

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0221
CALIBRATION DATE: 18-Dec-15

SBE 43F OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 2.5239e-004
Foffset = -826.68
Tau20 = 1.54

A = -4.7269e-003
B = 2.4574e-004
C = -3.6145e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4 H1 = -3.300000e-2
D2 = -4.64803e-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)
1.13	6.00	0.00	1352.716	1.13	0.00
1.14	2.00	0.00	1294.971	1.13	-0.00
1.14	12.00	0.00	1439.617	1.13	-0.00
1.16	20.00	0.00	1566.463	1.16	0.00
1.17	26.00	0.00	1663.754	1.18	0.00
1.17	30.00	0.00	1723.218	1.18	0.00
3.88	2.00	0.00	2429.144	3.88	-0.00
3.88	6.00	0.00	2630.164	3.88	0.00
3.89	12.00	0.00	2929.584	3.89	-0.00
3.91	20.00	0.00	3327.705	3.92	0.00
3.93	26.00	0.00	3629.787	3.94	0.00
3.95	30.00	0.00	3839.814	3.95	-0.00
6.65	6.00	0.00	3912.345	6.65	-0.00
6.67	12.00	0.00	4433.748	6.68	0.00
6.68	2.00	0.00	3587.543	6.69	0.00
6.69	30.00	0.00	5931.156	6.69	0.00
6.70	20.00	0.00	5105.500	6.70	-0.00
6.70	26.00	0.00	5600.911	6.70	-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

