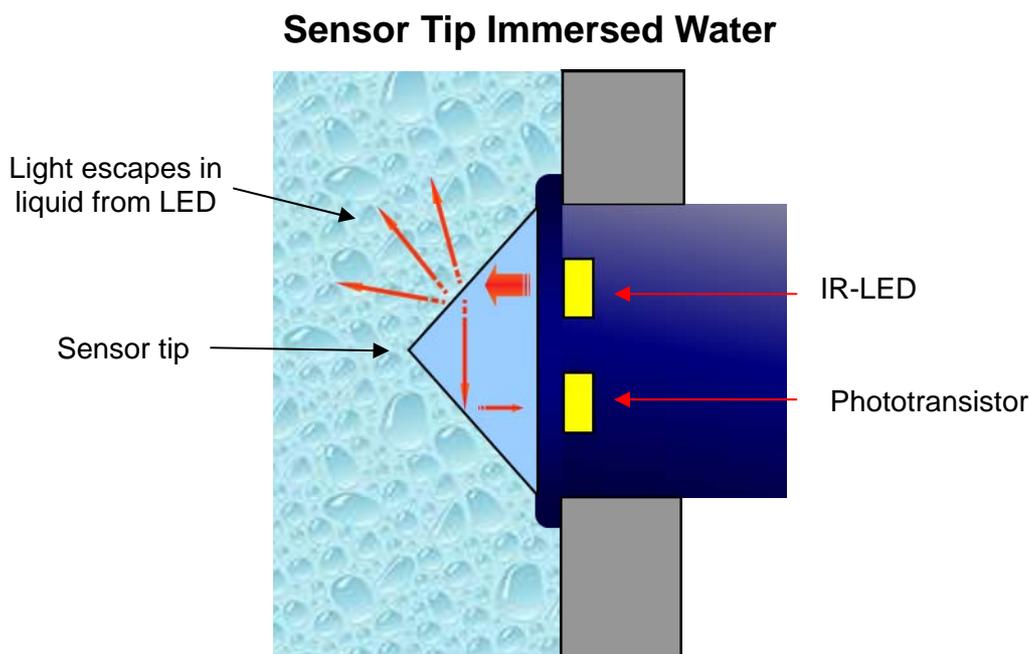
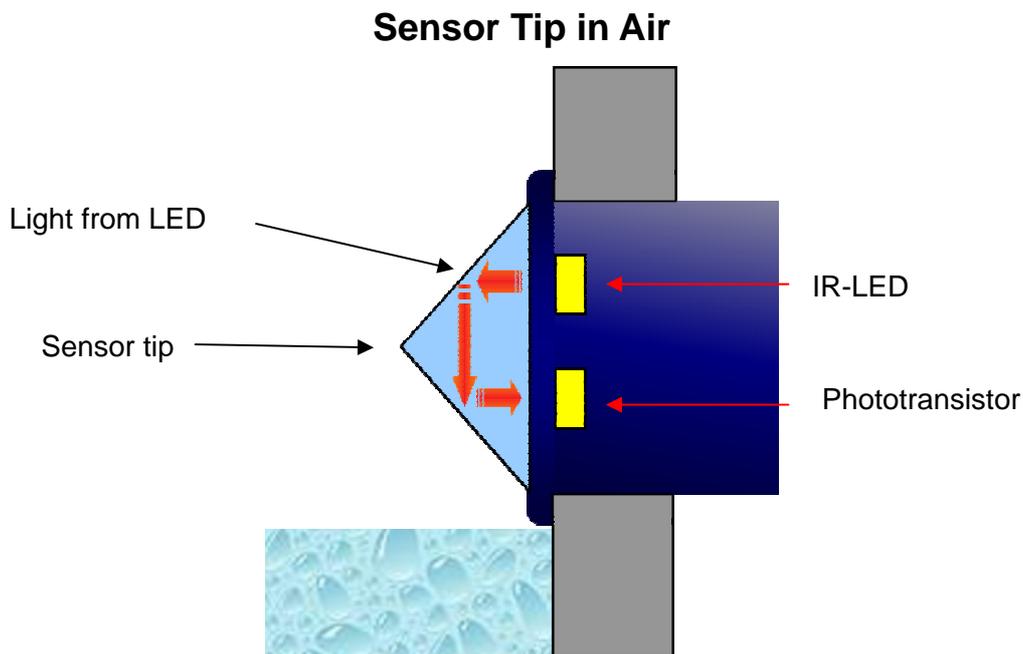


Application Note

Optical Liquid Level Sensor Operating Principle

An optical liquid level sensor uses an infra-red LED and phototransistor accurately positioned at the base of the sensor's tip. When the tip is air, infra-red light reflects internally round the tip to the phototransistor providing good optical coupling between the two. When the sensor's tip is immersed in liquid, the infra-red light escapes from the tip causing a change in the amount of light at the phototransistor which makes the output change state.



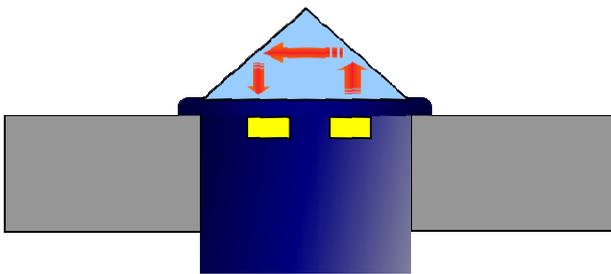
Application Note

Optical Liquid Level Sensor Mounting Guide

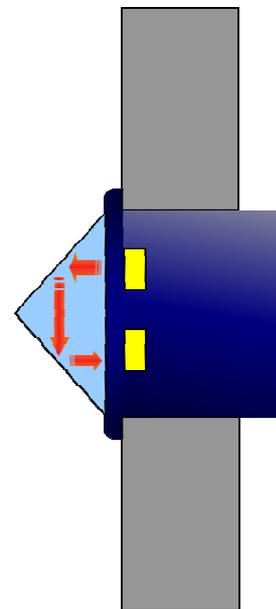
Optical liquid level sensors must be mounted from the side or from the bottom for proper use. Mounting sensors from the top down must be avoided to stop false readings caused by liquid droplets holding to the sensing tip.

Optical liquid level sensor performance can be affected by reflective surfaces in front of the sensing tip. Contact SST Sensing if you wish to use a sensor within 10mm of a reflective surface.

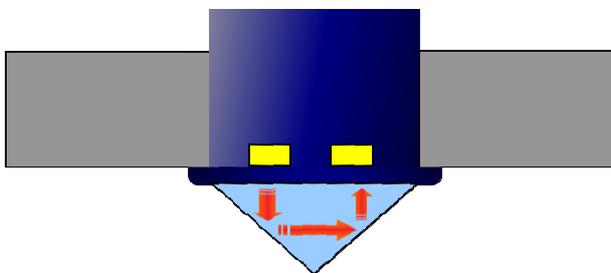
Mounted from the bottom up



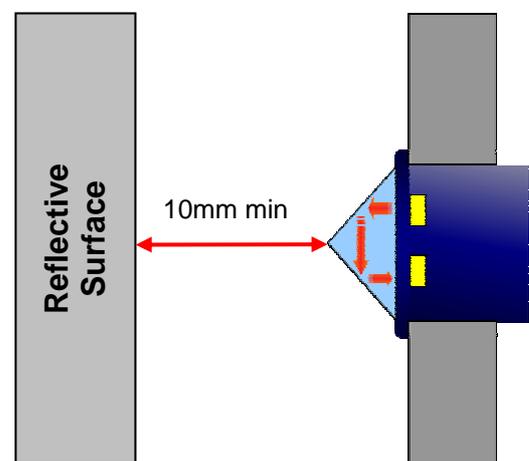
Mounted from the side



DO NOT mount from the top down



Avoid reflective surfaces within 10mm of sensing tip



Application Note

Compatible Fluids for Polysulphone

Whilst the following list may be used as a guide and gives common industrial fluids that are typically acceptable, we recommend that before use you check that the fluid you wish to use this device in is compatible with polysulphone. Contact SST Sensing Ltd: info@sstsensing.com

- | | |
|--------------------------|-------------------------|
| Acetic acid - Glacial | Glycerol |
| Acetic acid - 10% | Heptane |
| Ammonia - 88 | Hydrochloric acid 10% |
| Ammonium Hydroxide - 10% | Hydrochloric acid conc. |
| Ammonium Chloride - 10% | Hydrogen Peroxide |
| Aviation spirit | Isopropanol |
| Benzene | Iso-Octane |
| Benzoic acid | Kerosene |
| Bleach | Linseed oil |
| Brine | Magnesium Sulphate |
| Butane | Methanol |
| Butanol | |
| Calcium Nitrate | Motor oil |
| Calcium Hypochlorite | Nitric acid 10% |
| Carbon Tetrachloride | Oils - Vegetable |
| Chromic acid | Oxalic acid |
| Copper Sulphate | |
| Creosote | Petroleum Ether |
| Cyclohexane | Potassium Hydroxide 10% |
| Cyclohexanol | Potassium Hydroxide 50% |
| Detergent solutions | Silicone fluids |
| | Silver Nitrate |
| Diethylamine | Soap solution |
| Diethyl Ether | Sodium Chloride |
| Dioctyl Phthalate | Sodium Hydroxide 10% |
| Edible fats & oils | Sodium Hydroxide 50% |
| Ethanol 50% | Sulphuric acid 10% |
| Ethyl Alcohol | Transformer oil |
| Ethylene Glycol | Turpentine |
| Ferric Chloride | Varnish |
| Formaldehyde | Water |
| Formic acid | White Spirit |

<p>WARNING Personal Injury DO NOT USE these products as safety or Emergency Stop devices or in any other application Where failure of the product could result in Personal injury. Failure to comply with these instructions could Result in death or serious injury.</p>	<p>CAUTION Do not exceed maximum ratings. Although the sensor is protected against supply reversal, it is not recommended. Do not overtighten screw-in type. Do not use chlorinated solvents. Do not mount with dome pointing downwards. Failure to comply with these instructions may result in product damage.</p>
<p>It is the customer's responsibility to ensure that this product is suitable for use in their application. For technical assistance or advice, please email us: info@sstsensing.com</p>	