



Be Right™



Orbisphere 312xx Hydrogen Sensors

The Orbisphere patented Thermal Conductivity sensor has been developed to give continuous H₂ measurements in gas phase or dissolved in a liquid. The measuring technique is a combination of a gas diffusion membrane and a solid-state gas thermal conductivity detector.

A micro volume enclosed between a semi-permeable membrane and a thermal conductivity detector is periodically flushed with a purge gas. After each purge, the gas to be measured diffuses from the sample through the membrane, changing the thermal conductivity of the gas surrounding the detector. A change in thermal conductivity modifies the detector resistivity. This is measured, together with temperature, to calculate the gas concentration.

- Continuous H₂ measurements
- Selective measurement, result unaffected by the presence of other gases
- Fast response time to improve plant productivity
- Compact design for easy insertion into a process line or a flow chamber

Part Number	Range	Standard Range	Accuracy	Wetted Materials	USD Price
31290TC	Range at 25 °C Membrane 29561A: 0 - 2 ppm, or 0 - 25 cc/kg, or 0 - 1.5 bar Membrane 2952A: 0 - 10 ppm, or 0 - 120 cc/kg, or 0 - 6 bar Membrane 2935A: 0 - 20 ppm, or 0 - 220 cc/kg, or 0 - 12 bar		(Sample temp. 20 - 50°C within ± 5°C of calibration temperature) The greater of Membrane 29561A: ±1% of reading, or ±2 ppb, or ±0.03 cc/kg, or ±1.5 bar Membrane 2952A: ±1% of reading, or ±8 ppb, or ±0.1 cc/kg, or ±6 mbar Membrane 2935A: ±1% of reading, or ±25 ppb, or ±0.4 cc/kg, or ±20 mbar		Contact Hach

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31290HP	<p>Range at 25 °C</p> <p>Membrane 29561A: 0 - 2 ppm, or 0 - 25 cc/kg, or 0 - 1.5 bar</p> <p>Membrane 2952A: 0 - 10 ppm, or 0 - 120 cc/kg, or 0 - 6 bar</p> <p>Membrane 2935A: 0 - 20 ppm, or 0 - 220 cc/kg, or 0 - 12 bar</p>		<p>(Sample temp. 20 - 50°C within ± 5°C of calibration temperature)</p> <p>The greater of</p> <p>Membrane 29561A: ±1% of reading, or ±2 ppb, or ±0.03 cc/kg, or ±1.5 bar</p> <p>Membrane 2952A: ±1% of reading, or ±8 ppb, or ±0.1 cc/kg, or ±6 mbar</p> <p>Membrane 2935A: ±1% of reading, or ±25 ppb, or ±0.4 cc/kg, or ±20 mbar</p>		Contact Hach
31230.01	<p>Range at 25 °C</p> <p>Membrane 2956A: 0 - 75 ppb or 0 Pa - 5 kPa</p> <p>Membrane 2952A: 0 - 300 ppb or 0 Pa - 20 kPa</p> <p>Membrane 2995A: 0 - 3200 ppb or 0 Pa - 200 kPa</p> <p>Membrane 29015A: 0 ppb - 32 ppm or 0 - 2000 kPa</p>		<p>The greater of ±1% of reading, or ±0.03 ppb, or ±1 Pa (Membrane 2956A)</p>		Contact Hach
31292HP	<p>Range at 25 °C</p> <p>Membrane 29561A: 0 - 2 ppm, or 0 - 25 cc/kg, or 0 - 1.5 bar</p> <p>Membrane 2952A: 0 - 10 ppm, or 0 - 120 cc/kg, or 0 - 6 bar</p> <p>Membrane 2935A: 0 - 20 ppm, or 0 - 220 cc/kg, or 0 - 12 bar</p>		<p>(Sample temp. 20 - 50°C within ± 5°C of calibration temperature)</p> <p>The greater of</p> <p>Membrane 29561A: ±1% of reading, or ±2 ppb, or ±0.03 cc/kg, or ±1.5 bar</p> <p>Membrane 2952A: ±1% of reading, or ±8 ppb, or ±0.1 cc/kg, or ±6 mbar</p> <p>Membrane 2935A: ±1% of reading, or ±25 ppb, or ±0.4 cc/kg, or ±20 mbar</p>		Contact Hach

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