HACH®
Be Right™

Dissolved Oxygen: Hach LDO sc Probe, Model 2

Applications
- Wastewater
- Industrial
- Drinking Water

Accurate monitoring of dissolved oxygen in source water and for precise aeration process control

No Calibration Required

The Hach LDO sc probe uses luminescent dissolved oxygen technology. Traditional membrane-style DO probes require sensor calibration, which increase maintenance requirements.

No Membranes to Replace

There is virtually no maintenance with Hach's breakthrough luminescent technology. There are no membranes to replace, no electrolyte solution to replenish, and no anode or cathode to clean.

No Missed Cleaning Cycles

The Hach LDO sc probe is equipped with Prognosys, a predictive diagnostic system, that allows you to be proactive in your maintenance by alerting you to upcoming instrument issues. Know with confidence whether changes in your dissolved oxygen level measurements are due to changes in your instrument or your water. To make sure routine cleaning cycles are never missed, the probe offers operators customizable diagnostic alert indicators, ensuring the probe can operate at its maximum performance level.

Customizable service indicators trigger a service message so that a cleaning cycle is never missed.

No Drift Technology

Cutting-edge 3D calibration procedure is conducted prior to shipping, the DO probe will not drift and is more accurate than ever before, compared to membrane style probes.

No Complications

Our newest Model 2 DO probe has a robust design with a smaller footprint allows for easier handling with enhanced durability.

Technical Data*

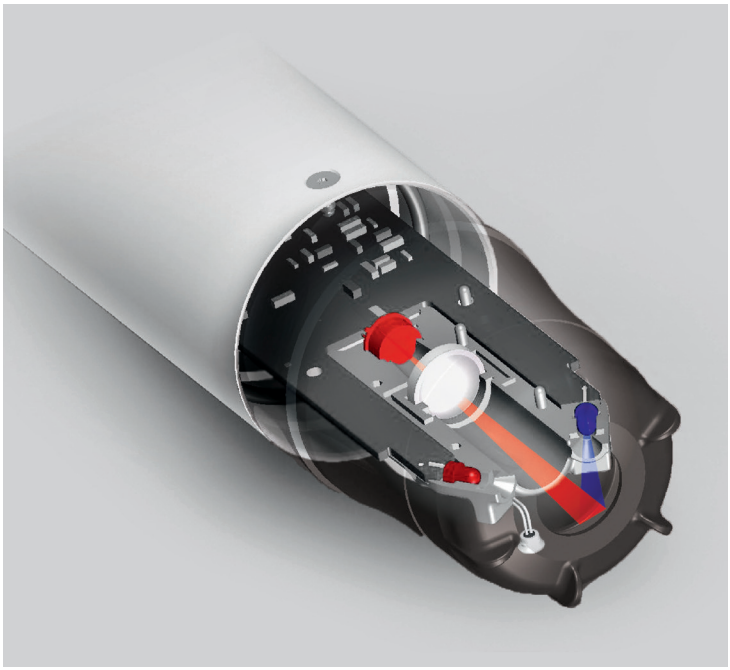
Range	0 - 20.00 ppm 0 - 20.00 mg/L 0 - 200% saturation
Accuracy	± 0.1 ppm Below 5 ppm ± 0.2 ppm Above 5 ppm
Response Time	T_{90} < 40 s T_{95} < 60 s
Resolution	0.01 ppm (mg/L) 0.1% saturation
Repeatability	± 0.1 ppm (mg/L)
Flow Rate	None required
Sensor Immersion Depth	Down to 34 m (112 ft.), 345 kPa (50 psi), maximum; accuracy may not be maintained at this depth
Transmission Distance	400 m (1312 ft.) maximum when used with a termination box
Cable Length	10 m (options with 30 m, 60 m)
Dimensions (D x L)	48.25 mm x 254 mm
Weight	1 kg (2.2 lbs), probe only
Warranty	36 months

**Subject to change without notice.*

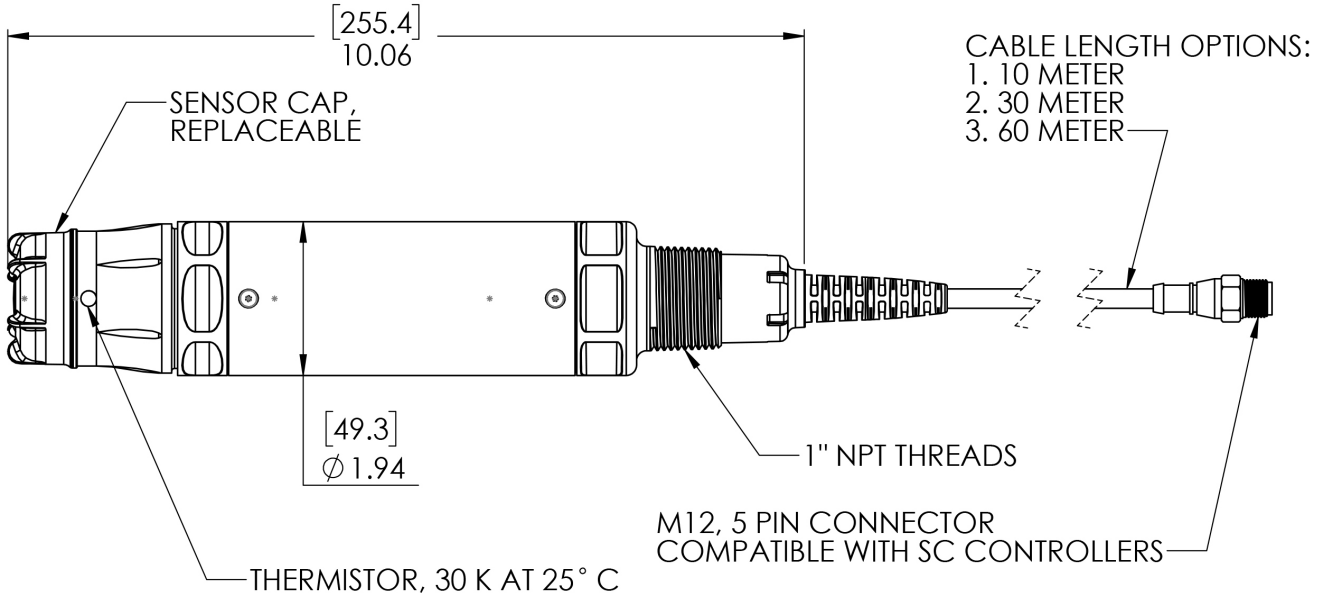
Principle of Operation

The Hach LDO sc sensor is coated with a luminescent material. Blue light from an LED is transmitted to the sensor surface. The blue light excites the luminescent material. As the material relaxes it emits red light. The time it takes for the red light to be emitted is measured. Between the flashes of blue light, a red LED is flashed on the sensor and used as an internal reference.

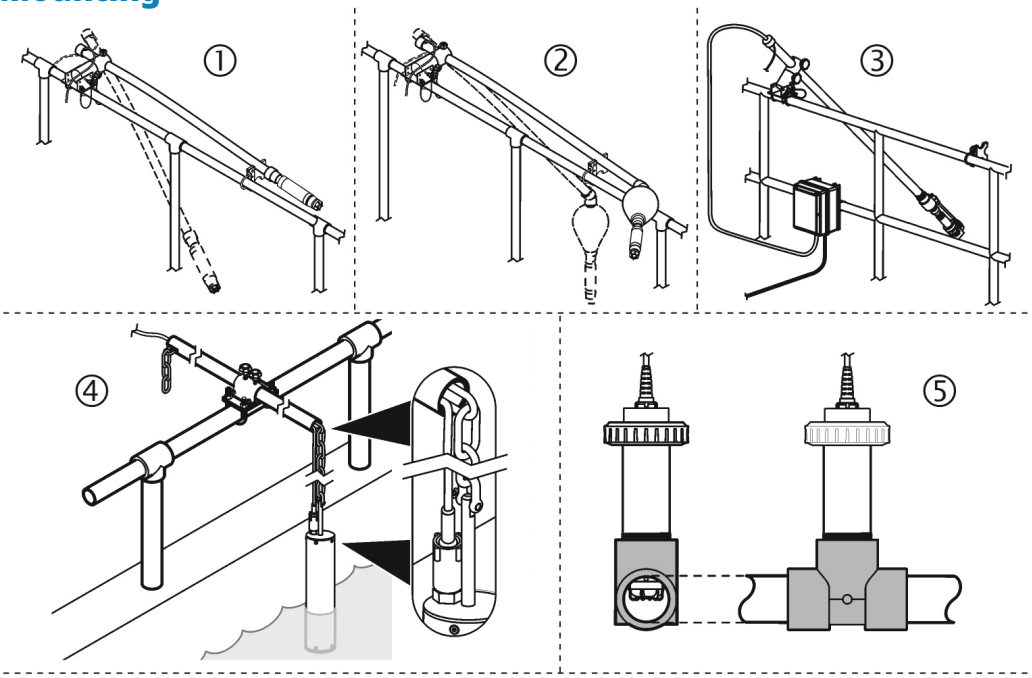
Increased oxygen in the sample decreases the time it takes for the red light to be emitted. The time measurements correlate to the oxygen concentration.



Dimensions



Installation / Mounting



1 Rail mount

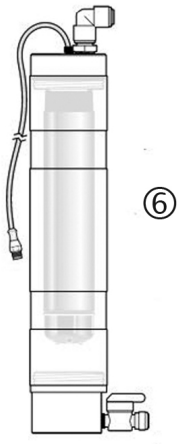
2 Float mount

3 Air blast system mount

4 Chain mount

5 Union mount

6 Flow cell mount



Order Information

Sensor

9020000	Hach LDO 2 sc Dissolved Oxygen Probe
9020000-UPGRADE	Hach LDO 2 sc Dissolved Oxygen Probe, with Mounting Conversion Adapter

Please note that a Hach SC controller is required to operate the LDO sc Sensor, controller must be purchased separately.

Accessories

5867000	Digital Termination Box
5796000	Digital Extension Cable, 7.7 m (25 ft.)
5796100	Digital Extension Cable, 15 m (50 ft.)
5796200	Digital Extension Cable, 30 m (100 ft.)
6860000	High Output Air Blast Cleaninn System, 115 VAC
6860100	High Output Air Blast Cleaning System, 230 VAC
9253500	Air Blast Hardware Components

Replacements and Parts

9021100	LDO sc Model 2 Sensor Cap Replacement Kit

Mounting Kits

9253000	Pole Mount Kit, PVC
9253100	Ball Float Mount Kit, PVC
9257000	Union Mount Kit, PVC
9253400	Mounting Conversion Adapter, LDO sc Model 1 to LDO sc Model 2
7300800	1" NPT sc Sensors Flow Cell

Controllers*

SC4500 Digital Controllers

LXV525.99A11551	SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, without plug
LXV525.99A11541	SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 1 mA Input, without plug
LXV525.99A11501	SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord

SC1000 Digital Controllers

LXV402.99.00002	SC1000 Display Module
LXV400.99.1R572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1B572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, Modbus® RS485, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1F572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, Profibus® DP, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1R582	SC1000 Probe Module, 6 Sensors, 4x 4-20mA Out, 4x 4-20mA In, 4x Relays, 100-240 V AC with Conduits

Additional controller configurations are available. Please contact Hach Technical Support or your Hach representative.

Enable the Benefits of Smart Monitoring

This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

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 maximize instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

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