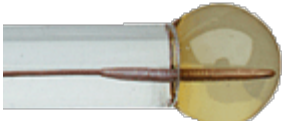
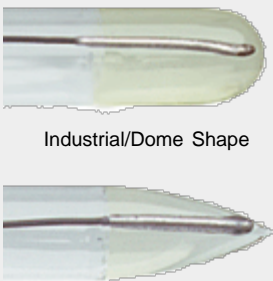


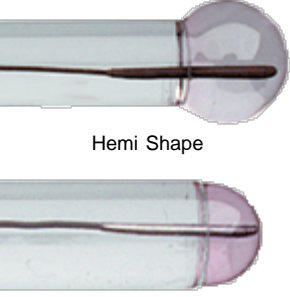


# pH Sensing Glass

ASI...MEASURING YOUR SUCCESS!



## ASI pH GLASS GUIDE

Glass Type	Glass Image	Specification
<p><b>Type II</b> Low Impedance Glass</p>	 Hemi Shape	<p>pH Range: 0 to 13 pH                      Impedance Range: 45 to 360 MW                      Temperature Range: -10 to 135°C                      Response Time: 1 second                      LIS Response Time: &lt; 30 seconds                      Stability: ± 1mV (in 24 hours)</p>
<p><b>Type III</b> Hard Glass</p>	 Industrial/Dome Shape  Spear Shape	<p>pH Range: 0 to 12 pH                      Impedance Range: 200 to 600 MW                      Temperature Range: -10 to 135°C                      Response Time: 10 seconds                      LIS Response Time: &lt; 60 seconds                      Stability: ± 1mV (in 24 hours)</p>
<p><b>Type IV</b> Low Na Error Glass</p>	 Hemi Shape	<p>pH Range: 0 to 13 pH                      Impedance Range: 45 to 360 MW                      Temperature Range: -10 to 135°C                      Response Time: 1 second                      LIS Response Time: &lt; 30 seconds                      Stability: ± 1mV (in 24 hours)</p>
<p><b>Type V</b> Flat Glass</p>	 Flat / Convex Shape	<p>pH Range: 0 to 13 pH                      Impedance Range: 80 to 315 MW                      Temperature Range: -10 to 105°                      Response Time: 5 seconds                      LIS Response Time: &lt; 30 seconds                      Stability: ± 1mV (in 24 hours)</p>
<p><b>Type VIII</b> Standard Glass</p>	 Hemi Shape  Industrial/Dome Shape	<p>pH Range: 0 to 14 pH                      Impedance Range: 120 to 675 MW                      Temperature Range: -10 to 135°C                      Response Time: 3 seconds                      LIS Response Time: &lt; 30 seconds                      Stability: ± 1mV (in 24 hours)</p>

- Impedance of a glass is given as a range of values @ 25°C. This is due to the different bulb shapes and the different glass stem sizes used in our products. Please ask your ASI account manager to determine the impedance of your glass.
- Temperature range is based on the abilities of the glass stem, not the overall

**NOTES:**

- combination electrode.
- Response time is the time to 95% of scale
- LIS: Low Ionic Strength Solution (< 100 $\mu$ S)
- Response time is calculated on the pH stem level, not is a completed combination electrode. Response time in a combination electrode varies from design to design due to the various electrolytes used in ASI sensors.