



Dissolved Oxygen: Hach LDO sc Probe, Model 2

Applications

- Wastewater
- Industrial
- Drinking Water
- Aquaculture



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*

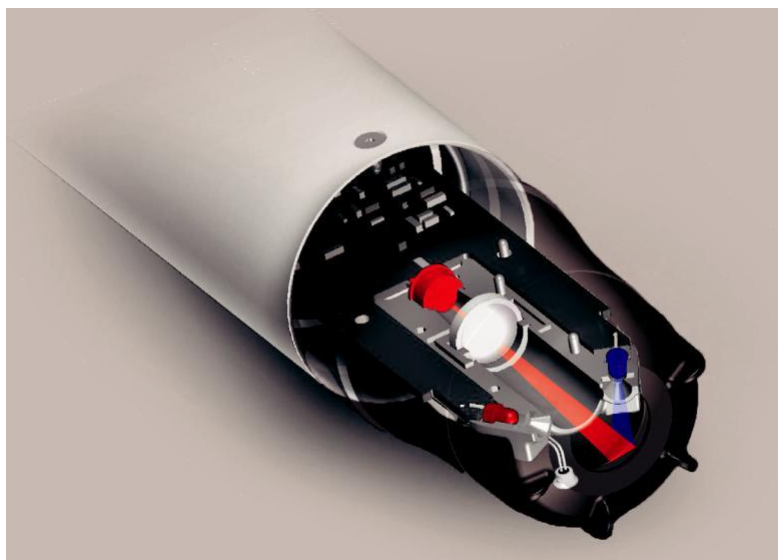
Measuring range	0 - 20.00 ppm	Flow rate	None required
	0 - 20.00 mg/L	Immersion depth	Down to 34 m (112 ft.), 345 kPa (50 psi), maximum; accuracy may not be maintained at this depth
	0 - 200% saturation	Transmission distance	400 m (1312 ft.) maximum when used with a termination box
Accuracy	Below 5 ppm: ± 0.1 ppm	Cable length	10 m (options with 30 m, 60 m)
	Above 5 ppm: ± 0.2 ppm	Dimensions (D x L)	48.25 mm x 254 mm
Response time	T ₉₀ < 40 s	Weight	1 kg (2.2 lbs), probe only
	T ₉₅ < 60 s	Warranty	12 months
Resolution	0.01 ppm (mg/L)		
	0.1% saturation		
Repeatability	± 0.1 ppm (mg/L)		

**Subject to change without notice.*

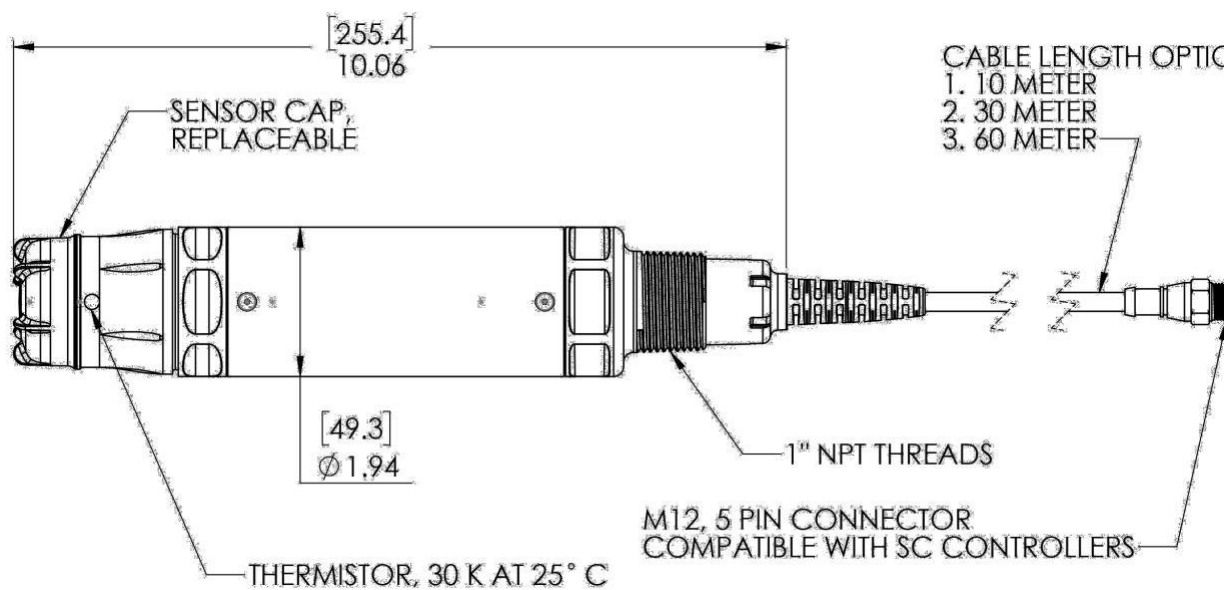
Principle of Operation

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.

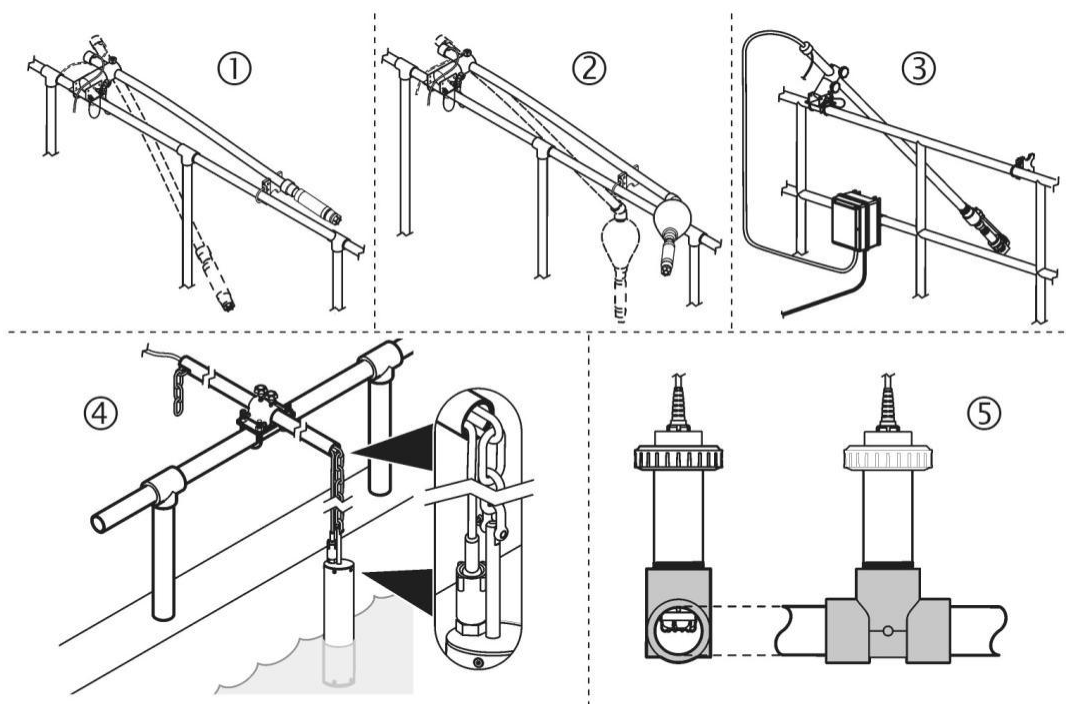
Increased oxygen in the sample decreases the time it takes for the red light to be emitted. The time measurements correlate to the oxygen concentration.



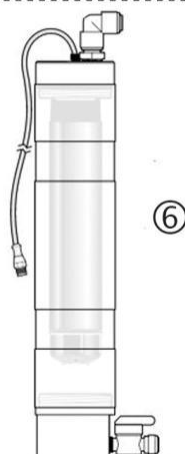
Dimensions



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

LXV416.99.20001 LDO 2 sc
Process Sensor for Dissolved Oxygen, 10
m cable

LXV416.99.20W01 LDO 2 sc Process Sensor for Dissolved
Oxygen, 10 m cable, extended warranty

*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.)

6860100.99.0002 High Output Airblast Cleaning System,
230 VAC

LZY812 LDO 2 sc Cleaning Head

Replacements and Parts

9021150 Replacement Sensor Cap Kit for LDO 2 sc

Mounting Kits

LZY714.99.21810 Pole mounting hardware DO, swivel,
1" NPT, PVC pole 2 m

LZX914.99.42200 Ball float mounting kit

LZX914.99.11200 Chain mount kit for electrochemical
sensor

9253400 Mounting Conversion Adapter, LDO sc
Model 1 to LDO sc Model 2

7300800 pH/DO sc Flow Cell

Controllers

SC4500 Digital Controllers

LXV525.99A11551 SC4500 Controller, Prognosys, 5x mA
Output, 2 Digital Sensors, 100-240
VAC, without power cord

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 LXV402.99.00001

SC1000 Display Module **LXV400.99.2R121** SC1000
Probe Module, 4 Sensors,

4x 4-20mA Out, 4x Relays, 110-240
VAC, EU Cord

LXV400.99.2R521 SC1000 Probe Module, 4 Sensors,
4x 4-20mA Out, 4x 4-20mA In, 4x Relays,
110-240 VAC, EU Cord

LXV400.99.2B031 SC1000 Probe Module, 6 Sensors,
Modbus RS485, 4x Relays, 110-240
VAC, EU Cord

LXV400.99.2F031 SC1000 Probe Module, 6 Sensors,
Profibus DP, 4x Relays, 110-240
VAC, EU Cord

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

