



Orbisphere Hydrogen (H₂) 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 H₂ 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.

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: 2×10^4 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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