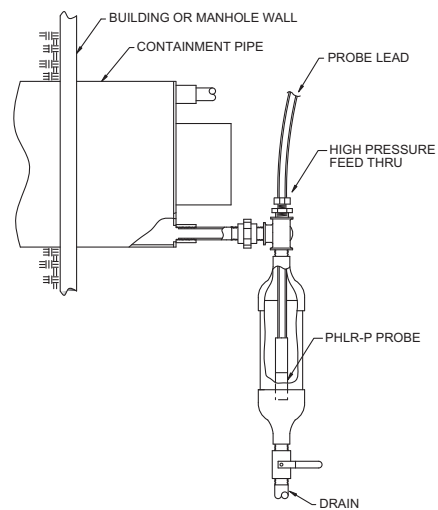
A "-L" probe must be connected more than 5,000 ft (1,500 m) from the PAL-AT panel.

# APPLICATIONS

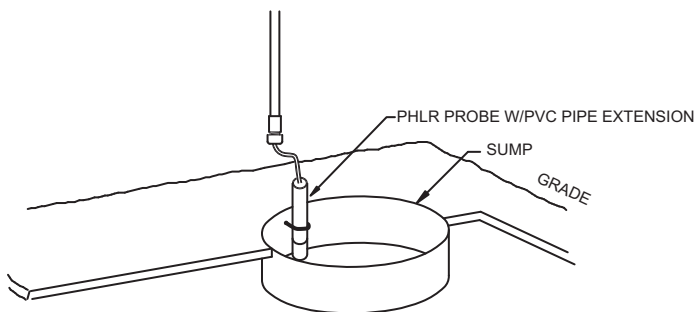
## Contained Pipe



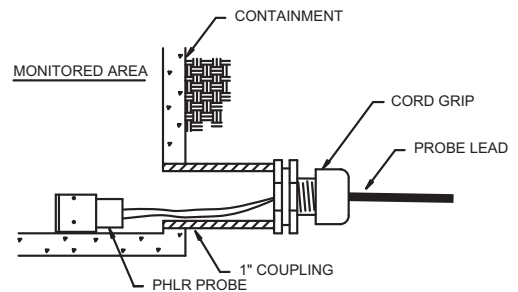
## Pressurized Containment



## Sump



## Contained Area Application



### Part Numbers:

PAL-AT		Liquidwatch	
PHLR-S	8027888	PHLR-LW	8027890
PHLR-L	8027889	PHLR-P-LW	8027913
PHLR-P-S	8027911		
PHLR-P-L	8027912		

Replacement Sensor Package: 8027895  
includes all removable parts, including sensor elements 8027896

Replacement Sensor Elements: 8027896  
includes sensor disks and sensor screens

U. S. Patent No. 7,525,444

### Description:

Probe Operating Temperature:  
-20°F to 122°F (-29°C to 50°C)  
Probe Length: 1.88" (48 mm) PHLR / 5.5" (140mm) PHLR-P  
Probe Diameter: 1.06" (27mm)  
Probe Lead Length: 20 ft. (6m)  
Activation Level (min):  
Vertical - 0.25" (6.4mm), Horizontal - 0.50" (12.8mm)  
Junction Box: (PAL-AT ONLY)  
NEMA 4X 10" x 8" x 4" (250mm x 200mm x 100mm)

### Application:

Double Wall Tank	Sumps
Double Wall Pipes	Manholes
Sealed Trenches	Value Pits

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