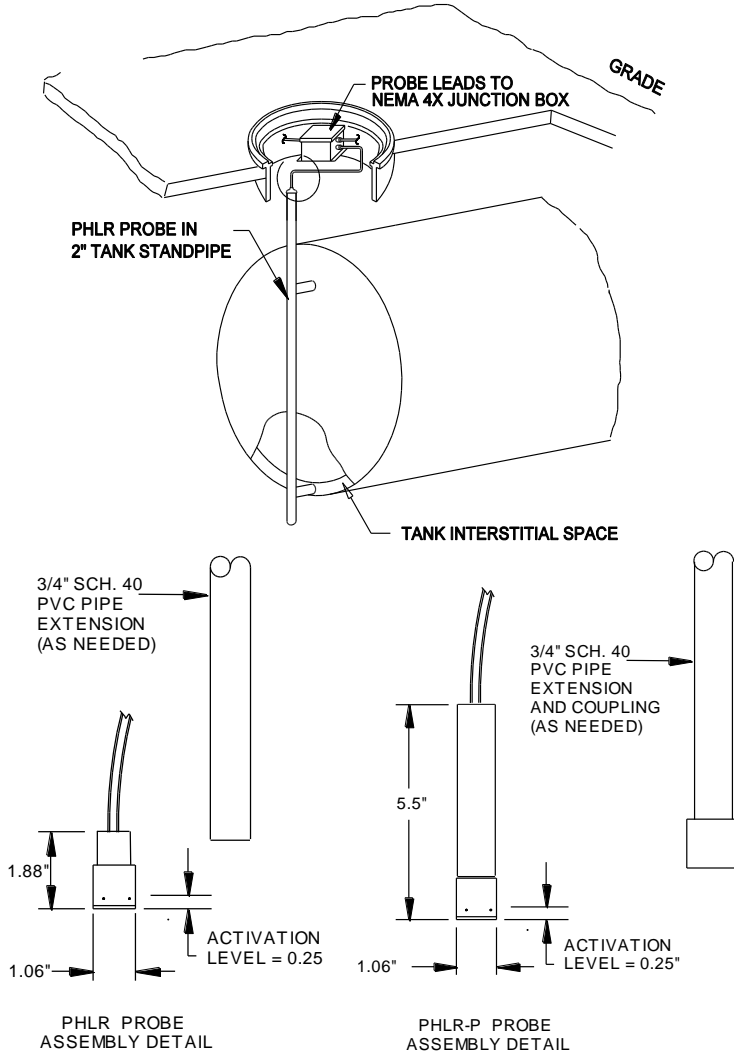


Double-Wall Tank Application



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 that 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 pipe can then be mounted in any orientation, horizontal or vertical. The **PHLR-P** probe slips into a 3/4" PVC coupling and must be mounted vertically.

A **PHLR** series probe is available for the PAL-AT® or LiquidWatch® systems.

The **PHLR** series can easily be connected to 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 a 1/2" NPT cord grip and a probe adapter incorporated 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.
- Each probe includes junction box, two connectors and three 1/2" NPT cord grips.

Typical PHLR Response Times

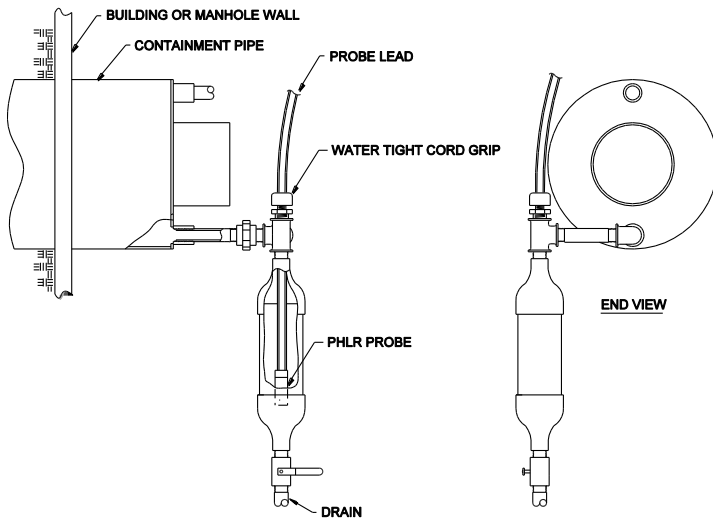
Liquid*	Response Time (@70°F)
1, 1, 1, Trichloroethane	<1 minute
Acetone	
MEK	
Xylene	
Naptha	
Gasoline	
Diesel Fuel	<5 minutes**
Kerosene	
Jet Fuel	
Crude Oil	
Alcohols	Not Detected

* Long exposure to some aggressive solvents like acetone or xylene may soften the epoxy sealing the probe, requiring probe replacement.

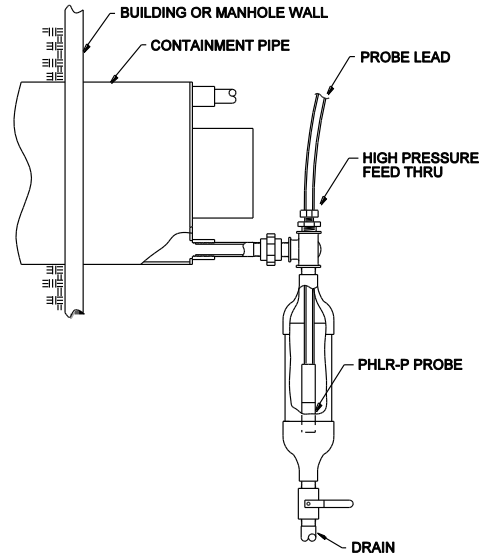
** Response time at room temperature. Response times will be longer for lower temperatures.

APPLICATIONS

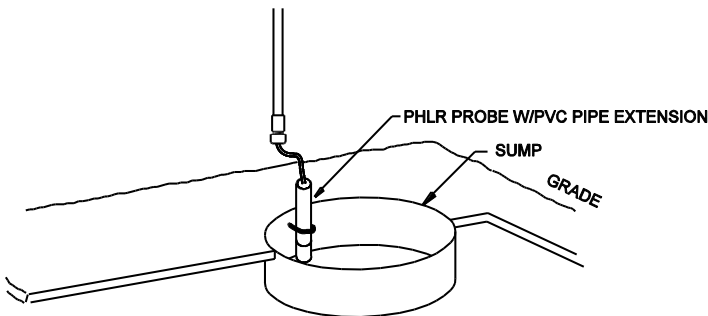
Contained Pipe



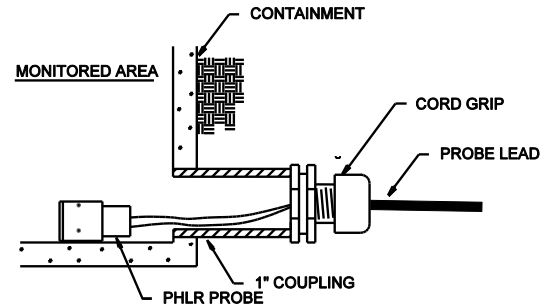
Pressurized Containment



Sump



Contained Area Application



Part Numbers:

<u>PAL-AT</u>		<u>LiquidWatch</u>	
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 replacement sensor elements, 8027896

Replacement Sensor Elements: 8027896

- includes sensor disks and sensor screens

PROBE TECHNICAL DATA:

- Operating Temperature: -20°F to 122°F (-29°C to 50°C)
- Length: 1.88" (48 mm) PHLR / 5.5" (140mm) PHLR-P
- Diameter: 1.06" (27mm)
- 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 (IP66) 10" x 8" x 4" (250mm x 200mm x 100mm)
- Maximum Temperature 140°F (60°C)

APPLICATIONS:

- Double Wall Tank • Sumps
- Double Wall Pipes • Manholes
- Sealed Trenches • Valve Pits

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