

# DISSOLVED OXYGEN: HACH LDO® PROBE, MODEL 2

## Applications

- Wastewater
- Industrial Water
- Drinking Water



**Take “No” for an answer when measuring dissolved oxygen with the next generation Hach LDO probe.**

### **No Calibration Required**

The Hach LDO probe is ready to work in your process right out of the box with no calibration required for the entire 2-year life of the sensor cap.

### **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**

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

### **No Drift**

A cutting-edge, 3D calibration procedure at the factory makes oxygen measurement with the Hach LDO probe more accurate than ever before.

### **No Complications**

A robust new design gives the Hach LDO enhanced durability and reduced size for easier handling.

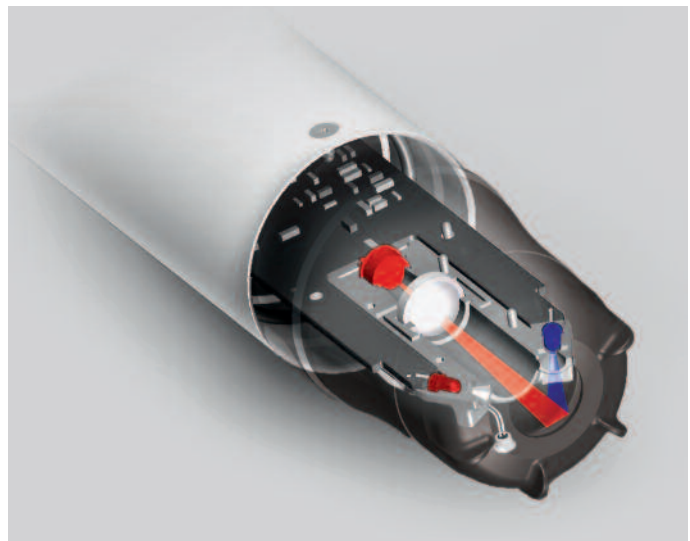
## Specifications\*

<b>Range</b>	0 to 20.00 ppm 0 to 20.0 mg/L (or ppm) 0 to 200 % air saturation	<b>Flow Rate</b>	None required
<b>Accuracy</b>	± 0.05 ppm below 1 ppm ± 0.1 ppm below 5 ppm ± 0.2 ppm above 5 ppm	<b>Sensor Immersion Depth</b>	Down to 345 kPa 345 kPa (50 psi), maximum; accuracy may not be maintained at this depth
<b>Response Time</b>	T <sub>95</sub> < 60 s T <sub>90</sub> < 40 s	<b>Transmission Distance</b>	1000 m (3280 ft.) maximum when used with a termination box
<b>Resolution</b>	0.01 ppm DO 0.1% saturation	<b>Cable Length</b>	10 m (options with 30m, 60m, 100m)
<b>Repeatability</b>	± 0.1 (mg/L) ppm	<b>Dimensions (D x L)</b>	1.9 in x 10 in (48.25 mm x 254 mm)
		<b>Weight</b>	2.2 lbs. (1 kg), probe only <i>*Subject to change without notice.</i>

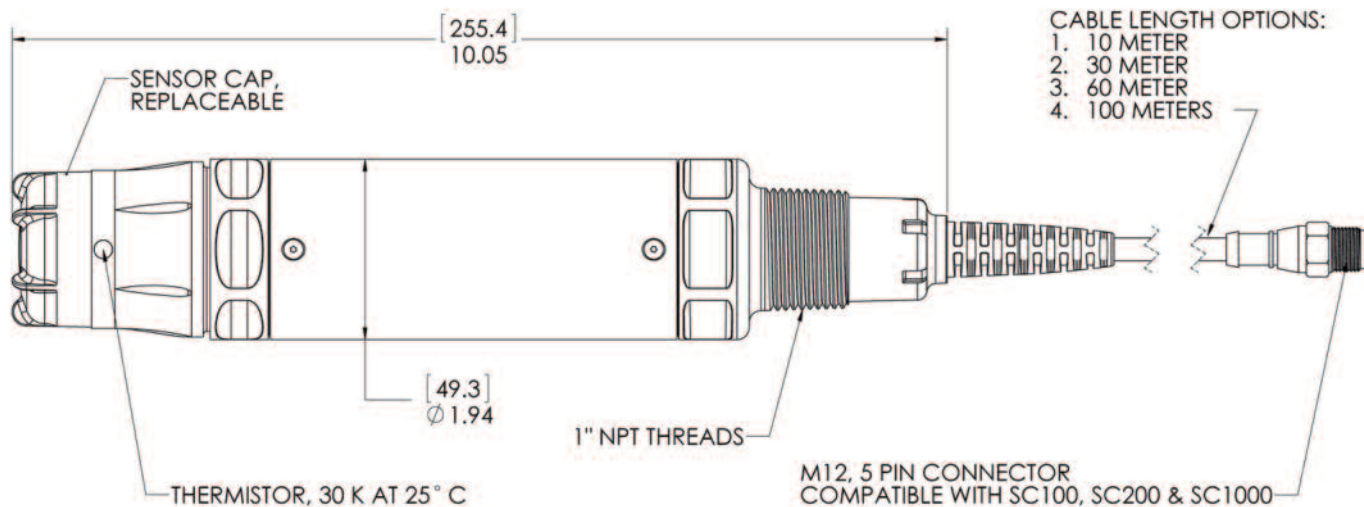
## Principle of Operation

The HACH LDO 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.

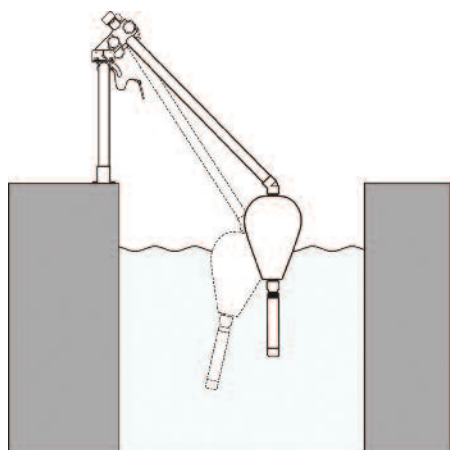
Increased oxygen in the sample decreases the time it takes for the red light to be emitted. The time measurements correlate to the oxygen concentration.



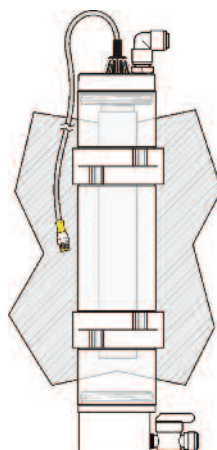
### Dimensions



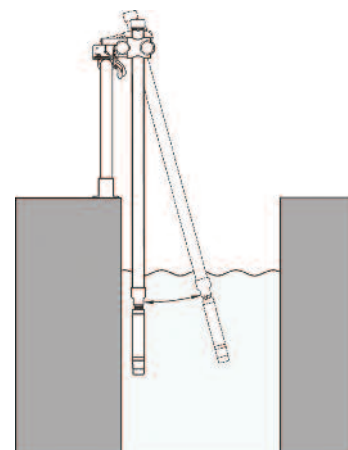
### Installation / Mounting



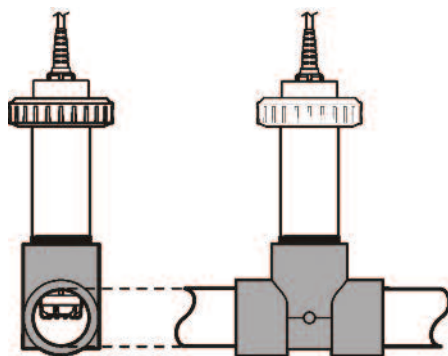
Float Mount Kit



Flow Cell



Pole Mount Kit



Union Mount Kit



Air Blast Cleaning System

## Ordering Information

<b>9020000</b>	Hach LDO Model 2 Probe
<b>9020000-UPGRADE</b>	LDO Probe, Mounting Conversion Adapter
<b>9020000-SC200</b>	LDO Probe, Mounting Conversion Adapter, sc200 controller with 2 channels

### Accessories

<b>5867000</b>	Digital Termination Box
<b>5796000</b>	Digital Extension Cable, 7.7 m (25 ft.)
<b>5796100</b>	Digital Extension Cable, 15 m (50 ft.)
<b>5796200</b>	Digital Extension Cable, 31 m (100 ft.)
<b>6860000</b>	High Output Air Blast Cleaning System, 115 Vac
<b>6860100</b>	High Output Air Blast Cleaning System, 230 Vac
<b>9253500</b>	Air Blast Hardware Components

### Replacement Parts

<b>9021100</b>	LDO Model 2 Sensor Cap Replacement Kit
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### Mounting Kits

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

### Controllers

#### sc200 Digital Controllers

<b>LXV404.99.00552</b>	sc200 controller, 2 channel, digital
<b>LXV404.99.00542</b>	sc200 controller, 2 channel, digital & mA input
<b>LXV404.99.00502</b>	sc200 controller, 1 channel, digital
<b>LXV404.99.00512</b>	sc200 controller, 2 channel, digital & pH/DO
<b>LXV404.99.00522</b>	sc200 controller, 2 channel, digital & Conductivity
<b>LXV404.99.00532</b>	sc200 controller, 2 channel, digital & Flow

#### sc1000 Digital Controllers

<b>LXV402.99.00002</b>	sc1000 Display Module
<b>LXV400.99.1R572</b>	sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In, 4 Relays, 110-230V
<b>LXV400.99.1B572</b>	sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In, 4 Relays, Modbus RS485, 110-230V
<b>LXV400.99.1F572</b>	sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In, 4 Relays, PROFIBUS DP, 110-230V
<b>LXV400.99.1R582</b>	sc1000 Probe Module, 6 sensors, 4 mA Out, 4 mA In, 4 Relays, 110-230V



## HACH COMPANY World Headquarters: Loveland, Colorado USA

United States:	800-227-4224 tel	970-669-2932 fax	orders@hach.com
Outside United States:	970-669-3050 tel	970-461-3939 fax	int@hach.com
<b>hach.com</b>			

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