

EVITA OXY Transmitter

Dissolved Oxygen



The Hach EVITA OXY Transmitter is a fast replaceable sensor with no regeneration needed. Its self-cleaning design makes it virtually maintenance-free.

DW

WW

PW

IW

Features and Benefits

Virtually Maintenance-Free

The Hach EVITA OXY Transmitter performs with less than 30 minutes of maintenance a year. The factory “all-inclusive” sensor contains electrolyte, membranes and electrodes.

There is no need for regeneration—simply replace the sensor every two years and it's done after 5 minutes.

Unique self-cleaning design—the spherical form and the “fins” ensure that contaminants will not stick to the sensor. Forget all about immersed cleaning systems! Wipe the sensor down three times per year during normal calibration to ensure optimal performance.

Automatic Calibration

Calibration is done automatically by simply tilting the transmitter. It takes 5 minutes, three times a year.

Self-Contained and Highly Accurate

Hach's EVITA OXY Transmitter is very accurate. An extremely accurate Pt 1000 temperature sensor ensures correct temperature compensation. Cartridges (factory-sealed or self-contained) are replaceable. No reuse of working parts, i.e. anodes and cathodes.

Versatile Configurations

The EVITA transmitter is available in three versions.

- Ball float style, model 4100
- Probe style, model 4150
- Probe style specific to fish farming applications, model 3150

DW = drinking water WW = wastewater municipal PW = pure water / power
IW = industrial water E = environmental C = collections FB = food and beverage



Be Right™

Specifications*

OXY TRANSMITTER

Measurement Range

Dissolved Oxygen: 0 to 500%, 0 to 50 mg/L
Temperature: 0 to 60°C

Accuracy

Dissolved Oxygen: $\pm 0.5\%$ of full scale
Temperature: $\pm 0.5^\circ\text{C}$

Response Time

50 μm : $t = 22\text{ s}$ (25 μm : $t = 7\text{ s}$, 125 μm : $t = 110\text{ s}$)

Operating Temperature

Air: -40 to 60°C
Medium: 0 to 40°C

Automatic Calibration

Automatically compensates for temperature. When using the USC, automatically compensates for temperature and pressure. Salinity and humidity values may also be entered when using the USC.

Power supply

12-30 Vdc

Cable

10 m; 2 x 0.75 mm² shielded cable

Current Output

4-20 mA, scalable (analog or digital by HART) galvanic isolated; maximum load 750 ohm at 30 V

Enclosure material

PBT/PC

Enclosure Rating

Model OXY 4100: IP 68 (1 m)
Models OXY 3150 and 4150: IP 68 (10 m)

Certification

CE, C-tick
Emission: IEC/EN 61000-6-3
Immunity: IEC/EN 61000-6-2

Dimensions

Model OXY 4100: 240 mm diameter
Models OXY 3150 and 4150: 50 mm diameter; 180 mm length

Weight

Model OXY 4100: 2 kg
Models OXY 3150 and 4150: 1 kg

OXY 1100 SENSOR

Dissolved Oxygen Sensor

Replaceable Clark sensor; 2 year typical life (temperature dependant)

- 50 μm sensor: approximately 40,000 ppm-hours
- 25 μm sensor: approximately 20,000 ppm-hours
- 125 μm sensor: approximately 80,000 ppm-hours

Operating Temperature

0 to 50°C

Material

Membrane: 50, 25, 125 μm FEP Teflon®
Cathode: gold
Anode: silver
Electrolyte: KCl

Weight

15 g

MOUNTING

Bracket

Handrail or flat surface bracket with pivot function to hold 50-mm (1.5-in.) ABS or PVC pipe and 1.5-in. pipe adapter

Note: Due to the variability in mounting configurations, the customer is required to supply the tubing necessary to complete the installation.

Operating Temperature

-40 to 70°C

Material

Stainless steel

Weight

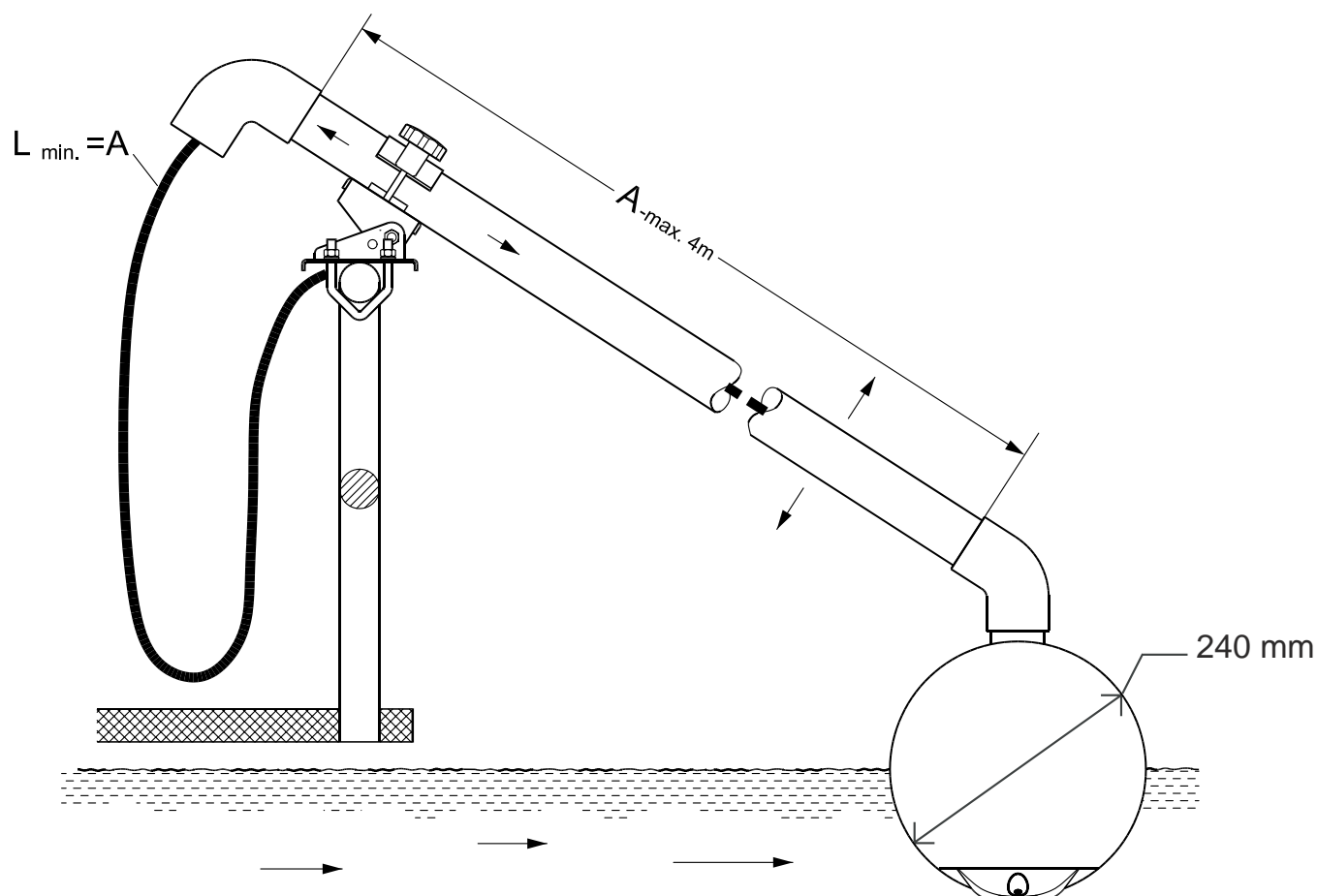
0.8 kg

**Specifications subject to change without notice.*

Engineering Specifications

1. The transmitter shall contain a replaceable dissolved oxygen sensor.
2. The dissolved oxygen sensor shall use Clark measurement and shall be composed of a membrane, gold cathode, silver anode, and KCl electrolyte.
3. The measuring range shall be from 0 to 50 mg/L dissolved oxygen.
4. The accuracy shall be less than 0.5% of the measured value.
5. The transmitter enclosure shall be rated at IP68.
6. The analyzer shall be the EVITA OXY Transmitter manufactured by Hach Company

Dimensions / Installation



Ordering Information

EVITA OXY Dissolved Oxygen System Packages

085G4000 OXY System Package 1
Includes: USC 6000, OXY 4100 DO Transmitter (ball float style), OXY 1100 Membrane Cartridge, Mounting Bracket

085G4001 OXY System Package 2
Includes: USC 5000, OXY 4100 DO Transmitter (ball float style), OXY 1100 Membrane Cartridge, Mounting Bracket

Call for details* OXY System Package 3
Includes: OXY 4100 DO Transmitter (ball float style), OXY 1100 Membrane Cartridge, Mounting Bracket
**Must specify measurement range.*

085G4008 OXY System Package 1A
Includes: USC 6000, OXY 4100 DO Transmitter (probe style), OXY 1100 Membrane Cartridge, Mounting Bracket

085G4009 OXY System Package 2A
Includes: USC 5000, OXY 4100 DO Transmitter (probe style), OXY 1100 Membrane Cartridge, Mounting Bracket

Call for details* OXY System Package 3A
Includes: OXY 4100 DO Transmitter (probe style) OXY 1100 Membrane Cartridge, Mounting Bracket
**Must specify measurement range.*

085G4010 OXY System Package 4
(For Fish Farming Only)
Includes: 4 to 15 ppm OXY 3150 DO Transmitter (probe style), OXY 1100 125 μ m Membrane Cartridge, Fish Protection Cap

085G4016 OXY System Package 4
(For Fish Farming Only)
Includes: 3 to 20 ppm OXY 3150 DO Transmitter (probe style), OXY 1100 125 μ m Membrane Cartridge, Fish Protection Cap

085G4014 OXY System Package 5
(For Fish Farming Only)
Includes: 3 to 20 ppm OXY 3150 DO Transmitter (probe style), OXY 1100 125 μ m Membrane Cartridge, Fish Protection Cap, Four-digit LED Display, Two Relays

Continued on next page.

Ordering Information *continued*

Transmitter Only

085G4064 OXY 4100 DO Transmitter, ball float style, 0 to 20 ppm, 24 Vdc, 33-ft. cable, 4-20 mA Hart transmitter

DOES NOT INCLUDE MEMBRANE CARTRIDGE

Range must be specified if not used with USC. Please call your Hach representative for details.

USC (Universal Signal Converter)

All USC listed here are rated NEMA6, 110 to 230 Vac

085G4146 USC 7000, up to 15 transmitter inputs, four 4-20 mA outputs, five relays

085G4160 USC 7000, with Profibus PA

085G4161 USC 7000, with Profibus DP

085G4140 USC 6000, one transmitter input, two 4-20 mA outputs, three relays

085G4145 USC 5000, one transmitter input, one 4-20 mA output

Note: Hach offers other options of USC. Please contact your Hach representative.

Membrane Cartridge

085G0022 OXY 1100 Membrane Cartridge, 50 µm Standard, single

085G0026 OXY 1100 Membrane Cartridge, 50 µm Standard, 5-pack

085G0027 OXY 1100 Membrane Cartridge, 50 µm Standard, 10-pack

085G0021 OXY 1100 Membrane Cartridge, 25 µm (0 to 2 ppm), single

085G0024 OXY 1100 Membrane Cartridge, 25 µm (0 to 2 ppm), 5-pack

085G0025 OXY 1100 Membrane Cartridge, 25 µm (0 to 2 ppm), 10-pack

085G0023 OXY 1100 Membrane Cartridge, 125 µm (2 to 50 ppm), single

085G0029 OXY 1100 Membrane Cartridge, 125 µm (2 to 50 ppm), 5-pack

085G0030 OXY 1100 Membrane Cartridge, 125 µm (2 to 50 ppm), 10-pack

Mounting Bracket

085G4085 Universal Mounting Bracket, flat surface or pipe, holds 1.5-in. PVC or steel pipe to attach to transmitter, 316 SS

Telecommunications Module (optional)

Please contact your Hach representative.

Replacement Parts

081B5013 Spare Parts Kit, for mounting bracket, two U-bolts, four washers, four nuts

085G9735 OXY 4100 Collar, for holding ion-permeable membrane

085G3309 OXY 4150/3150 Membrane Cartridge Holder

085G3320 OXY 3150 Fish Protection Cap

085G3325 PVC Adapter, for use between OXY 4150/3150 and 1.5-in. threaded pipe

085G2373 PVC Adapter, with 1.25-in. internal threads and 1.5-in. OD for PVC welding

192LX020 OXY 1100 Moisture Barrier Paste, 5.3-ounce tube

Accessories

LP-SUN02 Sun Shield, 304 SS

192LX020 OXY 1100 Moisture Barrier Paste, 5.3-ounce tube

At Hach, it's about learning from our customers and providing the right answers. It's more than ensuring the quality of water—it's about ensuring the quality of life. When it comes to the things that touch our lives...

Keep it pure.

Make it simple.

Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

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Be Right™