



Be Right™



## Hach Orbisphere Electrochemical Oxygen (O<sub>2</sub>) Sensor, Stainless Steel, 50 bar, EPDM O-Ring, with fast temperature changes option

Product #:  
AED Price:

31120A.01  
Contact Hach

Hazardous



### ORBISPHERE 311XX - the ultimate in O<sub>2</sub> sensors

The unique polarographic sensor design 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, this sensor provides fast, accurate oxygen 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 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.

#### From trace levels to super saturation

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

#### Unrivalled detection limit of ±0.1 ppb or 100 ppt

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

#### 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.

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## Specifications

Accuracy:	±1% of reading, or ± lower measurement range, whichever is greater
Ambient temperature:	-5 - 100 °C (23 - 212 °F)
Certifications:	2004/108/EC - EN 61326-1
Fast Temperature Change Option:	Yes, 50 bar
Flow rate:	Recommended flow rate in flow chamber
	2935A: 20 mL/min
	2952A: 30 mL/min
	2956A: 180 mL/min

	29552A: 50 mL/min
Material:	O-Ring: EPDM
Measuring range:	Range at 25 °C
	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
Parameter:	Oxygen
Protection class:	IP68 / NEMA4
Response time:	2935A: 2.5 min
	2952A: 38 s
	2956A: 7.2 s
	29552A: 90 s
Sample pressure:	0 - 50 bar
Sensor material:	Stainless Steel
Special Features:	Silver guard ring
Temperature range:	Temperature compensated range from -5 - 50 °C (23 - 122 °F)
Warranty:	24 months
Weight:	0.6 kg
What's included?:	Sensor and manual.
	Controller, sensor cable, flow-chamber or process connection must be ordered separately.

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