

# Dissolved oxygen optical probe BAMOX 453



- Optic-luminescent measurement
- Range: 0 to 20 mg/l
- Easy and reduced maintenance
- Temperature compensated signal
- Body: Or stainless steel, or titanium

## APPLICATIONS

- Urban wastewater treatments (nitrifying / denitrifying process)
- Treatment of industrial effluents
- Monitoring of surface waters, coastal waters, aquariums
- Fish farming and aquaculture (fresh water, sea water)
- Drinkable water

## DESCRIPTION

The BAMOX 453, dissolved oxygen sensor, applies the optical luminescence measurement technology approved by ASTM International Method D888-05.

This method confers many advantages:

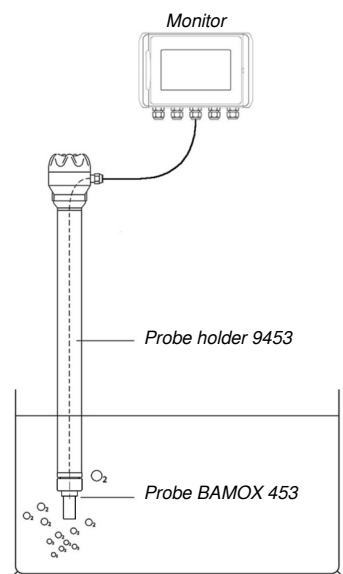
- High accuracy even for a low concentration of oxygen
- Reduced operating cost: Interchangeable sensor-end
- Optimized maintenance: No signal drift
- Easy commissioning: No necessary calibration
- Suitable for all environments: No consumption of oxygen
- Simplified installation: Direct immersion (no flow-cell)

With the integrated pre-amplifier and digital signal, the sensor is highly resistant to electrical noise. The measured value of dissolved oxygen is automatically compensated of variations of temperature, pressure and salinity, then transmitted to the monitor BAMOWIZ 452 (data-sheet 452-01)

The sensor-end is easy to replace for an easier maintenance task. The compact and robust probe is available or in passivated 316 L stainless steel, or in titanium for applications in seawater and corrosive environments.



BAMOWIZ 452



Complete system

## CODE NUMBERS AND REFERENCES

Code	Reference	Description
453 001	BAMOX 453 I	AISI 316 L probe
453 002	BAMOX 453 Ti	Titanium probe
<b>Accessories</b>		
453 010	9453	Probe holder, PVC Ø50 (L = 0.5 to 2 m)
130 112	9358 PE	PE adjustable flange for probe holder Ø 50
453 110	C4B	Extension cable (4 wires)
453 100	CM12	M12 female connector
453 120	C4B-20/ CM12	Extension cable: 20 m with connector M12
453 130	C4B-30/ CM12	Extension cable: 30 m with connector M12
<b>Spare parts</b>		
453 911	BAMOX 453 I/SP	Sensor end for AISI 316 L probe
453 912	BAMOX 453 Ti/Sp	Sensor end for titanium probe

# BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL  
 Tel +33 (0)1 30 25 83 20 Web [www.bamo.eu](http://www.bamo.eu)  
 Fax +33 (0)1 34 10 16 05 E-mail [export@bamo.fr](mailto:export@bamo.fr)

Dissolved oxygen optical  
probe  
**BAMOX 453**

02-06-2021

D-453.01-EN-AC

OXY

453-01 /1

## TECHNICAL FEATURES

### Measurement

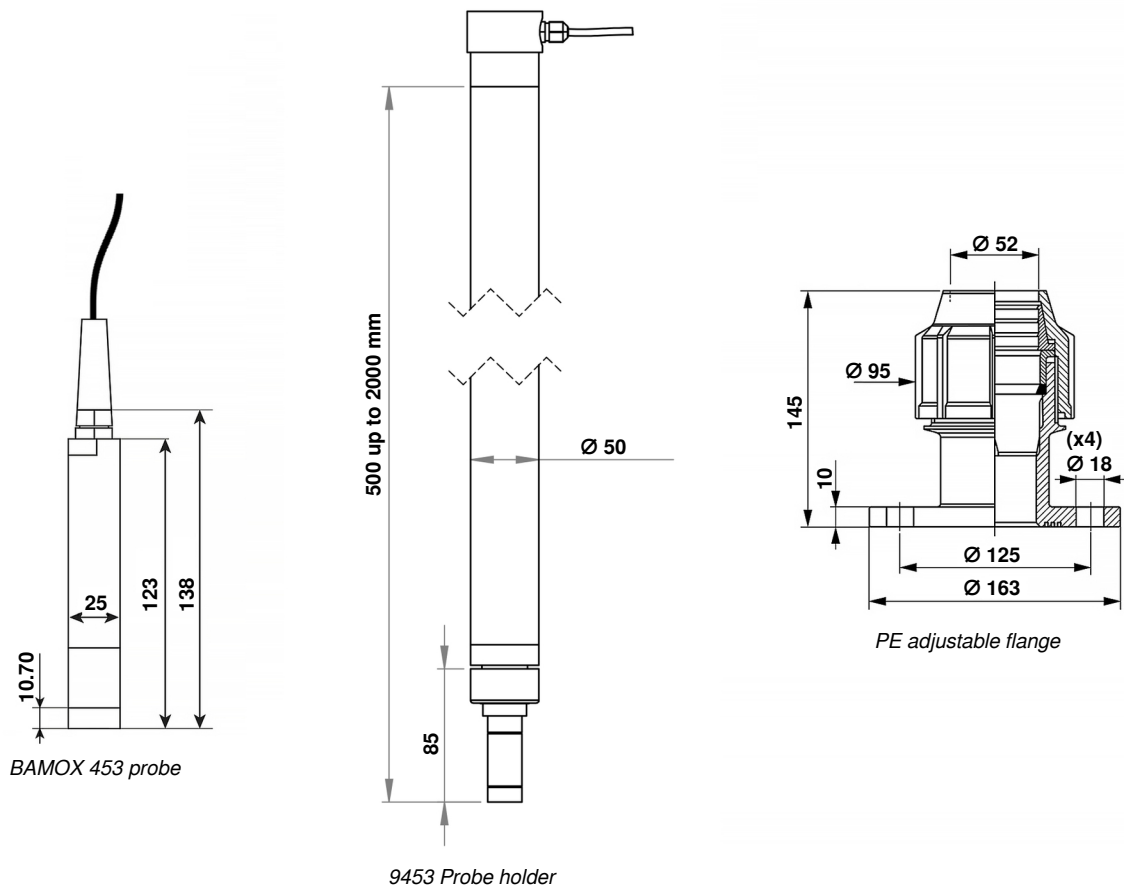
Principle	Optic-luminescent technology
Measurement range	From 0.00 up to 20.00 mg/l 0.00 ... 20.00 ppm 0... 200 %
Resolution	0.01
Accuracy	± 0.1 mg/l ± 0.1 ppm ± 1 %
Response time	60 seconds for 90 % of the final value
Fluid environment	Not necessary circulation
Operating temperature	0... +50 °C
Temperature compensation	Through a built-in NTC sensor <i>Temperature compensation in the range 0 to 40 °C</i>
Accuracy	± 0.5 °C
Interface	For connection to BAMOWIZ 452
Voltage supply	5 ... 12 V

### Probe

Mass	AISI 316 version: 450g (including cable) Titanium version: 300 g (including the cable)
Materials	Wet parts: AISI 316 L passivated, or, Titanium
Pressure limit	5 bar
Cable	6-wire shielded cable; External PUR sheath
Protection	IP 68

**EC Conformity:** The instrument meets the legal requirements of the current European Directives.

## DIMENSIONS



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Fax +33 (0)1 34 10 16 05 E-mail [export@bamo.fr](mailto:export@bamo.fr)

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**453-01 /2**