

## Immersion Probe

Probe is design for total or partial immersion into water or other liquids to create ultrasonic beams.

### Features

- Strong Pressure and Corrosion Resistance
- Excellent Acoustic Impedance in Water or Other Liquids, 1/4 wavelength of matching layer can ensure maximum power outputs
- No Coupling Issues between Probe and Liquid
- Acoustic Beam can perform Spherical Focusing (F) or Line Focusing (CF), to increase ability of defect identifications
- Three types of performance probes can meet most of detection

#### “PL” Universal Series:

Ideal for high sensitivity and penetration applications, less resolution and bandwidth required environments

#### “PH” Short Pulsing Series:

High damping and bandwidth, high SNR for high attenuation material detection, good resolution for precise thickness measurements and near surface detection environments

#### “C” Composite Series:

High penetration power and high SNR for coarse-grained, fiber-reinforced composite materials

### Applications

- Fast detection of Plates, Pipes or other workpiece
- For automated scanning system of material analyze imaging



#### Instruction:

1. Most of immersion probes working between  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) to  $55^{\circ}\text{C}$  ( $131^{\circ}\text{F}$ ); For lower Min Temp may cause sensitivity drop, and for exceed max temp may cause malfunction of internal of probe.
2. Due to epoxies as matching layer and with certain water absorption rate, Immersion time should control less than 8 hours and working again after 16 hours, otherwise may cause glue abate of matching layer of probe; For frequency  $\geq 10\text{MHz}$ , may easier to be damaged by it's thin matching layer.