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*

<table>
<thead>
<tr>
<th>Range</th>
<th>0 to 20.00 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 20.0 mg/L (or ppm)</td>
</tr>
<tr>
<td></td>
<td>0 to 200 % air saturation</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 0.05 ppm below 1 ppm</td>
</tr>
<tr>
<td></td>
<td>± 0.1 ppm below 5 ppm</td>
</tr>
<tr>
<td></td>
<td>± 0.2 ppm above 5 ppm</td>
</tr>
<tr>
<td>Response Time</td>
<td>T_{95} &lt; 60 s</td>
</tr>
<tr>
<td></td>
<td>T_{90} &lt; 40 s</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.01 ppm DO</td>
</tr>
<tr>
<td></td>
<td>0.1% saturation</td>
</tr>
<tr>
<td>Repeatability</td>
<td>± 0.1 (mg/L) ppm</td>
</tr>
</tbody>
</table>

Flow Rate
None required

Sensor Immersion Depth
Down to 345 kPa 345 kPa (50 psi), maximum; accuracy may not be maintained at this depth

Transmission Distance
1000 m (3280 ft.) maximum when used with a termination box

Cable Length
10 m (options with 30m, 60m, 100m)

Dimensions (D x L)
1.9 in x 10 in
(48.25 mm x 254 mm)

Weight
2.2 lbs. (1 kg), probe only

*Subject to change without notice.

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

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

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, 31 m (100 ft.)
6860000  High Output Air Blast Cleaning System, 115 Vac
6860100  High Output Air Blast Cleaning System, 230 Vac
9253500  Air Blast Hardware Components

Replacement Parts

9021100  LDO 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 Model 1 to LDO Model 2
7300800  1 NPT sc Sensors Flow Cell

Controllers

sc200 Digital Controllers

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

sc1000 Digital Controllers

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

hach.com