



## **Orbisphere 311xx Oxygen Sensors**

The patented polarographic sensor design of the ORBISPHERE 311xx Sensors is a proven performer wherever knowledge of O<sub>2</sub> content is critical.

From beverage quality control to corrosion monitoring in power generators, from package sampling to chemical manufacturing, these sensors provide fast, accurate oxygen measurements, in gaseous or liquid samples.

A wide range of temperature and pressure ranges is made possible by ORBISPHERE's 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 ORBISPHERE oxygen 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 improves speed of response and reduces interferences.
- Installs in-line for process control, or in flow chamber for spot measurement.
- Cable detaches at sensor end for installation and maintenance flexibility.

Part Number	Wetted Materials	Accuracy	Range	USD Price
31120A.01	`	±1% of reading, or ± lower measurement range,	Range at 25 °C	Contact Hach
		whichever is greater	2935A : 10 ppb-400 ppm or 20 Pa-1,000 kPa	
			2952A : 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A: 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A : 2 ppb-80 ppm or 5 Pa-200 kPa	

Part Number	Wetted Materials	Accuracy	Range	USD Price
31110.02	±1% of reading, or ± lower measurement range, whichever is greater	Range at 25 °C 2935A: 10 ppb-400 ppm or	Contact Hach	
			20 Pa-1,000 kPa	
			2952A : 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A : 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A : 2 ppb-80 ppm or 5 Pa-200 kPa	
31120.01		±1% of reading, or ± lower measurement range,	Range at 25 °C	Contact Hach
		whichever is greater	2935A: 10 ppb-400 ppm or 20 Pa-1,000 kPa	
			2952A: 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A: 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A: 2 ppb-80 ppm or 5 Pa-200 kPa	
31110A.02		±1% of reading, or ± lower measurement range, whichever is greater	Range at 25 °C	Contact Hach
			2935A: 10 ppb-400 ppm or 20 Pa-1,000 kPa	
			2952A: 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A: 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A: 2 ppb-80 ppm or 5 Pa-200 kPa	
31130.01		$\pm 1\%$ of reading, or $\pm$ lower measurement range, whichever is greater	Range at 25 °C	Contact Hach
			2935A : 10 ppb-400 ppm or 20 Pa-1,000 kPa	
			2952A : 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A : 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A : 2 ppb-80 ppm or 5 Pa-200 kPa	

Part Number	Wetted Materials	Accuracy	Range	USD Price
31130A.01		±1% of reading, or ± lower measurement range, whichever is greater	Range at 25 °C	Contact Hach
			2935A : 10 ppb-400 ppm or 20 Pa-1,000 kPa	
			2952A : 1 ppb-80 ppm or 5 Pa-200 kPa	
			2956A: 0.1 ppb-20 ppm or 0.25 Pa-50 kPa	
			29552A : 2 ppb-80 ppm or 5 Pa-200 kPa	