

DESCRIPTION:

- Probe Operating Temperature: 0°F to 180°F (-18°C to 80°C)
- Probe Length: 1.25" (32 mm)
- Probe Diameter: .625" (16 mm)
- Probe Lead Length: 20 ft (6 m)
- Activation Level (min): .62" (16 mm)
- Junction Box: **(PAL-AT ONLY)**
NEMA 4X 10" x 8" x 4"
(250 mm x 200 mm x 100 mm)
- Material: 304 Stainless Steel

APPLICATIONS:

- SUMPS • MANHOLES • DOUBLE WALL TANK
- SEALED TRENCHES • DRIP PANELS
- INDOOR WATER DETECTION

PWS

The **PWS** probe detects all conductive liquids - water, acid, bases, chemicals, etc. Its solid-state, stainless steel construction allows it to be used in corrosive environments and reset quickly after removal from a liquid.

The unique design of the **PWS** probe eliminates the need for external power at the probe.

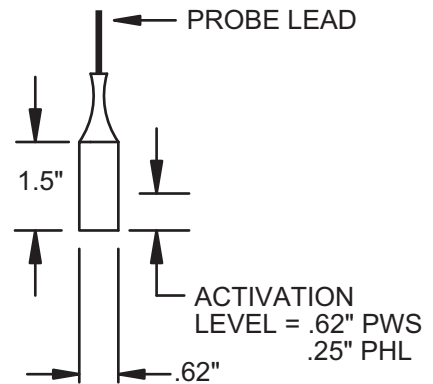
A **PWS** probe is available for the PAL-AT® or LiquidWatch® systems:

The **PWS** probe for the PAL-AT can easily be connected into a cable "sensing string" providing increased utilization of the PAL-AT capabilities. Each probe assembly includes a probe integrator with 60 ft (18 m) of jumper cable to connect to the sensing string, 20 ft (6 m) of lead wire to attach the probe to the probe integrator and a NEMA 4X junction box.

The **PWS** probe for LiquidWatch includes the probe adapter. 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.



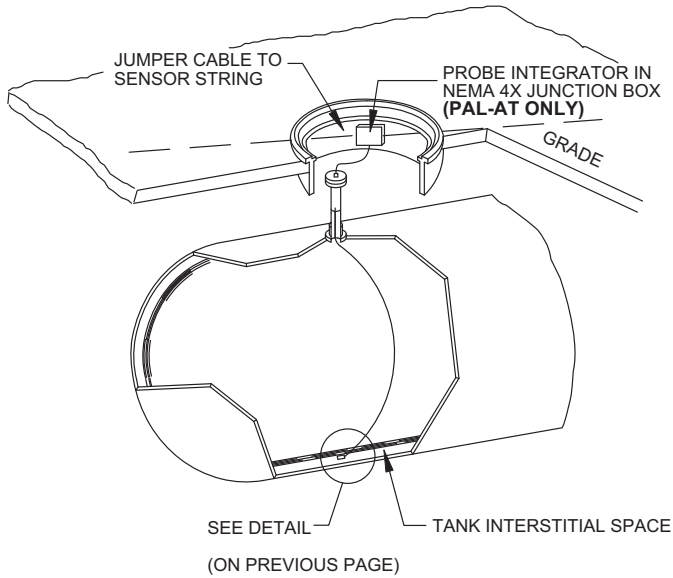
PROBE ASSEMBLY DETAIL

PART NUMBERS:

- PAL-AT:
- PWS-S • 8027630
 - PWS-L • 8027940
- LiquidWatch:
- PWS-LW • 8027904



PHL



The **PHL** probe's small size allows it to fit into monitored areas too small for the standard PHLR hydrocarbon probe. The **PHL** probe's patented solid-state construction allows it to respond to most liquid hydrocarbons but ignore vapors, thus virtually eliminating false alarms due to vapors. **PHL** is responsive to a broad range of fuels and solvents. The probe resets quickly after removal from exposure to most volatile hydrocarbons (see Table 1).

The unique design of the **PHL** probe eliminates the need for additional power at the probe.

A **PHL** probe is available for the PAL-AT® or LiquidWatch® systems:

The **PHL** probe 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 **PHL** probe 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.

PART NUMBERS:

- PAL-AT
- PHL-S • 8027620
 - PHL-L • 8027900
- LiquidWatch
- PHL-LW • 8027901

Typical PHL Probe Resetability Table

Liquid	Reset
1, 1, 1, Trichlorethane	YES
Methyl Ethyl Ketone	YES
Xylene (mixed)	YES
Naphtha	YES
Gasoline	YES
Kerosene	NO
Diesel Fuel	NO
Jet Fuel • A, JP4, JP5	NO
Crude Oil • Lt., Med., Hvy.	NO

The **PHL** probe responds to all the liquids listed in less than one minute. The number of times a sensor will reset is dependent on hydrocarbon purity and exposure time. Due to the variable conditions which may be encountered in each installation, this data is only provided as a guide. Actual performance may differ from the test values.

The **PHL** does not respond to alcohols.

Recommended test liquid is Coleman® Brand Camp Fuel. (Do not swirl or agitate the probe in any hydrocarbon liquid. It may damage the sensor element.)

Table 1

DESCRIPTION:

- Probe Operating Temperature: 0°F to 95°F (-18°C to 35°C)
- Probe Length: 1.25" (32 mm)
- Probe Diameter: .625" (16 mm)
- Probe Lead Length: 20 ft (6 m)
- Activation Level (min): .25" (6.4 mm)
- Junction Box: **(PAL-AT ONLY)**
NEMA 4X 10" x 8" x 4"
(250 mm x 200 mm x 100 mm)

APPLICATION:

- DOUBLE WALL TANK • DOUBLE WALL PIPES • SEALED TRENCHES

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PermaAlert ESP offers a sole and exclusive one year warranty from date of shipment as is stated in the Standard Terms and Conditions of Sale for these products. In no event will PermaAlert ESP be liable for any indirect, incidental, or consequential damages.