



VAN LONDON
Est. 1961



"When Accuracy Matters"

OD8325

Optical dissolved oxygen probe. 4/20 mA and RS 485 output

This unique submersible probe has been designed to measure dissolved oxygen based on fluorescent technology. The measuring system consists of:

- Optical device complete of fluorescent material
- Dissolved oxygen and temperature measuring circuit
- 2-wire 4/20 mA analog output
- RS 485 digital output
- Nozzle for the autoclean by external pressure air

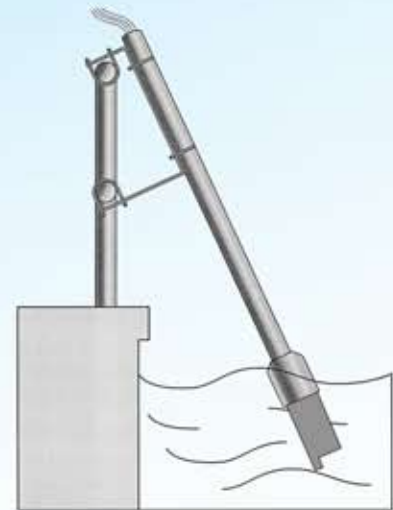
The measuring is provided in ppm or % of air with automatic temperature compensation. Through commands from the Personal Computer hyperterminal, the serial interface allows the dissolved oxygen and temperature data transmission, the ppm or % of air scale selection, the configuration of pressure, salinity and RH compensation, the zero and sensitivity calibration. Thanks to its 4/20 mA isolated output, the probe can be directly connected to a PLC or data logger. The probe can be connected to BC7635 or BC7335, which provides the power, the measuring readout, 2 set-points, alarm relay and the holding function for an external cleaning cycle. The most common applications of this probe include: water quality monitoring, municipal and industrial water treatment and aquaculture.

Principle of operation:

A light beam of a specific wavelength is sent to a special fluorescent layer in contact with the sample. The absorbed light energy is partially released as a light pulse with a higher wavelength. This phenomena is called fluorescence. If oxygen molecules are in contact with the sensing layer, the fluorescing is reduced (quenching). By measuring the amount of quenching it is possible to determine the oxygen concentration. The advantages of this measuring method are the absence of electrolyte and membrane, the possibility to measure the oxygen concentration in water or in air, and a good sensitivity in a low oxygen concentration.



Specifications
Scale: 0/20 ppm - 0/200 % air
Sensitivity: ± 0,5 % of the scale
Response time: 95% in < 60 seconds
Power supply: 9/36 Vdc
Analog output: 4/20 mA isolated current Loop
Load: 600 Ω max. at 24 Vdc
Digital output: RS 485
Temperature compensation: automatic
Secondary parameters: pressure, salinity, RH
Room temperature: -5/50 °C
Max. pressure: 1 Bar at 25 °C
Autoclean: by pressure air 3 bar max
Dimensions: L=165 mm total, D= 60 mm
Body: PVC
Cable: 10 m (100 m max.)
Protection: IP 68
<i>The technical specifications may be changed without notice</i>



Typical submersible installation

Van London-pHoenix Co.
6103 Glenmont Drive
Houston, Texas 77081
Local: (713) 772-6641
Toll Free: (800) 522-7920
Web: www.VL-PC.com
e-mail: info@VL-PC.com



Made in the USA

We Speak English, Spanish & Vietnamese