

Program Version: 04.09.2001

Product: Oxygen Optode 4831
Serial No: 675

Visual and Mechanical Checks:

- 1.1 Soldering quality
- 1.2 Visual surface
- 1.3 Galvanic isolation between housing and electronics

Current Drain and Voltages:

- 2.1 Average current drain at 0.5 Hz sampling (Max.: 33 mA)
- 2.2 CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)
- 2.3 Current drain in sleep (Max.: 180 μ A)
- 2.4 CANBus Current drain in sleep (Max.: 180 μ A)
- 2.5 DSP IO voltage, J4.18 (3.3 \pm 0.15V)
- 2.6 DSP Core voltage, J4.17 (1.8 \pm 0.05 V)
- 2.7 Excitation driver voltage, C4 Analog Board (4.5 \pm 0.15 V)

23.0	mA
216	mA
	μ A
	μ A
1.82	V
4.31	V

Performance test:

- 3.1 Average of Receiver readings (0 \pm 150mV)
- 3.2 Standard Deviation of Receiver readings (Max.: 45mV/10mV)
- 3.3 Amplitude measm. with non-fluorescence foil (<60mV/650-1200mV)
- 3.4 CANBus Output test

Blue	Red
-1.2 mV	-1.5 mV
1.78 mV	0.58 mV
14.8 mV	1066.7 mV

Function test from 0 to 40°C:

- 4.1 Minimum amplitude measurement (Blue: >550 mV, Red >650 mV)
- 4.2 Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)
- 4.3 Minimum phase measurement (Blue: >24°, Red: >1°)
- 4.4 Maximum phase measurement (Blue: <34°, Red: <5°)
- 4.5 Maximum standard deviation of Phase measurement: (< 0.02°)
- 4.6 Minimum temperature raw data measurement: (<-200 mV)
- 4.7 Maximum temperature raw data measurement: (>450 mV)

Blue	Red
679.3 mV	801.6 mV
1043.2 mV	1256.2 mV
34.72 °	7.51 °
40.33 °	8.56 °
0.05 °	0.04 °
	-506.2 mV
	619 mV

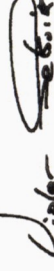
Pressure test :

- 5.1 Pressure (IW version: 20MPa, DW version 60MPa)

60MPa

Date: 23 Mar 2017

Sign:



Vidar Selsvik, Production Engineer



CALIBRATION CERTIFICATE

Form No 830, Juli 2012

a xylem brand

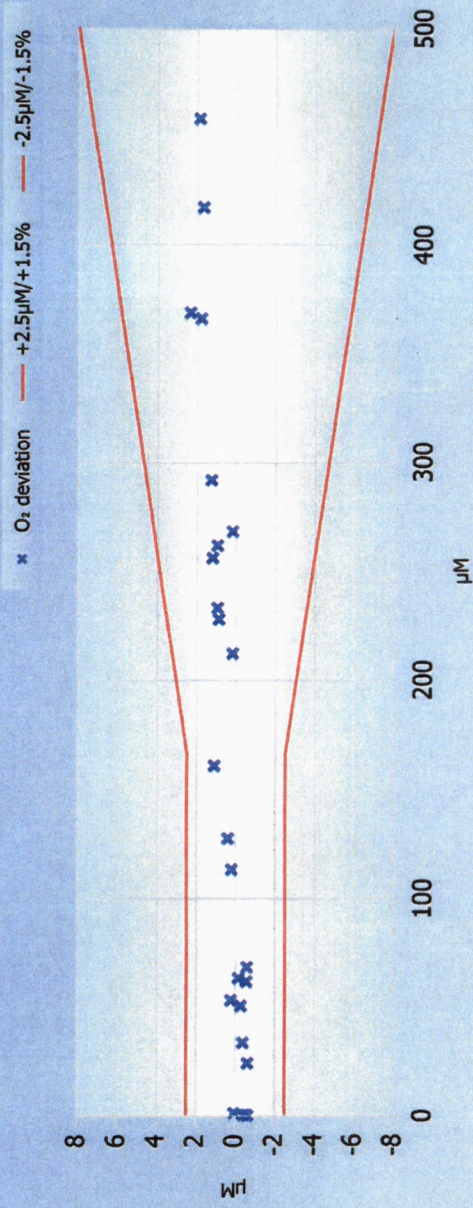
Certificate no: 4831_675_00128391
Foil batch no: 1517M

Product: 4831
Calibration date: 15.03.2017

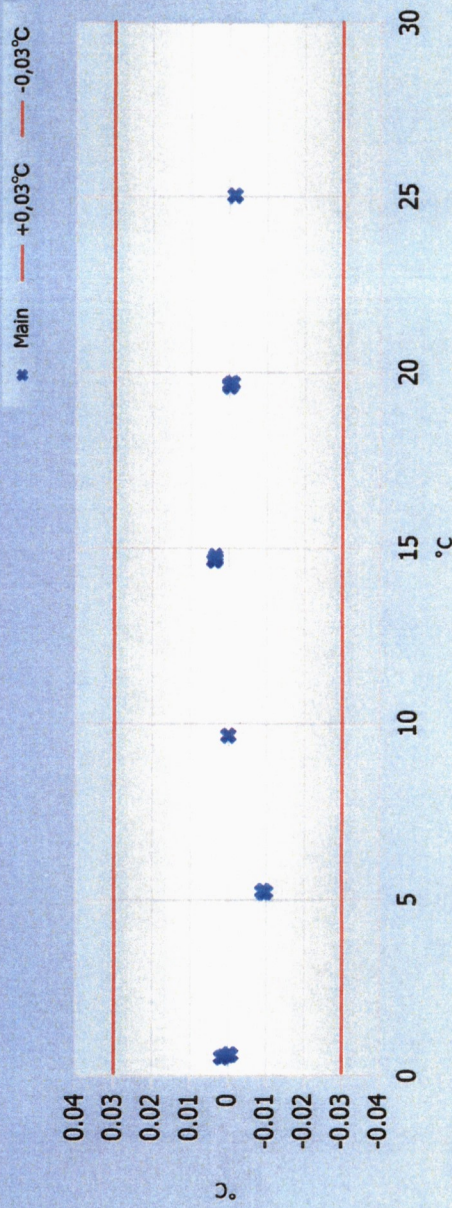
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Index	0	1	2	3	4	5	6
SVUFoilCoef	2.68472E-03	1.12034E-04	2.31129E-06	2.31460E02	-4.26981E-01	-5.09191E01	4.60068E00
TempCoef	2.42469E01	-3.11061E-02	2.90633E-06	-4.28648E-09	0.00000E00	0.00000E00	

Oxygen validation



Temperature validation



Date: 15.03.2017

Tor-Ove Kvalvaag
Tor-Ove Kvalvaag, Calibration Engineer