

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0212

SBE 43F OXYGEN CALIBRATION DATA

CALIBRATION DATE: 24-Aug-16

COEFFICIENTS:

Soc = 2.8881e-004 (adj)

Foffset = -808.26

Tau20 = 0.91

A = -4.2784e-003

B = 2.1726e-004

C = -3.1113e-006

E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS

D1 = 1.92634e-4

D2 = -4.64803e-2

H1 = -3.300000e-2

H2 = 5.00000e+3

H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP (° C)	BATH SAL (PSU)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.17	12.00	0.00	1377.682	1.17	-0.00
1.17	2.00	0.00	1244.431	1.17	-0.00
1.17	6.00	0.00	1300.778	1.17	0.00
1.19	20.00	0.00	1496.584	1.19	0.00
1.20	26.00	0.00	1581.479	1.20	0.00
1.20	30.00	0.00	1635.295	1.20	-0.00
3.91	2.00	0.00	2272.345	3.92	0.00
3.92	12.00	0.00	2719.986	3.91	-0.00
3.93	20.00	0.00	3078.378	3.93	0.00
3.95	6.00	0.00	2469.053	3.95	0.00
3.96	26.00	0.00	3358.369	3.96	0.00
3.96	30.00	0.00	3546.879	3.97	0.00
6.67	12.00	0.00	4064.922	6.67	-0.00
6.67	2.00	0.00	3300.919	6.67	-0.00
6.68	6.00	0.00	3616.177	6.69	0.00
6.70	20.00	0.00	4682.122	6.70	0.00
6.73	30.00	0.00	5453.012	6.73	-0.00
6.75	26.00	0.00	5162.306	6.75	-0.00

F = instrument output (Hz); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (F + Foffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

Residual (ml/l) = instrument oxygen - bath oxygen

