

## Where Should My Gas Sensor Be Mounted?

The ideal sensor mounting location depends on your application and on the density of the gas you are trying to detect relative to air. For a gas that is denser, or heavier, than air you typically will want to locate the sensor 6-12 in from the floor. For a gas that is lighter than air you will typically want to locate the sensor on or near the ceiling. For gas types which have a density similar to that of air you would typically have sensors installed 4 - 6 feet from the floor which is often referred to as the breathing zone. This breathing zone is a good location for most sensors, as many common gasses often disperse well in air.

Gas sensors should be placed as close to the potential gas source as possible or areas where gas may buildup. For example, near the compressor/piping or in enclosed areas of equipment. Avoid placing sensors near room entrances, fresh air intake vents, or vehicle/generator exhaust points. You will want to avoid areas where rapid air movement occurs but also avoid areas where there is little or no air movement. You should also consider accessibility to the sensor for calibration and other maintenance tasks that need to be regularly performed.

The information in this document should be used in conjunction with a site survey performed by a certified industrial hygienist or other certified safety professional to annotate the location and quantity of detection devices that are appropriate for your site. If you have any questions, please contact your product distributor or the Otis Instruments Technical Support Department.

On or Near the Ceiling		
Ammonia - NH <sub>3</sub>	Hydrogen - H <sub>2</sub>	Methane - CH <sub>4</sub>
Breathing Zone 4 - 6 ft from Floor to Sensor Housing		
Acetylene - C <sub>2</sub> H <sub>2</sub>	Oxygen - O <sub>2</sub>	Carbon Monoxide - CO
Carbon Dioxide - CO <sub>2</sub>	Nitric Oxide - NO	Nitrogen Dioxide - NO <sub>2</sub>
Ethylene - C <sub>2</sub> H <sub>4</sub>	Phosphine - PH <sub>3</sub>	Formaldehyde - CH <sub>2</sub> O
Silane - SiH <sub>4</sub>		
18 in from Floor to Sensor Housing		
Hydrogen Sulphide - H <sub>2</sub> S		
6 - 12 in from Floor to Sensor Housing		
Acetone - C <sub>3</sub> H <sub>6</sub> O	Benzene - C <sub>6</sub> H <sub>6</sub>	Butane/Isobutane - C <sub>4</sub> H <sub>10</sub>
Chlorine - Cl <sub>2</sub>	Diesel Fuel	Ethanol - C <sub>2</sub> H <sub>6</sub> O
Fluorine - F <sub>2</sub>	Gasoline	Hexane - C <sub>6</sub> H <sub>14</sub>
Hydrogen Chloride - HCl	Hydrogen Fluoride - HF	Hydrogen Cyanide - HCN
Isobutylene - C <sub>4</sub> H <sub>8</sub>	Isopropyl Alcohol C <sub>3</sub> H <sub>8</sub> O	Jet Fuel
Methanol - CH <sub>4</sub> O	Ozone - O <sub>3</sub>	Pentane C <sub>5</sub> H <sub>12</sub>
Propane - C <sub>3</sub> H <sub>8</sub>	Propylene - C <sub>3</sub> H <sub>6</sub>	Sulfur Dioxide - SO <sub>2</sub>
Toluene - C <sub>7</sub> H <sub>8</sub>	Xylene - C <sub>8</sub> H <sub>10</sub>	