



## Orbisphere Hydrogen (H<sub>2</sub>) EC Sensor in stainless steel with EPDM O-ring (100 bar)

**Product #:** 31230.01  
**AED Price:** Contact Hach

### Allows you to monitor hydrogen in the power production process.

The unique polarographic sensor design is a proven performer wherever knowledge of H<sub>2</sub> content is critical. From corrosion monitoring in power generators to chemical manufacturing, this sensor provides fast, accurate hydrogen measurements, in gaseous or liquid samples.

A wide range of temperature and pressure ranges is made possible by the exclusive valve seat sealing, whereby the sensor cathode is mechanically tensioned against a ceramic valve seat to ensure the integrity of the seal. This design enables a vanishingly small residual signal, for improved accuracy.

All these hydrogen sensors use the deep-draw membrane mounting method for a uniformly thin layer of electrolyte for faster response and superior stability. Coupled with a screw-on protection cap, the sensor provides in-service intervals of up to a year.

#### Guard Ring Electrode Design

An auxiliary guard ring electrode surrounds the working electrode to shield against the influence of other gases and improve stability.

#### Rugged Construction

Use for harsh chemicals, hot CIP and high pressure situations.

#### Flexibility

Installs in-line for process control, or in flow chamber for spot measurement. Cable detaches at sensor end for installation and maintenance flexibility.

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## Specifications

Accuracy:	The greater of ±1% of reading, or ±0.09 ppb, or ±6 Pa (Membrane 2952A)
Ambient temperature:	-5 - 100 °C (23 - 212 °F)
Application:	Corrosion rate
Certifications:	IP68 / NEMA4
Flow rate:	Typical Flow Rate
	Membrane 2956A: 50 - 220 mL/min
	Membrane 2952A: 40 - 200 mL/min
	Membrane 2995A: 20 - 70 mL/min
	Membrane 29015A: 20 - 40 mL/min
Measuring range:	Range at 25 °C

	Membrane 2956A: 0 - 75 ppb or 0 Pa - 5 kPa
	Membrane 2952A: 0 - 300 ppb or 0 Pa - 20 kPa
	Membrane 2995A: 0 - 3200 ppb or 0 Pa - 200 kPa
	Membrane 29015A: 0 ppb - 32 ppm or 0 - 2000 kPa
Protection class:	IP68 / NEMA4
Purge connection:	None
Radiation resistance level:	Membrane 2956A: $2 \times 10^4$ rad
	Membrane 2952A: $10^8$ rad
	Membrane 2995A: $10^8$ rad
	Membrane 29015A: N/A
Sample pressure:	0 - 100 bar
Temperature range:	Accurate from -5 - 50 °C (23 - 122 °F)
	Resistant - temperature from -5 - 100 °C (23 - 212 °F)
Warranty:	6 months
Weight:	140 - 700 g, depending on the construction material
What's included?:	Sensor only.
	Controller, sensor cable, flow-chamber or process connection must be ordered separately.

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