Hach Orbisphere GA2400/GA2800 **Oxygen Sensors**

Applications

- Beverage
- Boiler Water
- Cooling Water
- Industrial Water
- Ultrapure Water





Highly accurate and customizable oxygen measurement for all environments

The Hach® Orbisphere GA2400 & GA2800 EX oxygen (${\rm O_2}$) Electrochemical (EC) sensors are designed for process monitoring of dissolved oxygen in ppm or ppb environments. It can also be utilized as part of laboratory analysis of oxygen in the liquid or gas phases.

The Hach Orbisphere GA2400 can be used for a wide range of non-harsh applications, including beer or soft-drinks production, rinsing of semiconductor wafers in chip-manufacturing plants, and reactor coolant systems in nuclear power plants.

The Hach Orbisphere GA2800 EX sensor is suitable for harsh environments, including chemical, oil, or petrochemical plants.

There are several different pre-mounted membrane kits, able to be customized to fulfill any particular process requirements and oxygen measurement ranges required. This allows for low measurement ranges of 0.1 ppb, or even very high measurement ranges of 400 ppm.

Easy and fast maintenance

Traditional cleaning processes can take more than thirty minutes to complete. The GA2400 and GA2800 come with an innovative cartridge system that contains everything needed to complete membrane and electrolyte solution change in less than 5 minutes.

Low level oxygen measurement and unrivaled accuracy

The Hach Orbisphere GA2400 and GA2800 EX utilize an electrochemical oxygen sensor with a lower detection level of 0.1 ppb and unrivaled highly accurate readings of ±1%. This feature allows users to ensure control of low oxygen levels, for product and equipment integrity and avoiding corrosion.

Robust for harsh environments

The robust stainless steel or Hastelloy design makes the GA2400 and GA2800 EX sensor ideal for the most demanding applications. ATEX certification comes standard in all GA2800 units, making the sensor especially suitable for harsh chemical environments.

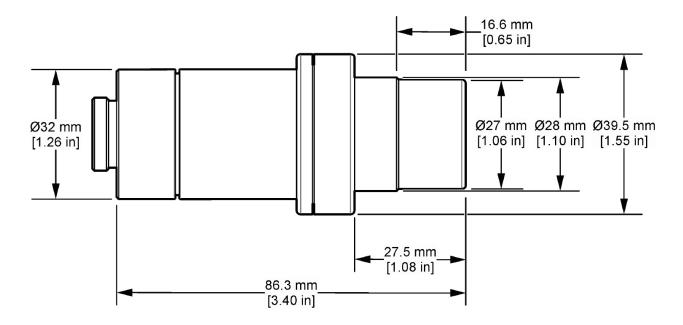


Technical Data*

Model	GA2400	GA2800
Certifications	2004/108/EC - EN 61326-1	ATEX
Sample Pressure	0 - 40 bar (GA2400-S0S: 0 - 100 bar)	0 - 100 bar
Wetted Materials	Stainless Steel 1.4404 (AISI 316L) No O-rings are in contact with the sample.	Hastelloy or Stainless Steel No O-rings are in contact with the sample.
Material	EPDM O-rings	Kalrez or Viton O-rings
Ambient Temperature	-5 - 100 °C (23 - 212 °F), due to electrolyte, but sensor will not be damaged up to 200 °C (392 °F), mechanical	
Flow Rate	Recommended flow rate in flow chamber 2935A-A: 25 mL/min 2952A-A: 50 mL/min 2956A-A: 180 mL/min 29552A-A: 50 mL/min 29552A-A: 50 mL/min	
Protection Class	IP66	
Range	Range at 25 °C (77 °F) 2935A-A: 10 ppb - 400 ppm or 20 Pa - 1,000 kPa 2952A-A: 1 ppb - 80 ppm or 5 Pa - 200 kPa 2956A-A: 0.1 ppb - 20 ppm or 0.25 Pa - 50 kPa 29552A-A: 2 ppb - 80 ppm or 5 Pa - 200 kPa	
Accuracy	±1% of reading, or ± lower measurement range, whichever is greater	
Response Time	2935A-A: 2.5 min 2952A-A: 38 s 2956A-A: 7.2 s 29552A-A: 90 s	
Temperature Range	-5 - 60 °C (23 - 140 °F), without grille, during measurement or -5 - 95 °C (23 - 203 °F), with grille	
Weight	0.3 kg (0.66 lbs)	

*Subject to change without notice.

Dimensions



Order Information

GA2400 Oxygen Sensors

GA2400-S00 Orbisphere GA2400 Stainless Steel Oxygen Sensor (EC), 40 bar, EPDM O-rings

GA2400-S00T Orbisphere GA2400 Stainless Steel Oxygen Sensor (EC) for 6110 TPO Analyser, 40 bar, EPDM O-rings

GA2400-S0S Orbisphere GA2400 Stainless Steel Oxygen Sensor (EC), 100 bar, EPDM O-rings

GA2800 ATEX Oxygen Sensors

GA280E-HKS Orbisphere GA2800 ATEX Oxygen Sensor (EC), Hastelloy, 100 bar, Kalrez O-rings

GA280E-HVS Orbisphere GA2800 ATEX Oxygen Sensor (EC), Hastelloy, 100 bar, Viton O-rings

GA280E-SKS Orbisphere GA2800 ATEX Oxygen Sensor (EC), Stainless Steel, 100 bar, Kalrez O-rings

GA280E-SVS Orbisphere GA2800 ATEX Oxygen Sensor (EC), Stainless Steel, 100 bar, Viton O-rings

Accessories

33051-S0 Protection cap for GA2400 oxygen sensors, stainless steel, 28 mm, without grille
 33051-SP Protection cap for GA2400 oxygen sensors, stainless steel, 28 mm, with grille
 32001.011 Flow chamber in stainless steel (316) with ¼" fittings. Supplied with EPDM O-rings.
 32001.010 Flow chamber in stainless steel (316) with 6 mm fittings. Supplied with EPDM O-rings.

2952A-A Recharge kit of 4 pre-filled cartridges with premounted 2952A membranes29552A-A Recharge kit of 4 pre-filled cartridges with premounted 29552A membranes

29552A-AV Recharge kit, 29552A membranes (4x), Viton O-rings

2956A-A Recharge kit of 4 pre-filled cartridges with premounted 2956A membranes

2956A-AV Recharge kit, 2956A membranes (4x), Viton O-rings

29781 Polishing kit for O₃ and H₂ sensors, incl. 3 μm powder (29331) and cloth

32301.A Electrochemical sensor cleaning and regeneration unit, 115 VAC



With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

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