



a xylem brand

# CALIBRATION CERTIFICATE

Form No 853, Feb.6.2017

Certificate no: Oxygen Optode 5013\_21\_128923  
FoillID: 1023

Product: **Oxygen Optode 5013**  
Serial no: 21  
Calibration date: 28.03.2017

## 2-POINT RECALIBRATION, OXYGEN OPTODE

This is to certify that this product has been calibrated and verified using the following reference equipment:

Reference Equipment	Serial
Calibration Bath Model Toho TM-005-P-A	12-K
Fluke 5615 PRT	Serial No. 802054 and Serial No. 849155
Fluke CHUB E-4	Serial No. A7C677
Reference sensor 4330	338

### Specification

	O2 Concentration	Air Saturation	Temperature
Range	0-500 µM	0 - 120%	-5 to +40°C
Accuracy	< ±8µM or ±5% <sup>1)</sup>	±5% <sup>2)</sup>	±0.03°C <sup>3)</sup>
Resolution	< 1 µM	< 0.4%	0.01°C
Settling Time (63%)	< 25 seconds	< 25 seconds	< 2 seconds

1) Requires salinity compensation for salinity variations > 1mS/cm, and pressure compensation for pressure > 100meter

2) Within calibrated range 0 - 120% / 0 - 30°C

3) Within calibrated range 0 - 36°C

### Calibration points and readings:

	Air Saturated Water	Zero Solution (Na2SO3)
Phase reading (°)	33.87	64.46
Temperature reading (°C)	10.00	21.73
Air Pressure (hPa)	984.60	

### Giving these coefficients

Index	0	1	2	3
PhaseCoef	-8.146774E+00	1.244328E+00	0.000000E+00	0.000000E+00

### With the following settings

Index	0	1	2	3
Coef0	4.270193E+03	-1.327236E+02	2.156297E+00	-1.402758E-02
Coef1	-2.297296E+02	5.742421E+00	-6.853578E-02	1.886123E-04
Coef2	5.064016E+00	-9.620849E-02	5.221808E-04	7.708897E-06
Coef3	-5.263322E-02	7.154674E-04	3.311850E-06	-1.861240E-07
Coef4	2.109168E-04	-1.840878E-06	-4.286455E-08	1.111203E-09
TempCoef	2.431767E+01	-3.112080E-02	2.938471E-06	-4.220552E-09
Salinity (mS/cm)	0.00			

Date:28.03.2017

  
Sr. Repair Technician