

BOD SENSOR

Get reliable results in the simplest way possible with VELP BOD EVO Sensor!
An impressive step ahead in BOD analysis, using the respirometric method.

BOD (Biochemical Oxygen Demand) is a chemical procedure for determining the amount of dissolved oxygen needed by aerobic biological microorganisms in water.

The analysis occurs in a given water sample at certain temperature over a specific period.

It is most commonly expressed in milligrams of oxygen consumed per liter of sample at the constant temperature of 20 °C during 5 days of incubation (BOD₅) or monitoring the complete oxidation value after a maximum period of 30 days (BOD_{ultimate}).

BOD determination is widely used as an indication of the organic quality of water and the degree of organic pollution of water.

BOD Sensor



2 lithium batteries and KOH trap included

The BOD Sensor is the mercury-free and reliable solution for BOD determination. **Easy to handle, quick and easy to read.**

A microprocessor-controlled pressure transducer transfers the BOD value directly to the display: **results are displayed directly in mg/l with no need for further calculation.**

Manufactured with premium materials, it automatically stores 5 BOD measurements at 24-hour intervals meaning that analysis can continue over the weekend.

The BOD value can also be obtained directly from the display at any time, even after five days.

Measurement is available on 4 different scales - 90, 250, 600 and 999 ppm BOD. Higher values can be measured by diluting the sample.

BOD Sensor Set



The BOD Sensor Set is a **ready-to-use solution** consisting of a BOD Sensor, a dark glass bottle, an alkali holder to absorb the carbon dioxide and a stirring bar.

This simple configuration was designed to meet the demands of those laboratories that carry out **individual BOD analysis** only.

The dark glass bottle can take sample quantities of from 100 to 400 ml.

The BOD Sensor Set is designed for use with the VELP MST magnetic stirrer, sold separately (Code No F203A0160).



The MST magnetic stirrer with ABS structure is a **small, simple and efficient** stirrer.

Extremely useful where a small but **reliable** instrument is needed.

The MST stirrer **remains cold** even after several days of continuous use.

BOD Sensor System



BOD Sensor System is available in 6- or 10-place configuration, including a 6- or 10-position stirring station with BOD Sensors, dark glass bottles, alkali holders for absorbing the carbon dioxide and stirring bars.

The 6-position Stirring Station is **extremely simple to handle** and the VELP stirring quality is guaranteed.

It **remains cold** even after several days of continuous use.

The **space saving footprint** means that up to 5 Stirring Stations for a total of 30 samples can be placed in a VELP incubator (FOC 215E) simultaneously.

CONTROL TESTS

VELP offers two accessories to test the accuracy of BOD instruments:

- BOD Sensor Check (A00000135): a quick test to check if the sensor is operating properly.
- Control Test Tablets (A00000136): to check the correct functioning of the system and the calibration of the pressure sensor through a 5-day test.

Features	Description
Construction Material:	Technopolymer
Display:	3-digit LED
Electronic protection degree CEI EN 60529:	IP 54
Supply:	2 lithium batteries per each sensor
BOD Sensor System 6 Dimension (WxHxP):	270x300x185 mm (10.6x11.8x7.3 in)
BOD Sensor System 6 Weight:	2.3 Kg (5.1 lb)
BOD Sensor System 10 Dimension (WxHxP):	432x300x165 mm (17.0x11.8x6.5 in)
BOD Sensor System 10 Weight:	3.0 Kg (6.6 lb)
Description	Code No.
BOD Sensor Set	F102B0134
BOD Sensor System 6 - 230 V / 50 Hz	S10220136
BOD Sensor System 6 - 230 V / 60 Hz	S10230136
BOD Sensor System 6 - 115 V / 60 Hz	S10240136
BOD Sensor System 10 - 230 V / 50 Hz	S10220137
BOD Sensor System 10 - 230 V / 60 Hz	S10230137
BOD Sensor System 10 - 115 V / 50 Hz	S10240137



Place up to 30 samples in a
VELP FOC 215E cooled incubator

Your authorized agent:

We reserve the right to make technical alternations
We do not assume liability for errors in printing, typing or transmission



VELP Scientifica srl
via Stazione 16
20040 Usmate (Milano) Italy
Tel +39 039 628811
Fax +39 039 6288120
inse@velp.it
www.velp.com

BOD EVO SENSOR

Get reliable results in the simplest way possible with VELP BOD EVO Sensor! An impressive step ahead in BOD analysis, using the respirometric method.

BOD (Biochemical Oxygen Demand) is a chemical procedure for determining the amount of dissolved oxygen needed by aerobic biological microorganisms in water.

The analysis occurs in a given water sample at certain temperature over a specific period.

It is most commonly expressed in milligrams of oxygen consumed per liter of sample at the constant temperature of 20 °C during 5 days of incubation (BOD₅) or monitoring the complete oxidation value after a maximum period of 30 days (BOD_{ultimate}).

BOD determination is widely used as an indication of the organic quality of water and the degree of organic pollution of water.

BOD EVO Sensor



2 lithium batteries and KOH trap included

Wireless Data Transmission

- ▶ 5-day test (BOD₅): every 30 min / 1 / 2 / 4 / 6 / 8 / 12 / 24 hour(s)
- ▶ Longer tests (e.g. BOD_{ultimate}): every 2 / 4 / 6 / 8 / 12 / 24 hours

Flexible Data Reading directly in BOD value (mg/l)

- ▶ On display: real time when pressing "Start"
- ▶ Through BODSoft™: according to the selected transfer time
- ▶ Different scales: 90, 250, 600 and 999 ppm BOD.
Higher values can be measured by diluting the sample

BOD EVO Sensor System includes:



The compact footprint BOD EVO Stirring Station

- ▶ 6-position constant stirring and **6 BOD EVO Sensor** (incl. of bottles, KOH traps and magnetic stir bars)
- ▶ Space saving - only 270 x 185 mm (VELP incubator accommodates up to 30 samples)
- ▶ Remains cold even after continuous use
- ▶ Extremely easy to handle

The exclusive BOD EVO Wireless DataBox™

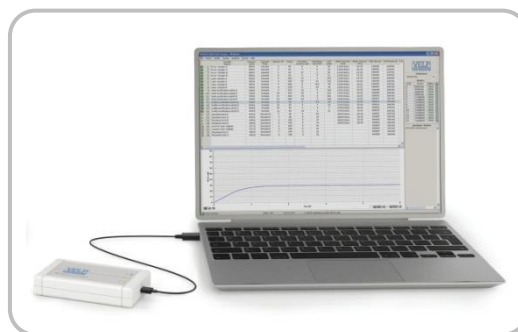
- facilitates regulatory compliance, continuously monitors and reports parameters
- ▶ Data storage for up to 80 samples per each DataBox™
 - ▶ Data transfer even when not connected to PC

The extremely intuitive BODSoft™ Software

EACH SENSOR TRANSFERS BOD VALUES TO THE WIRELESS DATABOX™
>>> NO NEED TO OPEN THE INCUBATOR DOOR FOR DATA TRANSMISSION!

BODSoft™

- ▶ Simple and easy to use
- ▶ Simultaneous data processing of many samples
- ▶ Automatic graph creation
- ▶ Active analyses tracking
- ▶ Selectable languages
- ▶ Unlimited database
- ▶ Test report creation
- ▶ Results monitoring and comparison



BEFORE AND DURING THE ANALYSIS

All the most important info is clearly displayed during analysis, including the status of the sensors' batteries. An intuitive database shows all the completed and active analyses, with a real time graph.

AFTER THE ANALYSIS

At the end of the analysis, customized test reports can be created along with results comparison. Results are stored into databases and can be exported in .xls, .txt and .csv format to PC or LIMS.

CONTROL TESTS

VELP offers two accessories to test the accuracy of BOD instruments:

- BOD Sensor Check (A00000135): a quick test to check if the sensor is operating properly.
- Control Test Tablets (A00000136): to check the correct functioning of the system and the calibration of the pressure sensor through a 5-day test.

Features	Description
Construction Material:	Technopolymer
Display:	3-digit LED
Electronic protection degree CEI EN 60529:	IP 54
Supply:	2 lithium batteries per each sensor
BOD EVO Sensor System Dimension (WxHxP):	270x300x185 mm (10.6x11.8x7.3 in)
BOD EVO Sensor System Weight:	2.3 Kg (5.1 lb)
Description	Code No.
BOD EVO Sensor System 6 - 230 V / 50 Hz	S10220146 *
BOD EVO Sensor System 6 - 230 V / 60 Hz	S10230146 *
BOD EVO Sensor System 6 - 115 V / 60 Hz	S10240146 *
BOD EVO Sensor System 6 - 230 V / 50 Hz	S10220156
BOD EVO Sensor System 6 - 230 V / 60 Hz	S10230156
BOD EVO Sensor System 6 - 115 V / 50 Hz	S10240156

* including Wireless DataBox™, BODSoft™ and cable



Place up to 30 samples in a VELP FOC 215E cooled incubator

...and collect reliable results with the Wireless DataBox™ and manage them with the exclusive BODSoft™!

Your authorized agent:

We reserve the right to make technical alternations
We do not assume liability for errors in printing, typing or transmission



VELP Scientifica srl
via Stazione 16
20040 Usmate (Milano) Italy
Tel +39 039 628811
Fax +39 039 6288120
inse@velp.it
www.velp.com