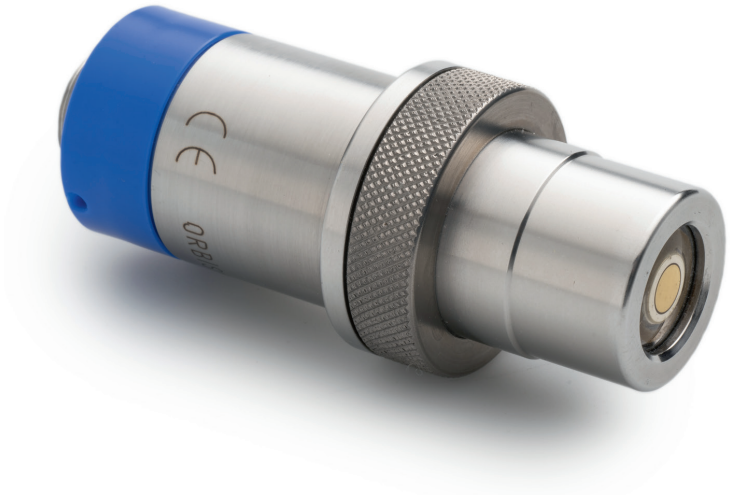
Hach Orbisphere GA2400/GA2800 Oxygen Sensors

Applications

- Beverage
- Boiler water
- Cooling water
- Industrial water
- Ultrapure water



Highly accurate and customisable oxygen measurement for all environments

The Hach® Orbisphere GA2400 & GA2800 EX oxygen (O_2) Electrochemical (EC) sensors are designed for process monitoring of dissolved oxygen in ppm or ppb environments. It can also be utilised 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 waters 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 customised 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 EX 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 utilise 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

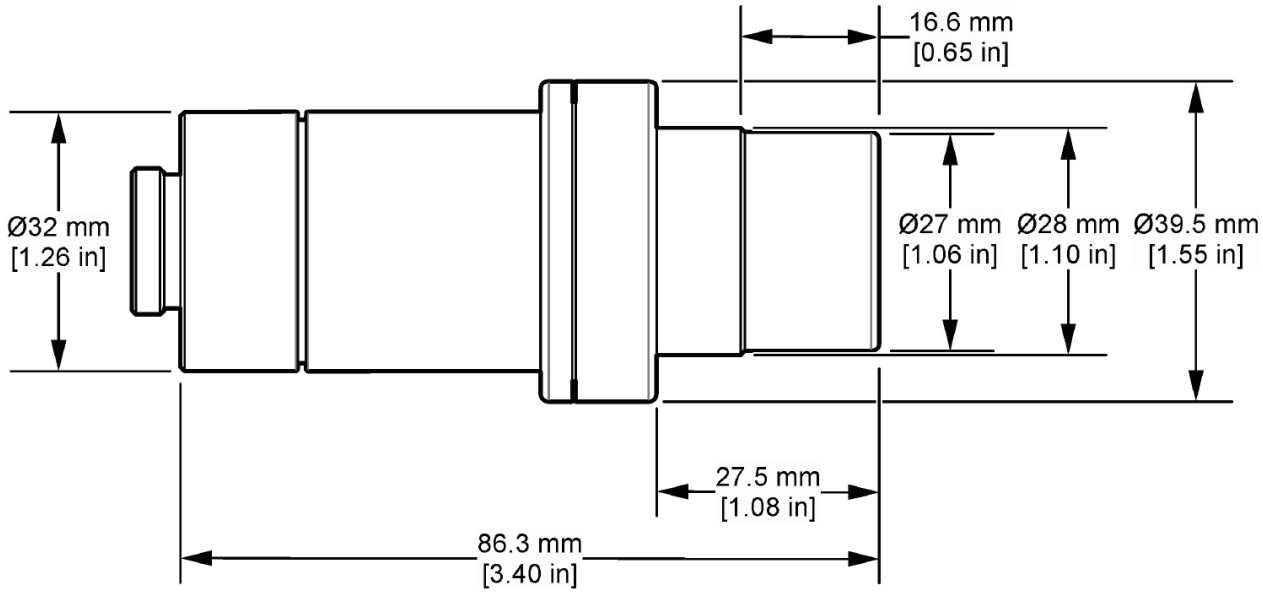
The robust stainless steel or Hastelloy design makes the GA2400 and GA2800 EX sensor ideal for the most demanding applications. ATEX certification comes standard in all GA2800 units, making the sensor especially suitable for harsh chemical environments.

Technical Data*

Model	GA2400	GA2800 EX
Certifications	CE	CE, Ex II 1 G, Ex ia IIC T6
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
Pressure resistance	40 bar minimum with default PPS collar (100 bar with stainless steel collar)	
Temperature resistance	-5 - 100 °C	
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	
Protection class	IP66	
Measuring range	Range at 25 °C 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	Accuracy = Trueness (ISO 57251) 2935A-A: The greater of ±1% of reading or ± 10 ppb, or ± 20 Pa 2952A-A: The greater of ±1% of reading or ± 2 ppb, or ± 5 Pa 2956A-A: The greater of ±1% of reading or ± 0.1 ppb[1], or ± 1 ppb[2], or ± 0.25 Pa 29552A-A: The greater of ±1% of reading or ± 2 ppb, or ± 5 Pa *[1] Accuracy is ± 0.1 ppb for 410, 510, 362x, 360x and 3655 instruments* *[2] Accuracy is ± 1 ppb for 366x and 3650 instruments*	
Response time	Response time at 25 °C for a 90% signal change 2935A-A: 2.5 min 2952A-A: 38 s 2956A-A: 7.2 s 29552A-A: 90 s	
Temperature compensation	-5 - 60 °C	
Weight	0.3 kg	

**Subject to change without notice.*

Dimensions


16.6 mm
[0.65 in]
Ø32 mm
[1.26 in]
Ø27 mm
[1.06 in]
Ø28 mm
[1.10 in]
Ø39.5 mm
[1.55 in]
27.5 mm
[1.08 in]
86.3 mm
[3.40 in]

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, FFKM/FFPM O-rings
GA280E-HVS	Orbisphere GA2800 ATEX Oxygen Sensor (EC), Hastelloy, 100 bar, FKM/FPM O-rings
GA280E-SKS	Orbisphere GA2800 ATEX Oxygen Sensor (EC), Stainless Steel, 100 bar, FFKM/FFPM O-rings
GA280E-SVS	Orbisphere GA2800 ATEX Oxygen Sensor (EC), Stainless Steel, 100 bar, FKM/FPM 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 membranes
29552A-A	Recharge kit of 4 pre-filled cartridges with premounted 29552A membranes
29552A-AV	Recharge kit, 29552A membranes (4x), FKM/FPM O-rings
2956A-A	Recharge kit of 4 pre-filled cartridges with premounted 2956A membranes
2956A-AV	Recharge kit, 2956A membranes (4x), FKM/FPM O-rings
29781	Polishing kit for O_3 and H_2 sensors, incl. 3 µm powder (29331) and cloth
32301.B	Electrochemical sensor cleaning and regeneration unit, 230 VAC

Hach Service Protects Your Investment

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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